

SPINOZA'S CONCEPTION OF THE INFINITE

by

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(Under the Direction of O. Bradley Bassler)

ABSTRACT

In this dissertation I focus on a difficult problem in Spinoza's metaphysics: how modes, which exist dependently, "follow" from substance (or God), which exists absolutely independently.

In Chapter One I argue that Spinoza's conception of infinity is key to resolving this problem. Infinitely many modes "follow" from infinite substance because substance consists of infinite attributes. However, the infinity of substance is unique and indivisible whereas the infinity of modes is manifold and divisible. The infinity of the attributes must somehow mediate between substance and modes.

In Chapter Two I explore Spinoza's conception of infinite substance. The absolute infinity of substance is absolutely positive, the "absolute affirmation" of its essence. This absolute affirmation consists in the expression of substance in infinite attributes; in Chapter Three I argue (following Gilles Deleuze) that the attributes are infinitely many yet nondenumerable; hence substance is infinitely yet indivisibly plural. However, though each attribute has equal power to express substance, the attribute of thought involves ideas of modes of all attributes and seems to express substance most comprehensively. In Chapter Four I develop a solution to this problem, "the thesis of radical mutual containment": each attribute

must contain and be contained by every attribute. This unique expressive relationship between the attributes constitutes the absolute infinity of substance.

In Chapter Five I explain how infinite modes “follow” from substance: each attribute insofar as it “contains” all attributes is conceived as an “immediate infinite mode,” and insofar as it is “contained” by an attribute it is conceived as a “mediate infinite mode.” In Chapter Six I explain how finite modes may “follow” from substance: they contain infinity insofar as their infinite divisibility metaphysically presupposes the absolutely indivisible infinity of substance (as is argued by Martial Gueroult), and they are contained within infinity insofar as each finite mode is one of infinitely many expressions of a “thing as it is in itself.”

In Chapter Seven I explore some consequences of this reading for metaphysical reductionism and the union of the mind and body.

INDEX WORDS: Spinoza, *Ethics*, Substance, Attributes, Modes, Infinite, Infinity, Infinite Modes, Finite Modes, History of Philosophy, Metaphysics, Gilles Deleuze, Martial Gueroult, James Thomas

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*This dissertation
Fell upon me like a brick.
Only heavier.*

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INTRODUCTION

Spinoza's metaphysics, which he largely sets out in the first two Parts of his masterwork, the *Ethics*, has long been a source of puzzlement to scholars of early modern philosophy. In particular, many commentators on the work of Spinoza have puzzled over what has come to be called "the derivation of the finite from the infinite":¹ that is, why and how finite modes, to use Spinoza's words, "must follow" (*debent sequi*) from absolutely infinite substance, God (IP16: G II/60/18-9).² Traditionally, the root of the problem has been regarded as the question of why and how something absolutely *infinite* could (and must) entail the existence of *finite* things. While this problem has received a considerable amount of attention, it is subsidiary to a more fundamental problem which has not: the problem of why and how *modes*, infinite or finite, "must follow" from *substance*. In this dissertation I will focus upon the development and resolution of this deeper problem.

The problem is at base about characterizing the *relation* between substance and modes; hence we need an account of what Spinoza means by 'substance' and 'mode'. Unfortunately, Spinoza's conceptions of substance and mode are somewhat unconventional, and as a result it is easy to become confused about their functions within his system. In particular, Spinoza's account of substance is to some extent at odds with the traditional function of substance in metaphysics. The Aristotelian conception of substance as a subject of predicates which is not predicable of anything else has often been regarded as the basis for the determination of identity

¹ See Chapter Six, p. 204 n. 1.

² See Appendix A for an explanation of abbreviations and citations of Spinoza's works.

and hence individuation. Individual substances persist through changes in their accidental properties, but the loss or gain of certain essential properties of the individual, or its “form,” results in a change of identity. Hence, according to this account, a substance is an individual that can be identified in terms of a form, or a certain set of essential properties. However, there is another facet to the Aristotelian conception of substance: substance is also conceivable as an ultimate substratum which is not predicable of anything else. In this sense substance is not *a* substance but rather is the independent ground for the existence of individuals.³ Both of these themes in the conception of substance are at work in the philosophy of René Descartes: Descartes contends that the mind or soul is an individual thinking substance, but he also acknowledges that in a strict sense God is the only true substance because only God exists absolutely independently.⁴ However, Spinoza conceives of substance as strictly absolutely independent, and as a consequence he rejects the notion that substance may serve as a principle of individuation. In the *Ethics* Spinoza defines substance as that which “is in itself and is conceived through itself, i.e., that whose concept does not require the concept of another thing, from which it must be formed” (ID3: G II/45/14-6). Thus, as becomes clear from the propositions that Spinoza derives from this definition, substance is the principle of independent and necessary existence. But Spinoza argues that God, a substance consisting of infinite attributes (ID6), is the *only* substance (IP14). Thus for Spinoza substance cannot function as a principle of individuation, nor can it be the principle that determines identity with respect to the sorts of beings we ordinarily consider individuals. Hence individuation must be explained in

³ For a helpful discussion of the Aristotelian conception of substance and its influence on early modern thought, see R. S. Woolhouse, *Descartes, Spinoza, Leibniz: The Concept of Substance in Seventeenth-Century Metaphysics* (London: Routledge, 1993), pp. 7-13. Aristotle’s account of substance is far more complicated and difficult than I present it here. My object is not to provide a full account of the history of the concept of ‘substance’, but rather to suggest a background for understanding the function of substance within Spinoza’s system. I undertake the task of explicating Spinoza’s conception of substance in detail in Chapter Two.

⁴ Woolhouse, 15-7.

terms of *modes*, which are “the affections of substance, or [*sive*] that which is in another through which it is also conceived” (ID5: G II/45/20-1). Spinoza’s definition makes clear that the fundamental characteristic of a mode is that it exists dependently; hence individuation must be explained in terms of dependent existence.

The failure to recognize Spinoza’s refusal to use substance as a principle of individuation can mislead one into thinking that Spinoza, because he is a substance monist, denies individuation altogether, or else cannot account for individuation at all. If we mistakenly import into our reading of Spinoza’s metaphysics the assumption that substance is a principle of individuation, we tend to fixate on Spinoza’s substance monism as a problem, because then we may assume that it entails the existence of only one thing, God. This mistake has particularly serious consequences. The one which is most significant with respect to this dissertation is that this mistaken assumption obscures the fact that Spinoza is in an important sense an ontological *dualist*: while he denies that *substance* can be individuated, he nevertheless accepts that *modes* can be individuated. As I argue in more detail in Chapter One, Spinoza regards the distinction between substance and modes as a distinction between two radically different ways of *existing*; therefore in this respect Spinoza must be regarded as an ontological dualist.⁵ The main problem, then, is the need for an account of how two radically different ways of existing relate to one another in a single metaphysical system. Because Spinoza’s definitions of ‘substance’ and ‘mode’ center on independence and dependence, respectively, the problem with which I will deal in this dissertation is basically the question of why and how the necessary existence of absolutely independent substance must entail the conditioned existence of dependent modes.

⁵ Of course this is not an ontological dualism of the familiar Cartesian sort, i.e. a substance dualism consisting of thinking and corporeal substances. For Spinoza both thought and corporeality are attributes of the same substance. The ontological dualism which I attribute to Spinoza is divided according to a completely different principle, and is closer to the Cartesian distinction between created and uncreated substances.

The problem might not be particularly difficult to address if it were not for the fact that Spinoza argues in the Demonstration to IP16 that modes “must follow” from the divine nature, the essence of substance. Had Spinoza simply claimed that whereas the existence of substance is a necessary fact of metaphysics (IP7), the actual existence of individual modes is merely a brute fact, he might have been able to argue that there can be no general account for why there are modes at all, but nevertheless modes do exist and depend upon substance for their existence. In this way Spinoza might have characterized the relationship between modes and substance as one of simple dependence, and as a *partially* brute fact: while it is necessary that any existing modes must depend upon substance, it is a contingent fact that there are modes at all.⁶ But Spinoza’s contention that modes “follow” (or, as he glosses it in Letter 12, “flow” (*fluunt*) (G IV/58/2)) from substance places a more stringent requirement upon his account of the relation of substance and modes. It seems, given Spinoza’s language, that the necessary existence of substance in some sense *entails* the actual existence of modes. Thus the modes do not merely depend upon substance for their existence, but substance must “produce” them as a necessary consequence of its nature. Hence an adequate account of Spinoza’s metaphysics must show how the relationship between substance and its modes is in some sense one of *production*: substance itself must provide the basis for the explanation for why modes exist at all.

The key to the resolution of this problem is Spinoza’s conception of the infinite. The infinite plays a prominent role in the Demonstration to IP16, and in this dissertation I will argue that it is essential to understanding how modes “follow from” substance. This aspect of the main problem initially seems to present its own problem. For Spinoza a human being is not a

⁶ I do not intend to argue here that such an account of the relationship of modes and substance is in fact consistent or otherwise acceptable. Indeed, IP16 shows that Spinoza must think that such an account is ultimately unintelligible. However, it at least seems superficially plausible. But here I only need to show that Spinoza does not in fact accept any such account, plausible or not.

substance (IIP10), but rather a “singular thing” or finite mode (IIP10 Cor.; IIP11 and Dem.). Thus we might expect that we are thereby in principle incapable of grasping the nature of the infinite, and that the derivation of the finite from the infinite (assuming there is one) is therefore inevitably out of our reach. Indeed, Descartes argues in the *Principles of Philosophy* that the misguided investigation of the nature of the infinite leads our finite intellects into insoluble conundrums.⁷ Infinity is properly the demesne of God, and at best a finite intellect can understand the infinite only in an indirect sense: we can grasp clearly and distinctly *that* we cannot grasp the infinite, but that is all.⁸ Spinoza, however, does not think that infinity is something beyond our cognitive grasp. In Lodewijk Meyer’s editorial preface to Spinoza’s *Parts I and II of Descartes’ “Principles of Philosophy,”* Meyer reports that this work is intended only as an exposition of Descartes’ argumentation in the *Principles*, and that Spinoza does not necessarily endorse its reasoning or conclusions. Specifically, Meyer indicates that while Descartes in the *Principles* claims that some things surpass human understanding, Spinoza thinks these same things “can not only be conceived clearly and distinctly, but also explained very satisfactorily” (G I/132/30-1). Descartes’ assertion in the *Principles* concerning our inability to grasp infinity is his only explicit claim that there are things which surpass human understanding.⁹ Letter 12, a letter to Lodewijk Meyer in which Spinoza clarifies how the “problem of the Infinite” may be resolved (G IV/53/1), is surely what Meyer has in mind.

The arguments of the *Ethics* confirm that Spinoza has little doubt concerning our capacity to grasp the nature of the infinite. There Spinoza discusses the infinity of substance and its

⁷ *Principles* I, 26 (CSM I 201-2). (See Appendix A for an explanation of abbreviations of the citations of Descartes’ works.)

⁸ *Meditations on First Philosophy* III (CSM II 32); *Objections and Replies*, First Set of Replies (CSM II 81).

⁹ *Principles* I, 26 (CSM I 201-2). See also Spinoza’s rendition of Descartes’ position: *Descartes’ “Principles”* IIP5 Schol. (G I/190/21 – I/191/4).

attributes, and even reiterates arguments from Letter 12,¹⁰ without hesitancy or reserve. If Spinoza thinks that we can conceive the infinite clearly and distinctly, and presumably that we also understand finitude clearly and distinctly, then Spinoza should think that the infinite is hardly beyond our ability to grasp. Nevertheless, how the infinite participates in the relationship between substance and modes, and in turn how the finite may be “derived” from the infinite, appears elusive. The difficulty is that there is no clear consensus on what Spinoza *means* by ‘infinite’. The literature covering this issue in Spinoza’s metaphysics, when it does not lapse into silence, includes a wide diversity of accounts of Spinoza’s conception of infinity. For example, Don Garrett assumes that ID2, the definition of ‘finite in its own kind’, constitutes by implication a definition of ‘infinite’ that is equivalent to ‘all’. Garrett even goes so far as to *refer* to ID2 as though it were a *de facto* definition of ‘infinite’.¹¹ By contrast George Kline argues that there are no less than *three* senses of the term ‘infinite’ in the *Ethics*, two with systematic functions and one with an informal or non-systematic function.¹² Yirmiyahu Yovel contends that there is in fact a “depreciation in the concept of infinity” through which Spinoza “unaccountably” asserts a transition from the eternal infinity of substance to the “indefinite duration” of the infinite modes.¹³ But if Spinoza thinks that the infinite can be understood, then we should find a clear account of it in his metaphysics.

¹⁰ These arguments appear in the Scholium to IP15 — immediately preceding the crucial IP16 and its Demonstration.

¹¹ Don Garrett, “Spinoza’s Necessitarianism,” in *God and Nature: Spinoza’s Metaphysics*, ed. Yirmiyahu Yovel (Leiden: E. J. Brill, 1991), 206. The interpretation of Spinoza’s conception of infinity as equivalent to ‘all’ or ‘complete’ has a long tradition in the literature. Harold H. Joachim advanced this interpretation in 1901; see *A Study of the Ethics of Spinoza* (New York: Russell and Russell, Inc., 1964), 34-5. For a brief discussion of Joachim’s reading, see George Kline, “On the Infinity of Spinoza’s Attributes,” in *Speculum Spinozanum 1677-1977*, ed. Siegfried Hessing (London: Routledge and Kegan Paul, 1977), 345-6.

¹² Kline, 342-5. See also Chapter One, p. 16 n. 4.

¹³ Yirmiyahu Yovel, “The Infinite Mode and Natural Laws in Spinoza,” in *God and Nature: Spinoza’s Metaphysics*, ed. Yirmiyahu Yovel (Leiden: E. J. Brill, 1991), 86.

Unfortunately, Spinoza's most explicit discussion of his conception of the infinite, which appears in Letter 12, initially suggests that the conception of the infinite is hardly a solution to the problem of the relation of substance and modes. Indeed, it appears to be part of the problem. In Letter 12 Spinoza indicates that there are three senses of the term 'infinite': one sense, appropriate to substance, is indivisible and unique; a second, appropriate to modes, is divisible and manifold; a third, apparently appropriate to finite modes, has parts exceeding any number (G IV/53/2-10). The first two senses will be the main focus of this dissertation, for they suggest a more precise formulation of the question concerning the relation of substance and modes: why and how do infinite modes "follow" from infinite substance, given that the ways in which each exist as infinite *oppose* one another? That is, if infinite substance entails infinite modes, and their most evident common property is their infinity, how can Spinoza use the infinite to effect this transition when infinity is indivisible and unique in substance, but divisible and manifold in modes? The answer to this question must include an explanation of how a divisible and manifold infinity follows from an indivisible and unique infinity. Since it must at the same time show how modes "follow" from substance, the answer will show how Spinoza's metaphysics constitutes a system of the infinite.

The first task for this dissertation is to explicate fully the character of the problem of the relation between substance and modes in Spinoza's metaphysics, and to show how the conception of the infinite plays a role in the problem. In Chapter One I develop and characterize the problem by examining Letter 12, the so-called "Letter on the Infinite," and its bearing on Spinoza's argument in the Demonstration of *Ethics* IP16, where Spinoza apparently "derives" modes from the divine nature of God or substance. Where Letter 12 presents substance and modes as existing in entirely different ways, apparently grounded in radically distinct forms of

infinity appropriate to each, IP16 constitutes an attempt to bridge substance and modes by introducing the *infinite attributes* of substance as mediating terms.

If substance and modes are “infinite” in radically different senses of the term, then presumably there is a root conception of infinity which allows the infinite attributes to serve as mediators between substance and modes. The appropriate place to start, then, would be with a definition of the term ‘infinite’. Since the infinity of modes must follow from the infinity of substance we should expect to find this definition in Spinoza’s account of substance. In Chapter Two I analyze Spinoza’s conception of substance by examining the arguments for the early propositions in Part I of the *Ethics*, propositions which characterize the nature of substance. Despite what initially appears to be an effort to define the infinity of substance negatively, ultimately Spinoza expresses the nature of infinity positively. In the first Scholium to IP8 we find what seems to serve as a global definition of the term ‘infinite’, the “absolute affirmation” of some essence (G II/49/19-20); however, I will argue that this is *not* a definition in a strict sense but rather simply indicates the fundamentally positive character of the infinite. Indeed, there can be no definition of ‘infinite’ in Spinoza’s system at all. As Spinoza discusses in the *Treatise on the Emendation of the Intellect*, affirmation is what drives definition and makes it possible; if infinity is “absolute affirmation” then it follows that infinity must be the fundamental force which drives all definition. Thus the sense of what infinity is must evolve from Spinoza’s system as a whole, as modes evolve (in some metaphysical and eternal sense) from substance.

In order to grasp how infinity functions in Spinoza’s system we must examine how it functions in Spinoza’s account of the nature of substance. Spinoza argues that God is the only substance, and God’s absolute infinity consists in the expression of the divine essence in infinite attributes. Hence an account of the infinity of the attributes at once provides an account of the

absolute infinity of substance, and constitutes a first step in understanding how the attributes enable infinite substance to “entail” infinite modes. In Chapter Three I begin an examination of Spinoza’s doctrine of the attributes. The first part of the chapter develops and resolves an initial problem presented by the attributes: while substance is indivisibly infinite and unique, the attributes which express the essence of substance are infinitely plural. The solution, taken from Gilles Deleuze’s commentary on Spinoza, is that the attributes exist in a unique sort of plurality which is indivisible and fundamentally nondenumerable.¹⁴ The second part of the chapter develops a deeper and far more serious problem for the doctrine of the attributes, a problem generated by Spinoza’s account of the nature of the attribute of thought: the attribute of thought seems to express the essence of substance more adequately than any other attribute. Thus while Spinoza claims in the Scholium to IIP7 that the attributes have equal capacity to express the entirety of nature, he nevertheless appears to accord to the attribute of thought a special “dominance” over all other attributes. Spinoza’s characterization of the attribute of thought seems to produce deep inconsistencies within his system, and thereby threatens the success of Spinoza’s attempt to use the infinite attributes as middle terms mediating between substance and modes.

Chapter Four is the heart of this dissertation. The problem developed in the second part of Chapter Three, while it is in a sense a problem embedded within the larger problem of the derivation of modes from substance, is nevertheless central to the larger problem and its solution. In Chapter Four I develop a solution to the embedded problem which not only resolves the problem surrounding the apparent inequality of the attributes, but generates a means to solve the overarching problem of the derivation of modes from substance. My solution, a modification of

¹⁴ Gilles Deleuze, *Expressionism in Philosophy: Spinoza*, trans. Martin Joughin (New York: Zone Books, 1990), 31-4.

a solution argued by James Thomas, takes the unusual tack of contending that the attributes, which traditionally have been regarded as conceptually and metaphysically independent of one another in a sense in which each attribute *excludes* every other, in fact must necessarily *involve* one another. The mutual involvement of the attributes is so thoroughgoing that I term it a “radical mutual containment.” Spinoza apparently did not think the attributes involved one another in this way; however, I argue that not only should Spinoza accept this account upon pain of inconsistency, but that this solution, far from being *ad hoc*, is necessarily entailed by Spinoza’s own commitments and argumentation. The radical mutual containment of the attributes entails a concrete account of what Spinoza intends by ‘absolute infinity’. Spinoza remarks that a thing is absolutely infinite if infinite attributes may be affirmed of it (ID6 Exp.). I argue that each attribute is absolutely infinite if and only if the attributes mutually involve one another. Since each attribute expresses the essence of God or substance adequately, the expression of God’s absolute infinity must consist in the mutual containment or involvement of the attributes.

This solution seems self-defeating, because it entails that attributes appear as modes of one another, which seems to undermine their conceptual independence.¹⁵ However, the attributes cannot be independent, nor can they express the essence of substance adequately, if they do not involve one another in this way. Hence it is necessary that the attributes manifest themselves as modes. Moreover, this necessary consequence of Spinoza’s doctrine of the attributes in turn generates an explanation of Spinoza’s terse and difficult account of the infinite modes. In Chapter Five I use this new reading of the doctrine of the attributes to provide a

¹⁵ Errol Harris, “The Problem of the Attributes in Spinoza’s System (James Thomas),” *Idealistic Studies* 25 (1995): 212; Paul Eisenberg, “On the Attributes and their Alleged Independence of One Another: A Commentary on Spinoza’s Ethics IP10”, in *Spinoza: Issues and Directions: The Proceedings of the Chicago Spinoza Conference*, ed. Edwin Curley and Pierre-François Moreau (Leiden: E. J. Brill, 1990), 4-7.

detailed explanation of the nature of the so-called “immediate infinite modes” and “mediate infinite modes.” The attribute grasped insofar as it contains or involves all attributes is an immediate infinite mode, and this expression of the “formal reality” or intrinsic character of the attribute follows from the attribute’s absolute nature (IP21). The attribute insofar as it is contained within some containing attribute as one attribute among infinitely many is a mediate infinite mode. A mediate infinite mode is the expression of the “objective reality” of an attribute — an attribute insofar as it is expressed or presented in terms of the formal reality of a containing attribute. This expression of the attribute has a dual character — it has an objective character of its own which is informed by the formal character of the attribute which contains it — and so it does not follow from the absolute nature of an attribute but rather from an attribute insofar as it is modified by an infinite mode (IP22).

In this way the mutual containment or involvement of the attributes provides an account of how modes are “derived” from substance: the absolute infinity of substance must be expressed as an indivisibly infinite plurality of attributes; the attributes can adequately express substance only if they contain or involve one another; the attributes can contain or involve one another only if they appear as infinite modes of one another. This leaves unanswered the question more familiar to Spinoza scholarship, that of how *finite* modes are ultimately derived from the infinity of substance. In Chapter Six I suggest a possible solution which is shaped by the thesis of the radical mutual containment of the attributes. First I discuss the matter of the divisibility of the infinite modes, which must be the foundational assumption behind their actual division into finite modes; Martial Gueroult and Gilles Deleuze offer important arguments concerning how modes may be divided. Second, I suggest that the finite modes in a sense reflect the mutual containment of the attributes because finite modes can be regarded as both containing

the infinite (immanently) and being contained by it (as constituents). Each finite mode may be understood as the intersection of a mediate infinite mode with a mysterious “thing as it is in itself” (*res ut in se est*) which Spinoza mentions in the important Scholium to IIP7.

In the final chapter, Chapter Seven, I provide a summary of the argument of the dissertation with an eye to addressing the two aspects of the main problem — how modes follow from substance, and how Spinoza’s conception of the infinite is explicated in terms of its involvement in this transition. I also return to address some unanswered questions about Letter 12 left over from Chapter One. Then I discuss my choice of the metaphor of “containment” to describe the unusual relationship between the attributes, and suggest a hypothesis about what bearing this relationship may have on our understanding of metaphysical reductionism. Finally, I suggest what my account of Spinoza’s metaphysics might say about the mind-body problem, at least as Spinoza conceives it.

This dissertation does not and cannot provide a critical evaluation of the overall success of Spinoza’s metaphysical project. Such an evaluation would require deeper investigation into the legitimacy of the definitions of ‘substance’ (ID3), ‘attribute’ (ID4), and ‘mode’ (ID5). Spinoza’s definitions are so succinct that one cannot really grasp what they mean until one has fully examined how they function in the arguments Spinoza makes for the propositions of Parts I and II of the *Ethics*. As is evident from the wide variety of interpretations of Spinoza’s doctrines of substance, attributes, and modes, making sense of Spinoza’s metaphysics is a very difficult task. Hence I restrict myself here to explaining and elaborating what is ultimately an idealized version of Spinoza’s metaphysics, and as such I have simply assumed that the definitions, individually and collectively, are semantically coherent. I think this dissertation shows that there is good reason to think that this is the case, but I do not intend to argue for this here.

This task, while it is not evaluative of the success of Spinoza's overall project, is nevertheless critically and carefully evaluative of Spinoza's argumentation. My object is to make sense of Spinoza on his own terms, and in particular to develop an account of his metaphysics that is as internally consistent as possible. This has required, putting it somewhat glibly, that I make Spinoza more Spinozistic. Most commentators concede that Spinoza's philosophy cannot be made entirely consistent, at least not without significant alterations of his doctrinal commitments.¹⁶ In this dissertation I argue for a radical change in our way of thinking about Spinoza's metaphysics, and that this change is necessitated by the demands of consistency. I do not think that Spinoza himself thought about the doctrine of the attributes in the way that I think he should have, though I think he may have been close to recognizing it. In this respect my reading of Parts I and II of the *Ethics* does not constitute an attempt to present what I think Spinoza actually thought concerning his metaphysics. However, I argue that this radical development of Spinoza's project is a necessary consequence of his own doctrinal commitments and argumentation — that is, it *follows* from his arguments, even though he apparently did not recognize this himself. Moreover, this transformation elucidates some of the more obscure aspects of Spinoza's metaphysical system, particularly the doctrine of the infinite modes, and, most importantly for the aim of this dissertation, Spinoza's conception of the infinite. Hence in this respect this dissertation is nevertheless an attempt to remain faithful to Spinoza's project.

Thus, in the end I find it necessary to reject an aspect of Spinoza's thinking in order to render his system consistent. However, I reject it in order to make Spinoza's system more Spinozistic. This aspect is Spinoza's tendency to value the cognitive over the physical. Spinoza inherits from Cartesianism the assumption of the dominance of thought over the corporeal, and,

¹⁶ One such commentator is Errol E. Harris. I will discuss his arguments concerning the inconsistency of Spinoza's doctrine of the attributes, and which of Spinoza's commitments must be abandoned in order to achieve consistency in this doctrine, in Chapter Three.

as I discuss in Chapter Three, this tendency initially generates a deep inconsistency within his doctrine of the attributes. This aspect of Spinoza's thinking is deeply misguided and at odds with his assertion in the Scholium to IIP7 of the explanatory (or expressive) parity of the attributes. Spinoza's assumption of the dominance of thought appears in many places (for example, his valuation of the intellect over the imagination in Letter 12, based on the presumption that there is a faculty of imagination which is tied to the corporeal body, whereas the intellect is not), whereas the expressive parity of the attributes is really mentioned only in the Scholium to IIP7. Still, the latter is far more essential to Spinoza's project and seems to me to be what makes Spinoza's project unique and important. In many ways Spinoza seems to *want* to elevate the status of the corporeal: he says it is an attribute of God (IIP2) and it is not unworthy of the divine nature (IP15 Schol.: G II/60/5-15); the nature of the human body must be understood first in order to understand the nature of the mind (IIP13 Schol.: G II/96/32 – 97/6); the mind functions in a mechanical and deterministic way in fundamentally the same way that the body does (IIP9 and Dem.). Yet Spinoza nevertheless accepts the Cartesian distinction between intellect and imagination, as well as the embedded value judgment. Ultimately I think this is a damaging assumption on Spinoza's part, and is responsible for his failure to present his metaphysical system in a consistent way. In this dissertation I argue that the groundwork is there for the system to be adequate and at least *more* consistent than it appears; one alteration (though a significant one) is all that is needed in order to generate an interesting and provocative system of the infinite.

CHAPTER 1

SPINOZA'S "LETTER ON THE INFINITE" (LETTER 12)

Introduction

The central passage for the examination of the "derivation" of modes from substance (and hence, one would think, of the finite from the infinite) is Proposition 16 of Part I of the *Ethics*. Joel Friedman considers this proposition Spinoza's "Principle of Plenitude,"¹ for here Spinoza argues that "infinite things in infinite ways [*infinita infinitis modis*]" (G II/60/17-8) follow from the necessity of the divine nature. The Demonstration of IP16 hinges on the conception of the infinite: here the infinity of the divine nature is linked with the infinite plurality of things produced.² However, this demonstration disguises a transition between two radically different ways of being infinite. In the theological tradition the infinity of the divine nature is generally understood as simple and unique, whereas if the created world is regarded as infinite it is in a sense that involves plurality and diversity.

¹ Joel Friedman, "How the Finite Follows from the Infinite in Spinoza's System," *Synthese* 69 (1986): 392.

² The phrase *infinitis modis* is translated as "infinitely many modes" by Curley (*The Collected Works of Spinoza* (Princeton: Princeton University Press, 1985), 424) and more literally as "infinite ways" by Shirley (*Spinoza: Complete Works* (Indianapolis: Hackett, 2002), 227). Shirley's translation permits an ambiguity between boundlessness and endless plurality appropriate to Spinoza's use of the Latin *infinitum* (see n. 4 below), but Curley's unambiguous rendering is accurate in this case, as recurrences of the phrase *infinita infinitis modis* in the Scholium to IIP1 (G II/86/24) and the Demonstration to IIP3 (G II/87/8) clearly show from context that an infinite plurality is intended. (The phrase also appears in IIP4 and its demonstration (G II/88/7, 13), but considered in isolation from the two instances mentioned its sense is ambiguous.)

Spinoza's most explicit discussion of the infinite, Letter 12, the so-called "Letter on the Infinite,"³ reveals that both ways of being infinite are at work in the conceptual background to the Demonstration to IP16. In Letter 12 Spinoza discusses three distinctions concerning the infinite that philosophers fail to make, and from these distinctions deduces three ways in which a thing may exist as infinite. Spinoza claims that it is only the ignorance of these distinctions that makes the "problem of the Infinite" seem insoluble (G IV/53/1-2). I argue that Spinoza's distinctions collectively require a radical conceptual separation between how we understand 'quantity' in the case of substance versus 'quantity' in the case of modes; this amounts to a distinction between a simple and indivisible infinity proper to substance and a manifold and divisible infinity proper to modes. Since Spinoza repeats much of the material from Letter 12 in the Scholium to IP15, not only had Spinoza not changed his mind about the importance of these distinctions at the time he was composing Part I of the *Ethics*, but they were fresh in his mind when he composed IP16 and its Demonstration. In this chapter I argue that Spinoza's articulation of the concept of *infinitum* in Letter 12 when compared to the Demonstration to IP16 reveals a project to relate two radically different ways of being infinite within one system of reality.⁴

³ Gueroult notes that Tschirnhaus in Letter 80 coined the title *Epistola de Infinito* for Letter 12; Spinoza followed suit in Letter 81. See "Spinoza's Letter on the Infinite (Letter XII, to Louis Meyer)" in *Spinoza: A Collection of Critical Essays*, ed. Marjorie Grene (Garden City, New York: Anchor Books, 1973), 182 n.1.

⁴ George Kline ("On the Infinity of Spinoza's Attributes," in *Speculum Spinozanum 1677-1977*, ed. Siegfried Hessing (London: Routledge and Kegan Paul, 1977), 333-352) contends there are three senses of *infinitum* at work in the *Ethics*, two systematic senses ("perfect without limitation" and "all without exception" (342)) and one nonsystematic ("countless" or "indefinitely many" (344)). Kline appears to rely for the most part on his interpretation of appearances of the term *infinitum* in the *Ethics* rather than on Spinoza's discussion in Letter 12. Kline recognizes two different senses of *infinitum* at work in IP16, but thinks their connection is "the idea of unconditional affirmation, exemption from all negation and limitation" (343). However, Kline does not at all concern himself with why there are multiple senses of *infinitum* at all, nor does he discuss in which sense the infinite modes are infinite. Kline seems most interested in the infinity of substance and of the attributes. Nor does Kline mark any significance in Spinoza holding apart these two senses of *infinitum*; as I will argue, Letter 12 suggests that the distinctions in the sense of *infinitum* are important to the structure of Spinoza's system.

Spinoza's "Letter on the Infinite"

Letter 12 is addressed to Lodewijk Meyer, and was written during Meyer's tenure as publication editor of Spinoza's *Parts I and II of Descartes' "Principles of Philosophy,"* a geometrical exposition of Descartes' work. Meyer has asked Spinoza what he has "discovered about the Infinite" (G IV/52/25), and in Letter 12 Spinoza replies that he is glad to discuss it. It seems likely that a comment Meyer makes in his editorial preface to *Descartes' "Principles"* — that the things that Descartes in the *Principles* claims surpass human understanding Spinoza thinks "can not only be conceived clearly and distinctly, but also explained very satisfactorily" (G I/132/30-1) — obliquely refers to this letter, since Descartes makes a point of saying the infinite surpasses human understanding.⁵ Spinoza, in contrast, makes quite clear in Letter 12 that he thinks matters concerning the infinite are quite intelligible from the human perspective.

Spinoza remarks in Letter 12 that the "problem of the Infinite" seems insoluble only because thinkers have failed to make three pairs of distinctions: (1) between "what is infinite as a consequence of its own nature, or [*sive*] by virtue of its definition, and what has no bounds, not indeed by virtue of its essence, but by virtue of its cause" (G IV/53/2-5);⁶ (2) between "what is called infinite because it has no limits and that whose parts we cannot explain or equate with any number, though we know its maximum and minimum" (G IV/53/5-8); and (3) between "what we can only understand, but not imagine, and what we can [understand and] also imagine" (G IV/53/8-10). Spinoza claims that failure to make these distinctions prevents us from understanding which kinds of infinite can and which cannot be divided into parts, and which can be conceived as greater or lesser and which cannot (G IV/53/11-15).

⁵ *Principles* I, 26 (CSM I 201-2). See also *Descartes' "Principles"* IIP5 Schol. (G I/190/21 – I/191/4).

⁶ Curley's translation, modified. Spinoza uses two distinct terms which both must be translated in English as 'or', *aut* and *sive*. *Aut* is the exclusive disjunction, whereas *sive* has the sense of 'or (what is the same)' (though Spinoza is not entirely consistent in his usage of either term). Curley marks this distinction by representing *sive* with the italicized '*or*'; to avoid confusion I instead indicate any appearances of *sive* by inserting that term in brackets.

The significance of the first distinction is opaque, and its use in the argument of Letter 12 is not readily clear; I will return to it below. The other two distinctions are not immediately transparent either, but their use in the letter helps to explicate them. The third, between what cannot be imagined but only understood and what can be both imagined and understood, is recognizable as Descartes' influence upon Spinoza,⁷ but is not obviously relevant in this context; the second, between what is infinite because it is without limits and what is infinite though it has a maximum and minimum because its parts are innumerable, is anything but obvious and needs explaining. Spinoza elucidates these distinctions in his discussion of the concepts of substance, mode, duration, and eternity by emphasizing the characteristics of these which determine different ways of being infinite.

Concerning substance Spinoza emphasizes that (i) existence pertains to its essence, (ii) from this it follows that substance is not "one of many" but rather there is "only one of the same nature", and (iii) "every substance can be understood only as infinite" (G IV/54/1-8). It is unfortunate that Spinoza uses the term *infinitum* here before making the distinctions needed in order to determine which sense of 'infinite' applies to substance; this suggests, however, that Spinoza thinks his use of the term is ultimately univocal. In any case, we can immediately see from (i) that Spinoza wishes to relate substance's necessity — that is, its necessary existence by reason of its own essence — to its infinity. In addition, (ii) suggests that the infinity of substance is not to be understood as a numerical or quantitative infinity, but apparently as something qualitative, since a substance of a given nature must be infinite and yet unique. So here it seems

⁷ See *Metaphysical Thoughts*, Part I, Chap. I, where Spinoza characterizes imagining as awareness of traces in the brain of the motions of animal spirits (G I/234/21-5). Curley (*Collected Works*, 300 n. 1) notes that this doctrine appears in Descartes' *Treatise on Man* (CSM I 105-6); it also appears in *The Passions of the Soul* I, 35 (CSM I 341-2). Descartes also distinguishes between things which can be imagined and things which are "purely intelligible and not imaginable" (*Passions* I, 20 (CSM I 336)). Roger Ariew ("The Infinite in Spinoza's Philosophy," in *Spinoza: Issues and Directions*, ed. Edwin Curley and Pierre-François Moreau (Leiden: E. J. Brill, 1990), 14-31) thinks Spinoza in Letter 12 adopts one of Descartes' *nonsystematic* senses of 'imagination' "roughly equivalent to false understanding" (18).

that Spinoza has in mind distinction (1): substance is infinite by virtue of its own nature or definition. Since existence pertains to the essence of substance, substance cannot be regarded as anything but infinite. As we will see, Spinoza makes this inference based on the claim that necessity entails eternity, and eternity in turn implies infinity.

Turning to modes, which are “the Affections of Substance” (G IV/54/8), Spinoza emphasizes that by contrast with substance their definition cannot involve existence, and so a mode’s present existence tells us nothing about its past or future existence or nonexistence.⁸ However, Spinoza qualifies this, noting that it applies only to the case where we attend to the essence of modes and “not to the order of the whole of Nature” (G IV/54/12-3). Evidently attending to the order of the whole of nature will tell us about the past and future existence of modes.⁹ Spinoza here does not exclude the possibility that a mode may have infinite existence in time, only that existence could pertain to the nature of a mode. Thus, if a mode is infinite, it is not because of anything intrinsic to its nature, but because substance in some way underwrites its existence, and in the whole of nature there are no external circumstances which preclude the mode from existing continually. Evidently Spinoza here has in mind the other side of distinction (1): modes, if they are infinite, are infinite not by their nature but in virtue of their cause.

At this point in the discussion Spinoza emphasizes that substance and mode exist in entirely different ways (G IV/54/15-6), and uses the concepts of duration and eternity to explicate this. Spinoza says that duration explains the existence of modes only, and that eternity

⁸ Note that this amounts to saying that the essences of modes are indefinite with respect to time. See also *Ethics* IIP30 and 31, which say that we cannot have adequate knowledge of the duration of our body or of any other external body. IIP7 and 8 contend that the *conatus* (or “striving”) of a thing is its essence, which does not determine any specific duration; IIL5 suggests that the essence of an individual body determines no specific size. Thus these aspects of modes are indefinite.

⁹ Spinoza does not tell us whether attending to the order of the whole of nature requires only some sort of contemplation of the present order where knowing the past and future is a matter of causal extrapolation, or whether the “whole” includes omniscience of all of time, in which case knowing the past or future existence of modes follows trivially. One would think God would know the order of the whole of nature in the latter way. See IIP3 (G II/87/5-6).

explains the existence of substance (G IV/54/17 – 55/2). Spinoza does not here make explicit what he means by duration, though from his use of the term later in Letter 12 (in particular in the discussion of how the concept of time is used to determine duration considered in abstraction “from the way it flows from [*fluit*] eternal things” (G IV/56/18)) it appears that he intends the kind of existence that can be conceived to be the case at some moment but need not necessarily be the case in the past or future relative to that moment. In Part II of the *Ethics*, Spinoza provides an explicit definition of duration along such lines: “Duration is an indefinite [*indefinita*] continuation of existing” (IID5: G II/85/10). The Explication following IID5 notes that the continuation of existing is indefinite “because it cannot be determined at all through the very nature of the existing thing, nor even by the efficient cause, which necessarily posits the existence of the thing, and does not take it away” (G II/85/12-4). Hence for Spinoza duration is what we might loosely call persistence over time.¹⁰

Eternity, by contrast, Spinoza defines in Letter 12 as “the infinite enjoyment of existing, or [*sive*], pardon the Latin, of being” (G IV/55/2-3; Shirley’s translation, modified). Unfortunately this definition cannot be helpful, since again Spinoza speaks of it as “infinite” without specifying which sense of *infinitum* he has in mind — and the distinction between eternity and duration presumably should elucidate the distinction he wishes to make with respect to the infinite! Here, again, we see evidence that Spinoza thinks that the distinct senses of *infinitum* are fundamentally univocal. Still, it is clear in Letter 12 that Spinoza wishes to draw a hard and fast distinction between eternity and duration, and in the *Ethics* Spinoza does just that in a more explicit fashion. There he defines eternity somewhat differently: “By eternity I understand existence itself, insofar as it is conceived to follow necessarily from the definition

¹⁰ I say loosely, for Spinoza later in the letter identifies “Time” as a being of reason (*ens rationis*) (G IV/57/18), which means that time is merely an imaginative way of conceiving of duration, and not vice versa.

alone of the eternal thing” (ID8: G II/46/13-5). The Explication following ID8 strongly contrasts it with duration: “For such existence, like the essence of a thing, is conceived as an eternal truth, and on that account cannot be explained by duration or time, even if the duration is conceived to be without beginning or end” (G II/46/17-9). Thus whereas duration is conceived as existence over some extent of time (including one that is genuinely endless in time), eternity is existence without such temporal extension. So Spinoza appears to endorse a rather traditional understanding of the notion of eternity: a thing that is eternal has at base an existence which cannot be properly conceived as enduring, even over an endless extent of time. The connection of this with “infinite enjoyment of existing” or “existence itself” remains far from clear,¹¹ but we at least understand that for Spinoza eternity and duration characterize two radically different ways of existing, and this is the distinction he emphasizes in his characterization of substance and modes in Letter 12.

Spinoza goes on to discuss how the distinction between duration and eternity manifests itself in the forms of existence of substance and modes. Spinoza explains that attending only to the essence of modes and not to the order of the whole of nature allows us to determine their existence and duration “as we please” (G IV/55/6) — that is, to conceive them as having greater or lesser duration, and as being divisible into parts — without destroying our concept of them (G IV/55/6-9). However, since substance and eternity can only be conceived as infinite (again Spinoza leaves unspecified which sense of *infinitum* he has in mind), these cannot be conceived/imagined as greater or lesser or as divisible without destroying our concept of them (G IV/55/9-11). Thus Spinoza remarks polemically that those who think that extended substance is

¹¹ The characterization of eternity as “existence itself” becomes clearer after a careful reading of *Ethics* IP7. See Chapter Two, pp. 56-8.

composed of parts or bodies which are “really distinct”¹² merely “babble” (*garriunt*) and “rave” (*insaniunt*) (G IV/55/11-13; my translations). The usual arguments for the finitude of extended substance make the untenable assumption that extended substance is composed, and thus these arguments are unsound; arguments for the finite divisibility of lines which reason from the assumption that they are composed of points are unsound for the same reason (G IV/55/16 – 56/4).

Hence we see a specific way in which modes and substance have radically different ways of existing, for modes are at least imaginably divisible and have indefinite duration, whereas substance is neither divisible nor indefinite even if it is extended. Since duration applies to modes and eternity to substance, duration itself is (imaginably) indefinite from the perspective of the present and divisible, but eternity is definite, indivisible, infinite being. This implies that duration can be indefinite temporal extension, but what does Spinoza mean when he says eternity is “infinite enjoyment of existing”? This might lead one to think that eternity is definite but endless temporal extension. Yet any temporal extension, definite or not, intuitively seems divisible in principle; besides, Spinoza is clearly aware of the Scholastic distinction between eternity (timelessness) and sempiternity (endless temporal extent).¹³ So Spinoza must think substance is eternal while modes are conceivably sempiternal (presumably actually sempiternal in the case of infinite modes).¹⁴ Here, then, Spinoza has explicated distinction (1): Substance,

¹² Real distinction is one of three kinds of distinction that Spinoza appropriates from Descartes; see Spinoza’s *Metaphysical Thoughts*, Chap. V, and Descartes’ *Principles* I, 60-2 (CSM I 213-5). Gilles Deleuze thinks Spinoza uses the tripartite distinction of distinctions (real, modal, and conceptual/of reason) quite differently, however, and that these distinctions are crucial to understanding Spinoza’s doctrine of the attributes and their relation to substance: attributes are really distinct, which is a substantial distinction, and yet they are not numerically distinct, which is a modal distinction. See “Numerical and Real Distinction,” chap. 1 in *Expressionism in Philosophy: Spinoza*, trans. Martin Joughin (New York: Zone Books, 1990). I discuss this matter in detail in Chapter Three.

¹³ See *Metaphysical Thoughts* Part II, Chap. I.

¹⁴ Spinoza is not always consistent in his treatment of the temporal status of the modes; see, for example, *Ethics* IP21, which says that immediate infinite modes “have always [*semper*] had to exist and be infinite, or [*sive*] are, through the same attribute, eternal and infinite” (G II/65/13-4). Jonathan Bennett (*A Study of Spinoza’s Ethics*

because existence pertains to its nature, has eternal existence; since eternity is infinite enjoyment of existence, substance necessarily exists as infinite, and its infinity is intrinsic to its nature. In contrast, existence does not pertain to the nature of the modes, and hence they exist durationally; if a mode does exist with infinite duration, that is, sempiternally, this can only be because of some cause which is not intrinsic to its own nature.

Spinoza moves on to the consideration of why we are inclined to consider extended substance divisible, and in the process Spinoza introduces the third distinction into his discussion of the infinite. He remarks that we conceive of quantity either abstractly or superficially with the imagination, or concretely with the intellect — that is, as substance. The first is easily done, and yields a conception of substance as divisible, finite, composed, and “one of many” (G IV/56/10-2). The latter is more difficult to conceive, but is to “perceive the thing as it is in itself”, which is “infinite, indivisible, and unique [*unica*]” (G IV/56/12-5). So Spinoza argues that our failure to recognize that extended substance is indivisible is due to our failure to distinguish between what we can understand but not imagine, and what we can imagine as well as understand: extended substance is intelligibly indivisible, but imaginatively (that is, contemplating quantity in abstraction from substance) we can determine quantity and duration however we please.

Spinoza continues: when we abstract quantity from substance (that is, conceive it through the imagination) and “separate Duration from the way it flows [*fluit*] from eternal

(Indianapolis: Hackett, 1984)) contends that for Spinoza eternity simply amounts to sempiternity. Bennett recognizes that Spinoza does distinguish eternity and sempiternity, but contends that Spinoza essentially contends that “eternal” means “logically necessarily existing” (204). Thus eternity entails sempiternity: if something is eternal, then it can be truly affirmed at any time that such a thing exists. Thus Bennett argues that eternity *involves* duration though it cannot be *explained through* duration, so avoiding the apparent counterexample of the Explication of ID8 (204-5). Bennett cites a number of passages where Spinoza indeed speaks of eternity in temporal terms (205-6), and explains away passages from the *Metaphysical Thoughts* where Spinoza explicitly denies that God has duration (206). Bennett credits his reading to Martha Kneale (“Eternity and Sempiternity,” in Grene, 227-40); Kneale’s argument rides on her claim that the “only clear sense” in which a truth could be called timeless is that the words used express a true proposition regardless of the time at which they are uttered (233); she also draws attention to the difficulty of interpreting the Scholium to *Ethics* VP20 and VP23 and its Scholium because they refer to the *duration* of the mind without relation to the body (236-7). Spinoza does not present a clear doctrine of eternity with respect to modes, but I think it is clear that at least substance is eternal in the usual philosophical sense of the term.

things” (G IV/56/16-8) we can determine quantity and duration however we please. This is the origin of the concepts of “Measure” and “Time,” respectively. The concept of “Number” arises from the act of separating modes from substance and then classifying them (G IV/57/3-6). These three concepts “are nothing but Modes of thinking, or rather, of imagining” (G IV/57/7-8). It is those who fail to see the imaginative nature of these concepts and try “to understand the course of Nature by such Notions” (G IV/57/9-10) who find themselves espousing “the most absurd absurdities” (G IV/57/12), for they try to explain what can only be grasped by the intellect in terms of what are merely “aids of the Imagination” (G IV/57/15).

This passage is remarkable, because Spinoza, in saying that quantity is truly infinite, indivisible, and unique, and that the concept of number comes from an abstraction of modes from substance, appears to contend that quantity “as it is in itself” (IV/56/13) is non-quantitative!¹⁵ But Spinoza’s point is insightful. Indivisible unity is a condition for the possibility of the familiar finite, divisible, one-of-many sort of quantity. There can be no such quantities if the units composing such a quantity cannot hold together as indivisible entities, for example. (You cannot have exactly five apples unless in some sense these apples are indivisible — otherwise you could have as many apples as you like.)¹⁶ Thus the non-quantitative or “monistic” quantity of substance understood intellectually is the ground of the “pluralistic” quantity of the modes abstracted in imagination.

But the problem which Spinoza identifies is not simply a consequence of the failure to distinguish the concrete quantity of substance from the abstract quantity of imagination; there is another layer of misunderstanding which accompanies the confusion of aids to the imagination,

¹⁵ Perhaps this should not be surprising given Spinoza’s marked preference for geometry over arithmetic. See Martial Gueroult, “Spinoza’s Letter on the Infinite,” trans. Kathleen McLaughlin, in Grene, 201-2.

¹⁶ Moreover, the infinite divisibility of the mode is a consequence of the immanent indivisible infinity of substance itself, in and through which the mode is and is conceived. See my discussion of Gueroult’s interpretation of the infinite divisibility of finite modes in Chapter Six.

which are beings of reason (*rationis Entibus*), with existing modes. This again involves a separation of the modes “from the way [*modo*] they flow [*fluunt*] from eternity” (G IV/58/2). Spinoza provides an example: when duration is (wrongly) considered divisible by being confused with the abstraction of time, it appears impossible for an hour to pass, for half the hour must pass first, then half the remainder, then half that, to infinity. Thus one never reaches the end of the hour (G IV/58/4-11). Spinoza’s point is clear: it is time, the abstract measure of duration, that is divisible, and not the duration itself. Divisibility in terms of time is an aid to the imagination for easily grasping the extent of duration, but not a feature of the duration itself: the fact that the imagination can divide the hour to infinity does not entail that the duration the hour measures is itself so divisible. And Spinoza adds that the error is compounded when as an attempted solution one asserts that duration is composed of moments, for this “is the same as composing Number merely by adding naughts” (G IV/58/14-5).

Spinoza continues: number, measure, and time cannot be infinite, “[f]or otherwise Number would not be number, nor Measure measure, nor Time time” (G IV/58/18 – 59/1).¹⁷ Spinoza’s point is that these three *entia rationis* could not function as measures if they were not finite. He continues: thus many of those who confuse these *entia rationis* with things themselves deny an actual infinite. Spinoza avers that mathematicians do not make this mistake, as they recognize that there are “many things which cannot be explained [*explicari*] by any Number — which makes quite plain the inability of numbers to determine all things” (G IV/59/7-9). Further, there are also “many things which cannot be equated with any number, but exceed every number that can be given” (G IV/59/9-10) — not because of sheer multiplicity, but

¹⁷ The capitalization regimen here seems to indicate that Spinoza uses capitalization when he refers to the concept itself, but lowercase when he refers to its application. For a discussion of Spinoza’s (or his editors’) use of capitalization, see Kline, 334-7.

because “the nature of the thing cannot admit number without a manifest contradiction” (G IV/59/12-3).

Spinoza illustrates the latter case with an example borrowed from Descartes,¹⁸ and so introduces the second distinction, heretofore neglected, into his discussion. Consider two nested yet non-concentric circles configured as a pipe through which matter flows. Spinoza remarks that because of the inequalities in the orthogonal distances of the space between the circles “all the variations which the matter moving in it must undergo exceed every number” (G IV/59/14-6). Because the variations¹⁹ exceed every number even if we select a small portion of the pipe, the variations are not due to the “excessive magnitude” of the space; and, as the maximum and minimum spaces between the circles are known, the variations do not exceed every number because we are ignorant of any such maximum or minimum (G IV/59/16 – 60/4). Spinoza claims that we know the variations exceed every number because “the nature of the space between two non-concentric circles does not admit anything of the kind. So if anyone should wish to determine all those inequalities by some definite number [*aliquo numero*], he will, at the same time, have to bring it about that a circle is not a circle” (G IV/60/4-8). Similarly, Spinoza continues, to reduce the motions of matter and their duration to a number and a quantity of time is to consider corporeal substance as though it did not have the nature that it in fact has (G IV/60/9-15). Spinoza enigmatically suggests that in this case such abstraction consists in “depriving corporeal Substance (which we can not conceive except as existing) of its Affections” (G IV/60/12-4). Considering the context, Spinoza is less concerned with a misunderstanding of

¹⁸ The conclusion that Spinoza draws from this example is significantly different from Descartes’. Compare Spinoza’s *Descartes’ ‘Principles’*, IIP9-11, with Descartes’ *Principles* II, 34-5 (CSM I 239). I will discuss these in detail in Chapter Six.

¹⁹ As is clear from IIP10 and 11 in *Descartes’ ‘Principles’*, the “variations” under consideration here are the degrees of speed with which the fluid body moves and the multiplicity of parts into which this fluid body is divided. See Chapter Six, pp. 222-3.

the nature of substance than he is with a misunderstanding of the nature of modes. Apparently he intends that numbering and determining the duration of modes of corporeal substance — that is, extended bodies — is to consider them in abstraction from substance; considered properly as relative to substance we learn that they have motion and duration, but considered in this way these are not numerically quantifiable.

Having set out the significance of the three neglected distinctions, Spinoza finally delineates three ways in which a thing may exist as infinite: (1) “some things are infinite by their nature and cannot in any way be conceived to be finite” (G IV/60/17 – 61/1), (2) “others [are infinite] in virtue of the cause in which they inhere, though when they are conceived abstractly they can be divided into parts and regarded as finite” (G IV/61/2-3; Curley’s translation, modified), and (3) “others...are called [*dici*] infinite, or if you prefer, indefinite [*indefinita*], because they cannot be equated with any number, though they can be conceived to be greater or lesser” (G IV/61/3-5). And Spinoza concludes that this explication sufficiently explains the origin of the “Problem of the Infinite” and how it is solved (G IV/61/9-13).

Unfortunately, Spinoza does not fully explain which ways of being infinite apply to which sorts of things. Given that substance can only be understood as infinite, it is clearly infinite in sense (1). I will discuss substance and its infinity in the next chapter. But what qualifies as *infinitum* in sense (2)? *Duratio* and *Quantitas* are Spinoza’s prime examples of things which are infinite in virtue of their causes, though when regarded in the abstract forms of *Tempus* and *Mensura*, respectively, they become finite and divisible. But it is not readily clear what duration and quantity are, nor why they are concrete and infinite while time and measure are abstract and finite. Another candidate for something infinite in sense (2) may be the infinite modes, though Spinoza does not discuss them here. *Ethics* IP21-23 make clear that these modes

exist necessarily and as infinite, and this is due to their “following from” God, either from the absolute nature of an attribute of God or from some other mode which follows from the absolute nature of an attribute of God. I will discuss the infinite modes in Chapter Five. Another possibility, also unmentioned in Letter 12, is the attributes of substance. The attributes do not seem plausible candidates, for Spinoza does not speak of them as either “following from” or being caused by substance/God; instead, they “belong” (*competunt*) to God (IP9: G II/51/24) or “express eternal and infinite essence” (ID6: G II/45/24-5). Thus it seems likely that they in some sense express the infinity of substance without “following from” it. I will discuss the attributes in Chapters Three and Four.

Infinitum in sense (3), or *indefinitum*, is different from the first two in that Spinoza makes a point of saying that things in this third sense “are called” (*dici*) infinite; this suggests perhaps that while the first two are genuinely infinite the third kind is not *really* infinite, but is merely spoken of as such. Spinoza’s example of the space between the non-concentric circles implies that such spaces, which are finite and have minima and maxima, are in a sense infinite in that number does not apply to the variations within that space. And the finite quantity of fluid matter flowing through such a space, since it must undergo variations to the same degree as the continuously changing nature of the space dictates, must also vary infinitely — that is, possess an infinite plurality of parts and degrees of speed.²⁰ Thus *infinitum* in sense (3) seems to apply to certain sorts of finite objects — those that possess or undergo variations which exceed all number. I will return to this issue in Chapter Six.

More importantly, it seems that while Spinoza has distinguished several different ways of being infinite, it is not readily clear *why* this should be the case. What is the basis for these distinctions? Why should it appear in different forms in different places? And most importantly,

²⁰ See n.19 above.

how are they connected within Spinoza's system? Martial Gueroult notes that Spinoza only intended to dispel confusion concerning the infinite in Letter 12, and did not explicitly provide the positive doctrine that underwrites these distinctions.²¹ But we can emphasize the following conclusions from Letter 12: (1) Substance is infinite in such a way as to be indivisible, unique, and eternal; (2) modes can be conceived as divisible and manifold when they are conceived abstractly in imagination and hence separately from substance; (3) modes "flow" from substance as duration flows from eternity; and (4) substance and modes exist in radically different ways. The doctrine which underwrites these claims has a difficult task: it must explain how substance and modes, which each manifest themselves as "infinite" yet in entirely different ways, nevertheless are in such an intimate relationship that modes simply "flow" from substance. If substance is ultimately indivisible, then a plurality of modes flowing from it seems unintelligible if not impossible. One might think Spinoza would have a simple answer: since modes are divisible and manifold when conceived in abstraction from substance, perhaps their plurality is simply an illusion caused by considering them only in the imagination. Thus if we regard things solely under the auspices of the intellect, we will understand their true nature, which is ultimately the indivisible and unique nature of substance. But such radical monism is not consistent with the positive doctrine of the relationship between substance and modes that Spinoza sets out in IP16 of the *Ethics*.

Infinitum in Ethics IP16

Letter 12 indicates that modes in some sense "flow" from substance, but remains silent as to what exactly this means. In the *Ethics* Spinoza provides positive argumentation for this, but the character of these arguments initially seems at odds with what he says in Letter 12. Where

²¹ "Spinoza's Letter on the Infinite," 183.

Letter 12 emphasizes a *monism* of the infinity of substance, and suggests that the pluralistic infinity of the modes is an illusion generated by the imagination, Proposition 16 in *Ethics* Part I, which asserts the relationship in which the modes “follow” or “flow” from substance, depends upon a *pluralism* of the infinity of substance, and further contends that this pluralistic infinity of substance is in fact recognized by the intellect.

IP16 asserts: “From the necessity of the divine nature infinite things in infinite modes (that is, everything which can fall under the infinite intellect) must follow” (G II/60/17-9; my translation). Since the “divine nature” refers to the essence of God, who according to Spinoza is the only substance (IP14 and Cor. 1), this proposition clearly refers to the relationship between substance and modes posited in Letter 12. However, the Demonstration of IP16 takes quite a different turn from what Letter 12 would lead us to expect:

[T]he intellect infers from the given definition of any thing a plurality of properties that really do follow necessarily from it (i.e., from the very essence of the thing); and 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 ID6), each of which also expresses infinite essence in its own kind, from its necessity infinite things in infinite modes (i.e., everything which can fall under the infinite intellect) necessarily must follow. Q.E.D. (G II/60/22-30; Curley’s translation, modified)

The argument clearly hinges on *infinitum*: the more reality a definition or essence expresses, the more properties the intellect infers from that essence; the divine nature has absolutely infinite attributes, and hence expresses infinite reality; therefore infinite things in infinite modes must follow. At least on the face of it, this argument is immediately at odds with Letter 12 in two respects. The obvious difficulty is that the demonstration derives an infinite plurality of modes from the divine nature in virtue of the divine nature itself involving an infinite plurality of attributes. But since the divine nature is substantial (ID6), it should be unique and indivisible. Letter 12 never mentions attributes, and so their appearance in the Demonstration of IP16 is

significant, for it appears that Spinoza thinks the infinite plurality of attributes which pertain to the divine nature somehow constitutes a transition between the indivisibility and uniqueness of substance and the divisibility and plurality of the modes. The second difficulty is that Spinoza claims that the intellect is part of this inference: it is the intellect that infers a plurality of properties of a thing from its definition. But Letter 12 suggests that it is the imagination that perceives plurality, while the intellect grasps reality as flowing from substance, and hence as ultimately indivisible and unique. How is it, then, that the intellect nevertheless plays a role inferring a plurality of things from the necessity of the divine nature?

IP16 presents further problems. First, even if we grant that the nature of God consists of an infinite plurality of attributes, which apparently are *properties* inferred from the divine essence, why should it follow that an infinite plurality of *things* “follow” or “flow” from the divine nature as well? This is clearly Spinoza’s intention, as he explains in a gloss on the argument in the Scholium to IP17:

I think I have shown clearly enough (see IP16) that from God’s supreme power, or [*sive*] infinite nature, infinite things follow in infinite modes, that is, all things [*omnia*] have necessarily flowed [*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. (G II/62/14-19; Curley’s translation, modified)

In Letter 12 Spinoza argues that we must conceive the existence of substance and the existence of modes as “entirely different” (G IV/54/15-6). And a key part of this difference is in how they exist as infinite: substance is indivisibly infinite, whereas its modes are divisibly infinite in some sense. Spinoza further contends that it is crucial for us to understand and be mindful of this distinction if we are to avoid the problems surrounding the infinite. But if we do as Spinoza suggests and accept the distinction, then the Demonstration of IP16 has a peculiar character. Substance, which is indivisibly and uniquely infinite, produces the modes, which are divisibly

and plurally infinite, and the point of connection is ostensibly a shared infinite nature. However, as these ways of being infinite are radically different and indeed play a significant role in the radical existential distinction between substance and modes, it is not at all clear *how* the modes can follow from substance in this way. As Yirmiyahu Yovel puts it, in the transition from substance to modes there has been a “depreciation in the concept of infinity” which allows “unaccountably” for a passage from *Natura naturans* (substance and the attributes) to *Natura naturata* (the modes or affections of substance).²² But Spinoza clearly seeks to avoid any such depreciation in the quality of being infinite. He appears forced to concede either that the plurality of the attributes really divides substance, or that the modes are not really divided — but if he chooses either horn of the dilemma, he no longer has any clear basis to assert that the existence of substance and the existence of modes are “entirely different.”

This difficulty is closely related to — and exacerbated by — another apparent inconsistency in Spinoza’s arguments. *Ethics* IP3 states that “If things have nothing in common with one another, one of them cannot be cause of the other” (G II/47/16-7). Its Demonstration rests on IA5, which posits that “Things 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” (G II/46/29-31). Since the definition of ‘mode’ claims that a mode is “in another through which it is also conceived” (G II/45/20-1), and since it is clear that the mode is in and conceived through substance, it follows that modes must have *something* in common with substance. Yet in the Scholium to IP17 Spinoza makes the surprising claim that God “must necessarily differ from [things] as to his essence and to his existence. For what is caused differs

²² Yirmiyahu Yovel, “The Infinite Mode and Natural Laws in Spinoza,” in *God and Nature: Spinoza’s Metaphysics*, ed. Yirmiyahu Yovel (Leiden: E. J. Brill, 1991), 86. Yovel specifically sees this “depreciation” in terms of a shift from the eternity of substance to the sempiternity of infinite modes. As sempiternity is durational, I think Yovel has in mind the same depreciation that Letter 12 implies in concert with IP16.

from its cause precisely in what it has from the cause” (G II/63/15-7).²³ Thus Spinoza seems to endorse a conceptual and causal dependency of modes upon substance, and yet characterizes them as radically different.

Spinoza does not see any difficulty in this matter, as is evident from his response to a letter from Georg Hermann Schuller (written on behalf of Ehrenfried Walther von Tschirnhaus) concerning this very problem in the *Ethics*:

...I pass to the second thing [you ask about], which is, whether one thing can be produced by another from which it differs, both with respect to essence and with respect to existence. For things which differ in this way from one another seem to have nothing in common. But since all singular things, except those which are produced by their likes, differ from their causes, both with respect to essence and with respect to existence, I do not see any reason for doubting here. (Letter 64: G IV/278/11-16)

Spinoza clearly thinks there is no inconsistency. Hence Spinoza consciously wishes to say that God and the modes or “singular things” that God produces differ both as to essence and as to existence, and yet modes nevertheless “flow” from God’s essence. Spinoza’s assertion in Letter 12 of a radical difference in existence between substance and modes carries over into the *Ethics*: God and singular things are so different as to have nothing in common with respect to essence or existence. Yet Spinoza’s claims can only be consistent if there is something other than essence or existence which substance and modes share in common. The Demonstration of IP16 suggests that the common factor is the infinite plurality of God’s attributes.

Could Spinoza perhaps have forgotten about or even rejected the distinct senses of *infinitum* from Letter 12 by the time he composed the Demonstration for IP16? This is unlikely:

²³ This passage actually talks about God’s *intellect* as the cause of all things. Spinoza here speaks counterfactually, because he rejects the notion that will and intellect pertain to the essence of God; Spinoza cannot accept the claim that God’s intellect causes all things because God as thinking substance is cause only of *ideas* (IIP5,6). However, Spinoza does think that God is cause of the essence and existence of all things (IP24 Cor., P25), and he appears to offer as axiomatic the claim that the effect differs from its cause in what the effect receives from the cause. So I think that this claim does apply to the causal relationship between substance and modes affirmed in IP16. It at least is consistent with Spinoza’s assertion in Letter 12 that substance and modes exist in radically different ways.

in the Scholium to IP15 — which immediately precedes IP16 — Spinoza reiterates some of the more salient points from Letter 12 about the indivisibility of extended substance. In particular he considers and rejects other arguments made by those who contend that corporeal substance is composed of parts and hence cannot be infinite (G II/57/24-7); these fallacious arguments appeal to absurdities that merely appear to follow from assuming that corporeal substance is infinite (G II/57/28 – 58/9). Spinoza also reiterates the distinction between quantity as conceived abstractly by the imagination and quantity as conceived concretely in substance by the intellect (G II/59/20-30). Considering that the distinction in ways of conceiving quantity is central to the distinctions in *infinitum* that Spinoza makes in Letter 12, it is likely that he has not only not forgotten them, but even thinks these distinctions *lead into* IP16.

One more thing should be noted about the Demonstration of IP16: Spinoza introduces the nature of definition into the argument, and its role is hardly unimportant. For in some sense the plurality of attributes that constitutes the divine nature is a plurality of properties which follow from the definition of that divine nature. The divine nature as substance is unique (IP14 Cor. 1) and indivisible (IP12, 13). Hence a definition expresses an essence, and the essence is unitary — and yet the intellect immediately infers a plurality from that definition, for the plurality of attributes is the central feature of the definition of God (ID6). Hence definition itself plays a key role in the “flow” of plurality from unity. As we will see in the next chapter, Spinoza’s conception of the infinite drives this flow from behind the scenes.

Conclusion

With Letter 12 serving as background for Spinoza’s conception of the infinite, the interpretation of IP16, and hence Spinoza’s doctrine of substance, modes, and their relation,

presents a considerable mystery. Spinoza clearly thinks that we must recognize three radically distinct ways of being infinite in order to dissipate the “problem of the Infinite.” These ways of being infinite are grounded in the intellectual and imaginative apprehensions of quantity, and entail radically different ways of existing for substance and modes. Yet Spinoza’s casual use of the term *infinitum* before he has made the distinctions clear, and its clearly transitional importance in the Demonstration of IP16 — which in the text appears immediately after Spinoza discusses the key distinction between the intellectual and imaginative ways of understanding quantity in the Scholium to IP15 — shows that Spinoza indeed thinks there is a univocal concept linking these radically different ways of existing as infinite. An extreme tension exists between radical distinction (between the indivisible, unique infinite and the divisible, plural infinite) and tacit univocity in Spinoza’s account of the infinite. Spinoza wishes to accommodate two ways of being infinite within his system, and yet their radical difference in character demands that they simultaneously be held apart.

In what follows I will argue that this tension is, paradoxically, essential to the coherence of Spinoza’s system. Substance and mode must be radically held apart, and yet intimately connected, and Spinoza uses the concept of *infinitum*, particularly as it is manifested in the infinite attributes, in an attempt to engineer this. Spinoza is not merely making things more difficult than they need to be. The contrast between the infinite simplicity of the God of the medieval theological tradition with the infinite diversity of the observable world — and the assumption that they must have a deeper connection — holds some weight with Spinoza. Letter 12 captures the radical difference between these two ways of being infinite; IP16, on the other hand, appeals to their intimate connection. Spinoza is doing nothing less than trying to bridge a gap that philosophers like Descartes think unbridgeable, at least for the human understanding.

But in order to understand how Spinoza hopes to achieve this we must consider his discussions of substance, attribute, and mode in the *Ethics*, and how the infinite manifests itself in those parts of the system.

Taken in conjunction, Letter 12 and *Ethics* IP16 present three questions that will guide the following chapters:

- (1) What is the deeper common structure of Spinoza's conception of the infinite that allows the infinity of substance to remain in some sense univocal with the infinity of modes, despite the fact that these two manifestations are wholly opposite to one another in character? In other words, what is the underlying *definition* of 'infinite'?
- (2) How can the infinity of substance be indivisible and unique and yet consist in an infinite plurality of independent attributes? In other words, how can substance consist of a plurality and yet be undivided?
- (3) Why and how does the intellect infer a plurality of properties, and in turn a plurality of things, from a singular essence, when the intellect should grasp reality primarily as indivisible and unique substance? In other words, what role does definition play in the "derivation" of the plurality of modes from the unity of substance?

CHAPTER 2

“ABSOLUTE AFFIRMATION”: THE INFINITY OF SUBSTANCE

Introduction

As we have seen, the “Letter on the Infinite” (Letter 12) delineates three different ways in which a thing can be considered infinite; while this classification perhaps resolves the problems of the infinite with which philosophers have struggled in general, it remains a mystery as to how the different senses of *infinitum*, despite the fact that they mark radical differences in the natures of substance and modes, nevertheless constitute a link between substance and modes as explicated in the Demonstration of IP16 in the *Ethics*. An indivisible, unique infinite generates a divisible, plural infinite in virtue of consisting of an infinite plurality of attributes, but as yet we have no explanation for why substance exists as an infinite plurality when it seems it should be infinite in a sense which implies indivisibility.

Letter 12 deals only with what Spinoza in the *Short Treatise* (I, 6: G I/45/21-20) calls *propria* — that is, necessary but not essential properties — of the infinite, not with its essential nature.¹ That is, the letter contends that substantial infinity is indivisible, metaphysical, etc., while modal infinity is divisible, mathematical, etc. — but it does not get to what the infinite is *per se*. This is because in the letter Spinoza offers no metaphysical account of the infinite, but

¹ See Deleuze, 49-50. The *Short Treatise* discussion focuses on God rather than *infinitum*, but the point of the discussion is that the traditional theological definition of God as simple, immutable, etc. appeals to *propria* of God rather than God’s true attributes, which include thought and extension. Hence it is concerned with dispelling an incorrectly formed definition.

seeks only to dispel misconceptions about it.² What we need, then, is a definition of *infinitum* that allows us to deduce its properties, including the reasons why it is indivisible and unique in substance and yet divisible and plural in modes. To characterize the matter in terms of the account of definition which Spinoza describes in the *Treatise on the Emendation of the Intellect*, “the properties of things are not understood so long as their essences are not known” (G II/35/6-7). Since we do not yet know why the infinite might in different contexts be considered as indivisible or divisible, unique or one of many, we have no adequate definition of *infinitum* that allows us to deduce these properties in a systematic way. Letter 12 discusses only some of the *propria* that follow from this unknown definition.³

The natural place to seek an account of *infinitum* is in the metaphysical system developed in the *Ethics*. However, although Spinoza gives a definition of ‘finite in its own kind’ (*in suo genere finita*) (G II/45/8), he provides no clearly marked definition of *infinitum*.⁴ So we must distill a definition from his *use* of the term in the *Ethics*. In this chapter I argue that the closest Spinoza comes to a definition is the characterization of *infinitum* as “absolute affirmation” (*absoluta affirmatio*) in the first Scholium to IP8 (G II/49/19-20); however, the sequence of propositions that leads to this affirmation of the infinity of substance (IP 2-6) nevertheless characterizes substance in a negative way, suggesting a negative way of understanding the nature of the infinite. Despite this tension between the affirmative nature of the infinite and the

² Gueroult, “Spinoza’s Letter on the Infinite,” 183.

³ It should be noted that in the *Treatise on the Emendation of the Intellect* Spinoza emphasizes that true definitions (sometimes called ‘genetic definitions’ because such a definition indicates how the thing is generated) express the essences of things; abstractions are not things and “we must never infer anything from abstractions” (G II/34/15-6). Since *infinitum* is a property of things and not a thing we should not expect a genetic definition. Still, it seems (at least at this juncture) that Spinoza nevertheless ought to provide something *akin* to a genetic definition which would provide a unified account explaining the distinctions made in Letter 12 and elucidating the Demonstration of IP16.

⁴ Kline acknowledges the lack of a definition, and refers the reader to Gueroult’s discussion (*Spinoza* (Paris: Aubier, 1968-74), 1:70-3) concerning the missing definition, in which Gueroult ends up (in Kline’s words) “suggesting as its cause [i.e., the reason for the absence of a definition] the complexity of an adequate ontological theory of infinity”; see Kline, 351 n. 24.

negative character of the early propositions, Spinoza's characterization of substance is in the end "affirmative." Furthermore, I will contend that the reason why Spinoza does not offer a definition of *infinitum* is due in some part to the fact that as absolute affirmation it underwrites the possibility of definition as such.

Early Definitions in Ethics I: ID2 and ID6 Exp.

The investigation of Spinoza's conception of the infinite at work in the *Ethics* must begin with substance. Indeed, what discussion of 'infinite' there is in the *Ethics* takes place for the most part in his exposition of the nature and properties of substance in the early propositions of Part I. As we have seen in Letter 12, for Spinoza the infinite most properly belongs to the nature of substance, for it is infinite by virtue of its own nature. In the *Ethics* he does not treat substance as infinite by definition, but rather because God must be the only substance (IP14), and God is the cause of all things (IP16 Cor. 1), anything else that will qualify as infinite ultimately must derive its infinity in one way or another from God.

Spinoza begins Part I of the *Ethics* with his definitions of the key terms and concepts with which he will work. However, despite the near ubiquity of the concept of the infinite in his discussion of substance, Spinoza provides no independent definition for 'infinite' at this point. He does provide, however, a definition of 'finite in its own kind' (ID2): "That thing is said to be finite in its own kind that can be limited by another of the same nature" (G II/45/8-10).⁵ Some commentators seem to think that this implies a complementary negative definition of 'infinite' — presumably referring to something that cannot be limited by another of the same nature.

Indeed, Don Garrett seems to think that this definition essentially provides us with the definition

⁵ It is perhaps significant that the definition says that a finite thing is such that it *can* be limited (*terminari potest*) by another of the same nature; this suggests that a finite thing may not in fact be so limited. This in turn implies that something that may be indefinite in character nevertheless may qualify as finite in its own kind.

of infinite, even going so far as to refer casually to ID2 as “the definition of ‘infinite’.”⁶ But can we make such an inference? It is not immediately clear what the complementary definition would be like: perhaps in order for a thing to be infinite there must be no other things of the same nature (which is the case for any substance of a given nature, at least (IP5)), or perhaps an infinite thing cannot be limited by another thing *even if* it is of the same nature. Relying exclusively on ID2 leaves the intrinsic character of *infinitum* ambiguous.

But perhaps we need not rely on ID2. *Infinitum* appears as a feature of the definition of ‘God’, ID6: “By God I understand a being absolutely infinite, i.e., a substance consisting of infinite attributes, of which each one expresses an eternal and infinite essence” (G II/45/22-5). The Explication following the definition distinguishes two ways of being infinite, which, interestingly, have no obvious connection to the distinctions made in Letter 12:

I say absolutely infinite, not infinite in its own kind; for if something is only infinite in its own kind, we can deny infinite attributes of it; but if something is absolutely infinite, whatever expresses essence and involves no negation pertains to its essence. (G II/46/1-6)

Could these statements help? This passage is also ambiguous: the conditional statements could be intended as definitions, or they could be intended to mark necessary but not essential properties (i.e., *propria*) of things that are infinite in their own kind and things that are absolutely infinite. That is, perhaps this Explication concerns only the differentiation of what is infinite in its own kind from what is absolutely infinite, and expressly for the purpose of understanding the definition of God more clearly — and so cannot serve as a definition of ‘infinite’.

The ambiguities here are sufficient to cast doubt on these passages as a source of a helpful definition of *infinitum*. However, they share another feature which suggests they are a dubious source for a definition: from them we may only deduce negative characterizations of

⁶ “Spinoza’s Necessitarianism”, in *God and Nature: Spinoza’s Metaphysics*, ed. Yirmiyahu Yovel (Leiden: E. J. Brill, 1991), 207.

what it means for something to be infinite. From ID2 we can only define infinite as the negation of finitude; ‘infinite in its own kind’ denotes something of which infinite attributes can be denied; ‘absolutely infinite’ denotes something which involves “no negation” (a double negation). This is at odds with Spinoza’s account of a true definition, for in the *Treatise on the Emendation of the Intellect* Spinoza contends that a definition must be “affirmative,” even if our language seems to express it negatively (G II/35/24-7); indeed, Spinoza specifically recognizes *infinitum* as a word that expresses negatively what in truth is “affirmative” (G II/33/15-20).⁷ But could a definition that is essentially negative — that denies a feature of something — serve to unite the radically disparate ways of being infinite that appear in Letter 12? Since a negative definition would suggest that we only understand what the infinite is not, and not what it is, and since Spinoza thinks the infinite is quite intelligible, we should be wary of settling with these definitions.

Indeed, Spinoza thinks that the infinite is ontologically prior to the finite: IP16 implies that the modes, presumably both those that are finite and those that are infinite, follow from the necessity of the divine nature, absolutely infinite substance (G II/60/17-9), and the Scholium to IP15 shows that Spinoza denies that infinite quantities are composed of finite parts (G II/58/19-29). To divide infinite substance amounts to conceiving of substance incoherently (IP12, 13 and Schol.; see also Letter 12: G IV/55/9-11). Spinoza rejects the notion that an infinite being could be dependent in any sense upon finite beings, either conceptually or in terms of composition. So a definition of ‘infinite’ that is derived from the definition of ‘finite’ certainly will not capture the fact that the finite in some sense is caused by or “follows” from the infinite. Perhaps, we might hypothesize, no verbally affirmative definition is available because of the “poverty of

⁷ Again, we should not expect a ‘true’ definition of *infinitum* because it is not a thing (see n. 3 above); nevertheless, if a positive characterization of what it means to be infinite can be found, surely it should be preferred.

language” (G II/35/26), and so the problem of the negative characterization is merely a linguistic matter and not a conceptual issue.⁸

It will be helpful at this point to consider Descartes’ treatment of the characterization of the infinite, for Descartes makes a distinction in terms of positive and negative characterizations between ‘infinite’ and what he calls ‘indefinite’. In the *Principles of Philosophy* Descartes contends that only God should be understood as infinite:

Our reasons for using the term ‘indefinite’ rather than ‘infinite’ in these cases [i.e., situations where we are unable to discover a limit, such as the magnitude or divisibility of extension] is, in the first place, so as to reserve the term ‘infinite’ for God alone. For in the case of God alone, not only do we fail to recognize any limits in any respect, but our understanding positively tells us that there are none. Secondly, in the case of other things, our understanding does not in the same way positively tell us that they lack limits in some respect; we merely acknowledge in a negative way that any limits which they may have cannot be discovered by us.⁹

At a first glance this seems to satisfy the need for a positive understanding of what it means for something to be infinite. But closer inspection reveals that it does not. Descartes’ differentiation of ‘infinite’ and ‘indefinite’ in terms of positive understanding versus negative understanding distinguishes them only from an epistemic standpoint. But from an ontological standpoint both are characterized negatively in terms of an absence of limits. In Letter 12 Spinoza apparently wishes to make a distinction in some ways similar to Descartes’ between ‘infinite’ and ‘indefinite’;¹⁰ however, an epistemically-based distinction between infinite and indefinite cannot satisfy Spinoza’s needs because none of the distinctions Spinoza makes in Letter 12 are based on ignorance concerning limits. So Spinoza cannot settle for a negative definition of ‘infinite’.

⁸ However, Spinoza’s description of ‘finite in its own kind’ apparently denotes a *capacity* to be limited, and as such could be conceptually and not merely linguistically positive. See n. 5 above. A complementary negative definition of *infinitum* as the lack of such a capacity would clearly be conceptually negative.

⁹ *Principles of Philosophy* I, 27 (CSM I 202).

¹⁰ Gueroult, “Spinoza’s Letter on the Infinite,” 185.

There is one last reason that a satisfactory positive definition cannot be deduced from the definitions for Part I. Returning to the definition of ‘finite’ in ID2, Spinoza indirectly clarifies why he uses the locution ‘finite in its own kind’ rather than simply ‘finite’ in the process of elucidating the locution ‘absolutely infinite’ in the Explication following ID6, the definition of God: “I say [that God is] absolutely infinite, not infinite in its own kind; for if something is only infinite in its own kind, we can deny infinite attributes of it; but if something is absolutely infinite, whatever expresses essence and involves no negation pertains to its essence” (G II/46/2-6). It is clear here that there are two manifestations of the infinite: “absolutely infinite” and “infinite in its own kind.” The former is perhaps infinity *simpliciter*, while the latter is a limited sort of infinity: infinity within a particular variety of thing. This suggests an explanation for the reason for using the locution ‘finite in its own kind’. In order to maintain terminological parallelism, there should be an ‘absolutely finite’. But this is clearly an oxymoron, for something absolutely finite would be limited without reference to anything else. If there were no reference to anything else, then there would be nothing that could ground limitation. Therefore absolute finitude is impossible. So Spinoza’s definition of ‘finite in its own kind’ emphasizes that finitude is intrinsically relative. Indeed, his additional note of explanation confirms this: “For example, a body is called finite because we always conceive another that is greater. Thus a thought is limited by another thought. But a body is not limited by a thought nor a thought by a body” (G II/45/10-3). Thus a body’s finitude can only be grasped relative to other bodies. But in the case of the infinite, for Spinoza there can be relative infinitude as well as absolute infinitude.¹¹ At least in the case of ‘absolutely infinite’, then, a definition that asserts that

¹¹ Frank Lucash suggests that for Spinoza infinity is in fact a matter of *degree*. See “On the Finite and Infinite in Spinoza,” *Southern Journal of Philosophy* 20 (1982): 71.

absolute infinity is characterized relative to something else which in some sense limits it — that is, a negative definition — will not do.

It is clear that these definitions alone provide little in the way of a positive account of *infinitum*, and hence neither will provide us with any means of seeing how the finite should follow from the infinite. On the contrary, left like this, the infinite seems to be explained along the lines of Locke’s account of the idea of the infinite: it is a complex idea that is ultimately derived from the idea of the finite.¹² Thus we must look to the early propositions of Part I to provide an account that will positively ground our understanding of the infinite, even if (because of the “poverty of language”) the words that we use are negative.

IP2-6: Negative Characterizations of Substance

Spinoza does not provide a definition of *infinitum* among the key definitions in Part I. However, he deduces in IP8 that infinity is a necessary property of substance, and he argues in IP11 that ID6, the definition of God as a being whose essential property is to be absolutely infinite (G II/45/22), expresses a real entity. The concept of the infinite only begins to do work upon its appearance in IP8; ID6, though it is the first mention of *infinitum* in the *Ethics*, does not play any role until IP11. Therefore we should expect in the propositions leading up to IP8 a basic definition of ‘infinite’ to evolve from the definition of substance. What emerges, however, is a succession of *denials* of certain features one might expect of substance, which suggests that Spinoza will end up with a negative characterization of the infinite. In the process of examining IP2-7 and their demonstrations, we find that their central theme is that substance is by nature “absolute”: its nature is to be independent of all else with respect to both essence and existence.

¹² John Locke, *An Essay Concerning Human Understanding* II, 17, §§2-3. In the Peter H. Nidditch edition, (Oxford, England: Oxford University Press, 1975), 210-1.

Hence in these early propositions Spinoza characterizes substance in a negative manner, denying various relational characteristics of substance.

ID3, the definition of ‘substance’, is the foundation for the early propositions of the *Ethics*: “By substance I understand what is in itself and is conceived through itself, i.e., that whose concept does not require the concept of another thing, from which it must be formed” (G II/45/14-6). The concept of ‘infinite’ is not incorporated in this definition, though Spinoza goes on to deduce that substance is necessarily infinite (IP8). Thus he must make the case that this definition of substance must entail the infinity of any substance.

IP2 constitute the first of several negative characterizations of the nature of substance: “Two substances having different attributes have nothing in common with one another” (G II/47/9-10). Spinoza simply says that this is “evident from D3,” the definition of substance: insofar as substance is in itself and conceived through itself, substances of different attributes have concepts that do not involve one another (IP2 Dem.: G II/47/12-4).

As happens at times in Spinoza’s geometrical method, more definitions and axioms are relevant to the argument than those he explicitly cites.¹³ ID4, the definition of attribute (“what the intellect perceives of a substance, as constituting its essence” (G II/45/17-9)) is clearly relevant since attributes play a key role in IP2.¹⁴ ID4 is also implicitly involved in the argument because the attribute constitutes the essence of the substance and (as becomes apparent in the Demonstration for IP5) if there is any way of differentiating substances, it must be in terms of

¹³ A notable example is the definition of ‘adequate idea’ (IID4): Spinoza never explicitly appeals to this definition in any demonstration or scholium that I have found despite the fact that he discusses adequate ideas at length late in Part II. Instead, he appeals to the Corollary to IIP7, which does not mention adequate ideas at all. This instance is a significant problem because it makes Spinoza’s account of truth rather difficult to ascertain. A less significant instance is the Demonstration to IIP2, where Spinoza clearly appeals to IIL3 but does not cite that Lemma explicitly.

¹⁴ IA2 (“What cannot be conceived through another, must be conceived through itself” (G II/46/22-3)) superficially appears as though it has some bearing here, but this axiom is concerned more with the identification of a substance than what properties follow from it; hence if Spinoza appealed to it here his argument would be circular.

attributes. Most obviously related is IA5, which says that things which share nothing in common cannot be understood through one another, or what is the same, “the concept of the one does not involve the concept of the other” (G II/46/30-1). The wording in the quotation appears verbatim in the Demonstration of IP2. If the intent of the axiom is to equate having nothing in common with not being able to be understood through one another, then it should be part of the articulation of IP2. On the other hand, it seems that IA5 may instead imply that not being understood through one another is a feature of all things that share nothing in common, but not vice versa; in this case there should be a corollary that substances that have different attributes and hence nothing in common therefore are not conceivable through one another. The definition of substance (ID3) does indeed imply such a corollary. In any case, I think the implicit argument is that two substances which share attributes must have conceptual common ground, meaning they either are not conceivable one through the other (in which case one would be a substance and the other a mode of that substance) or both are at least partially conceivable through some third thing (and hence neither would be a substance but rather modes of some other substance); either way the hypothesis of two substances is contradicted. Therefore substances with different attributes must have nothing in common.¹⁵

What we learn from IP2 is that Spinoza denies that there can be a positive relationship between substances that have different attributes. That is, the essences conceived have nothing in common, and hence there is no common point at which to articulate or posit a relationship.

¹⁵ Leibniz makes a famous objection to this argument that perhaps two substances might share an attribute, yet could be distinguished because each possesses other attributes which the other does not (*Gottfried Wilhelm Leibniz: Philosophical Papers and Letters*, ed. Leroy Loemker (Dordrecht: Reidel, 1969), 198-9). I suspect Spinoza might respond that the notion of substances overlapping in attributes is inconsistent with the definition of substance, because each substance to some degree would be conceivable through the point of overlap — meaning that either each substance is conceivable through the other, or both are conceivable through some third thing. Either way, at least one substance would not be conceived entirely through itself. For a helpful discussion of this issue and a different proposal for how Spinoza might respond, see Michael Della Rocca, “Spinoza’s Substance Monism,” in *Spinoza: Metaphysical Themes*, ed. Olli Koistinen and John Biro (Oxford, England: Oxford University Press, 2002), 17-22.

What is interesting is that this proposition is ultimately doubly negative, as it denies any commonality among a hypothetical plurality of substances whose reality Spinoza will subsequently deny in IP14 (“Except God, no substance can be or be conceived” (G II/56/4)).

IP3 specifies an important implication of IP2: “If things have nothing in common with one another, one of them cannot be the cause of the other” (G II/47/16-17). Its Demonstration appeals to IA5 where the Demonstration of IP2 did not, but in an unexpected way: since these things which have nothing in common with one another cannot be understood through one another, then by IA4 (“The knowledge of an effect depends on, and involves, knowledge of its cause” (G II/46/27-8)) it cannot be the case that one is cause of the other. IP3 is generalized to “things” (*res*), but evidently substances (at least at this point) qualify as “things.” Spinoza appears not to attribute any special ontological status here to “things”: the term serves merely as a placeholder. The significance of this proposition is that it denies a particular sort of relationship between substances of different attributes, that of causality. So we know so far that substances of differing attributes cannot limit one another (IP2), which entails that substances of differing attributes more specifically cannot limit one another causally, by being cause or effect of one another (IP3). And so the characterization of the absolute nature of substance, and presumably the nature of ‘infinite’ with respect to substance, remains negative, in terms of absence of limitations.

IP4 lays the groundwork for what sorts of things exist, as well as the ground rules for what sorts of distinctions can be made between these things: “Two or more distinct things [*res*] are distinguished from one another, either by a difference in the attributes of the substances or by a difference in their affections” (G II/47/23-5). The Demonstration proceeds from IA1 (“Whatever is, is either in itself or in another” (G II/46/21)), and ID3 and ID5, the definitions of

substance and mode, respectively. Because a substance is that which is in itself, and a mode (or affection of substance (ID5)) is that which is in another, it follows that “outside the intellect” there are nothing but substances and their affections (G II/46/29-30). Hence there is no real basis for making anything other than conceptual distinctions between things except distinctions between or among substances (“or [*sive*] what is the same (by D4), their attributes” (G II/47/30 – 48/1)) and their affections. The force of this Demonstration is to show that all things that exist outside the intellect are either substances or modes,¹⁶ and hence these can be the only real basis for making numerical distinctions. Moreover, this Demonstration suggests two things which will be of importance later: (1) If substances and their modes exist “outside the intellect”, there may be other things “inside the intellect” that might provide the basis for other, more subjective sorts of numerical distinction — perhaps “beings of reason” (*entia rationis*) (IIP49 Schol.: G II/135/21-3) or “beings of imagination” (*entia imaginationis*) (Appendix to Part I: G II/83/11-17). (2) If modes exist outside the intellect, then they cannot be illusory or subjective; thus the interpretation that modes are ultimately unreal will not be a feature of any satisfactory explanation of the relationship between substance and mode.¹⁷ Indeed, in Letter 12 Spinoza makes a point of claiming that substance and modes are conceived to exist in entirely *different* ways (IV/54/15-16) — but such a statement presupposes that nevertheless each sort of thing really exists in *some* way.

IP4 serves to establish that attributes and modes are the only conceivable grounds for distinctions among things; IP5 begins the process of considering on what basis distinctions might

¹⁶ Edwin Curley, *Spinoza's Metaphysics: An Essay in Interpretation* (Cambridge, Massachusetts: Harvard University Press, 1969), 3.

¹⁷ *Ibid.*, 24-5. Curley attributes such a view to H. H. Joachim, arguing that it at least follows from the latter's interpretation of the definitions of substance and mode, though clearly Joachim is ambivalent about the matter because if there are not real finite minds then it is not clear how the illusion of a world of finite modes could happen at all. It is also interesting that Wolfson, who champions the “subjective” interpretation of the definition of attribute, which reduces attributes to necessary illusions of the perspective of the finite intellect, explicitly accepts that finite modes have reality outside the mind (*The Philosophy of Spinoza* (Cleveland: Meridian Books, 1958), 1:393).

be made between substances,¹⁸ and denies that their modes could serve as this basis. IP5 states: “In nature there cannot be two or more substances of the same nature or [*sive*] attribute” (G II/48/4-5). The Demonstration takes the form of a disjunctive syllogism. A plurality of substances would have to be distinguished by differences in either attribute or affections. If the former is the case, then there is only one substance of the same attribute, which concedes the proposition. The latter cannot be the case, because (by IP1) substance is prior to its affections, meaning that to consider substance “truly” (by the definition of ‘substance’ ID3 and IA6 (“A true idea must agree with its object” (G II/47/1))) its affections must be “put to one side” (G II/48/12) or bracketed. Hence there will be no way of differentiating substances with regard to their modes or affections, and so (by IP4) it follows that the only conceivable way substances could be differentiated would be in terms of their attributes.

Spinoza’s Demonstration is not exactly clear: why does the priority of substance entail that its modes must be bracketed at least with respect to differentiation?¹⁹ An object is “prior” to its properties in that without the object the properties could not subsist on their own, but it seems absurd to insist that these properties cannot be used to differentiate the object from others. But here we find an instance where the specificity of Spinoza’s terminology does not allow us to consider substance and its modes as analogous to an object and its properties.²⁰ To consider a substance “truly” is to consider it in accord with its definition — that is, to consider it in itself and conceived through itself. Thus, to distinguish substances in terms of modes is to conceive them through their modes — in effect, to conceive them through another. This amounts to

¹⁸ Since the proposition is generalized to ‘things’ (*res*), presumably it applies to the distinction of modes as well.

¹⁹ For a discussion of this, see Della Rocca, “Spinoza’s Substance Monism,” 14-7.

²⁰ Spinoza does speak of the attributes as though they were “properties” (*proprietates*) of substance in the Demonstration of IP16: because the more properties that follow from a definition (which expresses the essence of a thing), the more the definition expresses reality, it follows that as the divine nature possesses absolutely infinite attributes, infinite things in infinite modes follow (G II/60/21-30). But what is at issue here is whether or not *modes* may be considered properties of substance.

treating a substance as a mode, and hence is not to consider a substance “truly,” but rather to have a false idea of substance.²¹

The implications are clear: substance does not rely upon its modes for any of its character, for then it would be dependent upon them at least in the sense of being conceivable through them. Therefore substances must be considered absolutely, and never relative to their affections or modes. Another crucial implication of this Demonstration is that the infinity of substance cannot be derived from the infinity of its modes, for any understanding of the infinity of a substance resting on an infinite number of modes affecting it will be inconsistent with Spinoza’s definition of ‘substance’. Thus IP5 constitutes another denial concerning substance — specifically, the denial of one of the disjuncts established in IP4, namely, that substances might be distinguished in terms of a difference in their affections. What is more interesting is that Spinoza will deny the remaining disjunct in the Scholium to IP10: “From these propositions it is evident that although two attributes may be conceived to be really distinct (i.e., one may be conceived without the aid of the other), we still cannot infer from that that they constitute two beings, or [*sive*] two different substances” (G II/52/2-5). So IP5 is only the first part of a dual denial of the disjunction established in IP4, from which it will follow that a plurality of distinct substances cannot be established at all.²²

The implication from IP5 that there cannot be a plurality of substances of the same attribute entails IP6, the denial of efficient causal relationships between substances: “One substance cannot be produced by another substance” (G II/48/17). IP5 shows that there cannot be two substances sharing the same attribute; by IP2 it follows that these substances must have

²¹ Curley (*Complete Works*, 411 n. 10) acknowledges an alternative and much simpler interpretation from Hubbeling (“The Development of Spinoza’s Axiomatic Method,” in *Revue Internationale de Philosophie* 31 (1977), 66) based on Letter 4: every definition, as a clear and distinct idea, is true (G IV/13/12-3).

²² See Chapter Three, pp. 81-2.

nothing in common with one another. Thus, by IP3 neither can produce or be cause of the other, which is to say that they cannot be related in terms of efficient causation. The Corollary to this proposition is the generalization that “a substance cannot be produced by anything else” (G II/48/24) — the only things that exist are substances and modes, and IP6 shows that substances cannot be produced by other substances. Spinoza conspicuously leaves out the consideration of the alternative, that the substance could be produced by its modes; evidently he thinks it obvious that IP1 (that substances are prior to their affections) rules out this possibility. The Alternative Demonstration of the Corollary, a *reductio ad absurdum*, bears this out: If a substance were produced by something else, then (by IA4, “The knowledge of an effect depends on, and involves, the knowledge of its cause” (G II/46/27-8)) the substance would be known through its cause and not itself, and hence would not really be a substance, which contradicts the hypothesis (G II/48/30-3). Thus Spinoza denies that substance is subject to external efficient causation. This proposition does not provide any positive characterization of a property of substance, for Spinoza so far has left open the question of whether substance is uncaused or cause of itself (*causa sui*) (ID1).

Spinoza seems to ignore yet another possibility: that the substance could be caused by the modes of *another* substance. IP1 leaves this possibility open given its wording: a substance is prior to *its own* affections (*suis affectionibus*) (G II/47/5). Descartes, for example, might be said to endorse this possibility. He contends that finite, contingent substances are created and preserved by God, who is the only necessary and infinite substance.²³ Perhaps Descartes understands that a finite substance either is caused by a mode of infinite substance, or is itself, with respect to infinite substance, a mode. Spinoza’s objection to such a line of reasoning is obvious: a finite substance created by an infinite substance could not qualify as a substance,

²³ *Principles* I, 21 (CSM I 200).

since the finite “substance” would have to be conceived through the infinite substance. Thus only the infinite substance can legitimately be considered a substance. Descartes avoids this difficulty by accepting an equivocal usage of the term ‘substance’ such that “there is no distinctly intelligible” common meaning for it between ‘finite substance’ and ‘infinite substance’.²⁴ Thus for Descartes in finite contexts ‘substance’ and ‘mode’ could be relative terms: the same entity can be a substance or a mode relative to different frames of reference. Spinoza, by contrast, is strict in his usage of the term *substantia*: since a substance must be in itself and conceived through itself, it cannot be regarded as a mode of some other substance.²⁵

Despite the apparent flexibility of the Cartesian approach, which promises to provide a transition between substance and mode because the application of these concepts is more fluid, it has a serious liability. Descartes classifies substances into categories of corporeal substance, created thinking substance (finite mind), and uncreated thinking substance (God)²⁶ — but since he has acknowledged that there is no “distinctly intelligible” common ground between God’s substantiality and that of finite minds, it is not at all clear that the relationship between God and created things is itself intelligible. If the substantiality of a created individual is not at all akin to God’s substantiality, then it is not clear in what sense it is dependent upon God. Perhaps the dependence should be characterized in terms of the dependence of a mode upon a substance —

²⁴ *Principles I*, 51 (CSM I 210). There is some debate as to whether Descartes really thought there were individual corporeal substances; the synopsis at the beginning of the *Meditations* suggests that there might be only one (CSM II 10). See R. S. Woolhouse (*Descartes, Spinoza, Leibniz: The Concept of Substance in Seventeenth-Century Metaphysics* (London: Routledge, 1993)), 22-3 for a discussion of this passage. This issue is of interest because it suggests that Descartes might have to admit the existence of a corporeal substance of ‘indefinite’ extent or magnitude, rather than an indefinite plurality of finite corporeal substances. Woolhouse thinks Descartes is only committed to “corporeal substance as such” (23) — that is, just one corporeal nature, rather than a single substance.

²⁵ However, I will argue in Chapter Five that attributes can and must be conceived as modes of other attributes, and hence the attributes have a certain kind of relative status which is metaphysically unique to them. But this is not tantamount to saying that the attribute conceived as mode is really a mode of a distinct substance.

²⁶ *Principles I*, 54 (CSM I 211).

but this is to concede Spinoza's account. Thus I think that Spinoza places himself at no disadvantage by insisting upon a strict univocity in the use of the term *substantia*.

As we can see, there has been a surprising result in these early propositions. Notwithstanding Spinoza's emphasis on the affirmative nature of definition, such that all the necessary properties of a thing follow from its true definition, these early propositions nevertheless *deny* a number of properties of substance. Some commentators think that at this stage of the *Ethics* Spinoza has tacitly assumed the reality of Cartesian single-attribute substances, only to exclude them once he has established the reality of God and God's status as the only substance (IP14 and Cor.), for if God has all attributes and attributes cannot be shared, then there can be no substance with any fewer than all the attributes.²⁷ They argue this on the strength of IP2, which appears to assume single-attribute substances, as Leibniz's objection assumes, but this is only a superficial appearance. In fact, Spinoza so far has focused on what substance is *not*, which means that he need not be concerned with whether or not the substances he considers are genuinely possible, but only that they (at least superficially) satisfy the definition of substance. Since Spinoza has made no positive characterization of substance in these propositions, he has made no hypothetical commitment to Cartesian single-attribute substances at all.²⁸

²⁷ See, for example, Woolhouse, 34, and Bennett, 70.

²⁸ Descartes thinks *all* substances have a single "primary attribute," including God, whose primary attribute is thought (*Principles* I, 53: CSM I 210-1). Spinoza cannot accept an account such as this because it entails that God is only infinite in his own kind. However, Spinoza does make a commitment to talking about single-attribute substances in the Demonstration to IP8 (G II/49/11). But this is not a counterfactual supposition, nor does it present any problem in consistency with the Corollary to IP14, for IP10 guarantees that substance can be conceived through only one attribute at a time; hence in a sense even a substance of infinite attributes must be regarded as a single-attribute substance. I will discuss this further in Chapter Four, pp. 143-6.

The Necessity and Infinity of Substance: IP7 and IP8

In IP2-6 Spinoza provides no account of the positive properties of substance; however, as these propositions focus on the denial of limiting relations between substances, Spinoza appears to be in the process of providing a negative account of the infinity of substance. However, in IP7 and IP8 Spinoza finally deduces two positive characteristics of substance: existence pertains to the nature of substance, and substance is necessarily infinite. Spinoza identifies these two characteristics very closely: he claims that IP7 should be regarded as axiomatic (IP8 Schol. 2: G II/50/1-4) and that IP8 directly follows from IP7 (IP8 Schol. 1: G II/49/19-21). This implies that IP2-6 can be regarded not as a negative definition of the infinite, but rather as clearing the way for a positive (and presumably self-evident) characterization of infinity as “absolute affirmation.”

IP7 affirms the necessary existence of substance: “It pertains to the nature of substance to exist” (G II/49/2; Curley’s translation, modified). The Demonstration is terse: since substance cannot be caused by anything else (IP6 Cor.), it must be caused by itself, and by the definition of ‘cause of itself’ (ID1) it must be something whose essence necessarily involves existence, which is to say that existence pertains to its nature. Spinoza explains IP7, in his own fashion, in Scholium 2 of IP8: IP7 should be regarded as axiomatic by those who “attend to the nature of substance” (G II/50/2-3). Those who do not know the difference between substances and their modifications²⁹ will think that substances can be created and annihilated. But if we stick rigidly to the definition of substance, we see that substance is conceived through itself, for “the knowledge of [substance] does not require the knowledge of any other thing” (G II/50/5-6), while modifications or modes must be conceived through another. To think of substance as

²⁹ *Modificatio* is generally understood by commentators as a synonym for *modus* in the technical sense of ‘mode’. See for example Curley, *Collected Works*, 413 n. 15. Deleuze is a notable exception; he apparently thinks *modificatio* refers to “things as they are in themselves”, mentioned in the Scholium to IIP7 (Deleuze, 110-1). This is an important element of his theory of expression. See Chapter Six, pp. 239-41.

coming into and/or going out of being, or even never existing at all, would imply that the existence of a substance and any limits on its duration would have to be understood in terms of external causes, for there must be reasons why the substance came to be or ceased to be. And if any aspect of the substance is understood in terms of another, then the substance in question is not really a substance. In other words, a thing's existence can only be limited by something of the same nature, which entails that a thing and anything which limits its existence must be understood through a common nature; therefore neither of these things could be substances.

Spinoza's argument seems to presuppose that if substance exists, then it must exist necessarily (that is, existence pertains to its nature).³⁰ Spinoza regards substance as necessarily *causa sui*, since it cannot be caused by anything else — but could it not simply be uncaused, a “brute fact” about reality? Spinoza must respond that this alternative contradicts IA7 (“If a thing can be conceived as not existing, its essence does not involve existence” (G II/47/3-4)).³¹ If substance were merely a brute fact about reality, then presumably it could be conceived as not existing, and as such existence would not pertain to its nature — it would not exist necessarily.³² Thus Spinoza must make the case that substance cannot be conceived *not* to exist — which suggests that Spinoza must make some sort of ontological argument. This appears in the

³⁰ To exist necessarily and to have existence pertain to one's nature are not identical; for Spinoza every existing finite mode exists necessarily when and where it does exist, but existence does not pertain to the essence of any of them (IP24). Moreover, existence that pertains to a thing's nature apparently *entails* that the thing has an atemporal necessary existence, but I do not think this is because these states are identical. Spinoza's account of necessity in some ways closely parallels his account of the infinite, and as such it is equally difficult to interpret; it deserves more consideration than I can give it here. See n. 32 below.

³¹ Spinoza could not contend that it contradicts IA3, which essentially says that every effect has a cause, without begging the question: an uncaused substance would not qualify as an “effect.”

³² The objection I consider here assumes that Spinoza's notion of existence pertaining to the essence of a thing can be legitimately analyzed in terms of a conception of necessity which is amenable to analysis in terms of possible worlds. In fact I do not think that such analysis of Spinoza's conception of necessity is acceptable. For Spinoza possibility and contingency appear to apply exclusively to finite things and not to the world as a whole (IVD3, IVD4). It is also unclear whether Spinoza would accept the notion that conceivability entails *real* possibility, for there is some question as to whether he thinks essences that are internally contradictory are in some sense conceivable (see, for example, the first Alternate Demonstration to IP11 (G II/53/3-5), where Spinoza speaks of the nature of a square circle involving contradiction). Again, however, this issue is beyond the scope of my discussion.

Demonstrations to IP11, the proof of God's necessary existence. But Spinoza cannot appeal to IP11 upon pain of circularity, for the Demonstration of IP11 appeals to IP7. So it would seem that Spinoza's only option is to show that it *cannot* be the case that something to whose nature existence pertains is merely possible. We can understand this as in a way reflecting Leibniz's criticism of the ontological argument to the effect that it only demonstrates that if God is possible, God necessarily exists.³³

I think we may find such a defense to this objection if we interpret IP7 somewhat differently. Curley translates the Latin *Ad naturam substantiae pertinet existere* as "It pertains to the nature of a substance to exist" (G II/49/2). The locution "pertains to its nature to exist" (IP7 Dem.: G II/49/6) is a fairly literal translation; "to exist" is *existere*. Put this way it does look like the existence in question is the substance's own existence. But one may also translate *existere* as an indeclinable noun, as Shirley does: "Existence belongs to the nature of substance."³⁴ Then it would be possible to read the proposition as not only intending that substance exists necessarily, but that existence *itself* pertains to its nature — that is, a self-caused nature "involves" existence (IP7 Dem.: G II/49/5-6; ID1: G II/45/6) in the sense that existence itself is *enfolded* in substance. This would be to say that substance not only exists but is also the condition for existence; thus if we ask *if* substance exists, and then appeal to some *external* criterion of existence, we in effect conceive of substance through something outside it and hence fail to conceive of it as substance. In order for anything at all to exist, substance must exist as the ground of actual existence. Therefore substance's existence cannot be regarded as merely possible.

³³ G. W. Leibniz, "Meditations on Knowledge, Truth, and Ideas," in *G. W. Leibniz: Philosophical Essays*, ed. Roger Ariew and Daniel Garber (Indianapolis: Hackett, 1989), 25.

³⁴ *Spinoza: Complete Works*, trans. Samuel Shirley (Indianapolis: Hackett, 2002), 219.

R. S. Woolhouse offers a similar reading of how Spinoza understands the existence of substance in his interpretation of IP14, which is Spinoza's assertion that no substance can be or be conceived except God. This assertion of substance monism has often been understood to entail the identity of God with the world, particularly the corporeal world. Woolhouse argues that this mistakenly assumes that God is an instantiation of various attributes. The instantiation of any attribute is a *mode* of substance; thus "the reality of Spinoza's extended substance is not that of an existent instantiation of extension; it is a reality of a kind which underwrites the possibility of actual instantiations of extension, of actual extended things."³⁵ Woolhouse notes that this is consonant with Spinoza's distinction between the reality of essences and the reality of actualizations of these essences, a distinction accepted by Descartes and Leibniz as well.³⁶

This reading resolves questions regarding *causa sui* by recasting what it means for an essence to "involve" existence (*essentia involvit existentiam*) (G II/45/5-6). In particular it makes sense of Spinoza's definition of eternity as "existence itself, insofar as it is conceived to follow necessarily from the definition alone of the eternal thing" (G II/46/13-5) — its meaning is not elliptical or metaphorical, but quite literal. Most importantly for our purposes, it suggests a way of understanding Spinoza's claim in Letter 12 that the existence of substance and the existence of modes are entirely different (G IV/55/15-6), and how this claim relates to IP16 in the *Ethics*. If existence itself is enfolded in substance, and existing modes "follow" or "flow" from the divine nature as do properties from a definition, then perhaps IP16 in some sense refers to the "unfolding" of the enfolded existence of substance itself.

³⁵ Woolhouse, 47.

³⁶ *Ibid.*, 47-8. Deleuze has an understanding of the nature of the existence of substance which is similar to that of Woolhouse: Deleuze considers substance "a *plane of immanence* in which finite modes operate" (*Expressionism in Philosophy*, 11).

This reading of IP7 should not be understood to exclude the interpretation suggested by Curley's translation — that substance necessarily exists. In fact, it must have that connotation as well. ID1 says not only that something self-caused is such that its essence involves existence, but that its nature “cannot be conceived except as existing [*existens*]” (G II/45/7); more importantly, IP11 claims that the only substance, God, “necessarily exists [*necessario existit*]” (G II/52/24-5). Spinoza clearly thinks that something whose essence involves existence *eo ipso* exists necessarily. Nevertheless we must keep in mind that this way of existing is radically different than that of the modes in that it “involves” existence itself.

The demonstration of the necessary existence of substance claimed in IP7 leads into the key proposition for our consideration of Spinoza's conception of the infinite with regard to substance, IP8: “Every substance is necessarily infinite” (*Omnis substantia est necessario infinita*) (G II/49/9). The Demonstration is relatively straightforward: A substance of a single attribute is unique (by IP5) and existence pertains to its nature (by IP7). Its existence will either be infinite or finite. In order to have finite existence something else of the same nature as the substance must limit it. This could only be the case if there were another necessarily existing substance of the same nature — which contradicts IP5. Therefore the substance (of one attribute) must exist as infinite.³⁷

Of some interest here is that Spinoza's Demonstration refers to a substance of one attribute, which is in accord with Descartes' characterization of each substance as possessing just one “primary attribute.”³⁸ Since Spinoza will go on to argue that God is the only substance, and possesses all the attributes, it appears that Spinoza posits a counterfactual substance here. Some

³⁷ Note that Spinoza fails to include “indefinite” in this disjunction. Perhaps this is because the indefinite refers to the parts of a finite entity, when the parts cannot be expressed by any number (Letter 12: G IV/61/3-5). See Chapter Six, pp. 224-6.

³⁸ *Principles* I, 53 (CSM I 210-1).

commentators, notably Gueroult and Deleuze, do not think that this is the case.³⁹ I will return to this issue in Chapter Three.

What is of even more interest is the first Scholium, which in effect provides an alternate demonstration of IP8. Spinoza contends that IP8 follows from IP7 alone, because “being finite is, in part, a negation, and being infinite is an absolute affirmation [*absoluta affirmatio*] of the existence of some nature” (G II/49/19-20). This remark constitutes Spinoza’s first explicitly positive characterization of ‘infinite’ in terms of “absolute affirmation.” Unfortunately this appears more a metaphorical characterization than a definition or strict characterization; if we take the assertion literally as a definition, then being infinite appears to be judgmental in nature: the unconditional affirmation or assertion of the existence of a thing. It seems unlikely Spinoza intends that being infinite is identical with some unconditional judgment about its existence, for then it would seem that infinity is fundamentally mind-dependent. So what does Spinoza mean here? Is this a definition of ‘infinite’ or only a metaphorical characterization of it?

Affirmation and Ideas

The alternate demonstration of IP8 ostensibly derives directly from IP7, which asserts that existence pertains to the nature of a substance, which seems to amount to the necessary existence of any substance.⁴⁰ The Dutch edition of the *Ethics* adds further explanation to the first Scholium: “For if we assumed a finite substance, we would, in part, deny existence to its nature, which (by IP7) is absurd” (G II/49/21-4). To “deny” existence to some part of the nature of the

³⁹ Deleuze contends that these propositions (IP1-8) are categorical, not hypothetical (337). Gueroult thinks that God is an infinite substance which is the union of an infinite plurality of single-attribute substances each infinite in their own kind (*Spinoza* 1:51-5). There is some textual evidence for Gueroult’s position; for example, Spinoza talks about “corporeal, or [*sive*] extended, substance” as not being inconsistent with God’s nature (IP15 Schol.: G II/57/13-4). For a discussion and criticism of Gueroult’s reading, see Alan Donagan, “Essence and the Distinction of Attributes in Spinoza’s Metaphysics” in Grene, 174-7.

⁴⁰ See n. 30 above.

finite corresponds to the “negation” that is “in part” an aspect of its being (G II/49/19). So perhaps we should infer that to “affirm” the existence of a substance absolutely must correspond to a positing or positivity that is the being of a thing to whose nature existence pertains.

I think it likely that Spinoza uses the term ‘affirmation’ in a sense that *seems* metaphorical but, because of his understanding of the nature of cognition, ultimately is not. The reason for this is Spinoza’s emphasis of a “parallelism”⁴¹ between the world of thought and the world of extension. Just as no body is properly considered in isolation from other bodies, for Spinoza an individual mind cannot be a separate realm of ideas that functions independently of all other minds. As a result, affirmation has a different character than appears in other philosophers of Spinoza’s time. For Descartes, for example, our capacity to affirm or deny is a function of our will, which is fundamentally free to affirm or deny as it chooses.⁴² Meanwhile everything else about the world is completely determined by God.⁴³ This divergence is to some degree grounded in Descartes’ radical distinction between thinking and extended substance. While this separation of the thinking and the extended is responsible for the familiar problems of relating mind and body in Cartesian metaphysics, it permits Descartes to capture the intuition that our mental life operates to some degree independently of the world — that the mind operates with ideas that in themselves are neither true nor false,⁴⁴ but become so depending upon whether they are correctly or incorrectly affirmed or denied.⁴⁵ Thus it appears that for Descartes the world the mind represents is a set of facts that are what they are, irrespective of what we believe, or what we affirm or deny.

⁴¹ As Della Rocca notes, this can be a somewhat misleading term since it can suggest that “parallel” terms refer to different entities, whereas Spinoza contends that mind and body “are one and the same [*una, eademque est res*]” (IIP7 Schol.: G II/90/9). See *Representation and the Mind-Body Problem in Spinoza* (New York: Oxford University Press, 1996), 19.

⁴² *Fourth Meditation* (CSM II 40); *Principles* I, 37, 39 (CSM I 205-6).

⁴³ *Principles* I, 40 (CSM I 206); *Passions of the Soul* II, 146 (CSM I 380-1).

⁴⁴ *Fourth Meditation* (CSM II 39).

⁴⁵ *Fourth Meditation* (CSM II 41).

Spinoza in a certain sense maintains the same radical distinction between thought and extension as Descartes in terms of what Della Rocca calls a conceptual or “explanatory barrier” between the attributes.⁴⁶ But modes of thought and extension, while they must be explained independently, are nevertheless not ontologically independent of one another. The central passage explaining this is IIP7 and its Scholium. IIP7 asserts that “[t]he order and connection of ideas is the same as the order and connection of things” (G II/89/21-2). The Scholium explains that this is ultimately because the idea and its corresponding object are “one and the same thing” considered under different attributes (G II/90/8-9). However, in other places Spinoza seems to consider the relationship between an idea and its corresponding extended object one of representation (IIP11-3: G II/94/14 – 96/20). In any case, it is clear that for Spinoza ideas and extended things exist in a one-to-one correspondence because they are ontologically the same; they do not exist in (mostly) independent realms as in Descartes’ account.

It follows in Spinoza’s account of the mind that, in the same way that the physical world operates mechanically and deterministically in terms of extension and motion and rest, the mind also operates deterministically. This leads Spinoza to reject the doctrine of free will in human beings (IP32, I Appendix (G II/78/12-21), IIP35 Schol.), as well as in God (IP32 and Cor. 1), at least in the customary sense of a capacity to make arbitrary decisions. As such, Spinoza rejects the Cartesian notion that human beings have the free capacity to affirm or deny their ideas; indeed, ideas are not inert entities (an idea is not “something mute, like a picture on a tablet” (IIP43 Schol.: G II/124/10)) but involve affirmation or denial as something *intrinsic* to their nature (IIP49 Schol.: G II/132/9-12).⁴⁷ The result is an account of mental life that is much more

⁴⁶ Ibid., 9-17.

⁴⁷ The issue of the involvement of negation or denial in an idea is more complex, for denial may be a product of the relation of two incompatible ideas. Later in the same Scholium Spinoza characterizes denial as consisting either in the exclusion of the object of a given idea by another idea, or by the inadequacy of the given idea itself (G II/134/31-

consonant with the Cartesian account of the mechanics of extension than with the Cartesian account of the mind. Spinoza's extended discussion of the affects in Part III amounts to a sort of mechanics of thought and emotion.

Given this account of mental life, it is clear that Spinoza cannot intend by 'affirmation' anything that really is like the intuitive sense of the term that Descartes uses. It is not a free act of the will, since Spinoza denies that the will is separate from the intellect (IIP49 Cor.). Moreover, since the mind operates in a "mechanical" fashion, affirmation must be a function of its system of mechanics. But what this has in effect done is to remove any motivation or reason to exclude affirmation from the world of extension — if affirmation is a "mechanical" feature of the operations of the mind and not an "absolute faculty of willing and not willing" (IIP48 Dem.: G II/129/15-6), then there is reason to think that something at least correlative to the mental activity of affirmation operates in some sense in the mechanics of the world of extension.

Thus for Spinoza "affirmation" is not a cognitive metaphor for the boundless positivity of the infinite, for Spinoza does not regard affirmation as a free act of will. If anything, it seems that the affirmations that we make orally, or cognitively — the affirmation which Descartes separates, as a part of our mental life, from the operations of the world — are but special cases of a deeper and more encompassing sense of 'affirmation'. In any case, for Spinoza the infinity of substance is tightly bound up with the absolute affirmation or positivity of its being, and hence with its necessity (in the sense of existence pertaining to its nature).

We now face the question of why Spinoza did not provide a positive definition of 'infinite' to begin with, and why he decides to argue a sequence of propositions that are negative,

8). IIP17 and its Corollary make the same point, only specifically with respect to the mind and the body: the mind will regard as present an external body that affects the human body unless the human body is affected by something else that excludes the presence of the external body.

only to finish with an assertion of substance as exhibiting the “absolute affirmation” of the infinite.

Genetic Definition

We have seen a sequence of propositions that deny certain properties of substance, yet lead up to a characterization of substance as infinite — that is, the infinity of substance consists in the absolute affirmation of its nature or essence. But are we to understand absolute affirmation only negatively? It will help to look at another area of Spinoza’s thought that involves “affirmation”: the nature of “genetic definition.” The consequence of a genetic definition is the affirmation of a plurality of properties from a single essence. Thus the nature of genetic definition reveals how *infinitum* as “absolute affirmation” functions in IP16, and suggests an account for why Spinoza does not provide a formal definition of ‘infinite’: affirmation drives genetic definition itself, and therefore the affirmative nature of infinity cannot be adequately captured by a definition.

Spinoza’s account of the nature of definition appears in his correspondence and in the *Treatise on the Emendation of the Intellect*. As is the case with our conception of the infinite, Spinoza contends that confusion ensues when we fail to distinguish between different sorts of definition. In Letter 8 Simon de Vries, on behalf of a group of Spinoza’s friends who are studying an early draft of the *Ethics*, expresses some confusion as to the status of Spinoza’s definitions. De Vries presents two possibilities which the group has borrowed from the works of mathematicians: (1) from Giovanni Alfonso Borelli, that a definition must consist of an essential property and it must be known to be true in order that true conclusions may be drawn from it,

and (2) from Christopher Clavius, that a definition merely nominally designates an idea and requires no justification (Letter 8: G IV/39/18 – 40/14). Spinoza replies:

I see that you are in these perplexities because you do not distinguish between 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. (Letter 10: G IV/42/28 – 43/18)

By way of illustration Spinoza suggests that a description of the Temple of Solomon would constitute a definition of the first sort, for it should accurately portray the temple, but that a plan for a temple to be built would be of the second kind, for it prescribes what one conceives to be required for the temple's construction, but does not describe any actual state of affairs (G IV/43/18-28). Conversely, “a bad definition is one that is not conceived” (G IV/43/35 – 44/19). For example, if a “figural” is defined as “two straight lines enclosing a space” then no conceivable thing is described by this definition, and hence there is no definition at all, unless by ‘straight line’ one intends a line that is in fact curved (G IV/44/20-7).

So for Spinoza there are two sorts of definition, and the difference appears to be in their intended use — that is, whether the definition is intended primarily to *describe* “the essences of things or of their affections” (G IV/43/31), or only to *prescribe* what is required for a conceived object (or kind of object) to be actualized. The definitions in the *Ethics* are not intended merely to depict hypothetical entities and then prescribe what would follow *if* these definitions represented actual entities; rather, they are intended to serve as the basis from which Spinoza may derive propositions that explain the nature of reality as it actually *is*. Therefore these definitions are intended primarily to describe rather than prescribe, and Spinoza must consider these definitions true.

For Spinoza a “true definition” cannot simply nominally represent an idea or notion. If this were so, then his definitions would represent mere assumptions; but then the propositions that Spinoza derives from these definitions would be no more reliable than the definitions themselves. Indeed, Spinoza is particularly wary of confusions in understanding that arise when words are used unreflectively and carelessly (*Treatise on the Emendation of the Intellect*: G II/33/8-24); such confusions lead to philosophical problems that could well have been avoided had the words had been used properly. In the case of ‘perfection’, for example, Spinoza objects to the ordinary conception of perfection that characterizes it as though it were something absolute and intrinsic to a thing’s nature. In Letter 23 Spinoza discusses the tendency to regard God as though he were a “perfect man,” and argues that such “theological ways of speaking” are not appropriate in philosophy (G IV/148/1-2); what is perfect for a human being is not perfect for God, just as what is perfect for an elephant or an ass is not perfect for a human being (G IV/148/5-8). This particular conceptual confusion induces people to anthropomorphize God, and as a result they conceptualize God incoherently. “So there [i.e., in philosophy] words of this kind have no place, and we cannot use them without confusing our concepts very much” (G IV/148/8-10).

And of course our conceptualization of the term ‘infinite’ in Spinoza’s view can give rise to similar problems, as Spinoza makes plain in the “Letter on the Infinite.” Misunderstanding or misapplication of the concept of *infinitum* engenders the paradoxes and confusion associated with the infinite. These problems lead philosophers such as Descartes to contend that we are constitutionally incapable of comprehending or grasping the infinite because of our finitude.⁴⁸ As we have seen, Lodewijk Meyer reports that Spinoza does not share Descartes’ suspicion of the weakness of our intellectual faculties (G I/132/25-33); clearly Meyer has in mind Spinoza’s own

⁴⁸ *Third Meditation* (CSM II, 32); *Principles of Philosophy* I, 26 (CSM I, 201-2).

discussion of Descartes' claim that we cannot understand the infinite — where Spinoza pointedly attributes this position to Descartes, evidently to distance himself from it (*Descartes' "Principles,"* IIP5 Schol.: G I/190/21 – 191/4).⁴⁹ Spinoza's Letter 12 is an attempt at conceptual clarification that is intended to justify Spinoza's contention that the infinite is intelligible and ultimately non-paradoxical if it is properly understood. But if this is so, then it seems Spinoza has no excuse for not providing us with a precise definition of *infinitum*.

For Spinoza it is inappropriate to use a term if there is any element of confusion in it or in how it is customarily used. So what work do the definitions in the *Ethics* do? Part of the task is of course nominal: Spinoza assigns a particular term to a concept, often giving a term in contemporary philosophical usage a new and sometimes unusual sense. Spinoza clearly pursues precise and consistent usage of terms as a way of avoiding philosophical problems which he considers to be purely verbal.⁵⁰ For example, in the case of 'perfection' Spinoza equates it with 'reality' (IID6), and then goes on to recharacterize perfection in a way that is relative or object/class/essence-specific (Preface to *Ethics* IV: G II/206/2-22; 207/18 – 208/7).

But nominal definition is not sufficient to lend authority or authenticity to the concepts that Spinoza defines. If he were to rely on nominal definition, his reader might reasonably object that Spinoza simply fabricates concepts and associates terms with them, rendering the metaphysical system which is based upon these definitions entirely suspect. If Spinoza's definitions were merely nominal there would be no reason to think his metaphysics provides a true account of reality; even if consistent, his philosophical system would be purely subjective.

⁴⁹ See Chapter One, p. 17.

⁵⁰ While Spinoza does wish to avoid disputes over words and does refine concepts so as to avoid inconsistencies, he nevertheless makes conceptual distinctions for which he fails to make corresponding terminological distinctions. The term *infinitum* is a case in point, but another prominent (and importantly related) case is that of *necessarius*, which can refer to things that are intrinsically necessary as well as to things that are extrinsically necessary (i.e., necessitated) (see IP33 Schol. 1: G II/74/6-11). Perhaps Spinoza believes that these distinct concepts are so strongly related that a terminological distinction would confuse the issue, or perhaps he thinks that the distinction is sufficiently evident that the reader can determine which sense is being used according to context.

Spinoza clearly thinks that the definitions he uses in the *Ethics* express real entities or their real properties. Moreover, as I discussed in Chapter One, the Demonstration of IP16 indicates that a definition is in some sense *generative* of its properties — they “follow” or “flow” from it. As such, some commentators have characterized Spinoza’s mode of definition as “genetic definition”: the definitions are not merely artificial concepts composed of ideas or predicates cut-and-pasted together and associated with a name, but provide a description of how the entity defined by the concept is caused or generated.⁵¹

Spinoza’s discussion of genetic definition appears in the *Treatise on the Emendation of the Intellect*. There he provides a famous illustration of what he calls a “perfect definition”: “To be called perfect, a definition will have to explain [*explicare*] the inmost essence of the thing, and to take care not to use certain *propria* in its place” (G II/34/29-31).

If a circle, for example, is defined as a figure in which the lines drawn from the center to the circumference are equal, no one fails to see that such a definition does not at all explain [*explicare*] the essence of the circle, but only a property of it. 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, because the properties of things are not understood so long as their essences are not known. If we neglect them, we shall necessarily overturn the connection of the intellect, which ought to reproduce the connection of Nature, and we shall completely miss our goal. (G II/35/1-10)

The verb *explicare* is of particular importance here, for it not only has the connotation of explaining something, but also means to unfold or expand.⁵² What Spinoza intends here, then, is that a perfect definition is the starting point from which all the necessary properties of an essence unfold: that is, given a perfect definition, all the necessary properties of a circle can be deduced from its definition. If a circle is defined as a figure where all lines drawn from a given center point to the circumference are equal, we have a true statement concerning a necessary property

⁵¹ For a discussion of genetic definition and its importance to Spinoza’s theory of adequate ideas, see Jon Wetlesen, *The Sage and the Way* (Assen, the Netherlands: Van Gorcum, 1979), 31-4.

⁵² For a reading of Spinoza’s use of *explicare* which emphasizes this connotation of unfolding, see Deleuze, 15-6.

of circles, but Spinoza claims that it does not allow us to deduce other necessary properties of circles. As such, a concept of circle based on that definition would not help us understand the essence of the circle.

However, Spinoza contends that the proper definition of a circle (1) will include its “proximate cause”, and (2) is such that “considered alone, without any others [i.e., other definitions] conjoined, all the thing’s properties can be deduced from it” (G II/35/18-9). Thus Spinoza contends that a circle is properly defined as the figure described by a line segment that is fixed at one end while the other end can move.⁵³ This definition basically provides the instructions for the generation of a circle; Spinoza further contends that this definition permits the deduction of all other necessary properties of circles. Spinoza does not suggest that the second requirement is derived from the first, but it seems that at least he thinks that a perfect definition of an essence is expressive of its generative nature. Both criteria evoke the productive character of a definition: it expresses its cause (what produces it), and all of the necessary properties that follow from it (what is produced).

Moreover, from the second requirement Spinoza infers that “every [perfect] definition must be affirmative [*affirmativam*]” (G II/35/24-5). He explains further:

I mean intellectual affirmation — it matters little whether the definition is verbally affirmative; because of the poverty of language it will sometimes, perhaps, [only] be able to be expressed negatively, although it is understood affirmatively. (G II/35/25-7)

The affirmative nature of definition again suggests a productive character. This aspect of definition is significant with respect to Spinoza’s characterization of ‘infinite’, as we will see shortly. In any case, for Spinoza more is at stake in a definition than providing a term to represent a concept, or even simply to clarify the character of the concept. Without a perfect

⁵³ This apparently describes the generation of a filled circle or disk rather than just the linear figure; however, this is just how Spinoza describes it.

definition which explicates an essence, a complete deduction of all its properties will be impossible. Since Spinoza's system as explicated in the *Ethics* proceeds from definitions to propositions, without well-formed genetic definitions the geometrical exposition of his system cannot "unfold" properly.

How will we know whether or not a proposed definition is well-formed? This is a difficult issue and would require a discussion of Spinoza's theory of truth, which I cannot provide here. However, we know that a definition is not perfect if we cannot derive a known necessary property from the definition or from other propositions derived from it. Hence Spinoza argues that a defective definition will reveal its own falsity in virtue of the fact that its productive power to affirm properties of an essence at some point will be interrupted.

[W]hen the mind attends to a fictitious thing which is false by its very nature, so that it considers it carefully, and understands it, and deduces from it in good order the things to be deduced, it will easily bring its falsity to light. And if the fictitious thing is true by its nature, then when the mind attends to it, so that it understands it, and begins to deduce from it in good order the things that follow from it, it will proceed successfully, without any interruption.... (TIE: G II/23/26-II/24/3)

Though Spinoza here speaks of fictitious ideas, this same consequence applies to the case of perfect definitions: a perfect definition will unfold in a series of truths (propositions), and it will unfold without interruption (G II/37/30-II/38/2). Though this deductive fecundity is a consequence of a true idea and not its intrinsic nature, it is nonetheless an important consequence.

The significance of this feature of definitions becomes manifest in an interchange with Ehrenfried Walther von Tschirnhaus in Spinoza's late correspondence. Tschirnhaus pointedly takes Spinoza to task on the matter of definition, and drives straight to the crucial point:

I have always observed in mathematics that we can deduce only one property from any thing considered in itself, that is, from the definition of any thing; but if we want to deduce more properties, it is necessary for us to relate the thing

defined to others; then, indeed, from the conjunction of the definitions of these things, new properties result.... In some way, in fact, this seems to be contrary to *Ethics* IP16, nearly the most important proposition in Book I of your Treatise. In this proposition, it is assumed as known that from the given definition of any thing many properties can be deduced. This seems to me impossible, if we do not relate the thing defined to other things. (Letter 82: G IV/333/23 – 334/9)

Spinoza's reply is consistent with what he says about genetic definition in the *Treatise on the Emendation of the Intellect*:

But as for what you add — that from the definition of any thing, considered in itself, we can only deduce one property — perhaps this is correct for very simple things, or beings of reason (under which I include shapes also), but not for real beings. For from the mere fact that I define God to be a being to whose essence existence pertains, I infer many of his properties: that he exists necessarily, that he is unique, immutable, infinite, and so on. In this way, I might bring up many other examples.... (Letter 83: G IV/335/1-8)

It is clear that for Spinoza true definitions define “real beings” — that is, a definition expresses an individual essence. Though Spinoza does not address the question concerning IP16 directly, it is clear that he thinks there is no difficulty.

However, while we may infer from a true definition a plurality of properties, *Ethics* IP8 Scholium 2 suggests that Spinoza does not think that we may infer a plurality of individuals:

...it must be noted, I. that the true definition of each thing neither involves nor expresses anything except the nature of the thing defined. From which it follows, II. that no definition involves or expresses any certain number [*numerum*] of individuals, since it expresses nothing other than the nature of the thing defined. E.g., the definition of the triangle expresses nothing but the simple nature of the triangle, but not any certain number of triangles. (G II/50/22-28)

IP16 apparently *violates* this, for it says that infinite things in infinite modes follow from the divine nature. Worse, the first Corollary to IP14, which claims that God is unique, seems to violate this as well. However, we must keep Spinoza's account of number from Letter 12 in mind: number is a being of reason. In the case of the three senses of ‘infinite’ enumerated in Letter 12, number applies to none of them; hence infinity is not a number. And since God is substance, God is infinite in the first sense, i.e. indivisible and unique. So the “one” of substance

is not a number either.⁵⁴ Thus the issue of how a plurality of things follows from the unity of the divine nature is not an issue about number, but rather about how the infinite can be divisible and plural in one way yet indivisible and unique in another. As Deleuze argues, it *cannot* be an issue about number. If Tschirnhaus is right to think that no plurality of properties may be derived without comparison of definitions, then no plurality may be derived from the divine essence at all, for there is nothing outside the divine nature with which we may compare it. It is fortunate, remarks Deleuze, that philosophy is not limited in the way that mathematics is.⁵⁵

The Definition of Infinitum

Does this help to explain why a positive definition of *infinitum* did not appear at the start of Part I, but only in the first Scholium to IP8? And what does this tell us about IP16? Starting with the second question, given what we know about definition and the characterization of infinity as absolute affirmation we can construct the following argument: To be infinite is to be the absolute affirmation of the existence of some nature or essence (IP8 Schol. 2). A true definition is “some particular affirmative essence” (*Treatise on the Emendation of the Intellect*: G II/34/19). True definitions of limited or finite things are such that a plurality of properties may be inferred in virtue of the affirmative nature of the true definition. But because the divine essence involves infinite reality in virtue of having absolutely infinite attributes, an infinite plurality of properties follows from it (IP16 Dem.) This explains one thing about the Demonstration of IP16: the concept of infinity is the fulcrum point between the divine nature and the infinitely many things of the world because infinity is “absolute affirmation,” and

⁵⁴ Richard Mason, *The God of Spinoza: A Philosophical Study* (Cambridge, England: Cambridge University Press, 1997), 39-41; Pierre Macherey, “The Problem of the Attributes,” in *The New Spinoza*, ed. Warren Montag and Ted Stoltze (Minneapolis: University of Minnesota Press, 1997), 83.

⁵⁵ Deleuze, 21-2.

affirmation has the intrinsic character of producing many from its oneness. If IP16 is a “Principle of Plenitude,” then the affirmative character of infinity is the engine that drives this principle.

Turning to the first question, why the characterization of ‘infinite’ appears in the first Scholium to IP8 rather than in the definitions at the beginning of Part I, we know that a definition is an essence. *Infinitum*, however, does not characterize an individual essence, but rather the absolute affirmation that is involved in the nature of substance, or God, and hence is itself the power that drives the derivation of a plurality of things from the divine essence. The infinity of God makes the divine essence absolutely affirmative; indeed, it is what makes the divine essence an essence. And since all essences are caused by God (IP25), and caused by God in the same sense that God is cause of himself (IP25 Schol.), the affirmation that is involved in *any* definition or essence can be traced back to the divine essence. Hence infinity as absolute affirmation is the power that drives every definition and essence whatsoever; it is what makes any definition *be* a definition. The first Scholium to IP8 strictly speaking does *not* offer a definition of ‘infinite’: genetic definition itself is underwritten by the infinite—infinity drives the expression or unfolding of definitions. A genetic definition of ‘infinite’ would in a sense be circular, for the affirmative nature of any true definition ultimately presupposes the affirmativity of the infinite. Thus Spinoza is justified in not providing a definition of *infinitum*, but only the brief characterization given in the first Scholium to IP8.

While the power of affirmation attributed to infinity explains why definition plays a role in the Demonstration of IP16, it does not satisfactorily answer Tschirnhaus’ question and his concern about IP16. Why should we think a definition as an affirmative essence must explicate itself in a plurality of properties? How does such explication happen? And even if an essence

must explicate itself in a plurality of *properties*, this does not entail that the divine essence must produce a plurality of *things*. Even if *infinitum* is strictly indefinable, we require some account of how affirmation works — how an indivisible and unique substance must necessarily produce a divisible plurality of modes. The next step in such an account will therefore require an investigation of the plurality of properties that immediately express the divine essence, namely the infinite attributes.

Conclusion

Spinoza offers a series of negative characterizations of substance before asserting that its nature is absolutely affirmative. Why did he not begin with the affirmative nature? There is a certain Cartesian character to the early propositions of the *Ethics*: these negative propositions clear away Cartesian presuppositions about substance that Spinoza's readers might endorse. Spinoza might have begun simply with affirmation: he regards IP7 as axiomatic (IP8 Schol. 2: G II/50/1-4) and furthermore contends that IP8 follows from IP7 alone (G II/49/19-21). The first demonstration for the existence of God (IP11) appeals only to IA7 and IP7; hence Spinoza need not have begun with the negative characterizations of substance in IP2-6. But had Spinoza not done so, arguably his readers might continue to hold some of these Cartesian presuppositions about substance; his readers' understanding of the nature of substance would then be colored by negations that would obscure the absolutely affirmative nature of substance, and substance so conceived could not be necessarily infinite. Hence it is rhetorically important for Spinoza to demonstrate what substance is *not* before demonstrating what it positively *is*. Perhaps one might say that if Spinoza does not dispel these presuppositions about substance, then the assertion of its infinity cannot be sufficiently affirmative.

Thus the result of the first eight propositions of the *Ethics* is a conception of infinity that is theological in character: it proceeds by way of a propaedeutic *via negativa* of sorts yet in the end reaches a characterization of *infinitum* as “absolute affirmation.” From Letter 12 we know that substance is infinite in the sense that it is unique and indivisible. At the same time the affirmative nature of substance implies that despite the fact that substance is unique and indivisible, nevertheless a plurality of properties may be deduced from its definition. For Spinoza, God is no exception: God, a substance which is unique (IP14 Cor. 1) and indivisible (IP13), nevertheless consists of a plurality of infinite attributes (ID6). This plurality of attributes is the first expression of the absolute affirmation of the divine nature. I turn to consider the doctrine of the attributes in the next chapter.

CHAPTER 3

INFINITY AND THE ATTRIBUTES

Introduction

Spinoza's metaphysical project is radical: it proposes to relate substance and mode, the fundamentally absolute and the fundamentally relative. Thus he seeks to characterize a relationship that cannot be a relationship in any ordinary sense. The nature of the infinite is central to Spinoza's approach to this task: it is the fulcrum-point upon which the Demonstration of IP16 turns, the link between the uniqueness and indivisibility of God and the plurality of singular things. As we will see throughout the course of the remaining chapters, the sometimes paradoxical character of the infinite lends itself to such a seemingly paradoxical task.

Despite the fact that Spinoza begins with negative characterizations of substance in the early propositions of the *Ethics*, he ultimately characterizes the infinity of substance as absolutely affirmative and positive. In this respect it appears to manifest the first variety of the infinite which Spinoza enumerates in Letter 12 — an infinite which is unique and indivisible. But in IP9 and IP10 Spinoza begins to make the case that a substance can have a *plurality* of attributes, and that each attribute is conceivable through itself; therefore, he concludes, a plurality of attributes does not entail a plurality of separate substances. In IP11 Spinoza argues that God, a substance consisting of infinite attributes, necessarily exists, and later he argues that God is the only substance (IP14). Hence it appears that substance, though it immediately manifests itself as unique and indivisible, nevertheless consists of a plurality of diverse

attributes. The doctrine of the attributes is perhaps the most obscure and impenetrable part of Spinoza's metaphysics of substance. But it is importantly the first appearance of a pluralistic side to the conception of the infinity of substance. Moreover, Spinoza regards it as a *natural* outgrowth from "absolute affirmation": as he argues in the Demonstration to IP16, from the infinite essence or definition of substance an infinite diversity of properties may be inferred. The infinite plurality of the attributes therefore constitutes the first and fundamental expression of absolute affirmation.

Spinoza's doctrine of the attributes involves two serious interpretive difficulties which must be addressed before we can explicate its systematic structure. First is the evident problem of the apparent paradox in Spinoza's contention that unique and indivisible substance expresses itself in a radically diverse plurality of attributes. In this chapter I begin with a discussion of IP9 and IP10, the propositions which introduce the seemingly problematic notions that substance consists of a plurality of attributes and that each attribute must be conceived through itself. Spinoza's assertion in the Scholium to IP10 that a plurality of substances cannot be inferred from a plurality of attributes is crucial, for without it he is in no position to argue in IP11 that "God, or [*sive*] a substance consisting of infinite attributes, each of which expresses eternal and infinite essence, necessarily exists" (G II/52/23-5). But it is hardly clear how one indivisible substance can consist in an infinite plurality of attributes. Next I will discuss Gilles Deleuze's interpretive solution. Deleuze argues that the "plurality" of the attributes is metaphysically unique and based in "real distinction," a form of distinction which is nondenumerable. According to Deleuze this plurality cannot be understood numerically, but only as a "qualitative multiplicity."¹ Consequently it differs radically from the more familiar denumerable form of plurality which is appropriate only to "modal distinction." The uniquely nondenumerable plurality of the attributes

¹ Deleuze, 37.

is fundamentally indivisible, and therefore it is consistent with the indivisible infinity of substance. I believe Deleuze's reading largely resolves this first problem. However, this account still does not explain in any precise terms what it means for the attributes to be "infinite."

To address this question, I next turn to considering what it means in the context of Spinoza's system for the "infinite attributes" of God to be a "qualitative multiplicity." One reading which readily suggests itself is that the attributes manifest a "dual infinity": each attribute is individually and intensively "infinite in its own kind," but all the attributes collectively constitute an extensively infinite plurality. According to this reading, the combination of both forms of infinity constitutes the absolute infinity of substance. While there is textual support for this interpretation in some of Spinoza's early works, ultimately it is untenable because it generates a new problem. This is "the problem of the infinity of the attributes,"² an apparent inconsistency between the "parallelism" of the order of modes conceived under each attribute as described in the Scholium to IIP7, and the compass of the infinite intellect of God over modes of all attributes as asserted in IIP3 and amplified in Letter 66. Together these commitments apparently entail that the order of the modes of the attribute of thought is more comprehensive than that of any of the other attributes. One avenue for resolving this problem is an idealist reading of Spinoza in which all non-thought attributes are comprehended in and transcended by the attribute of thought. Errol Harris and Gilles Deleuze each suggest variants of such a reading; however, this interpretive approach sacrifices the conceptual independence and parallelism of the attributes. The most promising solution is a new reading introduced by James Thomas which accords the attributes a dual status as "orders of being" and "qualities of being" (or "intuitions"); as orders of being attributes are independent,

² Errol E. Harris, *The Substance of Spinoza* (Atlantic Highlands, New Jersey: Humanities Press, 1995), 47.

but as qualities of being attributes are comprehended within other attributes.³ Thomas' reading unfortunately provides no textual support for his distinction between orders and qualities of being, but his crucial observation that the attributes in some sense must comprehend one another provides the foundation for a new interpretation of the doctrine of the attributes, which I will develop in Chapter Four.

Substance as a Plurality of Attributes: IP9 and IP10

In the propositions leading up to IP9 Spinoza apparently assumes that a substance possesses one and only one attribute. Yet in IP9 and subsequent propositions Spinoza inexplicably shifts to considering substance as though it consists of multiple attributes. The demonstrations to these propositions seem to create problems for Spinoza. But his explanation in the Scholium to IP10 ultimately points the way to a partial glimpse into what Spinoza intends when he claims that God is absolutely infinite.

IP9 is a jarring shift away from the Cartesian conception of single-attribute substance which Spinoza appears to presuppose in the preceding propositions:⁴ “The more reality or being each thing [*res*] has, the more attributes belong to it” (G II/51/23-4). Spinoza's Demonstration remarks only that this statement is evident from ID4, the definition of ‘attribute’: “By attribute I understand what the intellect perceives of a substance, as constituting its essence” (G II/45/17-19). Perhaps he intends that the more attributes a thing has the more content the intellect can conceive as constitutive of the essence of that thing. But as a gesture at an argument this is not

³ James Thomas, *Intuition and Reality: A Study of the Attributes of Substance in the Absolute Idealism of Spinoza* (Aldershot, England: Ashgate, 1999), 4-5.

⁴ Descartes argues that each substance has one and only one “principal attribute” through which it is conceived; there are only two principal attributes, thought and extension (*Principles of Philosophy* I, 53 (CSM 210-1)). See Woolhouse, 19. Since Spinoza accepts thought and extension as attributes of God (IIP1-2), he very likely has the Cartesian conception of substance in mind in the early propositions of Part I of the *Ethics*.

satisfactory. If the attributes of a thing are just different ways of conceiving the essence of a thing, then there is only one essence to be conceived,⁵ and hence there is no clear reason to think that just because an intellect conceives a thing in many ways it follows that the thing must have more reality or being.⁶ It is also unclear why this proposition seems to refer generally to “things” (*res*) rather than to substance in particular, especially since it appeals to attributes, which are perceived to constitute the essence of substance, not of things in general.

Spinoza exacerbates the problem in IP10: “Each attribute of one substance must be conceived through itself” (G II/51/28-9).⁷ The Demonstration is relatively clear: since an attribute is what the intellect perceives of substance as constituting its essence (ID4), and by the definition (or essence) of substance it must be conceived through itself (ID3), it follows that the attribute must be conceived through itself. In other words, if the attribute were conceived through another, then it could not be perceived to constitute the essence of substance, but rather would be perceived to constitute the essence of some mode of a substance. This proposition is nevertheless particularly puzzling because despite the fact that it appears *after* Spinoza has suggested the possibility of multiple-attribute substances, IP10 suggests a continuation of thinking in terms of single-attribute substances: if the attribute must be conceived through itself, it satisfies at least half of the definition of substance. If each attribute is conceived through itself,

⁵ Alan Donagan, “Essence and the Distinction of Attributes in Spinoza’s Metaphysics,” in Grene, 176-7. Gueroult, however, whose reading Donagan criticizes, thinks that God consists of a plurality of essences (*Spinoza*, 1:174-6).

⁶ It is possible that by ‘more reality’ Spinoza intends an intensive rather than an extensive quantity — i.e., a quantity of degree rather than of discrete units. Yet by ‘more attributes’ he must intend an extensive quantity. If this is so, then the demonstration is problematic in a different way: why would a greater intensive quantity or degree of reality imply a greater extensive quantity of attributes? This question is of course the root problem I am introducing in this chapter, and its resolution is fleshed out in the remainder of the dissertation.

⁷ Shirley’s translation (*Complete Works*, 221).

presumably it is “in itself” as well and thereby satisfies the second half of the definition of substance. Thus it seems that each attribute *is* its own substance.⁸

Spinoza immediately addresses this problem in the Scholium to IP10: “From these [propositions] it is evident that although two attributes may be conceived as really distinct, that is, one without the help of the other, we nevertheless cannot conclude from that that they constitute two beings, or [*sive*] two different substances” (G II/52/2-5).⁹ His argument is obscure: all the attributes in a substance “have always been in it simultaneously, and one could not have been produced by another; but each expresses the reality or [*sive*] being of substance”; hence “it is in the nature of a substance that each of its attributes be conceived through itself” (G II/52/5-8).¹⁰ Spinoza seems to think that this argument in conjunction with IP9 and IP10 entails that “really distinct” attributes do not imply different substances. He remarks that ultimately there is no difficulty in the individuation of substances, for no such individuation is possible: the ensuing propositions (in particular the first Corollary to IP14) will show “that in Nature there exists only one substance, and that it is absolutely infinite” (G II/52/19-20).

The argument is no less opaque to Spinoza’s correspondents than it is to us. Simon de Vries, after quoting the above argument, asks for clarification:

In this way you seem, Sir, to suppose that the nature of substance is so constituted that it can have more than one attribute, which you have not yet demonstrated, unless you depend on the...definition of an absolutely infinite substance, or [*sive*] God. Otherwise, I should say that each substance has only one attribute, and if I had the idea of two attributes, I could rightly conclude that, where there are two different attributes, there are two different substances. We ask you for a clearer explanation of this.... (Letter 8: G IV/41/7-14)

⁸ This is in fact Gueroult’s reading: each attribute is a substance, and God is the substance which is the union of these substances. See n. 5 above; see also Donagan’s summary of Gueroult in “Essence and the Distinction of Attributes,” 174-6.

⁹ Shirley’s translation, modified (*Complete Works*, 221).

¹⁰ Shirley’s translation (*ibid.*, 221).

Unfortunately Spinoza's response seems only to beg the question, merely reiterating some of his comments from the Scholium to IP10:

But you say that I have not demonstrated that a substance (or [*sive*] being) can have more attributes than one. Perhaps you have neglected to pay attention to my demonstrations. For I have used two: *first*, that nothing is more evident to us than that we conceive each being under some attribute, and that the more reality or being a being has the more attributes must be attributed to it; so a being absolutely infinite must be defined, etc.; *second*, and the one I judge best, is that the more attributes I attribute to a being the more I am compelled to attribute existence to it; that is, the more I conceive it as true. It would be quite the contrary if I had feigned a Chimaera, or something like that. (Letter 9: G IV/44/34 – 45/25)

It is almost as though Spinoza thinks that the burden of proof is on de Vries to show that a distinction of attributes entails a distinction of substances.

It is worth noting that Spinoza is in a position to argue that there can be no plurality of substances at all if IP9 and IP10 really are sufficient to show that the real distinction of attributes does not entail a plurality of substances. Recall the disjunction from IP5:¹¹ substances, if they can be distinguished at all, must be distinguished either in terms of their modes or in terms of their attributes. In the Demonstration to IP5 Spinoza argues that substances cannot be distinguished in terms of their modes. If he can show that substances cannot be distinguished in terms of attributes, then the other leg of the disjunction must be rejected, and it follows that no plurality of substances is possible. The Scholium to IP10 effectively rejects the second disjunct. Yet Spinoza does not draw this conclusion here. Instead he first argues in the Demonstration to IP11 that God exists as absolutely infinite substance, and then in the Demonstration to IP14 (and its first Corollary) he contends that since God has all attributes, and there can be no two substances of the same attribute (IP5), it follows that God is the only substance. I think Spinoza argues for the uniqueness of substance in this roundabout way because to infer at this point that a

¹¹ See Chapter Two, pp. 48-49.

plurality of substances is impossible is, for his purposes, a dead end: to demonstrate the negative claim that there can be no plurality of substances does not positively establish the existence and nature of substance. Spinoza needs a positive proof of the existence of a substance if he is to deduce a positive metaphysical account of substance and its modes, and the demonstration of the existence of God, a substance consisting of infinite attributes, does just this. I will not analyze the proofs of God's existence in this dissertation; here I am concerned primarily with what it means for God to be absolutely infinite — that is, what it means to say that God is a substance consisting of infinite attributes. So, for my purposes, IP9 and IP10 evoke two questions: why does Spinoza shift from propositions concerning single-attribute substances to a many-attribute substance, and why does he think the real distinction of attributes is not sufficient to establish a plurality of distinct substances?

Spinoza's gesture at the answers to these questions is in the argument in the Scholium to IP10, and clearly he thinks that IP9 and IP10 somehow address these questions. But there is still much in the argument that needs unpacking. The main difficulty is what Spinoza means by "really distinct," and why he thinks that it constitutes a distinction of attributes but not of substances.

Real Distinction and the Attributes

Two commentators from distinct philosophical traditions, Alan Donagan and Gilles Deleuze, independently identify real distinction as one of three varieties of distinction that can be traced back to Descartes' *Principles*.¹² There Descartes distinguishes between real distinctions, modal distinctions, and conceptual distinctions.¹³ A real distinction is a distinction between

¹² Donagan, "Essence and the Distinction of Attributes," 165-7; Deleuze, 28-9.

¹³ *Principles* I, 60-2 (CSM I 213-5).

substances, such that the substances are clearly and distinctly perceived separately; for example, the mind and the body are really distinct because (according to Descartes) we clearly and distinctly perceive them separately, and therefore they are distinct substances. Modal distinction obtains between either a mode and the substance of which it is a modification or between two modes of the same substance; for example, between a body and its local motion. Finally, conceptual distinctions obtain between a substance and some attribute or property without which it is “unintelligible,” or between two such attributes; this is the case, for example, with a substance and the attribute of its duration, because we cannot form a clear and distinct idea of the substance while excluding its duration.¹⁴ So for Descartes real distinctions obtain between individual things; modal distinctions obtain either between the individual and its properties or accidents, or between the properties or accidents themselves; and conceptual distinctions obtain between the individual and some attribute or “mode of thought”¹⁵ which belongs to the individual substance but without which we cannot conceive the substance clearly and distinctly.

Descartes contends that there are two kinds of substances, minds and bodies, and that their respective “principal attributes” of thought and extension constitute their natures. Hence to consider substance separately from these attributes is “merely a conceptual distinction,” and so it is better to think of these attributes as constituting the natures of substances or even as the substances themselves.¹⁶ This suggests a possible interpretation of Spinoza’s IP10: since the attributes constitute the essence of the substance itself, there is no “real distinction” between the attribute and the substance, and we can treat the attribute and the substance as “really” identical. The distinction is conceptual, between the substance considered in terms of its nature as

¹⁴ *Principles I*, 62 (CSM I 214).

¹⁵ *Principles I*, 57 (CSM I 212). Number, time, and universals considered abstractly are examples of modes of thought.

¹⁶ *Principles I*, 63 (CSM I 215).

conceived by the intellect (that is, through a given attribute) and the substance considered as an actual individual (substance proper).¹⁷ However, this does not explain how a real distinction of attributes does not thereby constitute a real distinction of substances.

Donagan and Deleuze agree that Spinoza does not merely adopt the Cartesian classification but modifies it.¹⁸ In the Scholium to IP10 Spinoza draws a radical conclusion regarding the metaphysical consequences of this classification. Spinoza contends that IP9 and IP10 show that a real distinction between attributes does not entail a plurality of substances. Thus there is no difficulty in attributing many attributes to one substance. If a real distinction is one where the entities distinguished are independently conceived clearly and distinctly, then by IP10 a distinction between attributes is a real distinction. Here Descartes would argue that if the attributes are distinct, then they must belong to different substances — that is, a distinction of attributes must imply a distinction between individuals. So, for example, if we can conceive of two attributes, thought and extension, then there are at least two substances, one of each attribute.

It is here that a problem arises for Descartes: how does one distinguish between substances of the *same* attribute? In the case of thinking substances the experiential fact that thoughts are not shared between minds allows for a clear distinction between minds. However, Descartes distinguishes bodies, the prime candidates for possible material substances, in terms of common motion. Yet motion is a mode of the substance in which it adheres.¹⁹ Thus a distinction of bodies in terms of motion could only be a modal distinction, not a real one. Thus

¹⁷ This is essentially Pierre Macherey's interpretation of the definition of attribute. While the attributes are really distinct, attribute and substance are only distinguished conceptually. See "The Problem of the Attributes," trans. Ted Stoltze, in *The New Spinoza*, ed. Warren Montag and Ted Stoltze (Minneapolis: University of Minnesota Press, 1997), 78-80.

¹⁸ See n. 12 above.

¹⁹ *Principles* I, 61 (CSM I 214).

Descartes has no clear basis for making a real distinction between corporeal individuals. And indeed, Descartes does struggle with this issue. In places Descartes speaks of individual bodies as though they were individual substances.²⁰ However, the prefatory synopsis of the *Meditations* suggests that Descartes entertained the possibility that there was indeed only one corporeal substance; there he notes that the human body is a substance “in the general sense” and in that respect cannot be destroyed, but as a configuration of organs it can lose its identity.²¹

Woolhouse suggests that Descartes ultimately thinks there are neither a plurality of extended substances nor just one; *substantia*, in the case of extension, is a mass term: just as there is lead or gold, but not “leads” or “golds,” nor just one lead or one gold, there is simply extended substance as such, and particular pieces of it.²²

In any case, Spinoza cannot accept the Cartesian account, even if we grant that there is a plurality of minds that do not share thoughts, for these individual substances of the same attribute would be distinguished in terms of the particular modes of thought they bear.²³ Thus these substances are not really distinct, but merely modally distinct; Descartes has in essence reduced real distinction to a variety of modal distinction. So we can see for Spinoza there is reason to think that real distinction is not useful for individuation of substances.

Then what role does real distinction play if it is not the basis for individuation? Its real significance concerns how we conceive of plurality. Donagan acknowledges a fundamental difference between the real plurality of attributes and modal plurality, and concludes that substance and attributes stand in a “unique relation...neither of definitional identity nor of

²⁰ See, for example, *Principles* I, 60 (CSM I 213).

²¹ *Meditations*, Synopsis (CSM II 10).

²² Woolhouse, 22-3.

²³ Michael Della Rocca, in fact, argues that thoughts are *indeed* shared, at least between God and finite minds. Della Rocca argues, based on the Corollary to IIP11 (“the human mind is a part of the infinite intellect of God” (G II/94/30-1)), that “the ideas that make up our mind are numerically identical with certain of the ideas in God’s mind” (*Representation*, 40). The reason why our ideas may not be adequate while all of God’s ideas are adequate is that the content of these ideas is “mind-relative” (*ibid.*).

causality.”²⁴ Deleuze, however, pushes further and suggests an unusual interpretation of the nature of real distinction: real distinction does not constitute *numerical* distinction at all. Hence the attributes are not a quantitative plurality but what Deleuze calls a “qualitative multiplicity.”²⁵ This is a rather subtle claim, and it is difficult to conceive of a plurality or multiplicity which does not involve number or discrete quantity, but I think Deleuze’s reading has its roots in Spinoza’s contention in Letter 12 that number is only a “being of reason.” Enumeration presupposes an act of *abstraction* in order to define a unit that enables us to count; however, the attributes are *concrete* expressions of the nature of substance. That is, their real distinction as attributes is not grounded in any act of abstraction. Hence whatever sense in which the attributes constitute a plurality is fundamentally non-numerical.

Deleuze argues as follows. The second Scholium to IP8 constitutes a positive proof of IP5: since a true definition neither expresses nor involves any definite number of individuals, an explanation of why a given number of individuals who satisfy the definition in fact exist must be given in terms of external causes. But since existence pertains to the nature of a substance (IP7), there can be no external causes for the existence of some number of substances; therefore no number of substances of the same nature can be inferred.²⁶ Deleuze contends that in the background of this argument is the fact that numerical distinction presupposes a common nature within which such distinctions can be made. Substance exists in itself and hence can only *be* the common nature within which such distinctions are made; therefore substance cannot be produced or affected by an external cause — and an external cause is a necessary precondition for the existence of a numerical diversity of substances.²⁷ It follows that numerical distinction cannot

²⁴ “Essence and the Distinction of Attributes,” 178-80.

²⁵ Deleuze, 37.

²⁶ Deleuze, 31-2.

²⁷ *Ibid.*, 31.

apply to substances at all, and hence that the infinity of substance is not susceptible to numerical analysis — indeed, the problem of the infinite is the result of such treatment.²⁸ In the Scholium to IP10 Spinoza argues that the attributes are really distinct; it follows that they too are not numerically distinct, for IP10 asserts that they are conceived through themselves just as substance is. The result is not a weakening of real distinction, but recognition that it differs from modal distinction in virtue of the fact that it does *not* constitute a numerical distinction.²⁹

Deleuze's reading makes some sense of why Spinoza regards the intellectual apprehension of quantity as indivisible, infinite, and unique in Letter 12 and in the Scholium to IP15. Because it cannot constitute a numerical distinction, real distinction does not entail an individuated plurality of substances. In a sense it constitutes a "qualitative multiplicity" of substances, but since this is indivisible, infinite, and unique this is really no different from a single substance. It is in this way that the infinite conceived as simple and unique nevertheless "involves" plurality. It is to be sure an unusual sense of plurality, for the fact that the attributes are conceived entirely independently (IP10) requires that the plurality of attributes cannot properly be conceived in any sense which appeals to number. Numerical individuation pertains only to modal distinctions.

The "Dual Infinity" Reading of the Attributes

We now understand why a plurality of attributes does not entail a numerical plurality of substances: it is because the plurality of attributes is itself nondenumerable. However, Spinoza's discussion of the real distinction of the attributes immediately segues into the proofs for IP11, which asserts the necessary existence of God, "a substance consisting of infinite

²⁸ Ibid., 33.

²⁹ Ibid., 34.

attributes” (ID6: G II/45/23; my translation). In the Scholium to IP10 Spinoza wishes to show that to conceive God’s indivisible and unique nature in terms of an infinite plurality of attributes is not incoherent. However, Spinoza intends not merely that we *can* consistently conceive of God in this fashion, but that we *must*: the infinity of the attributes is constitutive of God’s nature, for God is absolutely infinite substance. But exactly how does the infinite plurality of attributes *constitute* the simple and indivisible absolute infinity of God?

The explanation that comes most readily to hand is that the attributes are infinite in a dual sense: each attribute is “infinite in its own kind,” and collectively all the attributes constitute an infinite plurality. Thus on this reading what it means for substance to be “absolutely infinite” is that it consists of an infinite plurality of attributes each of which is infinite in its own kind. This reading is based on the Explication of ID6, the definition of ‘God’:

I say absolutely infinite, not infinite in its own kind; for whatever is only infinite in its own kind, we can deny infinite attributes of it [inserted in Dutch edition: (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. (G II/46/2-7; Curley’s translation, modified)

God is absolutely infinite; given IP10, “Each attribute of one substance must be conceived through itself” (G II/51/28-9),³⁰ it appears to follow that we can deny infinitely many attributes of any given attribute; therefore each attribute must be infinite in its own kind. The Demonstration to IP16 apparently confirms this: “the divine nature has absolutely infinite attributes [*infinita absolute attributa*] (by ID6), each of which expresses infinite essence in its own kind [*infinitam essentiam in suo genere*]” (G II/60/26-28; Curley’s translation, modified). Thus a dual sense of ‘infinite’ is implicit in the phrase *infinita absolute attributa*: each attribute is intrinsically infinite (that is, as a “part” of substance it is infinitely rich, infinite in its own kind), while collectively the attributes of God are extrinsically infinite (that is, collectively the

³⁰ Shirley’s translation (*Complete Works*, 221).

“parts” constitute an infinite plurality). Thus when Spinoza speaks of “infinite attributes,” *infinitum* can simultaneously designate two senses of the term; their “product” (considered as a “multiplication” of the two senses) is the absolute infinity of God.³¹

There is persuasive textual support in some of Spinoza’s early writings for what I will call the “dual infinity” reading of the infinity of the attributes. Spinoza quite explicitly claims that each attribute is infinite in its own kind in Letter 4. In Letter 3 Henry Oldenburg asks Spinoza “are you certain that Body is not limited by Thought nor Thought by Body?” (G IV/10/26-7). Spinoza replies (evidently referring to the attributes of thought and extension):

But please note: if someone says that Extension is limited not by Extension, but by Thought, is that not the same as saying the Extension is infinite not absolutely, but only so far as it is Extension? I.e., does he not grant me that Extension is not infinite absolutely, but only insofar as it is Extension, i.e., in its own kind? (G IV/13/17-22; Curley’s translation, modified)

In the *Short Treatise* Spinoza makes clear that the attributes are not only each infinite in its own kind, but together constitute an infinite collection as well: “He [God] is, we say, a being of which all, or infinite, attributes are predicated, each of which is infinitely perfect in its own kind” (G I/19/4-7); “...Nature consists of infinite attributes, of which each is perfect in its kind” (G I/22/10-2). Letter 4 dates to October 1661, which was probably during the time that Spinoza was composing the *Short Treatise*.³² So at least early in his career Spinoza thinks that each attribute is infinite in its own kind; this commitment seems to carry over into the *Ethics*.

However, the “dual infinity” reading presents a serious difficulty. It involves the notoriously ambiguous definition of ‘attribute’ (ID4), which asserts that an attribute is what the intellect perceives as constituting the essence of substance. On the “dual infinity” reading the infinite plurality of the attributes “constitute” the absolute infinity of God as elements in a

³¹ Harris, “Infinity of Attributes and *Idea Idea*,” 39. See also Kline, “On the Infinity of Spinoza’s Attributes,” 344; Harris, *The Substance of Spinoza*, 39; Stuart Hampshire, *Spinoza* (Middlesex, England: Penguin Books, 1987), 42.

³² See Curley’s “Editorial Preface” to his translation of the *Short Treatise* (*Collected Works*, 50).

composition. If we assume that the attributes can exist as an infinite plurality only in the sense that they collectively *compose* substance, it is not at all clear on what grounds Spinoza can argue that there is one substance consisting of an infinite plurality of infinite attributes rather than an infinite (though nondenumerable) plurality of single-attribute substances, each of which is its own world.³³ It is perfectly plausible to think that each attribute, because it is infinite in its own kind and conceived through itself (IP10), might express a different substance. In other words, the “dual infinity” reading of the attributes presupposes that there is some unifying principle which unites the attributes in one absolutely infinite substance, but it does not supply one.

The other side of the dual infinity reading of the attributes, i.e. the intrinsic or intensive infinity of each attribute, contributes to the same difficulty. Here, however, it follows from a different line of reasoning. Spinoza’s argument for the uniqueness of substance appears to be as follows:

- (1) The more reality a being has, the more attributes pertain to it (IP9).
- (2) Each attribute expresses the essence of substance, and hence is conceived through itself, and cannot be produced by another attribute or substance (IP10 Schol.).
- (3) Existence pertains to the nature of a substance (IP7).
- (4) God is a substance consisting of infinite attributes (ID6).
- (5) Therefore God necessarily exists (IP11).
- (6) There cannot be a plurality of substances of the same attribute (IP5).

³³ Again, this is in some ways similar to the conclusion that Gueroult draws, though he contends that the plurality of single attribute substances are nevertheless united in absolutely infinite substance or God. This reading presents obvious problems if each attribute is understood to express a single essence. See Alan Donagan, “Essence and the Distinction of Attributes in Spinoza’s Metaphysics”, in *Spinoza: A Collection of Critical Essays*, ed. Marjorie Grene (Garden City, New York: Anchor Press, 1973), 164-81 for a discussion of this problem. See also Macherey, 84-88.

(7) Therefore (by (4) and (6)) God is the only substance, consisting of all attributes (IP14 and Cor. 1).

The weak link in the argument is the first premise, IP9, for without it ID6 could be merely a nominal definition: if Spinoza cannot establish that the more reality a thing has, the more attributes it has, then it is not clear that a substance consisting of an infinite plurality of attributes is a coherent notion. Spinoza's proof of IP9 remarks only that it is "evident from ID4" (G II/51/26), the definition of 'attribute'; however, if an attribute is only infinite in its own kind, then IP9 does not follow. If, for example, the attribute of extension expresses the essence of a substance, but is only infinite insofar as it is extension, it does not follow that the same substance expressed by extension must also be expressed by the attribute of thought, or by any other attribute. Therefore it is an open question whether there is one substance consisting of infinite attributes, or an infinite plurality of single-attribute substances — again because we lack a unifying principle. One might argue that the latter alternative is no more intelligible than the former, since there is no ground for a plurality of substances either, unless this ground of existence transcends substantiality altogether. However, the problem here does not really concern which of these options is more plausible. The problem is that the reading of the attributes as each infinite in its own kind forces a choice between two options, neither of which is intelligible. Hence this reading must be rejected.

This difficulty in dealing with the relationship between substance and attribute has motivated a variant reading of ID4, famously argued by Harry A. Wolfson, known as the "subjective interpretation" of the attributes. Wolfson contends that ID4 involves a subjective component: "By attribute I understand *what the intellect perceives* of a substance, as [*tanquam*]

constituting its essence” (G II/45/17-9; emphasis mine).³⁴ Wolfson thinks that Spinoza tacitly intends the *finite* intellect, and its role in the definition of ‘attribute’ is to suggest that the apparent differences in attributes are illusions attributable to the nature and activity of the finite intellect, for in reality substance is simple.³⁵ This reading further suggests that the ambiguous *tanquam* should be rendered as ‘as if’ rather than ‘as’.³⁶ Thus Wolfson resolves the tension between the apparent irreducible plurality of attributes and the uniqueness of substance by denying that this plurality is in fact real.³⁷ Wolfson’s reading effectively eliminates infinite plurality from the absolute infinity of God; the consequence is the elimination of the contrast between absolute infinity and infinite in its own kind. This does not trouble Wolfson; indeed, he (inexplicably) thinks that for Spinoza ‘infinite’ is tantamount to ‘unknowable’.³⁸

Most commentators consider the subjective interpretation a dead issue.³⁹ I too think the subjective interpretation is ultimately unsupportable. However, at the same time there is something *right* about the subjective interpretation that its detractors overlook. The best way of illustrating what I mean is to consider Pierre Macherey’s argument against the subjective interpretation, for Macherey has a particularly concise and persuasive argument against it, yet at

³⁴ Harry Austryn Wolfson, *The Philosophy of Spinoza* (Cleveland: Meridian Books, 1958), 1:146.

³⁵ *Ibid.*, 1:115, 153 n.2.

³⁶ Francis Haserot imputes this preference in translation to Wolfson (“Spinoza’s Definition of Attribute,” in *Studies in Spinoza: Critical and Interpretive Essays*, ed. S. Paul Kashap (Berkeley: University of California Press, 1972), 30 n. 3), but Wolfson never explicitly discusses the translation of *tanquam*, only the significance of the phrase *quod intellectus percipit*.

³⁷ Wolfson, 1:153.

³⁸ *Ibid.*, 1:138-9.

³⁹ Some prominent commentators hold Gueroult’s refutation of the subjective interpretation in high esteem: Curley calls Gueroult’s response a “definitive refutation” (*Collected Works*, 409 n. 2); Donagan agrees just as strongly, calling it a “decisive criticism” (“Essence and the Distinction of Attributes”, 171 n. 32). Bennett (146 n. 11) and Mason (*The God of Spinoza: A Philosophical Study* (Cambridge, England: Cambridge University Press, 1997), 46-7) cite Haserot’s (see n. 36 above) as the definitive refutation of the subjective reading. Subjectivism of the attributes is not entirely a dead issue, however. Paul Eisenberg, claiming Wolfson’s position constitutes a “strong” form of the subjective interpretation because it considers the perception of a plurality of the attributes an “invention” of the *finite* intellect, instead endorses a “moderate” subjectivist interpretation that ascribes the perception of a plurality of attributes to the workings of any intellect, finite or infinite. See his “On the Attributes and their Alleged Independence of One Another: A Commentary on Spinoza’s *Ethics* IP10”, in *Spinoza: Issues and Directions: The Proceedings of the Chicago Spinoza Conference*, ed. Edwin Curley and Pierre-François Moreau (Leiden: E. J. Brill, 1990), 1.

the same time he unwittingly demonstrates that the subjective interpretation is right to make a point of the fact that the intellect is a significant feature of the definition of ‘attribute’.

In “The Problem of the Attributes” Macherey appeals first to a comment in Letter 2 that Spinoza makes concerning Francis Bacon’s understanding of the nature of intellect:

I shall say little about Bacon, who speaks quite confusedly about this matter [the human mind], and proves hardly anything, but only makes assertions. For first he supposes that in addition to the deceptiveness of the senses, the human intellect is deceived simply by its own nature, and feigns everything from the analogy of its own nature, not from the analogy of the universe, so that in relation to the rays of things it is like an uneven mirror, which mixes its own nature with the nature of things, etc. (G IV/8/28-34; Curley’s translation, modified)

Macherey argues that this demonstrates that Spinoza’s conception of intellect is not Kantian: the intellect, whether it is finite or infinite, does not actively inform substance by means of the attributes, but instead perceives the essence of substance passively.⁴⁰ Macherey adds that in Letters 2 and 4 Spinoza presents definitions of attribute and substance that are virtually identical:

By attribute I understand whatever is conceived through itself and in itself, so that its concept does not involve the concept of another thing. (Letter 2: G IV/7/26-8)

[B]y Substance I understand what is conceived through itself and in itself, i.e., that whose concept does not involve the concept of another thing.... (Letter 4: G IV/13/32-4)

Hence, argues Macherey, the attributes are not merely representations or “names” of substance, but are identical with substance. What it means when Spinoza says that the attributes “express” the reality of substance is that they constitute its concrete nature.⁴¹

This much I think decisively refutes Wolfson’s version of the subjective reading of the attributes; Spinoza clearly does not think that the intellectual perception of the attributes presents a distorted understanding of the nature of substance. However, Macherey offers a questionable new paraphrase of the definition of attribute: “By attribute I understand what constitutes the

⁴⁰ Macherey, 73-4.

⁴¹ Ibid., 79.

essence of substance, and it is thus that the intellect perceives it (such as it is).”⁴² Macherey’s paraphrase trivializes the presence of “what the intellect perceives” in the definition of ‘attribute’ — if the intellect is merely a passive percipient of the nature of substance, why should Spinoza mention the intellect at all? Macherey is right to insist that the intellect does not inform the nature of substance in any way that either distorts the essence of substance or is somehow alien to it. Still, the intellect plays *some* role in attributes’ expression of the essence of substance, or else Spinoza should not have mentioned it. Thus to this extent the subjective interpretation identifies something important about the nature of the attributes. Therefore the “dual infinity” reading of the attributes remains problematic whether we consider the attributes as “subjective” or “objective.” The subjective reading is unsupportable, but to consider the attributes as objective leaves us mired in the difficulty of understanding why an infinite plurality of attributes must express only one substance.

The “dual infinity” interpretation of the infinity of the attributes, in which the absolute infinity of substance consists in an infinite plurality of attributes, each of which is infinite in its own kind, illustrates an apparent need for substance somehow to transcend the confines of its expression in the attributes. To consider the attributes as some sort of collective totality which constitutes the essence of substance requires a unifying principle. However, on the “dual infinity” reading the attributes themselves are treated as though collectively they are sufficient ground for the unity of substance when it is clear that they are not. In order to conceive of thought and extension as distinct attributes, we seem to need some still more fundamental context in which these attributes are embedded, and through which they can be conceived as attributes of the same substance. In other words, in order to understand attributes as attributes of substance, it appears that we somehow must transcend the limitation of conceiving of substance

⁴² Ibid., 80.

through its attributes. A deeper context is essential for the intelligibility of the deep foundations of the metaphysical system, but it is also crucial for the intelligibility of the specific natures of the attributes themselves: in particular, the character of modes of thought is apparently to *represent* modes of other attributes.⁴³ Such a trans-attribute relationship between modes requires some trans-attribute means of intelligibly relating the attributes.⁴⁴ It seems, then, that we must conceive of substance as substance in order to grasp that the infinity of the attributes expresses that substance. But is this a viable option for Spinoza? I will argue that it is not — precisely because the intellect, a mode of the attribute of thought, can grasp the unity of the attributes in one substance. Thus the unifying principle must be available to thought, and hence does not transcend it.

Harris' Absolute Idealist Interpretation of the Attributes

While the subjective interpretation of the attributes is ultimately unsupportable, it nevertheless hardly seems plausible that Spinoza's reference to the intellect's perception of the attributes in ID4 has no bearing on our understanding of the nature of the attributes whatsoever; otherwise, there is no reason for him to have mentioned the intellect. As we have seen in Letter 12 Spinoza certainly believes that the intellect has the capacity to grasp the reality of substance truly — that is, to grasp that substance is unique and indivisible. Thus we might expect that Spinoza's mention of the intellect indicates something about the intellect's role in his

⁴³ See Della Rocca, *Representation*, 47-9 for an argument for the representative character of ideas in Spinoza's system; however, see Deleuze 139-40, 153 for the argument that the representative content of ideas is only an appearance which supervenes on a deeper content which "expresses" only the attribute of thought. I tend to side with Deleuze; I discuss the issue of representation in Chapter Seven, pp. 265-8.

⁴⁴ See, for example, Frank Lucash ("On the Finite and Infinite in Spinoza," *Southern Journal of Philosophy* 20 (1982): 64), who argues that the intellect adequately perceives substance only when it considers all the attributes together; Della Rocca (*Representation*, 132-3), who argues that there must be "attribute-neutral properties" in order for Spinoza's mind-body parallelism to work; and Bennett (42-7, 143-9) who discusses "trans-attribute concepts" at some length.

metaphysics. There is indeed evidence that Spinoza thinks that the attribute of thought has a special status in his system, for the mention of the intellect — a mode of thought — in the very definition of ‘attribute’ ultimately leads Spinoza to argue that the attribute of thought has modes that either represent or reflect each and every mode of every attribute. Since Spinoza does not explicitly grant this capacity to any other attribute, the attribute of thought appears to have the privilege of a wider compass than any other attribute.

Errol E. Harris is one of the more lucid expositors of this aspect of Spinoza’s account of the attributes.⁴⁵ Harris rejects the subjective interpretation of the attributes.⁴⁶ However, he finds in Spinoza’s Letter 66 an account of the attribute of thought that extends its compass over all the attributes, and as a result produces what Harris thinks is a serious inconsistency in Spinoza’s metaphysical system. Harris calls this “the problem of the infinity of attributes.”⁴⁷ The problem is essentially identified by Tschirnhaus in his correspondence with Spinoza; it grows out of his request that Spinoza provide a direct proof accounting for why we know of only two attributes, thought and extension, and no others. In particular, Tschirnhaus wonders if it follows that there is an infinite plurality of worlds corresponding to the infinite plurality of distinct attributes (Letter 63: G IV/274/19 – 275/10). Spinoza replies that the human mind is the idea of the human body only, and so knowledge of the mind and the body involves knowledge of God only under the attributes of thought and extension; as to the question of a plurality of worlds, Spinoza tersely refers Tschirnhaus to the Scholium to IIP7 (Letter 64: G IV/277/10 – 278/10). Evidently Spinoza intends to convey to Tschirnhaus that there is *not* an infinite plurality of worlds, for in the Scholium Spinoza emphasizes that “the thinking substance and the extended substance are one

⁴⁵ See Errol E. Harris, *Salvation From Despair: A Reappraisal of Spinoza’s Philosophy*, (The Hague: Martinus Nijhoff, 1973), 69-73, and “Infinity of Attributes and *Idea Ideae*,” chap.3 in *The Substance of Spinoza*, 38-51.

⁴⁶ *Salvation From Despair*, 50, 82.

⁴⁷ “Infinity of Attributes and *Idea Ideae*,” 39, 50.

and the same substance” (G II/90/6-7), but the whole of nature must be explained exclusively under one attribute at a time, whether the attribute is thought, extension, or any other attribute (G II/90/23-28). In other words, the reason for the explanatory independence of modes of different attributes (IIP6) is not a plurality of distinct worlds but the conceptual independence of the attributes, which does not constitute a plurality of substances, but a plurality of expressions of one substance.

Tschirnhaus is of course not quite satisfied with these answers, for they appear inconsistent with the experiential fact that we know of only two attributes. He argues in Letter 65 that the Scholium to IIP7 in fact entails that the mind is an idea or mode of thought which is merely one of infinite expressions of one and the same “modification” of substance (i.e., as Spinoza puts it, the *res ut in se est*, or the thing as it is in itself, of which “God is really the cause insofar as he consists of infinite attributes” (G II/90/28-9)). Since the order and connection of these expressions are the same across the infinite plurality of attributes, the mind and the body should be simply two corresponding expressions out of an infinite plurality of corresponding expressions of some single modification of substance.⁴⁸ But this means that Spinoza has not provided a satisfactory demonstration for why the mind perceives only the body and not any of the other corresponding expressions (Letter 65: G IV/279/6-29).

Spinoza’s response is unsurprising and, according to Harris, eminently unsatisfactory:

To reply to your objection, I say that although each thing is expressed in infinite modes in the infinite intellect of God, nevertheless those infinite ideas by which it is expressed cannot constitute one and the same mind of a singular thing, but infinitely many minds, since each of these ideas has no connection with any other, as I have explained in the same scholium, that to *Ethics* IIP7, and as is evident from IP10. If you will attend a bit to these things, you will see that no difficulty remains. (Letter 66: G IV/280/7-15; Curley’s translation, modified)

⁴⁸ I will discuss the notions of *res ut in se est* and *modificatio* in more detail in Chapter Six.

This response is unsurprising because Spinoza cannot concede that the mind should have knowledge of all the other attributes. As Harris notes, even if Spinoza's contention that the human body is the *exclusive* object of the idea which constitutes the human mind (IIP13) does not rule out such a possibility in principle, he at least must admit that as a matter of empirical fact this is not the case.⁴⁹ Spinoza appeals to IP10, the assertion of the conceptual independence of each attribute, because if one idea represented all the corresponding expressions of one modification of substance across the infinite attributes, then these attributes would not be conceptually independent, but could be conceived through a single finite idea. However, the assertion of an infinite plurality of completely separate minds united with each corresponding modal expression across the infinite plurality of attributes has an unacceptable consequence for our understanding of the attribute of thought in comparison with each of the other attributes. Tschirnhaus presses this point in Letter 70: if in this way "the attribute of thought is held to extend much more widely than the other attributes" then it cannot be the case that each of the attributes constitutes the essence of God (G IV/302/23-8). Spinoza never replies to this objection because it is preceded by an obvious but unrelated misinterpretation of IIP5; fearing that Tschirnhaus has a corrupt copy of the *Ethics*, Spinoza defers responding to any of the objections from Letter 70 until Tschirnhaus understands IIP5 properly (G IV/304/4-17). Unfortunately, the issue never resurfaces in their correspondence thereafter.

Harris amplifies Tschirnhaus' objection regarding the greater extent of the attribute of thought: this is inconsistent with the Scholium to IIP7, for as God's knowledge encompasses all things, God must know all of the attributes and their modes. Since knowledge pertains to the attribute of thought, the attribute of thought therefore must be more comprehensive than any of the other attributes individually, and indeed in some sense must encompass them all. The

⁴⁹ *Salvation From Despair*, 72.

problem basically stems, as Tschirnhaus notes, from Spinoza's insistence that all the attributes are in reality the same substance conceived in different ways. As Harris explains, since the attributes are all ultimately one and the same in substance (IIP7 Schol.), any mode of a given attribute should have a correlative mode in every other attribute. Thus these correlative modes are all expressions of the same thing in different attributes. This accounts for why the idea and its object are one and the same: there is strictly speaking no parallelism of modes amongst the infinity of the attributes, but rather only one order of modes that is manifested in each of the attributes, and that order is conceived differently under each attribute.⁵⁰ Tschirnhaus' objection is that this makes it a puzzle how human beings, whose minds are the ideas of their bodies, are only aware of modes under the attributes of thought and extension. Spinoza's reply in Letter 66 amounts to the claim that each mode, regardless of the attribute under which it is conceived, has its own idea under the attribute of thought; therefore a given idea represents a specific expression of a thing in one attribute, and that expression alone. I think Spinoza is unable to avoid this conclusion. If a mode lacked its own idea, then that mode would be inconceivable; or else, if it shared an idea with some other mode or modes (of attributes other than thought), the mode would be conceptually indistinguishable from the correlate mode(s) with which it shared the idea. Thus each correlate mode of each of the other non-thought attributes must have its very own idea or mind. As Harris puts it, the attribute of thought insofar as it is expressed in the infinite intellect of God must comprehend all minds, and must therefore have a separate idea of each and every mode of every attribute.⁵¹

However, argues Harris, from this it follows that the mind of God has an order and connection of ideas that is infinitely more extensive than the order and connection of modes

⁵⁰ Ibid., 70.

⁵¹ Ibid., 71.

under any of the other attributes.⁵² Indeed, in some sense the attribute of thought must be a super-attribute which encompasses the order and connection of modes in all other attributes:⁵³ whereas non-thought attributes are “one-dimensional,” the order of ideas in the attribute of thought is “multidimensional.”⁵⁴ Hence Letter 66 is inconsistent with IIP7 itself. Furthermore, since according to the Scholium to IIP7 ideas, bodies, and all other corresponding expressions of the modifications of substance are “one and the same” in these modifications of substance, and yet Letter 66 says these ideas or minds have no connection whatsoever because of the assertion of the conceptual independence of the attributes in IP10, it follows that Letter 66 is inconsistent with the Scholium as well.⁵⁵

Harris contends that this major inconsistency in Spinoza’s system is irreparable without sacrificing some important part of Spinoza’s doctrine of the attributes. Initially he thinks that Spinoza incorrectly assumes the legitimacy of Cartesian dualism so far as it regards extension and thought as fundamentally different, and thereby inherits the mind-body problem. Harris suggests Spinoza might avoid the problem by eliminating the infinity of attributes, and substituting a single attribute of “absolutely infinite self-completeness” which immediately differentiates into a plurality of modes hierarchically organized by “degree of reality” in a holistic system.⁵⁶ In a later essay Harris tentatively suggests that the attributes might be saved as distinct and self-contained levels of order represented by the diversity of physical and other sciences which had not been adequately developed in Spinoza’s time — but the price is that

⁵² Ibid.

⁵³ Not to mention the formal essences of finite modes which do not actually exist. See IIP8 and its Scholium.

⁵⁴ “Infinity of Attributes and *Idea Ideae*,” 41.

⁵⁵ Ibid.

⁵⁶ *Salvation From Despair*, 73-4.

Spinoza's assertion of a "reduplication of minds" (that is, that there is an idea or mind for each mode of each and every attribute) from Letter 66 must be abandoned.⁵⁷

Harris' discussion of the problem of the infinity of the attributes draws attention to the special role that thought appears to play in Spinoza's system. The root of the problem of the infinite attributes, I think, is Spinoza's assertion in ID4 that intellectual perception is relevant to our understanding of the character of the attributes. As this definition suggests that the intellect has perceptual access to all the attributes, it is unsurprising that other attributes should fall under the scope of the attribute of thought. But Tschirnhaus (and Harris) argue that this is inconsistent with Spinoza's contention that each attribute must be conceived through itself. Clearly if a thing is perceived by the intellect, then in some sense it must be conceived through the attribute of thought, since the intellect is a mode of thought (IP31 Dem.). Therefore it cannot be true that each attribute must be conceived through itself, because it must at least partly involve the attribute of thought in order for it to be conceived at all. Thus the attribute of thought swallows up all else — perhaps even substance itself, for if thought is the only legitimate attribute then it coincides with substance.⁵⁸ Spinoza seems left with a deeply idealist system.

However, there is a virtue to this idealist reading: it provides an account of immanence, clearly an important element of Spinoza's thought. If thought is the most comprehensive attribute, comprehensive of all else, it need not transcend itself to capture the whole of reality. We have an easy explanation for how thought can grasp things outside the mind: there is not really anything "outside" of mind. Expanding one's knowledge is simply a matter of expanding the bounds of one's own thought within a deeper context of thought. The unpalatable

⁵⁷ "Infinity of Attributes and *Idea Ideae*," 48-50.

⁵⁸ Spinoza tends to identify substance with the attribute under which it is conceived; see Letter 9 (G IV/46/20-5). Recall also Macherey's observation (79) that Spinoza offers definitions of 'attribute' and 'substance' in Letter 2 (G IV/7/26-8) and Letter 4 (G IV/13/32-4) that are virtually identical.

consequence is perhaps a form of anthropocentrism — the human being, who on the Cartesian model is a mind united with a piece of matter, is perhaps the measure of the whole universe.

But might this not be just a function of perspective? Could it not just *look* as though the universe is wholly comprehended (in principle) only in thought because the human way of existing in and relating to the universe is as a thinking being? Certainly there are modes of thinking that do not grasp reality adequately, such as the Cartesian faculty of the imagination. Still, there is something persuasive about idealism: we could not really hope to escape thought as our means of grasping the universe. If “reality” is a distinction of thought opposed to “illusion” or appearance, then to say a reality exists outside our thought is only to apply a category of thought to something that may transcend thought. Harris’ account of “the problem of the infinity of attributes” accurately reflects a central aspect of Spinoza’s project: the attempt of thought to grasp all of reality. But an idealist reading of Spinoza nevertheless is at odds with the “parallelism” of the modes of thought and extension asserted in IIP7, for what Harris appropriates to the attribute of thought can (and indeed must) equally well apply to any other attribute.

Deleuze: The Dual Parallelism of Attributes and Powers

Gilles Deleuze concurs in some ways with Harris’ idealist reading; however, Deleuze develops more concretely the special role that thought appears to play in Spinoza’s metaphysics. Furthermore, Deleuze thinks that the “singular privilege” that the attribute of thought enjoys is nevertheless consistent with the “parallelism” of the modal orders in each attribute.⁵⁹ Deleuze argues that Spinoza actually holds a *dual* parallelism, one for the modal orders of the attributes and the other for two “powers” of substance mentioned in the Corollary to IIP7. The parallelism

⁵⁹ Deleuze, *Expressionism in Philosophy*, 114.

of the modal orders of the attributes constitutes an *ontological* parallelism, whereas the parallelism of the powers of thinking and of acting or existing constitutes an *epistemological* parallelism which according to Deleuze accounts for the more comprehensive character of the attribute of thought without contradicting the parallelism of the modal orders.

Deleuze accepts that Spinoza intends to argue for a parallelism of the modal order of the attributes, as well as their explanatory independence.⁶⁰ He finds three “formulations” of parallelism in the orders of modes in distinct attributes: an “identity of order” (correspondence), an “identity of connection” (equality of principle), and an “identity of being” (ontological unity).⁶¹ By “identity of order” Deleuze understands that the modal order of each attribute is such that there is no mode which does not have a corresponding mode in another attribute.⁶² “Identity of connection” means that the causal connection between modes of any given attribute is governed by a principle which is “equal” to the principle governing the connection of modes in any other attribute — that is, that the fundamental ordering principle for a given attribute determines the causal sequence of modes in exactly the same order as that of any other attribute, even though the ordering principle for each attribute is qualitatively unique.⁶³ Finally, “identity of being” indicates that correlative modes are ontologically one and the same thing or “modification” and differ only in the attribute in which they are expressed.⁶⁴ In these three respects no one attribute or its modal order has any preeminence over any other.

However, while Harris thinks that Spinoza does not contradict his commitment to the parallelism of the modal order until the admission in Letter 66 that there are distinct modes of thought representing every mode of every attribute, Deleuze argues that the apparent

⁶⁰ Ibid., 106.

⁶¹ Ibid., 107.

⁶² Ibid.

⁶³ Ibid., 108.

⁶⁴ Ibid., 109.

contradiction is already implicit in IIP7 and its Corollary. IIP7 asserts that “The order and connection of ideas is the same as the order and the connection of things [*rerum*]” (G II/89/21-2), and the Corollary to IIP7 infers from this that “God’s power of thinking [*cogitandi potentia*] is equal to his actual power of acting [*actuali agenda potentiae*]” (G II/89/27-8). These propositions assert an *epistemological* parallelism distinct from the parallelism of the modal orders, for the parallelism specifically obtains between an idea and its object — that is, between a mode of thought and a mode of some attribute. The parallelism of the modal orders of different attributes, which really appears in Scholium to IIP7, constitutes an *ontological* parallelism.⁶⁵

The epistemological parallelism has its own triad of “formulations” in terms of identity of order, connection, and being. As God must understand his own essence and all that follows from that essence (IP30) God must also have an idea for every mode produced (IIP3); hence there is identity of order. The epistemological parallelism is manifested as the equality of two powers, and thus there is identity of principle. Finally, the idea and its object are the same thing expressed under these two powers, and so there is identity of being.⁶⁶ But of course the question is whether or not such a dual parallelism can be consistently held, for it “forces us to confer on the attribute of Thought a singular privilege,” the privilege which Spinoza makes explicit in Letter 66, at Tschirnhaus’ prompting in Letter 65, and “[t]his privilege seems in flagrant contradiction with all the demands of ontological parallelism.”⁶⁷

Deleuze insists that there are two distinct parallelisms because there are distinct equalities of principle involved. Whereas in the case of the ontological parallelism there are identical orders according to the equal principles of each of the infinite attributes, each of which is infinite

⁶⁵ Ibid., 113.

⁶⁶ Ibid., 116-7.

⁶⁷ Ibid., 114.

in its own kind, the powers of thinking and of acting are different principles altogether, for they constitute “two halves” of substance, each of which is absolutely infinite.⁶⁸ The condition for attributing these two powers to God is not that God has the attributes of thought and extension, but rather that God consists of *infinite* attributes. The power of acting (or existing) is coextensive with all of the attributes and not just with extension; Spinoza refers generically to the order of “things” [*rerum*] in IIP7, and the power of acting must include not just the production of modes of extension, but modes of every attribute (including thought, for ideas are existing things too).⁶⁹ And the power of thinking must extend over modes of every attribute, or else God cannot understand his own essence and all that follows from it. Because each of these powers extends over the entirety of God’s nature, each must be absolutely infinite.

The dualistic epistemological parallelism, then, corresponds not to the dualism of body and mind, but to the dualism of formal and objective reality — that is, the difference between the intrinsic reality or formal essence of a thing and its reality insofar as it is represented as the content of an idea.⁷⁰ The attributes are equal so far as they constitute the formal essences which “express” substance, “explicating” or unfolding the absolute essence of substance and “complicated” or enfolded as an infinity of forms in the absolute; it is this relationship with substance, in which the formally or really distinct attributes are equal, which is the condition for God’s power of acting or existing.⁷¹ Complementing this power is God’s power of thinking, which is God’s power of understanding himself and all that follows from his essence. Thus the attributes which are formally distinguished in God are also objectively distinguished in the idea of God. The condition for the power of thinking is the attribute of thought, in which the idea of

⁶⁸ *Ibid.*, 118.

⁶⁹ *Ibid.*, 119.

⁷⁰ I will discuss the distinction between formal and objective reality in Chapter Four. See pp. 158-9.

⁷¹ Deleuze, *Expressionism in Philosophy*, 119-20.

God has its formal reality as a mode of thinking.⁷² Deleuze argues that the power of thinking nevertheless must not be confused with the attribute of thought. While the idea of God takes its form as a mode of the attribute of thought, nevertheless it is grounded in the power of thinking. Hence the power of thinking is grounded in the necessity of God's self-understanding of his essence and all that follows from it, but it is grounded in the possibility of the idea of God — that is, it can only have actual reality as a mode of thought.⁷³

The result, according to Deleuze, is that the attribute of thought is not privileged so far as it is an attribute. It is privileged only relative to the power of thinking which has its formal reality in the attribute of thought. Hence IIP7 and its Corollary describe a parallelism in which the attribute of thought, as the locus of the formal reality of the power of thinking, is equal to the entirely infinite plurality of attributes (including thought), which is the locus of the power of acting or existing.⁷⁴ Where the ontological parallelism places each attribute on equal ground, so that each attribute is equal to any other, the epistemological parallelism in a certain sense posits the equality of the single attribute of thought to the system of attributes as a whole. It is only with respect to the parallelism of powers that the attribute of thought has the privileges of having ideas which objectively represent each of the attributes, of having an idea for each and every mode of every attribute as described in Letter 66, and of having ideas that reflect themselves *ad infinitum* as ideas of ideas.⁷⁵

Deleuze argues that one unusual consequence of his dual parallelism reading is that the ontological parallelism must “pass through” the epistemological parallelism. That is, rather than beginning with the unity of substance and from this deriving the unity of the “modification” or

⁷² Ibid., 122.

⁷³ Ibid., 122-3.

⁷⁴ Ibid., 121-2.

⁷⁵ Ibid., 124-5.

“thing as it is in itself [*res ut in se est*]”, instead we pass to an infinite plurality of idea-object pairs. Each idea-object pair obtains its unity as a modification from the peculiar status of the idea of God, which is grounded in the absolutely infinite power of thinking and yet exists formally as a mode of thought. Deleuze argues that this route is unavoidable, for otherwise the possibility of a plurality of independent worlds constituted by the real distinction of the attributes could not have been ruled out despite their unitary ground in substance.⁷⁶ Only the idea of God can be the principle which establishes the unity in diversity of the modes.

There is much to be said for Deleuze’s reading of the parallelism of the modal orders of the attributes. In particular he is correct to emphasize that the Corollary to IIP7 significantly foreshadows Letter 66. Spinoza does not cite the Corollary for quite some time in the demonstrations of the propositions of Part II; when it appears it is glossed in a quite different form from a statement of the equality of two powers. It first appears as demonstrative support in IIP32, where it is taken to mean that all of God’s ideas agree with their objects (G II/116/6-7); by IA6, this entails that God’s ideas have the main *extrinsic* characteristic of true ideas, that of agreement or correspondence. But subsequent appeals to the Corollary to IIP7 in IIP36, 38, and 39 gloss it as the statement that all of God’s ideas are *adequate*; by the definition of adequacy (IID4) it then follows that God’s ideas have “all the properties or [*sive*] *intrinsic* denominations of a true idea” (G II/85/5-6; emphasis mine). Thus the import of the Corollary to IIP7 is that God’s ideas are adequate and true because God’s power of thinking is capable of covering *all* that exists, as expressed in any attribute.

However, I think the same question I put to Harris may also be addressed to Deleuze: why does thought have a power equal to the collective power of all the infinite attributes, while the attribute of extension (or any of the other unknown attributes, for that matter) lacks a

⁷⁶ Ibid., 127-8.

correspondingly comprehensive power? Deleuze seems to think that the distinction between formal and objective reality can only be a distinction between the object and its idea; evidently the parallelism of powers is grounded in a quality peculiar to the nature of thought. But the formal/objective distinction might only superficially *appear* that way from the vantage point of the attribute of thought. On the other hand, if Deleuze is right then the attribute of thought has a certain adequacy of power in expressing the nature of God that no other attribute shares. While Deleuze may have preserved Spinoza's commitments to parallelism and conceptual independence with his reading, it has been at the cost of the adequacy of the expression of substance in non-thought attributes. But this price need not be paid if the equality of powers expressed in the Corollary to IIP7 only *appears* to favor thought because we just so happen to be engaged in grasping the nature of substance in the context of thought. It seems that in principle the equality of powers could and should be generalized so that *any* attribute is the formal expression of a power that is equal to the entirety of the infinity of attributes — that is, each attribute must express in itself the same absolute infinity that the totality of attributes expresses collectively.

James Thomas: The Intuitionist Theory of the Attributes

Harris and Deleuze are content to grant the attribute of thought preeminence in Spinoza's system; for Harris this is because it is the only attribute which genuinely is conceived only through itself, and for Deleuze it is because the attribute of thought provides the formal condition for the actualization of a "power of thinking" that is equal to the collective "power of existing" of all attributes. I have suggested that such readings, if they do not contradict the parallelism and conceptual independence of the attributes, are nevertheless suspicious because Spinoza may

privilege the attribute of thought simply because we are thinking beings, and because we thereby approach metaphysics as an endeavor of thought. The question, then, is how the apprehension of reality in terms of thought could be adequate to a reality that consists of a plurality of attributes that are ostensibly independent of thought. If Spinoza must be an idealist then there is no difficulty in understanding how thought can adequately express reality, for then thought itself constitutes reality; but if non-thought attributes have a reality independent of the reality of the attribute of thought, then it seems that thought can only grasp reality adequately by somehow transcending itself. However, if there is no intelligible deeper context within which such transcendence can take place, then either such transcendence is impossible and thought fails to express substance adequately, or else the transcendence is real but unintelligible, which entails that Spinoza's rationalist project must ultimately fail.

For this reason I think that Spinoza should not privilege the attribute of thought over other attributes. But is there reason to think that Spinoza in fact does not intend to imply that the attribute of thought has a special status? Many commentators simply accept on the strength of Letter 66 that Spinoza believes that the attribute of thought is unique so far as it (in some sense) comprehends all the attributes.⁷⁷ In contrast, James Thomas, a Hegelian interpreter of Spinoza, thinks that in fact there is reason to think that Spinoza must *not* intend to privilege thought over the other attributes. However, this requires that we reconceive the conceptual independence of the attributes. Thomas argues that we must distinguish two aspects to each attribute: its expression of a modal order shared by all attributes, and its unique qualitative character. As “orders of being” the attributes are conceptually independent, but as “qualities of being” or “immediate intuitions” each attribute is contained in every other attribute.

⁷⁷ See, for example, Edwin Curley, *Spinoza's Metaphysics: An Essay in Interpretation* (Cambridge, Massachusetts: Harvard University Press, 1969), 145-50; Alan Donagan, *Spinoza* (Chicago: University of Chicago Press, 1989), 118-9; and Della Rocca, *Representation*, 19.

In his discussion of the attributes Thomas focuses primarily on the problem of how the attributes can be diverse if Spinoza commits himself to regarding each attribute as identical with indivisibly unique substance. Thomas admits that he is less interested in providing an exegesis of Spinoza than in “finding the solution to a problem that Spinoza’s system makes especially evident.”⁷⁸ He makes the case that given Spinoza’s commitments to the objective reading of the attributes, the “*aseity*” or ontological independence of each attribute (IP10), and the fact that attributes and substance are both infinite (ID6), it follows that substance must be identical with each of its attributes.⁷⁹ Thomas notes that this “identity” of substance and attribute cannot be an identity of indiscernibles but must rather be an “identity in difference” of some sort.⁸⁰ But the consequence of this line of reasoning is that there must be a certain expressive parity between the attributes, in which “reality can be both fully explained in thought but also actualized in experience through this and every other attribute.”⁸¹ Thomas makes the following argument: Assuming the objective reading of the definition of attribute (ID4), then by the definition of what it means to pertain to the essence of a thing (IID2), that is, “that which, being given, the thing is necessarily posited and which, being taken away, the thing is necessarily taken away” (G II/84/17-9), it follows that “every element in the reality of substance must be given whenever any attribute is given.” Since by ID6 God has infinite attributes, “it follows that this absolute infinity must be derivable within each attribute.” Since Spinoza sought a complete account of reality, and God as the ground of all reality has all attributes, then “because the attributes each actually

⁷⁸ Thomas, *Intuition and Reality*, 2.

⁷⁹ “The Identity of Substance and Attribute,” chap. 2 in *Intuition and Reality*.

⁸⁰ *Intuition and Reality*, 18.

⁸¹ *Ibid.*, 2.

constitute the essence of this [divine] nature, it follows that the entire system of the attributes is conceived through each.”⁸²

This conclusion of course presents an obvious problem: if all of the attributes are conceivable through any given attribute, then no attribute whatsoever is conceptually independent, a seemingly blatant contradiction of IP10. Thomas notes that Delahunty draws a similar conclusion and finds the same contradiction, but is unable to resolve it.⁸³ Thomas however contends that his own theory of the attributes, the “intuitionist theory,” affirms that each attribute is conceived through every other but nevertheless does not contradict IP10.

Thomas considers the intuitionist theory as the culmination of a series of absolute idealist readings of Spinoza that has its roots in the interpretive work of John Clark Murray and Errol E. Harris. Thomas contends that readings such as Harris’ which argue for reading a “dominance of the attribute of thought” in Spinoza’s philosophy really only establish a domination of an order of “internal relations,” the order of the intellect.⁸⁴ Internal relations are intrinsic to an individual, such as part-whole relations, in contrast with external relations, which obtain between discrete individuals, as for example in addition and subtraction. Murray and Harris mistakenly identify internal relations with the attribute of thought, and external relations with the attribute of extension.⁸⁵ However, if both internal and external relations are involved in each attribute, then to establish the dominance of internal relations is only to emphasize the systematic unity of reality as a whole, and in that case we cannot infer the systematic dominance of the attribute of thought.

⁸² Ibid., 28.

⁸³ Ibid., 35-7; R. J. Delahunty, *Spinoza* (London: Routledge and Kegan Paul, 1985), 120, 122-3.

⁸⁴ Ibid., 73.

⁸⁵ Ibid., 2.

Thomas' argument for the claim that internal and external relations are involved in each attribute is based on a distinction between the attribute as constituting the "order of being" and the attribute as a unique "quality of being" or "immediate intuition" of this order of being. Because Thomas construes his "intuitionist theory" of the attributes as the extension of a dialectical line of reasoning established by earlier absolute idealist readings of Spinoza, his argument is couched in rather difficult Hegelian language; however, I think the gist of his argument is as follows. The order of being is a single order of self-reflection common to all attributes. However, this order of being must be grasped in an "immediate intuition," a particular quality of being in terms of which the order of being is grasped as a complete and self-determining whole. This intuition is *scientia intuitiva*, the "third kind of knowledge" which according to Spinoza "proceeds from an adequate idea of the formal essence of certain attributes of God to the adequate knowledge of the essence of things" (IIP40 Schol. 2: G II/122/15-9). A quality of being, then, is the qualitative character unique to each attribute. Because there is an infinite diversity of attributes, there must be a corresponding infinite diversity of qualities of being. But as we have seen the genuinely complete order of self-reflection must in some sense contain every attribute as a conceivable immediate intuition of substance. Therefore each attribute expresses the same order of being, but at the same time each attribute is a qualitatively distinct immediate intuition of that order of being, which as an intuition must itself enter into the order of being; thus each attribute must appear as a unique quality of being in the order of being as it is expressed in any given attribute.⁸⁶ Hence, though extension as a quality of being primarily reflects the external relations of "determinate being" and thought as a quality of being primarily reflects the internal relations of "systematic unity," in virtue of constituting one and the

⁸⁶ Ibid., 114-5; "Spinoza's Letter 66 and Its Idealist Reading," *Idealistic Studies* 24 (1994): 193-4.

same order of being each attribute contains the other as a quality of being, and hence each must involve both forms of relation.⁸⁷

Thomas contends that there are two reasons why this reading does not contradict IP10. First, the attributes are conceptually independent only so far as each constitutes the order of being which is intuited; it is only so far as they are qualities of being or immediate intuitions of this order that they are contained within and conceived through other attributes.⁸⁸ So Thomas argues that his reading is consistent with the following passage from Letter 64:

It is evident, then, that the human mind, or [*sive*] the idea of the human body, neither involves nor expresses any other attributes of God besides these two [i.e., thought and extension]. From these two attributes, moreover, or from their affections, no other attribute of God (by IP10) can be inferred or conceived. And so I infer that the human mind cannot achieve knowledge of any other attribute of God beyond these, as was proposed. (G IV/277/29 – 278/5)

Thomas argues that here Spinoza emphasizes the order of being rather than the immediate intuition: “Spinoza is saying that the order as conceived through unknown attribute *x* cannot be in the order of substance as conceived through any attribute we know directly, since an attribute, as order, does not enter as a separate order into the order of things as conceived through another.”⁸⁹ Second, IP10 *itself* entails that the attributes as qualities of being must enter into one another as diverse intuitions of the order of being: “The very independence of the attributes...ensures that they enter into the complete order of substance as intuited through any one. As their independence is a function of their infinity with respect to every conceivable order of being, an attribute cannot be limited in the order of being as conceived through any one.”⁹⁰ In other words, the radical independence of the attributes *prevents them from excluding one another* from entering into one another as qualities of being within the order of being.

⁸⁷ *Intuition and Reality*, 120.

⁸⁸ *Ibid.*, 115.

⁸⁹ “Spinoza’s Letter 66,” 195.

⁹⁰ *Ibid.*, 114.

Thomas considers his “intuitionist theory” an absolute idealist reading, yet he nevertheless argues that Spinoza’s system is not idealist because ultimately it is irreducible to thought.⁹¹ This commitment forces Thomas to regard certain concepts as having a trans-attribute character. Indeed, the concept ‘concept’ itself earns this sort of treatment: a concept is not an idea, for the concept of substance can be formed in any attribute; thus an idea is a concept formed in the attribute of thought.⁹² And surprisingly the concept ‘intellect’ is also trans-attribute in character: “Adequately conceived, the finite centre’s unique perspective in systematic unity *as conceived through any attribute* is the finite intellect.”⁹³ Evidently Thomas draws this conclusion because adequate understanding involves grasping things in terms of what Spinoza calls “the order of the intellect, by which the Mind perceives things through their first causes” (IIP18 Schol.: G II/107/12-3). In this way the intellect grasps reality in its true structure; by contrast, the imagination grasps reality merely “according to the order and connection of the affections of the human Body” (G II/107/9-11) — that is, the order of things as they are experienced by the human body. The intellect grasps the finite individual as a perspective in the community of finite intellects. If, as Thomas argues, this self-conception in terms of perspective is not attribute-specific, then the intellect itself as well as its order cannot be attribute-specific.

I have several objections to Thomas’ reading so far as I understand it. First, Thomas provides no specific evidence that Spinoza in fact makes any distinction between the order of being and the quality of being of an attribute. As mentioned above, Thomas does admit that he is more interested in resolving problems presented within the context of Spinoza’s philosophy than

⁹¹ *Intuition and Reality*, 115; “Spinoza’s Letter 66”, 195.

⁹² *Intuition and Reality*, 92.

⁹³ *Ibid.*, 93 (emphasis mine).

providing an exegesis,⁹⁴ but even so I think his reading amounts to an *ad hoc* solution to the problem of the infinity of the attributes, for Thomas' solution appears to proceed from the thought of Hegel. A solution that arises more naturally from the intrinsic structure of Spinoza's system would be preferable. Second, though Thomas argues that each attribute must be absolutely infinite,⁹⁵ he provides no clear account of what it *means* for individual attributes or substance to be absolutely infinite. Evidently, absolute infinity is manifested by each attribute insofar as it constitutes the order of being, and so must involve all attributes as qualities of being. But why should we regard this infinity as *absolute*? Any account of the nature of the attributes should explain in what sense they express or constitute the absolute infinity of the divine nature; I do not think that Thomas has fully achieved this. Finally, Thomas relies upon the possibility of a schematic grasp of the systematic relations of the attributes, as evidenced by his claims that 'concept' and 'intellect' are trans-attribute concepts. Thus it seems that we are capable of conceiving the metaphysical structure of the system of the attributes independently of any given attribute, hence transcending the attributes altogether. But Thomas' purportedly trans-attribute concepts are clearly modes of the attribute of thought. Spinoza explicitly states that a concept is considered "to express an action of the Mind" (IID3 Exp.: G II/85/2), and that any intellect, finite or infinite, is a mode of the attribute of thought (IP31 Dem.). The concept of 'intuition' to which Thomas appeals in a trans-attribute fashion also seems more applicable to thought than any other attribute. Thomas' reading of Spinoza, which starts from absolute idealism but labors to transcend thought, nevertheless seems mired in the attribute of thought, in which the metaphysics of substance apparently has its most adequate expression.

⁹⁴ Ibid., 2.

⁹⁵ Ibid., 27-8.

Despite these problems, Thomas' intuitionist theory of the attributes contains the crucial insight that not only is it *not* inconsistent with the conceptual independence of the attributes (IP10) for the attributes in some sense to be involved in one another, but that the conceptual independence of the attributes makes such mutual involvement *necessary*. The attributes are distinctions within substance but not divisions of it.⁹⁶ This is because each attribute, as really distinct from every other, has no leverage for holding itself apart from the others as an independent substance; because each attribute is conceived through itself the attributes cannot oppose one another, and hence are necessarily compossible in one substance.⁹⁷ Thomas' crucial insight is that no attribute can express the essence of substance independently and adequately if it cannot in some way express the other attributes, for if the attributes can only adequately express substance collectively, not individually, then they are not truly conceptually independent. Nor can any attribute exclude other attributes from entering into it as constituents of the order of substance if it is truly radically conceptually independent, for attributes could exclude one another only if they shared something in common which would provide the ground for such exclusion. It is this reconception of the significance of IP10 that provides Spinoza with a unifying principle which justifies grasping the infinity of attributes as expressive of one substance rather than many. With this insight into the nature of the attributes, Thomas' account opens the door to considering more radical solutions to the problem of the infinity of the attributes.

⁹⁶ Harris, *Salvation From Despair*, 52.

⁹⁷ Deleuze, 79-80. Della Rocca ("Spinoza's Substance Monism," 26-30) makes an argument for Spinoza's substance monism that is in some ways similar. Put briefly, Della Rocca argues that since each attribute is conceived through itself, every possible attribute necessarily exists; there must be a sufficient reason for why a substance possesses one attribute and not another; since each attribute is conceived through itself, failure to have an attribute cannot be explained in terms of the possession of another: therefore the "conceptual barrier" between the attributes (IP10) prevents any attempt at differentiating attributes as distinct substances.

Conclusion

In this chapter I have considered several issues surrounding Spinoza's account of the attributes. To begin, I investigated the infinity of the attributes — that is, in what sense they constitute the absolute infinity of substance. Following Deleuze, I think that collectively they must constitute an infinite plurality, but that this form of plurality, because it is based in real distinction, is nondenumerable. This accounts for how the attributes can constitute indivisible and unique substance, and yet nevertheless express substance as a diverse plurality. Still, this does not explain what it means for the attributes to be “infinite.” The explanation supported at least superficially by some of Spinoza's early works and a few passing statements in the *Ethics* is that the attributes are infinite in a dual sense: their plurality constitutes an extrinsic form of infinity, while each attribute intrinsically is “infinite in its own kind” and expresses an infinite order of modes. I argued that this interpretation is not sufficient to show that an infinite plurality of attributes constitutes the expression of the nature of one substance. However, Spinoza's reference to the intellect in the definition of ‘attribute’ (ID4) suggests that the attribute of thought is perhaps the source of a unifying principle for the attributes of substance. Unfortunately, this apparently special capacity of the attribute of thought, in conjunction with the conceptual independence of the attributes and the parallelism of their modal orders, immediately leads to an apparent difficulty within Spinoza's system, the so-called “problem of the infinity of the attributes.” As a result of the apparent dominance of the attribute of thought there seems to be no consistent way to fully articulate the nature of the infinity of the attributes. Harris and Deleuze suggest readings of Spinoza that restore consistency while conceding the supremacy of thought; however, their approaches unfortunately (and I think unacceptably) sacrifice the parity of the attributes which seems so central to Spinoza's project. However, I think that James

Thomas' intuitionist theory offers a crucial insight — that the very independence of the attributes in virtue of their real distinction prohibits them from excluding one another, and indeed mandates that each attribute express every other attribute.

Thomas' insight suggests a foundation for a new interpretation of the doctrine of the attributes which I think ultimately resolves the problems I have discussed in this and earlier chapters. This new interpretation, which I will develop in the remainder of this dissertation, has four significant advantages. First, it provides a consistent account of the doctrine of the attributes and hence how they express the absolute infinity of substance. Second, it demonstrates that the attributes can be conceptually independent, that each expresses the same modal order, and that each adequately expresses the nature of God — all without contradiction. Third, it explains the very difficult problem of the metaphysical status of the attributes by demonstrating how they constitute a transitional term linking the radically different ways of existing that pertain to substance and modes. Finally, it provides an explanation for how Spinoza's system can consistently require that all explanation, metaphysical or otherwise, be immanent within the attributes, and yet nevertheless the system can produce an account of substance which seemingly should transcend the system of attributes altogether. Moreover, I will argue that this interpretation of the doctrine of the attributes flows naturally from Spinoza's own assumptions and commitments. Though I think it unlikely that Spinoza himself espoused the doctrine of the attributes that I think he must, I also think that had Tschirnhaus had the opportunity to press his objections concerning the doctrine of the attributes as he understood it, Spinoza eventually would have been forced to infer something along the lines of the interpretation I present.

CHAPTER 4

THE THESIS OF RADICAL MUTUAL CONTAINMENT

Introduction

In the last chapter we saw that the status of the attributes is very complex and also very problematic. As Deleuze argues, they exist in an infinite plurality that is in principle nondenumerable. The attributes manifest a quantity that, following Spinoza's comments in Letter 12, is apprehended intellectually but not imaginatively and therefore does not involve the features of quantity with which we are most familiar. But according to the Scholium to IIP7 they also seem each to be on an independent and equal footing with respect to one another, at least as regards the explanation of nature. This, however, presents a problem because it seems that the very definition of attribute (ID4), because of its reference to the perception of the intellect, shows that the attribute of thought extends over all other attributes in some sense, and therefore is apparently dominant.

As I discussed in Chapter One, the attributes have a peculiar status to begin with. Spinoza explicitly argues that the only things which exist are substance and modes (IP4 Dem.), and this follows from the definitions of substance and mode (and IA1, "Whatever is, is either in itself or in another" (G II/46/21)), for they clearly exclude any alternatives. In Letter 12 Spinoza asserts that we conceive of the existence of substance and the existence of modes in entirely different ways (G IV/54/15-6); hence there is what appears to be a profound metaphysical discontinuity between substantiality and modality. The attributes clearly play some role in

establishing metaphysical continuity between substance and modes. The attributes figure prominently in the Demonstration of IP16, which concretely links substance with the modes which “follow” from it: infinite modes follow from God in virtue of the fact that “the divine nature has absolutely infinite attributes (by ID6), each of which also expresses infinite essence in its own kind” (G II/60/26-8; Curley’s translation, modified). But Spinoza immediately faces a daunting conundrum. If the attributes exist, then they must exist either as substance or as modes. If they are substance, then the Demonstration of IP16 achieves nothing, for it suggests that modes follow from substance by means of the attributes — but if the attributes simply *are* substance then another demonstration is needed to show that modes necessarily follow from attributes. If they are modes, then again the Demonstration of IP16 achieves nothing, for then Spinoza must provide another demonstration that shows that attributes as modes must follow from substance. It seems that either way the attributes cannot mediate between substance and modes.

The fact that we can ask the question of whether attributes are substantial or modal reflects a fundamental ambiguity in Spinoza’s thinking concerning their existential status. I think that the problems discussed and developed in Chapter Three are in fact a direct result of the ambiguous status of the attributes — or rather, the result of *assuming* that we know the status of the attributes even as their function seems to oscillate. We regard the attributes as substance in one context, but as modes in another. Specifically, in the Scholium to IIP7, for example, each attribute must express the *entire* order of things, in virtue of expressing the essence of God; in this respect the attributes are substantial. But the parallelism of the modal orders of the attributes regards the attributes as parts or constituents of an order in substance (though this order is not a systematic hierarchy or even a sequential structure); in this respect the attributes themselves are

modal. We might be inclined to regard this oscillation concerning the attributes as pernicious to Spinoza's metaphysical system — but I think we should not. The attributes, in order to establish the needed metaphysical relationship between substance and modes, can only succeed if in some sense they are *both substantial and modal*. Hence this oscillation is grounded in a real need in Spinoza's metaphysics, a need for the attributes to function in a way that is both substantial and modal — and yet in a way which does *not* transcend either, to form some third thing which serves as an intermediary. The attributes must exist and function *immanently* within the realm of substance and modes.

The task, then, is to provide an account in which the attributes can function both substantially and modally without generating contradictions within Spinoza's metaphysics. The remainder of the dissertation consists in the development of just such an account, and the consequences it entails within Spinoza's system. In the last chapter I argued that Thomas' reading of the doctrine of the attributes provides a crucial insight which will lead to just such an account. Thomas argues that the attributes involve one another as "intuitions" or "qualities of being," and that this reading resolves Harris' "problem of the infinity of the attributes." However, I argued that Thomas' reading appears to threaten the immanentism of Spinoza's metaphysics, and ultimately seems mired in idealism. But in this chapter I wish to take Thomas' insight about the mutual involvement of the attributes and direct it towards the deeper problem of the metaphysical status of the attributes: if the attributes mutually "contain" one another, then it follows that the attributes are both substantial and modal. Thus the question of whether attributes are substance(s) or modes is a false dilemma. Moreover, if we replace Thomas' superimposed distinction between "orders of being" and "qualities of being" with a distinction that clearly belongs to Spinoza's thinking — the distinction between formal and objective reality

— then we gain a much clearer understanding of how the attributes establish a metaphysical relationship between substance and modes, and how the modes “follow” or “flow” from the essence of God (IP16 Dem.). Ultimately, and most importantly with respect to the overall theme of this dissertation, this new reading of Spinoza based on what I call “the thesis of radical mutual containment” of the attributes preserves and explains Spinoza’s immanentism, and avoids falling into idealism, by establishing an understanding of exactly what must constitute “absolute infinity” in Spinoza’s system.

In this chapter I will discuss the fundamental character of radical mutual containment of the attributes. First I will argue that from Spinoza’s standpoint the attributes must in some way “involve” and express one another if his metaphysics is to be internally consistent and non-idealist. The thesis of radical mutual containment is my attempt to provide a consistent and explanatorily fruitful account of this mutual involvement of the attributes. Next, I will discuss the role that radical mutual containment must play in Spinoza’s doctrine of the attributes. I will argue that the attributes mutually involve one another if and only if each attribute is absolutely infinite; this is important, for much of the textual support for the thesis of radical mutual containment rests on the claim that the attributes are individually absolutely infinite. Furthermore, I will argue not only for the weaker claim that mutual involvement of the attributes along the lines of radical mutual containment is *consistent* with Spinoza’s basic claims about the nature of the attributes, but I will also argue for the stronger claim that Spinoza *must* accept the mutual involvement of the attributes on pain of fundamental inconsistency within the doctrine of the attributes — and most surprisingly, Spinoza must accept it if he is to assert unproblematically that the attributes are conceptually independent. I will then discuss the explanatory power the thesis of radical mutual containment has with respect to some unclear parts of Spinoza’s doctrine

of the attributes. Next I turn to what textual evidence there is to suggest that Spinoza might countenance such a reading of the doctrine of the attributes; finally, I defend the thesis against the objection that according to this reading the attributes, all having the same content, reduce to just one attribute.

The Thesis of Radical Mutual Containment

Consider this variation on Thomas' argument for the claim that the entire system of attributes must be conceivable through any one.

- (1) Each attribute expresses the essence of substance (ID6; IP10 Schol. (G II/52/5-8, 15-7)).
- (2) The definition or essence of God is that of a substance which consists of infinite attributes, each of which expresses eternal and infinite essence (ID6).
- (3) Thought is an attribute of God (IIP1).
- (4) Therefore the attribute of thought expresses the essence of God.
- (5) Therefore the attribute of thought must express God as a substance consisting of infinite attributes.

This argument is quite consistent with the assertion in Letter 66 that every mode of every attribute has its own idea or mind in the infinite intellect of God; if the attribute of thought does not in some way express the other attributes and their own modes, then the infinite intellect could have no ideas of the attributes or their modes. Indeed, if Spinoza does not accept such an argument, then his metaphysical system must be fundamentally unintelligible. Consider the obvious objection that one might make to the argument: it presupposes that the attribute of thought *adequately* expresses the essence of substance; but if thought could adequately express

substance, why would it be necessary for substance to be expressed in an infinite plurality of non-thought attributes? It seems more plausible, the objection continues, to think that Spinoza intended that thought is merely infinite in its own kind, like any other attribute, and this is why an infinite plurality of attributes is needed rather than just one. Therefore, from the fact that the attribute of thought expresses the essence of God, it does not follow that it expresses the essence of God insofar as he consists of infinite attributes. But we can reply to this objection that we have already seen that Spinoza must think that the attribute of thought is absolutely infinite. IIP3 entails this: “In God there is necessarily an idea, both of his essence and of everything that follows from his essence” (G II/87/5-6). IIP5 confirms that among those things that follow from God’s essence there are ideas of the attributes of which God is cause solely insofar as he is a thinking thing (G II/88/17-20). And Letter 66 simply carries this commitment further: there are distinct ideas in the attribute of thought for each and every mode of every attribute. Spinoza has good reason to infer these conclusions: if the attribute of thought failed to comprehend the other attributes, then metaphysics would be fundamentally unintelligible. Intelligibility would be restricted in principle to the attribute of thought, for the intellect is only a mode of thought, and as such the intellect can only apprehend ideas. But this does not simply constitute the humble acceptance of our limitations as thinking beings, for this problem would extend to *all* intellects: God would be ignorant of all of his non-thought attributes, for the difficulty is not due to the limitations of a finite intellect, but to the fact that in principle an intellect, finite or infinite, can only encompass ideas. Hence Spinoza’s metaphysical system as a whole would be unintelligible with respect to any intellect whatsoever, and as a metaphysical project would be self-defeating.

Spinoza’s doctrine of the attributes, then, faces a fundamental problem regarding representation: how do ideas represent things which are not ideas? And can we establish

whether any idea represents its object truly or accurately?¹ The problem goes even deeper: we know that we can only think our own ideas, and nothing else — but how is it that we can intelligibly assert our ignorance of things that are not ideas if we did not in some sense have a capacity to *know* there could be things that are not ideas? That is, we could not contemplate limits to thought if there were not some sense in which thought recognizes limits in virtue of *indicating*, at the very least, things that are not ideas. This paradox is directly analogous to the paradox involved in the denial that we understand infinity: we cannot intelligibly deny that we understand the nature of infinity without in some sense understanding the very thing about infinity that we cannot grasp. Yet it is worth noting that the intellect can nevertheless only apprehend ideas, for otherwise the intellect would have the capacity to transcend itself and thought. Spinoza's system excludes such self-transcendence because of the conceptual independence of the attributes: if the intellect could think objects of other attributes as well as ideas, then it would seem that the attributes would simply blend together into one indistinguishable whole. So Spinoza is beset with a difficult problem: he must find a way for the attribute of thought to involve other attributes and their modes, and yet nevertheless the attribute of thought must only involve modes which are ideas.

Hence I think we not only have strong textual reasons for thinking that Spinoza would accept the above argument, but strong philosophical reasons for thinking he must. Thus far we have reason to think that the attribute of thought comprehends all the other attributes. But the argument can clearly be generalized to apply to the attribute of extension:

¹ I will argue in Chapter Seven that this formulation of the problem is in fact defective. The assumption that ideas “represent” objects of other attributes — at least in the usual sense which presupposes some sort of causal relation between the represented object and its representation — implies an explanatory trans-attribute relation between modes of different attributes. Spinoza explicitly denies explanatory trans-attribute relations in the Scholium to IIP7: the entirety of nature must be explained through one attribute at a time. See Chapter Seven, pp. 265-8. But the underlying problem concerning the relationship of thought to non-thought reality is certainly legitimate, so for the time being this formulation of the problem must suffice.

- (3') Extension is an attribute of God (IIP2).
- (4') Therefore the attribute of extension expresses the essence of God.
- (5') Therefore the attribute of extension must express God as a substance consisting of infinite attributes.

Spinoza, at least in his later thought, thinks that the attributes of thought and extension are the only ones which human beings can know (Letter 64: G IV/277/29 – 278/5). But clearly God knows the others, and so in principle similar arguments could be made for any other attribute of God whatsoever. This argument makes it quite clear that it is not the case that there is some sort of reflective character qualitatively peculiar to thought in virtue of which it involves ideas of other attributes; rather, it is the expressive power of the attribute *as attribute* that requires that it in some way express every other attribute. Hence Letter 66 cannot be regarded as proof that the attribute of thought uniquely comprehends all other attributes and their modes. Indeed, if the attribute of thought held this power uniquely, it would follow that God's power of thinking would *exceed* his power of acting — that is, God's nature would be expressed in thought in a way that it could not be within other attributes — which contradicts the Corollary to IIP7. To put it in Cartesian terms acceptable to Spinoza, something would follow objectively in the attribute of thought — i.e., the metaphysical system of the attributes — that does not follow formally in any other attribute.² And of course the order and connection of ideas would not be the same as that of things, and so IIP7 would also be false.

This argument is the foundation for what I call *the thesis of the radical mutual containment of the attributes*: each attribute contains every attribute (including itself) as a constituent. The remainder of the dissertation will be dedicated to fleshing out exactly what radical mutual containment is, and what it entails for Spinoza's philosophy and his conception of

² See my discussion of the Cartesian distinction between formal and objective reality, pp. 158-9 below.

the infinite. The argument which motivates the thesis has the virtue of taking Spinoza at his word. It accepts that each attribute adequately expresses the nature of substance, and that the attributes are parallel in order and conceptually independent. As we saw in Chapter Three, thought appears to swallow up all the attributes as constituents of its own order, and so appears to contradict the parallelism and conceptual independence of the attributes. But if *any* given attribute involves all attributes as constituents, then these requirements are in fact compatible. I will demonstrate this in the next section.

Radical Mutual Containment: ID4, IIP7 Schol., and IP10

The argument which I presented at the beginning of the last section, when generalized, shows that the attributes must mutually express one another, and therefore that in some sense they must “involve” one another. However, to characterize the attributes in this way, as I do with the thesis of radical mutual containment, at first blush appears to be inconsistent with Spinoza’s doctrine of the attributes, in particular his assertion of their conceptual independence in IP10. More generally, the thesis of radical mutual containment is unacceptable if it is inconsistent with the three main features of the doctrine of the attributes: the definition of ‘attribute’ (ID4), the parallelism of the modal order of the attributes (IIP7 Schol.), and the conceptual independence of the attributes (IP10). I will argue in this section that not only is radical mutual containment consistent with these doctrinal commitments, but overall it is a *more* consistent reading of Spinoza’s doctrine of the attributes than the interpretation entailed by the traditional “exclusivist” reading of IP10, according to which the attributes’ conceptual independence is believed to entail that they *cannot* be involved within one another. I will argue here only that the thesis of radical mutual containment is *consistent* with these three features of

the doctrine of the attributes, not that Spinoza actually held the thesis. In fact, I do not think that Spinoza consciously accepted the mutual involvement of the attributes, though perhaps he might have deduced something like it had he lived longer.

Radical mutual containment satisfies ID4, the definition of ‘attribute’ (what the intellect perceives as constituting the essence of substance), because if an attribute expresses the essence of substance³ *adequately*, then each attribute must express, and therefore involve, all attributes. The only substance is God, who is defined as a substance absolutely infinite, and consisting of infinite attributes (ID6). As a definition expresses the nature of the thing defined (IP8 Schol. 2: G II/50/22-4), the attribute must express God’s essence.⁴ Therefore each attribute must express a substance which is absolutely infinite and consists of infinite attributes. If the thesis of radical mutual containment is true, then it is clearly intelligible how each attribute may express each of the others: each attribute contains and thereby “involves” each of the others. Thus the thesis of radical mutual containment is consistent with ID4.

Radical mutual containment also satisfies the second requirement, that of the parallelism of the modal order of the attributes (IIP7 Schol.). Since each attribute adequately expresses God, and as a consequence contains each of the other attributes, there is no attribute missing from the order of any attribute.⁵ Therefore each attribute contains all the same attributes, and we can infer

³ This is Spinoza’s own gloss on the definition of ‘attribute’, which appears in ID6, the definition of ‘God’, as well as in the Scholium to IP10 (G II/52/15-7).

⁴ For Spinoza a thing’s essence and its nature are identical. IP16, for example, says that infinite modes follow from the “divine nature,” and in the Demonstration to IIP3 Spinoza glosses IP16 by saying that these things follow from God’s essence. See also Mason, *The God of Spinoza*, 36, 61; Della Rocca, *Representation*, 88, 187 n. 14.

⁵ It is important to keep in mind that on the thesis of radical mutual containment the order of the attributes is not an order in any familiar sense. Since the thesis rejects the dominance of the attribute of thought and emphasizes the expressive equality of the attributes, the order is not hierarchical; there is no reason to think that there is any sequential ordering of the attributes either. The order seems closest to a merely aggregative order — but to say even this is questionable, because the plurality of the attributes is strictly nondenumerable. Ultimately (as will become clear in the remaining chapters of the dissertation) I think that radical mutual containment is a metaphysically primitive order which generates the other, more familiar modal orders as consequences of the actualization of the expressive power of the attributes. Hence radical mutual containment simply *is* the order of the attributes; since

no difference in order in terms of the attributes which are contained within a given attribute. Nor could different attributes arrange the attributes they contain fundamentally differently from the other attributes, for a variance in order between the attributes would entail that one attribute would express substance in one way but not in another way which is expressed by another attribute. This would entail a contradiction: an attribute, which must adequately express the essence of God, would fail to express the essence of God adequately because it did not express the order expressed by another attribute. Put another way, if each attribute expressed God in a unique order, then each attribute would express a distinct essence; it would follow that the attributes express a plurality of essences. But God has only one essence. Therefore each attribute cannot express God in terms of an order unique to that attribute. Therefore according to the thesis of radical mutual containment the attributes must be parallel in their modal order, and hence it is consistent with the Scholium to IIP7.

The third requirement, the conceptual independence of the attributes (IP10), is apparently the most difficult for the thesis of radical mutual containment. For it seems we must argue that since any given attribute involves all other attributes, all attributes are conceived through the given attribute. Hence radical mutual containment, rather than asserting the radical conceptual independence that Spinoza intends, apparently asserts instead a radical conceptual *interdependence* of the attributes: each attribute must be conceived through every other attribute. Thus radical mutual containment seems deeply inconsistent with conceptual independence.

But in fact radical mutual containment is consistent with IP10. Indeed, some form of mutual involvement is *a necessary condition* for the conceptual independence of the attributes.

First, we must take a careful look at the propositions cited in support of what I call the

each attribute mutually contains or involves every attribute and thereby every attribute's modal order, it is for this reason that the attributes have parallel modal orders.

“exclusivist” reading of the attributes’ conceptual independence: if each attribute must be conceived through itself, then it cannot be conceived through any other attribute.⁶ This reading of IP10, if it is correct, entails that the thesis of radical mutual containment is false. The exclusivist might argue for this reading as follows. If a thing is contained or involved within an attribute then that thing must necessarily be explained through the containing attribute, and thus it is conceptually dependent upon that attribute. It follows that if an attribute were to be contained or involved within another attribute, it would thereby be conceptually dependent upon that attribute. Since this is inconsistent with the assertion of the conceptual independence of the attributes in IP10, the exclusivist infers that no attribute can be conceived through another attribute. The exclusivist’s mistake is the assumption that to be contained within an attribute, and hence explained through that attribute, entails conceptual dependence. This assumption is in fact inconsistent with Spinoza’s argumentation.

The mistake is due to a misunderstanding of the nature of conceptual independence as Spinoza argues it. The fundamental assertion of the conceptual independence of the attributes is IP10: “Each attribute of one substance must be conceived through itself” (G II/51/28-9; Shirley’s translation, 221). This statement is inconsistent with radical mutual containment only if to be conceived through oneself *positively excludes* being conceivable through another. But the Demonstration of IP10 does not explicitly state any such thing: since an attribute is what the intellect perceives of substance as constituting its essence (ID4), and by the definition (or essence) of substance it must be conceived through itself (ID3), it follows that the attribute must be conceived through itself. The demonstration is silent as to whether an attribute, while fully conceivable through itself, might nevertheless also be conceivable through another. One might

⁶ Here I will consider the propositions that Harris cites (contra Thomas) as specifically excluding the possibility that the attributes are conceivable through other attributes — namely, IP10, IIP5, and IIP6 (“The Problem of Attributes in Spinoza’s System (James Thomas),” *Idealistic Studies* 25, no. 2 (1995): 212).

contend that the positive exclusion of being conceived through another is implied by his use of ‘must’ (*debet*) in IP10, but this only begs the question; moreover, positive exclusion does not follow from the demonstration.

One might appeal to the axioms IA2 and IA5 to justify the claim of positive exclusion, but these will not help either. IA2 asserts that “What cannot be conceived through another, must be conceived through itself” (G II/46/22-3); to argue that this excludes the possibility of attributes being conceived through one another is to commit the fallacy of affirming the consequent. IA5 at first seems more promising: “Things 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” (G II/46/29-31). If the attributes are conceptually independent then perhaps they have nothing in common, and hence cannot involve one another conceptually. However, attributes do in fact have something in common: they are what the intellect perceives as constituting the essence of substance. Indeed, if they had nothing in common, there could not be an infinite plurality of them. Therefore the conceptual independence of the attributes cannot entail that they have nothing in common, for Spinoza cannot intelligibly assert that the attributes have nothing in common. Hence we cannot infer from IA2 or IA5 that the attributes cannot be understood through one another. I think it is significant that Spinoza cites neither IA2 nor IA5 in IP10. IP10 demonstrates only that each attribute must be *capable* of being conceived through itself alone, but does not entail that distinct attributes cannot be conceived through one another. Thus IP10 amounts only to saying that the attributes are (to borrow an expression from Leibniz) “windowless.” That is, there is no need to appeal to a deeper interpretive context in order to understand an attribute’s character fully.

Finally, one might appeal to IIP5 and 6 as evidence that the exclusion is implied. Indeed, the demonstrations of each appear to gloss IP10 in that way quite explicitly: “so (by IP10) it involves the concept of no other attribute” (IIP5 Dem.: G II/88/30-1); “For each attribute is conceived through itself without any other (by IP10)” (IIP6 Dem.: G II/89/8-9). Surprisingly, these are not decisive evidence against the thesis of radical mutual containment — and indeed IIP5 *supports* the thesis. First, to say that the attribute is conceived through itself and not any other may only mean that in a given situation the attribute is conceived only through itself as a matter of fact — for IP10 at least claims that each attribute is *sufficient* as a means for conceiving itself. Therefore these glosses are at least not decisive evidence that the exclusion is implied. Next, IIP5 and IIP6 are propositions dealing with the explanatory independence of *modes*: IIP5 claims that ideas are caused by God only so far as God is considered as a thinking thing and not under any other attribute, and IIP6 generalizes this statement to modes of any attribute, such that they are caused by God only so far as God is considered under that attribute and no other. But the explanatory independence of modes of different attributes is not the same thing as the conceptual independence of attributes. The Corollary to IIP6 makes it quite clear that in these propositions Spinoza is primarily concerned with ruling out the notion that existing modes of non-thought attributes follow from the divine nature because God had ideas of them first; rather, modes follow directly from God insofar as he is conceived under the attribute of which they are modes (G II/89/15-9). Hence the exclusion does apply here. But this is a claim about the causal explanation of *modes*, and hence it is *not* the same thing as saying that the *attributes* must be conceived only through themselves. The explanatory independence of the modes of different attributes (and the rationally normative claim that the entirety of nature must be explained under a single attribute and no other (IIP7 Schol.: G II/90/23-8)) *follows* from the conceptual

independence of the attributes, but this is no reason to think they are in fact the same thing.⁷

Hence while the exclusion of the capacity to be conceived through other attributes applies to the causal explanations of modes of a given attribute, it is not necessarily a feature of the attributes themselves.

Finally, a close look at the text of IIP5 shows that Spinoza in fact *does* think that other attributes can be conceived through the attribute of thought:

The formal being of ideas admits God as a cause only insofar as he is considered as a thinking thing, and not insofar as he is explained by any other attribute. I.e., *ideas, both of God's attributes and of singular things*, admit not the objects themselves, or the things perceived, as their efficient cause, but God himself, insofar as he is a thinking thing. (G II/88/15-20; emphasis mine)

In order for there to be an *idea* of an attribute, that attribute must be conceived through God insofar as he is considered under the attribute of thought. If IP10 implies that conceptual independence of the attributes positively excludes the possibility that they could be conceived through one another then it is not possible for there to be ideas of non-thought attributes, and IIP5 is self-contradictory. But if no such exclusion is implied there is no contradiction. Hence there is positive textual support for my contention that IP10 does *not* exclude the possibility of attributes being conceived through one another, and therefore the thesis of radical mutual containment is consistent with IP10.

That said, I think that an even stronger claim can be made: that the attributes *cannot* be conceptually independent if they *fail* to mutually involve one another. There are two parts to this

⁷ Della Rocca recognizes that there is a relation of entailment between what he calls the “explanatory separation” of the attributes and the explanatory separation between modes of different attributes (*Representation*, 10), yet he does not acknowledge any distinction between conceptual and explanatory independence because he does not think Spinoza makes any distinction between conceptual and explanatory claims (3-4, 11). But clearly conceptual independence of attributes and explanatory independence of modes are different things: for attributes can be explained solely through themselves, but finite modes must be explained in terms of a causal series of other finite modes conceived under the same attribute. The conceptual independence of the attributes certainly *entails* the explanatory independence of the finite modes of different attributes, but I think it is important to understand these forms of independence separately. See n. 8 below.

argument. First, recall the argument I made in the last section. In order for an attribute to express adequately the essence of God as substance, the attribute must express all other attributes. If, for example, the attribute of thought did not contain or involve all the other attributes, then in order to grasp the nature of substance adequately we must transcend the attribute of thought, and all other attributes, into some deeper context through which all the attributes are regarded schematically as independent expressions of the essence of God. In this context each attribute is merely infinite in its own kind, and so it is not conceived through itself, but conceived through some undefined ground for conceiving, presumably substance itself. But this is in effect to *deny* the conceptual independence of the attributes, for under these circumstances they can be grasped adequately only from a transcendent perspective, through which the attributes are conceived. In this case not only do the attributes fail to satisfy the conceptual independence asserted in IP10, but they also fail to satisfy ID4, the definition of ‘attribute’, for no attribute can be conceived as *constituting* the essence of substance, since in this case each is only some partial and *inadequate* expression of the essence of substance. This part of the argument establishes that the attributes cannot be conceptually independent, or even be attributes at all, if they do not express God as a substance consisting of infinite attributes — that is, if each attribute does not in some way involve all attributes.

Next, consider the case of the attributes of thought and extension, each of which expresses the essence of God. IP10, as I have argued, posits only that these attributes *can* be conceived solely through themselves. But, as Harris correctly observes, in the *Ethics* these attributes are conceived under the attribute of thought. Thus both thought and extension are conceived through thought, which violates conceptual independence only if the exclusivist is right to claim that each attribute’s conceptual self-sufficiency requires the exclusion of other

attributes as constituents. But since the comparison of thought and extension in the *Ethics* takes place exclusively in the attribute of thought — and indeed it seems that we are in some sense incapable of transcending thought when we engage in metaphysical speculation — Spinoza’s consideration of the attributes has in fact been *faithful* to the statement of explanatory independence at the end of the Scholium to IIP7: the order of the whole of nature has been considered under the attribute of thought alone. And in principle we could consider both attributes under the attribute of extension, or under any other attribute for that matter (though if we were to do so we presumably would no longer be engaging in philosophy per se). But any such comparison must take place under a *single* attribute. In order to discuss a plurality of attributes — so as to compare them, or differentiate them, for example — these attributes must be embedded in a deeper metaphysical context within which such a comparison can take place. But this context *must* be a single attribute. So in the case of the attributes conceptual independence is not a rationally normative claim about how we *ought* to understand the attributes, but rather it is a descriptive claim about how we *must* understand them.⁸ This part of the argument establishes that all the attributes must be contained within one ground through which they must be conceived, and in virtue of this the containing ground or context, having its own formal reality which constitutes the ground of comparison, must itself be an attribute which is conceptually independent. Hence the fact that an attribute must contain all the other attributes, and must be contained by all attributes, only *confirms* the conceptual independence of the attributes. The fact that the work of the *Ethics* is incapable of transcending the attribute of

⁸ However, while the *conceptual* independence of the attributes is in a certain sense an unavoidable consequence of their nature, the *explanatory* independence of the finite modes of different attributes *is* rationally normative, as is clear from the Preface to *Ethics* V, where Spinoza rejects Cartesian interactionism between mind and body (G II/279/24 – 280/26). But this is the case because radical mutual containment applies to the infinite attributes and not to the finite modes; the “parallelism” of the modes is not identical with the conceptual independence of the attributes, but rather is grounded in the attributes’ “equality” or conceptual independence (Deleuze, 110).

thought concretely demonstrates that at the level of the attributes it is impossible for us to explain the whole of nature except under a single attribute. Nature cannot even be conceived *as* a whole unless it is conceived under a single attribute. But the fact that the attribute of thought seems more comprehensive than any of the others is an artifact of the fact that when we engage in philosophical investigation concerning metaphysics we conceive the whole of nature from the perspective of thought; in principle it must equally well seem this way from the perspective of any attribute.⁹

Radical Mutual Containment and Absolute Infinity

The global reason for an examination of Spinoza's doctrine of the attributes in this dissertation is to provide an account of how the infinite is the central concept driving Spinoza's metaphysical project. In Chapter Three I began to investigate how the doctrine of the attributes constitutes a first expression of the "absolute affirmation" of the essence of substance. The attributes clearly in some sense constitute an *absolute* infinity, for God as substance is absolutely infinite insofar as he consists of infinite attributes. There I argued that the conventional "dual infinity" reading of the attributes — that is, that the attributes constitute an absolute infinity in virtue of the fact that they are individually intensively infinite, and collectively extensively infinite — is unsatisfactory. Hence I must show that the thesis of the radical mutual containment of the attributes provides a more satisfactory account of how the attributes express the absolute

⁹ One might argue that to "conceive" the whole of nature from the perspective of an attribute other than the attribute of thought would not be "conceiving" at all, since conceiving is a mode of thinking. Strictly speaking this is correct; some analogue of conceiving in the given non-thought attribute would be at work in that attribute. How to characterize the analogue in the only other attribute of which we have knowledge, the attribute of extension, is a difficult matter. Part of the problem is that we are engaged in philosophy, an activity of thought, and so we must attempt to *conceive* a non-thought analogue of conception. For that reason, whatever we deduce about this analogue will in a sense be contaminated because the analogue of conceiving will be informed by thought insofar as this analogue is itself conceived. In other words, a philosophical account of any non-thought analogue of conceiving inevitably will appear formally as a mode of thought. See also pp. 141-3 below.

infinity of God as substance. First I will present an argument that establishes that the attributes in some sense mutually “involve” one another if and only if each attribute is itself absolutely infinite. This argument is crucial because much of the textual evidence I marshal for the thesis rides on statements that suggest that Spinoza thinks that the attributes are *individually* absolutely infinite. Then I will develop a metaphor for understanding the radical mutual containment of the attributes that will provide a first glimpse into the concrete character of absolute infinity in Spinoza’s metaphysics.

My argument centers on Spinoza’s gloss of ‘absolutely infinite’ in ID6, the definition of ‘God’, and its Explication:

ID6: By God I understand a being absolutely infinite, i.e., a substance consisting of infinite attributes, of which each expresses eternal and infinite essence.

Exp.: I say absolutely infinite, not infinite in its own kind; for if something is only infinite in its own kind, we can deny infinite attributes of it [inserted in Dutch edition: (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. (G II/45/22 – 46/7; Curley’s translation, modified)

Spinoza equates ‘absolute infinity’ with the infinite plurality of the attributes, and ‘infinite in its own kind’ with the denial of infinite attributes. Because these are contradictories, we can say that a thing is absolutely infinite if and only if the infinite plurality of attributes can be affirmed of it. If each attribute is absolutely infinite, then it follows that the infinity plurality of attributes can be affirmed of each attribute. In order for the infinite plurality of attributes to be affirmed of a given attribute, these attributes must in some sense be “involved” or expressed within that attribute. This is to say that if each attribute is absolutely infinite, then it follows that the attributes must in some way mutually involve one another. Conversely, if each attribute involves every attribute including itself, it follows that every attribute can be affirmed of any given attribute. Since this is equivalent to saying that each attribute is absolutely infinite, it follows

that if the attributes mutually involve one another, then each attribute is absolutely infinite. Therefore the attributes mutually involve one another if and only if each attribute is itself absolutely infinite. Thus any textual evidence that supports the proposition that a given attribute is absolutely infinite by that token implies that that attribute in some sense involves all the infinite attributes, and vice versa.

This argument is rather empty of content, for at this stage all that we can validly infer is that at least part of what it means for each attribute to “involve” infinite attributes is that we may affirm infinite attributes of any attribute; so far we have no account of what else it may mean to say that the attributes mutually involve one another. But at this stage I need only establish that mutual involvement of the attributes and the absolute infinity of each attribute — whatever these assertions may amount to — entail one another. To use Spinoza’s language from the Demonstration to IP16, I have presented the definitions or essences of mutual involvement of the attributes and absolute infinity, and argued that they mutually entail one another, but it still remains to deduce the properties of each from these definitions. In the process of this deduction we will learn more concretely what it means for the attributes to involve one another mutually, and what it means to say that they are absolutely infinite. The thesis of radical mutual containment is one way of characterizing the nature of the mutual involvement of the attributes, and to this extent at least it is consistent with the assertion that each attribute is absolutely infinite. However, I think it is the best way of characterizing the mutual involvement of the attributes because it suggests an enlightening account of the infinite modes, and in the process provides a means to understanding the relationship of *entailment* between substance and modes.

For the moment, I should sketch what the thesis of radical mutual containment entails concerning the character of the absolute infinity of substance. It will help if we consider radical

mutual containment in terms of an extended metaphor. Suppose that the attribute of thought is a house, and we are inside this house. By IP10 it is “windowless” — from the standpoint of a perspective within the interior of the house, the house must be conceived through itself, and not as an element embedded within a deeper metaphysical context. According to the thesis of radical mutual containment, inside this house is an infinite plurality of houses, constituting all of the attributes, *including* the house which constitutes the attribute of thought itself. If we were to enter one of these houses contained in the attribute of thought, we would find the same infinite array of houses all over again. Furthermore, if we were to exit the house in which we find ourselves (that is, the attribute of thought), we would find it was one of an infinite array of houses inside some other windowless house. It is apparent that this infinity of containment is an infinity that is both in itself and (in the case of the attribute of thought, at least) conceived through itself. This infinity has no maximum or minimum limit, for there is no “outermost” house. Moreover, since we can always exit a house but can never find ourselves completely outside of any house, we are in a sense always capable of “transcending” the particular context within which we find ourselves, and yet this capacity is entirely *immanent* — we cannot escape every containment context altogether.

The significance of this metaphor as a characterization of Spinoza’s account is that an attribute which is infinite in the way characterized by radical mutual containment — an infinity of attributes within attributes within attributes — is infinite in a way which is quite distinct from an attribute regarded as merely infinite in its own kind. Radical mutual containment constitutes what might be called a more “thorough” infinity of the attributes. The attributes do exist in an infinite array, as in the “dual infinity” reading. But because this infinite array expresses the nature of substance, and because each attribute expresses the essence or nature of substance

adequately, the infinite array must also be present or immanent in *each* attribute. Thus it is not the case, as it is with the “dual infinity” reading, that the absolute infinity of God is expressed adequately only in terms of the infinite collection of all attributes, and is expressed inadequately in any one attribute. Rather, the absolute infinity of God is expressed adequately in any attribute whatsoever — that is, absolute infinity is immanent in each and every expression of the divine essence.

It may sound like sheer mysticism, but the infinity of radical mutual containment performs an eminently rational function in Spinoza’s metaphysics: *it makes it possible to apprehend the system of attributes intelligibly as a whole*. Recall the difficulty which I raised in Chapter Three: that we must find some ground from which we might conceive of the attributes as an infinite system expressing the nature of substance, which apparently requires that we must transcend the system of attributes.¹⁰ There are two options: either deal with substance as substance, without regard to how it is expressed in the attributes — which is unacceptable because then the attributes could not be conceptually independent, nor adequately express the essence of substance — or find some way of grasping the system of attributes from *within* the system, despite their conceptual independence. The thesis of radical mutual containment constitutes the latter alternative: the mutual involvement of the attributes allows us to grasp the system in its entirety within the confines of any given attribute, and in effect performs a function that would ordinarily require some form of transcendence — but performs it entirely *immanently*. And this, I think, is what Spinoza must ultimately intend by saying that substance is “absolutely infinite”: since infinity is “absolute affirmation,” substance affirms itself absolutely in each of its attributes, and this requires that each attribute in turn affirms all attributes absolutely.

¹⁰ See Chapter Three, pp. 94-5.

The Explanatory Power of Radical Mutual Containment

I have argued that the thesis of the radical mutual containment of the attributes is consistent with Spinoza's characterization of the attributes as expressive of the essence of substance (ID4), as conceptually independent (IP10), and as involving a parallelism of modal order (IIP7 Schol.). The thesis also has significant explanatory power with respect to a number of other puzzles in Spinoza's metaphysical system. In this section I will first discuss how radical mutual containment of the attributes explains how the attribute of thought could appear to be "dominant" over all other attributes, and in turn why the "subjective reading" of the attributes initially seems accurate. Next I will discuss the bearing radical mutual containment has on our understanding of the early propositions of Part I of the *Ethics*, where Spinoza treats of substance as though it consists of a single attribute. I also will consider the related issue of the identity of substance and attribute. In the next chapter I will argue that the thesis also entails a new account of the infinite modes.

First, the thesis of radical mutual containment accounts for the apparent "dominance of thought" which Harris observes in Spinoza's philosophy: thought seems uniquely comprehensive of all attributes. Thought does indeed comprehend all attributes simply because it contains them, for God's infinite intellect comprehends his essence and all that follows from it (IIP3). But if this comprehensive character is part of the nature of the attribute of thought because it must express the essence of God adequately, then this same comprehensive character must also obtain in any attribute whatsoever. Therefore the attribute of thought cannot be uniquely dominant over all attributes, and each and every attribute must comprehend all attributes. But this entails that, for example, when God's essence is regarded as expressed under the attribute of extension, the attribute of extension appears specially comprehensive of all

attributes, and from that standpoint the attribute of extension appears to “dominate” the system of attributes. So from the perspective of any given attribute, that attribute will superficially appear more comprehensive than all others, for it contains them all. Hence each attribute, from its own perspective on substance, *is* the dominant attribute; it is only when we realize that *any* attribute must have the same comprehensive character that the illusion of unique dominance is dispelled. The appearance of dominance is an unavoidable illusion, analogous to the illusion Spinoza discusses concerning our sense-perception of the sun: our sense-perception must represent the sun as small and not very far away, even after we understand that this is only an illusory appearance, simply because this is how our bodies are affected by the sun (IIP35 Schol.: G II/117/21-30). Similarly, each attribute must appear dominant when conceived through itself, even after we recognize that other attributes must appear the same way from their own perspectives, simply because each attribute, insofar as it is conceived through itself, contains all attributes.

For this reason, according to the thesis of radical mutual containment the cognitive characterizations of certain elements of the *Ethics* are not errors on Spinoza’s part, nor do they constitute elements of an absolute reduction of all reality to idealism. Rather, the *Ethics* appears idealist *only from the perspective of the attribute of thought*, and even then only superficially. For example, the “subjective interpretation” of the definition of ‘attribute’ (ID4), which I have argued is ultimately unacceptable, is nevertheless in a sense accurate, for from the perspective of the attribute of thought all attributes must be distinct perceptions of the infinite intellect of God. Moreover, since ID4 is in form a definition, it is unsurprising that it should be articulated in terms of intellectual perception, for a definition itself is a thought.¹¹ Thus ID4 is expressed in

¹¹ In a certain sense the definition of attribute is *not* a mode of thought, for the term ‘attribute’ does not refer to an individual idea which corresponds to some particular individual object. In this sense the definition of ‘attribute’ is a

cognitive terms because the *Ethics* is a philosophical work, and thus a work of thought. What is more, the thesis of radical mutual containment accounts for the less obvious instances of language suggesting mind-dependence that appear in the *Ethics* yet receive little if any consideration in the literature. For example, not only the definition of ‘attribute’ (ID4) but also the definitions of ‘substance’ (ID3) and ‘mode’ (ID5) refer to the activity of the intellect, for substance is “conceived through itself” (G II/45/15) while a mode is “in another through which it is also conceived” (G II/45/21). Again, such characterizations do not reduce substance or mode to mind-dependent entities, but only reflect the fact that in the *Ethics* the metaphysical system is expressed under the attribute of thought. Finally, the thesis further elucidates why Spinoza characterizes *infinitum* in terms of “absolute affirmation,” a phrase which suggests an act of judgment:¹² for Spinoza affirmation is not an act of will but rather an intrinsic characteristic of ideas (IIP49 and Dem.), and under the attribute of thought the infinite must be conceived as an aspect of thinking.

Next, the thesis of radical mutual entailment accounts for why the first eight propositions of Part I of the *Ethics* refer to single-attribute substance rather than many-attribute substance, and why Spinoza makes periodic references to substance as though it had a single attribute even *after* he has established that substance has infinitely many attributes (for example, in the Scholium to IIP7: “the thinking substance and the extended substance are one and the same substance” (G II/90/6-7)). The single-attribute substance is not a hypothetical or counterfactual supposition that Spinoza casts away once he has established that God is the only substance. For IP10 asserts that each attribute can be conceived through itself, and this entails that substance may be adequately

being of reason (*ens rationis*) and not a real individual, for it does not express or correspond to any particular attribute. Yet Spinoza would also say that in another sense the definition of ‘attribute’ as a being of reason is nevertheless a mode of thought, as the definition insofar as it is a definition must be manifested as an individual idea in one mind or another. See *Metaphysical Thoughts*, Part I, Chap. 1 (G I/235/10-6).

¹² See Chapter Two, pp. 59-63.

conceived under a single attribute at a time. Hence in a certain sense even an infinite-attribute substance may be adequately regarded as a single-attribute substance. For example, even as we conceive of God as a substance consisting of infinite attributes, the fact that we “conceive” God in this way shows that we regard God exclusively under the attribute of thought, insofar as all of God’s attributes are involved in the attribute of thought.

This matter becomes clearer when we consider it in terms of two closely related interpretive problems: at times Spinoza treats the attributes as though they satisfy the definition of substance itself, and he also tends to identify substance and attribute. First, Spinoza has reason to think that attributes satisfy the definition of ‘substance’. Indeed, if each attribute must be conceived through itself (IP10) then evidently each attribute satisfies at least the second half of the definition of ‘substance’ (ID3): substance is in itself and conceived through itself. In the Demonstration for IP10 Spinoza argues that attributes are conceived through themselves because they are what the intellect perceives of substance as constituting its essence (G II/51/31-3). This shows that Spinoza does think that the attributes share at least part of the character of substance simply because they express its essence. And what is more, at times he seems to treat the attributes as though they individually constitute single-attribute substances. The Demonstration of IP8 discusses “substance of one attribute” (G II/49/11), a conception of substance which Spinoza appears promptly to abandon in the following propositions as he proves the existence of God as substance consisting of infinite attributes. But even after Spinoza proves that God is the only substance (P14 Cor. 1), in the Scholium to IP15 he claims that “extended substance is one of God’s attributes” (G II/57/22-3). Hence there is some evidence that Spinoza does think of each attribute as in some sense a substance in its own right. Textual considerations such as these motivate Gueroult’s reading of the doctrine of the attributes: each attribute is a single-attribute

substance expressing an essence infinite in its own kind, the first eight propositions of Part I of the *Ethics* concern these substances, and God as infinite-attribute substance is the union of these substances.¹³ But of course the problem with this reading is that God is the only substance, and has one essence — but this is incompatible with a plurality of single-attribute substances each expressing a distinct essence infinite in its own kind.¹⁴ However, Gueroult’s reading provides an account for Spinoza’s apparently hypothetical discussion of single-attribute substances in IP1-8, and his claim that extended substance is an attribute of God in the Scholium to IP15.

Second, Spinoza tends to identify substance and attribute in general. Macherey identifies definitions of attribute and substance from Spinoza’s early correspondence that are virtually identical.¹⁵

By attribute I understand whatever is conceived through itself and in itself, so that its concept does not involve the concept of another thing. (Letter 2: G IV/7/26-8)

[B]y substance I understand what is conceived through itself and in itself, that is, that whose concept does not involve the concept of another thing.... (Letter 4: G IV/13/32-4)

Thomas argues at length that the combination of the objectivity of the attributes, their “aseity” (that is, their existence in and through themselves), and their infinity entails that each is identical with substance.¹⁶ If God is the only substance (IP14 and Cor.) then Spinoza has a considerable problem. We not only have reason to think that each attribute is a substance in its own right, but also that each attribute is identical with the only substance, God. Since there is an infinite plurality of attributes, but only one indivisibly infinite God, it seems impossible that each attribute could be identical with God.

¹³ Gueroult, *Spinoza*, 1:51-5, 67-74. For helpful discussions and criticisms of Gueroult’s reading of the attributes see Donagan, “Essence and the Distinction of Attributes,” 174-7; Macherey, “The Problem of the Attributes,” 81-2, 84-8; and Curley, *Collected Works*, 412 n. 12.

¹⁴ Donagan, “Essence and the Distinction of Attributes,” 176-7; see also Eisenberg, 4.

¹⁵ Macherey, 79.

¹⁶ “The Identity of Substance and Attribute,” chap. 2 in *Intuition and Reality*.

The fact that the infinite plurality of the attributes is indivisible and nondenumerable to some degree mitigates these difficulties concerning the unity of substance and the plurality of its attributes.¹⁷ But the thesis of radical mutual containment provides a clearer explanation of how we might understand this relationship between attribute and substance, and this explanation resolves both of the contradictions discussed above. For in a sense each attribute is both *the* substance and *a* substance. From the perspective of a given attribute insofar as it is involved or contained in the attribute of thought, for example, that attribute is itself *a* substance, one complete and adequate expression of substance among infinitely many. But insofar as all these attributes are conceived under (for example) the attribute of thought, the attribute of thought is *the* substance, and indeed a single-attribute substance — which nevertheless expresses the essence of God as a substance consisting of infinite attributes. Thus Gueroult is not quite correct to argue that God is the union of an infinite plurality of independently existing single-attribute substances. However, he is on the right track insofar as God is the ground in which the infinite plurality of attributes can *be* an infinite plurality — but God must be fully conceivable through any one of these attributes, and therefore each attribute must in itself be sufficient to serve as the ground for explicating the entire system of the attributes.¹⁸ Hence the first eight propositions in Part I of the *Ethics* are indeed categorical and not hypothetical.¹⁹ In a strict sense substance must be conceived under one attribute at a time (and this is the *real* import of IP10) even in circumstances where we compare modes of different attributes.

¹⁷ See Chapter Three, pp. 85-87.

¹⁸ One should object that this account is inconsistent on the grounds that what it calls ‘substances’ and ‘attributes’ must really be *modes*, for they are conceived through something else as their ground; see Eisenberg 5-6. This is in fact correct, but it is not a problem. On the thesis of radical mutual containment the status of being a substance, attribute, or infinite mode is perspective-relative. This will become clear in Chapter Five, where I will discuss how radical mutual containment entails a complementary reading of Spinoza’s doctrine of the infinite modes.

¹⁹ Deleuze, *Expressionism*, 337.

Textual Support for Radical Mutual Containment

The thesis of radical mutual containment offers solutions to many problems surrounding the doctrine of the attributes. Moreover, I have argued that a commitment to some sort of mutual involvement between the attributes is latent within Spinoza's argumentation concerning the attributes. But does Spinoza consciously accept anything like the thesis? Spinoza never explicitly states that each attribute contains every other attribute. Indeed, Spinoza argues (on the strength of IP10) that no other attribute can be inferred from or conceived through a given attribute (Letter 64: G IV/278/1-3). So the available texts in general favor the interpretation that Spinoza did *not* accept anything like radical mutual containment, at least early in his thought. However, a close examination of several passages shows that Spinoza is, at least late in his career, surprisingly close to endorsing something like the thesis. In this section I will discuss the textual evidence concerning the infinity of the attributes. As I argued above, the attributes in some way mutually involve or express one another if and only if each attribute is in itself absolutely infinite.²⁰ Thus, if the thesis of radical mutual containment is the best available way of characterizing this mutual involvement, then any textual evidence that implies that an attribute is absolutely infinite will tend to support the thesis. While Spinoza explicitly asserts in some of his earlier works that each attribute is infinite in its own kind, there are nevertheless doctrinal tensions that suggest this claim is inconsistent with the "dual infinity" reading of the attributes.²¹ Moreover, in correspondence from late in Spinoza's career he remarks that the infinite modes of the attributes of thought and extension are absolutely infinite. If the infinite modes of the

²⁰ See pp. 137-8 above.

²¹ However, as I will argue in the next chapter, despite the fact that the attributes mutually involve or express one another if and only if the attributes are each absolutely infinite, there is nevertheless a legitimate sense in which each attribute can be regarded as infinite in its own kind. However, since I argue that the "dual infinity" reading cannot provide a consistent account within which each attribute can be regarded as infinite in its own kind, I contend that each attribute can legitimately be regarded as infinite in its own kind only if the attributes in some way mutually involve one another. See Chapter Five, pp. 199-200.

attributes are absolutely infinite, then each of the attributes from which these modes follow must also be absolutely infinite, and therefore Spinoza must admit that the attributes cannot exclude one another absolutely but must in some sense involve one another.

According to the thesis of radical mutual containment of the attributes each attribute is absolutely infinite, not merely infinite in its own kind. Hence any references Spinoza makes that suggest the attributes are absolutely infinite will constitute evidence for this reading. However, evidence that Spinoza thinks each attribute is infinite in its own kind is readily available.

Spinoza is quite explicit about this matter in Letter 4 to Henry Oldenburg. In Letter 3 Oldenburg asks Spinoza, “are you certain that Body is not limited by Thought nor Thought by Body?” (G IV/10/26-7). Spinoza replies:

But please note: if someone says that Extension is limited not by Extension, but by Thought, is that not the same as saying the Extension is infinite not absolutely, but only so far as it is Extension? I.e., does he not grant me that Extension is not infinite absolutely, but only insofar as it is Extension, i.e., in its own kind? (Letter 4: G IV/13/17-22; Curley’s translation, modified)

Spinoza here clearly refers to the attributes of thought and of extension; this reading is confirmed by the *Short Treatise*: “He [God] is, we say, a being of which all, or infinite, attributes are predicated, each of which is infinitely perfect in its own kind” (G I/19/4-7); “...Nature consists of infinite attributes, of which each is perfect in its kind” (G I/22/10-2). Letter 4 dates to October 1661, which is around the time that Spinoza was composing the *Short Treatise*.²² So early in his career Spinoza definitely contends that each attribute is infinite in its own kind.

The *Short Treatise* provides some insight into what Spinoza must have believed constituted “absolutely infinite” in his early thought. Consider the following argument:

Because we have already found previously that there must be an infinite and perfect being, by which nothing else can be understood but a being of which all in all must be predicated. For of a being which has some essence, [some] attributes

²² See Curley’s “Editorial Preface” to his translation of the *Short Treatise* (*Collected Works*, 50).

must be predicated, and the more essence one ascribes to it, the more attributes one must also ascribe to it. So if a being is infinite, its attributes must also be infinite, and that is precisely what we call a perfect being. (G I/23/18-26)

Notice that this argument, coupled with Spinoza's assertion that each attribute is infinite in its own kind, suggests an interpretation quite in line with the "dual infinity" reading of the attributes: each attribute as infinite in its own kind is internally infinite insofar as an infinite plurality of modes is conceived through it, but each attribute is also a member of a plurality which is collectively infinite.²³

Nevertheless, even at this early juncture there is an internal tension with respect to the infinity of the attributes in Spinoza's thought. For example, in the *Short Treatise* Spinoza argues "that no substance or attributes exist in God's infinite intellect which do not exist formally in Nature" (G I/21/33-4). This clearly suggests that the attributes exist objectively in God's infinite intellect; but if this is the case then God's intellect, at least, cannot be merely infinite in its own kind. For if the attribute of thought was infinite in its own kind then the infinite intellect of God could have no knowledge of the qualitative nature of any other attribute, much less of an infinite plurality of attributes. This leaves Spinoza with a dilemma. If God's intellect is an infinite mode of thought or identical with the infinite attribute of thought itself, then it encompasses the extensive infinity of the attributes; therefore thought cannot be regarded as simply infinite in its own kind. Alternatively, if God's intellect is not properly conceivable as thought or a mode of thought, then God's intellect transcends the attributes entirely; this entails that no attribute adequately expresses the essence of God, and therefore no mode of thought can grasp nature adequately. Worse, it is unclear what the formal nature of God's infinite intellect could be if it is not a mode of thought. Given Spinoza's contention in the *Short Treatise* that each attribute is infinite in its own kind, he can accept neither horn of this dilemma.

²³ See Chapter Three, pp. 88-89.

In the *Ethics* Spinoza presumably continues to think of each attribute as infinite in its own kind, yet nevertheless he seems more diffident about the matter. The only place where Spinoza says anything which could be construed to state explicitly that each attribute is infinite in its own kind is the Demonstration of IP16. But considered in isolation the passage is ambiguous: “the divine nature has absolutely infinite attributes [*infinita absolute attributa*] (by D6), each of which expresses infinite essence in its own kind [*infinitam essentiam in suo genere*]” (G II/60/26-28; Curley’s translation, modified). To say the divine nature has “absolutely infinite attributes” is probably to intend both aspects of the dual infinity simultaneously; i.e., “absolutely infinite attributes” means “attributes which are each infinite in its own kind *and* collectively constitute an infinite plurality.”²⁴ Yet this passage has an alternative reading: each attribute is itself absolutely infinite, while what each attribute *expresses* of infinite essence (i.e., the divine nature) is infinite in its own kind. Though it by no means entails it, such a reading is suggestive of something akin to the thesis of radical mutual containment.

Elsewhere the *Ethics* seems silent about the infinity of the attributes. Where in Letter 4 Spinoza infers that each attribute must be infinite in its own kind from the fact that extension can only be limited by extension, in the *Ethics* he infers only that finite modes of different attributes cannot limit one another: “Thus a thought is limited by another thought. But a body is not limited by a thought nor a thought by a body” (ID2: G II/45/11-3). In this context this claim reflects more the explanatory independence of the modes than the character of the infinity of the attributes. ID6 and its Explication are consistent with Spinoza’s statements in Letter 4 and the *Short Treatise*, but nevertheless are quite vague with regard to the issue of the infinite attributes:

²⁴ Kline, “On the Infinity of Spinoza’s Attributes,” 344; Harris, “Infinity of Attributes and *Idea Ideae*,” 39.

By God I understand a being absolutely infinite, i.e., a substance consisting of infinite attributes, of which each expresses an eternal and infinite essence.

Exp.: I say absolutely infinite, not infinite in its own kind; for if something is only infinite in its own kind, we can deny infinite attributes of it [inserted in Dutch edition: (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. (G II/45/22 – 46/7; Curley’s translation, modified)

This passage is clearly compatible with the reading that each attribute is infinite in its own kind, but it does not explicitly assert this. As I argued above this passage is also compatible with the thesis of radical mutual containment, for on that reading it is *not* the case that one can deny infinite attributes of any given attribute. The Demonstrations of IIP1 and IIP2, which assert that thought and extension are attributes of God, also are silent as to the status of the infinity of the attributes; they say only that each “is necessarily one of God’s infinite attributes” (G II/86/26-8).

The same tensions present in the *Short Treatise* reappear in the *Ethics*. IP16 and its Demonstration, even if they are consistent with the reading that each attribute is infinite in its own kind, necessarily imply that even modes of other attributes must in some sense fall within the scope of the infinite intellect. If this were not the case, then IP16 could only account for an infinite plurality of modes of *thought*, for Spinoza specifies that exactly what constitutes the “infinite things in infinite modes” is “everything which can fall under the infinite intellect” (G II/60/18; Curley’s translation, modified). But IP15 (“Whatever is, is in God, and nothing can be or be conceived without God” (G II/56/24-5)) clearly intends that God is cause of *all* modes of any attribute, and IIP6 confirms this by contending that modes can be regarded as caused by God only so far as God is considered under the attribute of which they are modes. We have already seen that IIP5 cannot be internally consistent unless attributes can appear as modes of thought

and hence be conceived through the attribute of thought.²⁵ Hence each attribute must exist independently, yet at the same time each attribute must be conceived through the attribute of thought.

Thus while in word Spinoza thinks that each attribute is infinite in its own kind, it nevertheless does not sit well with his account of the attribute of thought, and he seems to become more aware of this problem over the course of his career. But there is another source of textual evidence for the claim that the attributes are absolutely infinite: Spinoza's rare discussions of the infinite modes. There are places where Spinoza explicitly remarks that the infinite modes of the attributes of thought and extension are absolutely infinite. If a mode of an attribute is absolutely infinite, then Spinoza cannot consistently hold that the attribute through which that mode is conceived is merely infinite in its own kind. Consider Spinoza's enumeration of the infinite modes in Letter 64. Here Spinoza responds to Letter 63, in which G. H. Schuller, writing on behalf of Tschirnhaus, presses Spinoza for clarification of the immediate and mediate products of God's activity:

...I would like examples of those things which are produced immediately by God, and those which are produced by the mediation of some infinite modification. Thought and extension seem to me to be examples of the first kind; examples of the second kind seem to be, in thought, intellect, and in extension, motion, and so on. (Letter 63: G IV/276/1-4)

Schuller evidently thinks that the attributes themselves are what God produces immediately, and that God produces mediately the basic, most universal modes which are grasped under those attributes. But Spinoza, consistent with his terse account of the immediate and mediate products of the attributes in IP21-23, sees both kinds as modes:

Finally, the examples which you ask for: examples of the first kind are, in thought, *absolutely infinite intellect*, and in extension, motion and rest; an example of the second kind is the face of the whole universe [*facies totius*

²⁵ See p. 133 above.

Universi], which, although it varies in infinite ways, nevertheless always remains the same, concerning which see the Scholium to Lemma 7 preceding P14, Part II. (Letter 64: G IV/278/24-28; Curley's translation, modified; emphasis mine)

This passage identifies what have come to be referred to in the literature as the immediate and mediate infinite modes of the attributes of thought and extension. I will discuss Spinoza's doctrine of the infinite modes at length in Chapter Five. For the moment, the claim that the infinite intellect is absolutely infinite (*intellectus absolute infinitus*) is of primary interest, for here for the first time Spinoza explicitly indicates his commitment to this position. The immediate infinite mode of the attribute of thought, which follows from the "absolute nature" of that attribute (IP21), is therefore absolutely infinite. But if the attribute of thought is merely infinite in its own kind then the transition from the attribute to its immediate infinite mode constitutes an *appreciation* in the qualitative character of the infinite. But this cannot be the case. Since the absolutely infinite intellect follows from the absolute nature of the attribute of thought, the infinite intellect cannot derive its absolute infinity from the attribute of thought in conjunction with other attributes. It follows that the immediate infinite mode of thought derives its absolute infinity from the nature of the attribute of thought alone, and therefore the attribute of thought cannot be infinite in its own kind, but rather must be absolutely infinite.

Letter 66 shows that the attribution of absolute infinity to thought in Letter 64 was no slip of the pen. In Letter 65 Tschirnhaus presses Spinoza on the implications of the Scholium to IIP7:

Although I gather from that scholium that the world is absolutely unique, still it is no less clear also from that scholium that it is expressed in infinite ways. And therefore each singular thing is expressed in infinite ways. From this it seems to follow that that modification which constitutes my mind and that modification which expresses my body, although it is one and the same modification, is nevertheless expressed in infinite ways, in one way through thought, in another through extension, in a third through an attribute of God unknown to me, and so on to infinity, since there are infinitely many attributes of God, and the order and connection of the modifications seems to be the same in all.

From this, now, the question arises why the mind, which represents a certain modification, and which same modification is expressed not only in extension, but also in infinite other ways, why, I ask, does the mind perceive only that modification expressed through extension, that is, the human body, and no other expression through other attributes? (Letter 65: G IV/279/14-29)

Spinoza's reply in Letter 66 shows that he is aware that the scope of the divine intellect must be greater than merely "infinite in its own kind":

To reply to your objection, I say that although each thing is expressed in infinite modes in the infinite intellect of God, nevertheless those infinite ideas by which it is expressed cannot constitute one and the same mind of a singular thing, but infinitely many minds, since each of these infinitely many ideas has no connection with any other, as I have explained in the same scholium, that to *Ethics* IIP7, and as is evident from IP10. If you will attend a bit to these things, you will see that no difficulty remains. (G IV/280/7-15; Curley's translation, modified)

Hence Spinoza's explanation for why we perceive only our own bodies and not any corresponding modal expressions in other attributes is that there is a distinct mind (that is, a distinct idea in the infinite intellect (IIP11 and Cor.)) for each modal expression. It follows that the attribute of thought involves distinct ideas which express the distinct modes of each and every attribute. Interestingly, as Curley points out,²⁶ Spinoza holds that every object irrespective of attribute has its own idea in the attribute of thought as early as the *Short Treatise*:

Therefore, the essence of the soul consists only in the being of an Idea, or objective essence, in the thinking attribute, arising from the essence of an object which in fact exists in Nature. I say *of an object that really exists*, etc., without further particulars, in order to include here not only the modes of extension, but also the modes of all the infinite attributes, which have a soul just as much as those of extension do. (Appendix II: G I/119/5-13)

In a passage shortly thereafter Spinoza nevertheless insists that "there is no inequality at all in the attributes" (G I/119/23-4); hence the apparent privilege accorded to the attribute of thought, and the assertion of the "equality" of the attributes that appears to contradict it, was present in Spinoza's thought much earlier than Letter 66. If there is a mode in the attribute of thought for

²⁶ Spinoza's *Metaphysics*, 149-50.

each and every mode of every attribute, it follows that the attribute of thought itself must involve every attribute, and therefore it must be absolutely infinite.²⁷

As we have seen, however, if absolute infinity is the unique privilege of the attribute of thought and its immediate infinite mode, the infinite intellect, then Spinoza cannot consistently hold that the attributes have parallel modal orders.²⁸ If the attributes are genuinely “equal” then the absolute infinity accorded to the attribute of thought (and its immediate infinite mode) must be accorded to the other attributes as well. If from its own perspective the attribute of thought only *appears* more comprehensive than the other attributes, and if each of the other attributes, as attributes, adequately express the essence of God, then the attributes must involve one another, and conceptual independence and modal parallelism are preserved.

Is there any textual evidence, then, that Spinoza considers the other attribute of which we are aware, that of extension, absolutely infinite? Consider the following passage from Letter 32:

Now all bodies in Nature...are surrounded by others, and are determined by one another to existing and producing an effect in a certain and determinate way [*ratione*], the same ratio of motion to rest always being preserved in all of them at once, that is, in the whole universe. From this it follows that every body, insofar as it exists modified in a certain way, must be considered as a part of the whole universe [*totius universi*], must agree with the whole to which it belongs, and must cohere with the remaining bodies. And since the nature of the universe is not limited...but is *absolutely infinite*, its parts are restrained in infinite ways [*in infinitis modis*] by this nature of the infinite power, and compelled to undergo infinitely many variations. (G IV/172/15 – 173/8; emphasis mine)

Perhaps one could argue that ‘the nature of the universe’ must refer to the divine nature at large, and it is this that is absolutely infinite, but in this context it seems more likely that Spinoza has in mind the entirety of the extended or physical universe. *Totius universi* is the same thing as ‘the face of the whole universe’ (*facies totius universi*), the mediate infinite mode mentioned in Letter 64. For in the Scholium to *Ethics* IIL7, to which Spinoza refers Schuller for further explanation

²⁷ Ibid., 150.

²⁸ See Chapter Three, pp. 98-100.

of ‘the face of the whole universe’, Spinoza considers the universe as an individual that maintains an unchanging form defined by a ratio of motion and rest (G II/102/8-13). Hence the attribute of extension, like the attribute of thought, apparently involves a mode which is absolutely infinite.²⁹ Again, unless it is possible for the infinite to “appreciate” from an attribute infinite in its own kind to a mode that is absolutely infinite, we must infer that the attribute of extension itself must be absolutely infinite as well.

I think it is unlikely that Spinoza fully grasped that the attributes must in some way involve one another in order to adequately express the essence of substance or God. However, his thought clearly entails it. Spinoza cannot consistently hold the key elements of his doctrine of the attributes if he does not allow for the infinite attributes to involve one another in some way. Spinoza died only a year and a half after he had written Letter 66, in which he responds to questions from Tschirnhaus that involve just these sorts of issues; perhaps had Spinoza lived long enough for Tschirnhaus to press him further on these matters he might have acknowledged that the attributes must mutually involve one another. Or perhaps Harris is right to think that Letter 66 is only an expression of Spinoza’s commitment to the dominance of the attribute of thought. However, if Harris is correct, then Spinoza should not have nonchalantly quipped in his response to Tschirnhaus that “no difficulty remains” in the matter of the infinity of the attributes, for if the attribute of thought is uniquely more comprehensive than all other attributes Spinoza

²⁹ This issue is more complicated than I present it here. As I will argue in the next chapter, *facies totius universi* as it is presented in the Scholium to IIL7, despite the fact that it expresses the entirety of the physical universe as a ratio of motion and rest, is technically a mode of the attribute of *thought*. This in turn suggests that Letter 32 really amounts to further textual evidence that the attribute of thought is the only attribute which has absolutely infinite modes. However, I will also argue that the face of the whole universe is the attribute of extension insofar as it is contained or involved in the attribute of thought; as such, the absolute infinity of that mode has more to do with the character of the attribute of extension than the attribute of thought. Hence I think this passage positively supports my claim that the absolute infinity of the face of the whole universe must reflect the absolute infinity of the attribute of extension.

must abandon his commitments to the conceptual independence of the attributes and the parallelism of their modes.

Objections to the Thesis of Radical Mutual Containment

Such a radical reading of the doctrine of the attributes invites some obvious objections. One is that the thesis of radical mutual containment appears to reduce attributes to modes. Because the thesis entails a new interpretation of Spinoza's doctrine of the modes I will address this objection in the next chapter. I will consider two further objections here. The first and most obvious objection is that if each attribute contains every other attribute, including itself, then every attribute will have the same order and content; therefore all the attributes reduce to just one attribute, for there will be no intrinsic means of distinguishing them.

The argument can be posed in more detail in the following way. Suppose the thesis of radical mutual containment is true. Then each attribute involves infinite attributes, and it follows that each attribute is absolutely infinite — that is, infinite attributes can be affirmed of each attribute (ID6 Exp.). But this is only to say that each attribute is identical with God or substance (ID6). Moreover, if each attribute is absolutely infinite, each attribute has the same content as any other attribute. If each attribute has the same content, then each attribute must have the same nature. But there can be no two substances with the same nature or attribute (IP5). Therefore there can be no plurality of attributes, only one. Since the thesis of radical mutual containment presupposes that there is an infinite plurality of attributes, its supposition leads to a contradiction. Therefore the thesis cannot be correct.

Put another way, the objection contends that the thesis of radical mutual containment in effect reduces the infinite attributes to a single attribute possessing all the different “qualities”

which are supposed to distinguish the attributes, and so posits a pan-attribute with no specific nature of its own. But I have argued that this cannot be the case. Spinoza, because he is a philosopher, works within the attribute of thought. Thus his propositions often seem to refer to the mind; ID4, the definition of ‘attribute’, and IP16 (which states that *infinita infinitis modis* are everything that falls under the infinite intellect (G II/60/17-8)) are cases in point. It is not the case that all the attributes commingle indistinguishably. Rather, everything superficially *appears* to reduce to a single, specific attribute: because we are thinking beings engaged in the cognitive activity of philosophy, it is the attribute of thought.

The argument behind the objection mistakenly assumes that if each attribute has the same content, each attribute must have the same nature. This assumption neglects the important Cartesian distinction (which Spinoza accepts) between formal reality and objective reality.³⁰ The formal reality of an idea, for example, is its existence as an idea, but its objective reality is its content; hence what an idea possesses objectively, its object or *ideatum* possesses formally. According to the thesis of radical mutual containment, this distinction applies to the attributes themselves, and is relative to the perspective from which we regard the attributes: so far as an attribute contains other attributes, it expresses its own formal reality, and so far as an attribute is contained, it is expressed as an objective reality. Consider the metaphor of windowless houses again. From the perspective of the house that is the attribute of thought, then, it has the formal reality of thought, but contains all houses (including itself) as objective realities. But from the perspective of each of the contained houses (each of which, being windowless, can only look

³⁰ Spinoza is clearly aware of (and understands) the Cartesian distinction between formal and objective reality, because he discusses it in *Descartes’ “Principles”* (ID3, 4: G I/150/1-12). Spinoza also discusses the distinction at some length in the *Treatise on the Emendation of the Intellect*, noting that the formal reality of an idea is reflexively the objective reality of another idea — that is, that an idea entails an idea of that idea — and so on indefinitely (G II/14/13 – 15/6). In the *Ethics* Spinoza makes use of the distinction in the Scholium to IP17 (G II/63/7-9), the Demonstration to IP30, IIP5, and the Corollary to IIP8.

inward at its own contents) its own reality is formal, and the houses which the containing house contains are objective realities. Hence in radical mutual containment the distinction between formal and objective reality is relative. However, in any single act of reflection concerning the attributes only one formal reality is in play — that constituting the perspective of the containing attribute — and relative to that formal reality all realities are objective.

Hence while all attributes have the same objective reality as content, each has its own formal reality which informs that content. Therefore the fact that the attributes have the same content does not entail that they have the same nature, and the objection is based upon an unsound argument. To put the matter another way, the objection only has force if we can somehow transcend the houses and get a look at them all from an absolute “outside.” But according to the thesis of radical mutual containment there is no absolute “outside.” Therefore a reduction to one attribute with no specific character of its own is impossible.

The second objection is a more serious challenge: if the entirety of nature, including the metaphysics of substance and its infinite attributes, can in principle be explained through any attribute, then how does the other attribute which we perceive, that of *extension*, involve all other attributes? Harris’ account has an advantage in that it posits a unique self-reflexive quality to the attribute of thought — the doctrine of *idea ideae*, according to which every idea is itself the object of another idea *ad infinitum* (IIP21 Schol.), has no obvious correlate of *objectum objecti* in the attribute of extension. Thus there are empirical reasons for thinking that only the attribute of thought is adequately comprehensive of the entire system, for we of course experience thought as self-reflexive but do not experience extension in that way.³¹ But radical mutual containment entails that there should be some way in which the attribute of extension expresses the other attributes. If we are in one respect extended beings, then it seems that in principle we should be

³¹ Curley, *Spinoza’s Metaphysics*, 150.

aware of how extension contains at least the attribute of thought, as well as an infinite plurality of other attributes. In other words, how does one do metaphysics outside of thought? I think that this is a legitimate concern, but its status is really that of an open question, given that Spinoza never worked out a full account of physics within his system. Hence it is in the last of his correspondence we have available to us that Tschirnhaus presses Spinoza:

I would like you to oblige me...by indicating how, according to your meditations, the variety of things can be shown *a priori* from the concept of extension. For you recall Descartes' opinion: he maintained that he could not deduce it from extension in any other way than by supposing that this was brought about in extension by a motion started by God. In my opinion, therefore, he does not deduce the existence of bodies from a matter which is at rest, unless, perhaps, you would consider the supposition of God as a mover to be nothing. For you do not show how [the existence of bodies] must necessarily follow a priori from God's essence, something which Descartes believed surpassed man's grasp. (Letter 82: G IV/333/6-16)

Spinoza responds to this objection by distancing himself from Descartes:

You ask whether the variety of things can be demonstrated *a priori* from the concept of extension alone. I believe I have already shown sufficiently clearly that this is impossible, and that therefore Descartes defines matter badly by extension, but that it must necessarily be defined by an attribute which expresses eternal and infinite essence. But perhaps I will treat these matters more clearly with you some other time, if life lasts. For up till now I have not been able to set out anything concerning them in an orderly way. (Letter 83: G IV/334/22-8)

Spinoza died seven months later. Does Spinoza here admit to a change of mind about whether or not the attribute of extension is in fact an attribute? Since the immediate infinite mode of extension is "motion and rest" (Letter 64: G IV/278/25-6) perhaps not. But the Cartesian physics as an account of the physical world is woefully inadequate to explaining physical phenomena; if we had a better sense of what Spinoza might have thought an adequate account of the physical world, perhaps we would have a better sense of how other attributes could be grasped through the attribute of extension (or whatever attribute Spinoza might have had in mind as expressive of physical reality).

Conclusion

The overarching theme which I have explored in this chapter is that Spinoza's metaphysical system requires that the attributes, if they are to *be* attributes — that is, function as adequate expressions of God or substance — must in some sense involve and express one another, and therefore must each be absolutely infinite. If we regard each attribute as only infinite in its own kind, and conceptually independent in a way which absolutely excludes other attributes, then the doctrine of substance can only be understood schematically. Such a schematic understanding transcends the attributes altogether, and presupposes that it is possible to take up a perspective outside of the attributes where substance is grasped as substance, and the attributes are grasped as merely partial expressions of substance. If substance can only be grasped properly by transcending the attributes altogether, then it follows that no attribute can adequately express the essence of substance. If this is the case then the attributes serve no significant metaphysical function; each is only an incomplete perspective on the nature of substance.

But clearly this is not the case for at least the attribute of thought; even finite intellects have an adequate idea of God (IIP47). The fact that we can think about the metaphysics of substance at all entails that we need not transcend the attribute of thought to grasp substance as substance. Moreover, Spinoza's use of cognitive language in the exposition of his metaphysics shows that the nature and relations of substance, attributes, and modes can be grasped in thought; the definitions of 'attribute' and even that of 'substance' are explicitly mind-relative. Thus Spinoza initially appears to be an idealist. But an idealist reading entails that no other attribute adequately expresses the essence of God; the cost, as Harris points out, is to sacrifice the conceptual independence of the attributes and the parallelism of their modal structure. However,

if the more comprehensive character of thought is only how things superficially appear to the intellect from its perspective as a mode of the attribute of thought — if the intellect, when it presses its investigations further, grasps that the other attributes must each be adequately expressive of substance, and that each attribute from its own perspective must superficially seem more comprehensive than the others — then conceptual independence and parallelism of modal structure is restored.

Radical mutual containment as a model for the conceptual independence of the attributes reveals a way in which reality can be grasped by the intellect immanently, without any appeal to transcendence: the totality of nature can be explicated under the attribute of thought alone, and as each attribute is involved in the attribute of thought, thought does not need to look beyond its own resources. There is no need to transcend the attribute of thought in order for the intellect to grasp reality adequately. Since each attribute has all the same resources, each attribute has the same expressive capacity. As I have argued, if the attributes in some way mutually involve one another then they satisfy Spinoza's characterization of 'absolute infinity' in the Explication to the definition of 'God' (ID6): they are something of which infinite attributes may be affirmed, and they express essence and involve no negation. The result, then, is a concrete sense of what it means for God or substance to be absolutely infinite: the mutual involvement of the attributes *is* absolute infinity.

What remains now is to ascertain how the attributes function as intermediaries between substance and modes. It is interesting that something which initially seems to be a difficulty entailed by the thesis of radical mutual containment ultimately provides an explanation for how the attributes, in the act of expressing the essence of substance, entail the existence of modes. Following Deleuze, we have seen that the attributes are not denumerable. Yet we nevertheless

can count *two* attributes of which we in fact have knowledge — extension and thought. Thus, despite Deleuze’s argument to the contrary, in some sense the attributes *are* susceptible of numerical or modal distinction. That is, while the distinctions of attributes may not constitute a numerical diversity of substances, we nevertheless know that it constitutes an evident numerical diversity of attributes. The thesis of radical mutual containment explains this phenomenon by entailing a complementary account of the infinite modes. The infinite modes are the natural consequence of (and so “flow” from) the mutual containment of the attributes: insofar as an attribute contains all attributes including itself, it is conceived through itself and hence is a mode of itself,³² and this mode regarded as the formal reality of the attribute is the immediate infinite mode; insofar as an attribute is contained in an attribute and regarded as one attribute among many, it is conceived through another and hence is a mode of that attribute, and is thus regarded as an objective reality, a mediate infinite mode. Therefore it is in the guise of modes that the attributes are denumerable, as I will argue in the next chapter.

³² Thomas, *Intuition and Reality*, 25, 115.

CHAPTER 5

THE “DEPRECIATION” OF THE INFINITE: THE INFINITE MODES

Introduction

In Chapter Three I began a long digression into a difficulty in the interpretation of Spinoza’s doctrine of the attributes. This was “the problem of the infinity of the attributes,” as it is called by Errol E. Harris: according to Spinoza the attributes are conceptually independent (IP10) and express themselves in parallel modal orders (IIP7 Schol.), but the attribute of thought nevertheless seems to exhibit a sort of dominance over all attributes. The dominance of the attribute of thought entails a modal order inclusive of all other attributes, which seemingly violates the conceptual independence and parallel modal orders of the attributes. In Chapter Four I developed a solution to the problem: the attributes each mutually contain or involve one another. Thus each attribute from its own perspective “dominates” all other attributes, and the conceptual independence of the attributes and the parallelism of their modal orders are preserved.

However, the resolution of this problem was not really a digression. The problem of the infinity of the attributes is in fact embedded in the deeper problem of how the attributes serve as intermediaries between substance and modes. I have suggested that the attributes must be in some respects substantial and in some respects modal in order to fulfill this purpose. The resolution of the embedded problem constitutes the development of an account of how the attributes are substantial — that is, how they express the essence of substance. What remains, then, is to develop a complementary account of how the attributes are also modal. Perhaps

surprisingly, the thesis of radical mutual containment, when its consequences are followed out, provides this complementary account, for if the attributes are mutually contained or involved in one another, then they must appear as modes of one another. In this way the thesis, in the process of solving the embedded “problem of the infinity of the attributes,” opens the door to the solution to the original problem of how the attributes can serve in Spinoza’s system as mediators between substance and modes. At the same time we also discover an account of how Spinoza’s conception of the infinite functions as the thread of continuity linking substance, attributes, and modes in such a way that the modes “follow” from the essence of substance.

In this chapter I will develop an account of the infinite modes based on the thesis of radical mutual containment. First, I will briefly discuss the customary reading of the infinite modes as constituting a sort of “depreciation” or degradation of the infinity of the attributes. The usual approach to explaining how the finite modes “follow” from substance is to focus on the infinite modes as mediators, such that the infinite modes participate in a linear ontological “depreciation” of infinity, from absolutely infinite substance to the finite modes. This approach is highly problematic because there is no explanation for why or how the infinity of substance must depreciate. I will argue that the emphasis should be placed on the attributes as mediators between substance and the infinite modes, and that the thesis of radical mutual containment segues into just such an account.

Next, I will discuss Spinoza’s definition of ‘mode’ (ID5), which shows that modes serves as counterparts to substance and stand in some sort of unspecified dependence relationship with substance. Then I turn to considering the first modal expressions of the attributes, the immediate and mediate infinite modes. I will argue that the thesis of radical mutual containment entails that the attributes, in order for them to be adequately expressed as attributes, must have

corresponding formal and objective expressions of their reality. The formal expression, which is the attribute insofar as it contains all attributes, is the attribute insofar as it self-reflexively grasps itself as the ground for apprehending the entirety of substance. The objective expression, which is the attribute insofar as it is contained in some attribute, is the attribute insofar as it is expressed as one attribute among infinitely many. These modal expressions of the attributes have an ambiguous status because they are each in a sense the attributes themselves; however, this ambiguity is essential for the possibility of the intelligibility of Spinoza's metaphysical system.

Next, I will discuss how the thesis of radical mutual containment is to some extent compatible with Edwin Curley's account of the attributes and infinite modes as expressions of natural law. Finally, I will consider in what respect the infinite modes are infinite, and show that there is no depreciation or degradation in Spinoza's conception of the infinite. Nevertheless, I will argue, the infinite modes do provide the basis for an account of how each of the attributes can in some sense be regarded as infinite in its own kind, even though each attribute is absolutely infinite.

The "Depreciation" of the Infinite

The manifestation of the absolute infinity of substance in the infinite attributes is the immediate "expression" of the essence of substance as a plurality, yet an infinite plurality of attributes does not constitute a plurality of substances (IP10 Schol.). Deleuze argues that this is because the plurality of attributes is not a quantitative plurality at all. Instead it is a radical plurality where the constituents, because they are "really distinct," are so radically diverse that

they cannot be regarded as separate substances.¹ Their very conceptual independence implies a lack of common ground in which a numerical distinction could be made.

If, by contrast, modal distinction constitutes numerical or quantitative distinction, in which entities become separable and enumerable because they have sufficient commonality that we can abstract universals from them and so count them,² we should expect that more conventional mathematical conceptions of the infinite would appear in the guise of the infinite modes as some sort of “depreciation” or degradation of the infinity of the attributes.³ That is, if the attributes are in some sense a “qualitative plurality” which implies no numerical division in substance, then by contrast the modes, which are infinite in a sense (according to Letter 12) that is compatible with divisibility, should be understood in terms of quantitative plurality.

Unfortunately, the infinite modes, rather than serving as an easily explicable transition between the attributes and the infinite plurality of the finite modes, at first seem to be another difficult part of the mystery of the relationship between substance and the modes. Spinoza in fact talks very little about the infinite modes,⁴ and when he does his intentions are rather obscure. Discussion in the *Ethics* of the infinite modes is limited to IP21-3, where it is clear that they are expressions that “follow from” the infinite attributes in immediate and mediate forms, but otherwise the infinite modes do not appear to play any systematic role other than as a point of contrast for the demonstration of how the finite modes “follow” from substance (IP28 Dem.). In the Appendix to Part I Spinoza hints that the infinite modes function as mediating forms between the highest perfection of God and the lower perfection of finite things (G II/80/14-22). An early account of the infinite modes appears in Chapters 8 and 9 of Part I of the *Short Treatise*, though

¹ Deleuze, 31-7. See Chapter Three, pp. 85-7, 116.

² See Chapter Three, p. 86.

³ Yirmiyahu Yovel, “The Infinite Mode and Natural Laws in Spinoza,” in *God and Nature: Spinoza’s Metaphysics*, ed. Yirmiyahu Yovel (Leiden: E. J. Brill, 1991), 86.

⁴ Curley, *Spinoza’s Metaphysics*, 58-9; see also *Collected Works*, 429 n.54.

at that stage in Spinoza's thought he does not distinguish between immediate and mediate forms. The only other reference to the infinite modes (and it is not an unambiguous one, as we will see) is Letter 64, where Spinoza only cursorily identifies examples of immediate and mediate infinite modes, but neglects to explain them or what role they play. It seems reasonable to think that Spinoza either did not feel the infinite modes were especially important, or else had not fully worked out their role in his system. Curley opines that since the infinite modes exist at "the border between philosophy and science," it is unsurprising that Spinoza should have very little to say about them.⁵

Many if not most commentators consider the infinite modes to be transitional forms mediating between the attributes and the finite modes.⁶ Deleuze, for example, contends that substance and modes are links in a chain of expression: substance expresses itself in attributes, attributes express themselves in immediate infinite modes, immediate infinite modes express themselves in mediate infinite modes, and mediate infinite modes express themselves in finite modes.⁷ A few think that both the immediate and the mediate infinite modes follow immediately from God, but even these commentators think of the infinite modes as serving a transitional role between substance and the finite modes.⁸ Spinoza's writings do support understanding the infinite modes as mediators, and to some degree this is correct. Nevertheless, I think focusing on the infinite modes as the key terms holding the uniqueness of substance and the plurality of finite modes together is wrongheaded. Emphasizing the infinite modes as intermediaries serves to

⁵ Spinoza's *Metaphysics*, 61.

⁶ See, for example, Frank Lucash, "On the Finite and Infinite in Spinoza," *Southern Journal of Philosophy* 20 (1982): 66; Alan Donagan, *Spinoza* (Chicago: University of Chicago Press, 1989), 106; Yovel, "The Infinite Mode and Natural Laws in Spinoza," 79; and Michael Della Rocca, *Representation and the Mind-Body Problem in Spinoza* (New York: Oxford University Press, 1996), 6-7.

⁷ Deleuze, 105.

⁸ Curley, *Spinoza's Metaphysics*, 71; Martial Gueroult, *Spinoza* (Paris: Aubier, 1968-74), 2:342. But for a criticism of this reading see Emilia Giancotti, "On the Problem of Infinite Modes," in *God and Nature: Spinoza's Metaphysics*, ed. Yirmiyahu Yovel (Leiden: E. J. Brill, 1991), 102-4.

avoid the deeper and more difficult question of why modes, infinite or finite, should “follow” or “flow” from substance at all. Before we can pursue the issue of how or even if the infinite modes serve as a transition between substance and the finite modes, we must see how the attributes themselves serve as the transition between substance and the infinite modes. We have already seen in the Demonstration to IP16 that the attributes, which are univocally predicable of God and the finite modes,⁹ are the key to this transition: in some sense it is the infinite degree of reality expressed of God in an infinite plurality of attributes that explains the infinite plurality of things that “follow from” the divine nature. But exactly how do the attributes effect this transition from substance to modes? Hence the attributes are the mediating terms that should hold our interest first, and the role of the infinite modes as themselves mediating terms with respect to the finite modes should concern us only later.

In a certain sense IP16 is the answer to the question of why there are modes — God gives rise to everything that falls under the infinite intellect; therefore as a “Principle of Plenitude” IP16 asserts that *all* of God’s power is exercised, and that nothing that could be or exist is left out.¹⁰ Thus the question of “why is this the case rather than that” is dismissed because this *and* that have their being somewhere. However, this still does not quite answer the question of why there should be modes at all — indeed, IP16 in this respect begs the question, for the infinite intellect itself is an infinite mode (Letter 64: G IV/278/24-5), and yet IP16 itself posits it as the touchstone for the production of a thing: anything which falls under the infinite intellect is produced.

Nevertheless, since it is clear from IP21-3 that the immediate infinite modes “follow” from the attributes, and the mediate infinite modes follow from attributes as mediated through

⁹ Deleuze, 102-3, 449.

¹⁰ Joel Friedman, “How the Finite Follows from the Infinite in Spinoza’s Metaphysical System,” *Synthese* 69 (1986): 372, 373.

some other modification of an attribute, any answer to the question of how the attributes should participate in the production of modes in the first place must begin with the infinite modes. The interpretation that immediately suggests itself, as Yirmiyahu Yovel argues, is that somehow there is a “depreciation” of the infinite, from the absolutely infinite substance to the attribute which is infinite-in-its-own-kind, to perhaps a denumerable infinity of infinite modes, of which the finite modes are constituents. But, as Yovel notes, on such a reading the depreciation happens “unaccountably” — there is no clear reason why or how the attributes should give rise to modes which involve lesser forms of infinity.¹¹

However, as I argued in Chapter Four, the thesis of the radical mutual containment of the attributes suggests this interpretation is untenable. There is no depreciation of the infinite in the transition from substance to attribute to immediate infinite mode: as each attribute must adequately express the essence of substance, each attribute must be absolutely infinite as well, and since Spinoza identifies the immediate infinite mode of thought in Letter 64 as “absolutely infinite intellect” (Letter 64: G IV/278/24-5), absolute infinity proceeds as far as the infinite modes at least in the case of the attribute of thought. If Letter 32 is any indication, it may extend in some sense to the *mediate* infinite modes as well, for we have seen there that the entirety of the physical universe is also absolutely infinite (G IV/173/5-8).¹² Hence we require an account of the infinite modes that does not present them as some sort of depreciated form of the attributes from which they follow. At the same time, however, the account must achieve the seemingly incompatible result of explaining how and why the infinite modes are divisibly infinite whereas

¹¹ “The Infinite Mode and Natural Laws in Spinoza,” 86. Lucash (“On the Finite and Infinite in Spinoza,” 70-1) argues that there is a *degradation* of the infinite in a literal sense, for the between the absolutely infinite and the finite exist degrees of infinity, including those corresponding to the various infinite modes.

¹² See Chapter Four, p. 155-6.

the attributes are indivisibly infinite. The first step towards understanding this problem, and how it must be solved, is to consider what it means for something to be a mode.

The Definition of 'Mode' (ID5)

The concept of 'mode' (*modus*) is defined in Part I of the *Ethics* first in terms of substance, and then in contrast with the definition of 'substance'. ID5 states: "By mode I understand the affections of substance, or [*sive*] that which is in another through which it is also conceived" (G II/45/20-1; Curley's translation, modified). Starting with the first part of the definition, Spinoza does not explain what 'affections' (*affectiones*) are; from context we may understand that modes as affections must have their existence in substance and must be conceived through substance, but other than that what it means for a mode to be an affection is murky. From the Latin usage we might expect 'affection' to mean the condition of being affected, that is, a change in the state of substance brought about by an external cause. But because the one substance, God, is eternal (IP19: G II/64/9) and immutable (IP20 Cor. 2: G II/65/7) this interpretation seems implausible. Moreover, the condition of being affected suggests passivity, which is inconsistent with God's nature (IP17 Cor. 1: "there is no cause, either extrinsically or intrinsically, which prompts God to action, except the perfection of his nature" (G II/61/17-9)).¹³ And it further suggests that there is something external to substance which effects a change in substance. This would be inconsistent with IP15, which contends that all things that are, are in God (G II/56/24-5); with IP16 Corollaries 1 and 3, which claim that God is efficient cause of all things which fall under an infinite intellect and is absolutely first

¹³ It should be noted that there is an etymological connection between the terms 'affection' (*affectio*) and 'affect' (*affectus*). However, according to Spinoza there can be active affects (see IID3). Hence if to have an affection is to have an affect, it need not imply a passive state. In any case, I do not think this problem bears any serious consequences for my conclusion in this section.

cause, respectively; and indeed with the second part of ID5. Curley remarks that while *affectio* in classical and Medieval Latin generally means ‘emotion’ or ‘passion’, Spinoza appears to follow Descartes in using it as a synonym for ‘quality’ or ‘mode’.¹⁴ Still, such a usage is odd given that for Spinoza there is only one substance, which is not only the substrate (or context) for affections but also ultimately their efficient cause (IP16 Cor. 1: G II/60/31-2).

The second part of the definition is more helpful: whereas substance “is in itself and is conceived through itself” (ID3: G II/45/14-5), the mode is in another and conceived through that other. In this sense the mode is a counterpart of substance. In conjunction with the first two axioms of Part I — “Whatever is, is either in itself or in another” (IA1: G II/46/21), and “What cannot be conceived through another, must be conceived through itself” (IA2: G II/46/22-3) — the import of these definitions is clear: only substance and modes exist, and nothing else (IP15 Dem.: G II/56/31 – /57/1).¹⁵ Hence these definitions exhaust all that exists in terms of substance and mode, which is so far consistent with Spinoza’s discussion of the term ‘infinite’ (*infinitum*) in Letter 12: Spinoza appeals only to substance and modes to elucidate his distinctions, and he makes a point of saying that the existence of substance and that of modes are entirely different. However, the second part of the definition by itself is not sufficient to tell us of any relationship between substance and mode: substance could exist in itself and be conceived through itself in splendid isolation, while the modes could exist and be conceived through other modes *ad infinitum*. Thus the importance of the first part of the definition of modes as *substantiae affectiones* tells us that the modes, while radically different from substance, nevertheless have some sort of relationship with substance, presumably one which involves dependence. But what

¹⁴ See Curley’s “Glossary” to *The Collected Works of Spinoza*, 625.

¹⁵ Curley, *Spinoza’s Metaphysics*, 3.

sort of relationship could this be? Finding an answer to this question may tell us what it means for a mode to be an “affection” of substance.

Moreover, from the standpoint of the definitions of ‘substance’ (ID3) and ‘mode’ (ID5) it is not clear where the attributes fall in the division of being — are they substantial or modal? We have already seen there is good reason to think they are substantial. But the attributes are also the transitional element in the Demonstration to IP16: it is in virtue of possessing an infinite plurality of attributes that substance produces an infinite plurality of (infinite and finite) modes. So perhaps we should not be surprised to find that the attributes have a *dual* status in Spinoza’s division of being.

There is another matter to keep in mind. Clearly the interpretation of *modus* should involve Spinoza’s use of the term in the context of the propositions of the *Ethics*. Unfortunately there is an interpretive complication: the Latin term *modus* can have both the technical sense of ‘mode’ as Spinoza indicates in ID5, but it can also have the more informal, nontechnical sense of ‘way’ or ‘manner’. The first significant appearance of the term *modus* in reference to ID5, in IP16, is a case in point. The Latin is as follows: “*Ex necessitate divinae naturae, infinita infinitis modis...sequi debent*” (II/60/17-9). This has been translated by Curley as “From the necessity of the divine nature there must follow infinitely many things in infinitely many modes [*modis*]”;¹⁶ Samuel Shirley renders the passage as “From the necessity of the divine nature there must follow infinite things in infinite ways [*modis*]”;¹⁷ Thus the appearance of *modus* in this proposition, considered in isolation, could arguably be interpreted in either way. In the end I do not think this presents a serious interpretive problem because the definition of *modus* appears to

¹⁶ *Collected Works*, 424.

¹⁷ *Complete Works*, 43.

encompass a wide variety of forms of dependence upon substance; still, we should remain mindful of the ambiguity in the Latin term.

Spinoza does not really discuss the modes in any detail in the *Ethics* until he provides his account of the infinite modes in Propositions 21-23.¹⁸ In Part I, Propositions 1 through 13 focus on substance; Propositions 14 through 20 concern the nature of God as substance. The modes are mentioned in various places in these first twenty Propositions, but only in order to explain the nature of substance; even IP16 is not so much concerned with the character of modes as it is with God's capacity to produce them. Only with Propositions 21-23 does Spinoza finally begin to discuss things that "follow" (*sequuntur*) from the attributes of substance. While the infinite modes are the first to receive any treatment, Spinoza appears to mention the infinite modes only in order to distinguish them from finite modes in the Demonstration to IP28, and then never again in the *Ethics* returns to consider them in any detail. At the end of Part I (I Appendix: G II/80/14-22) Spinoza mentions briefly that the infinite modes are the modes produced most immediately, but that is all.

IP21-23 discuss things which exist necessarily and are infinite because they in some sense follow from the attributes of God. As we have seen, the locution 'follows from' (*sequitur*) is part of the mystery of the interpretation of IP16. There is considerable discussion among commentators as to whether 'follows from' should be understood in a logical sense or a causal sense or both;¹⁹ Deleuze thinks that the relation of 'following from' is ultimately unique and

¹⁸ The term *modus* appears explicitly only in IP23, but it is clear from the connection between it and its predecessors that Spinoza has modes in mind in IP21 and IP22.

¹⁹ The general consensus in the literature is that Spinoza confounds logical necessity with causal necessity, and hence thinks that modes "follow" from substance in the same way that the property of having interior angles equaling two right angles follows from the nature of a triangle. See, for example, the discussion of "causal rationalism" in Bennett, 29-32. However, Joel Friedman argues that the locution "follows from" has two distinct senses in Spinoza, one of logico-metaphysical necessity and another of causal necessity, and these two senses can operate simultaneously within the same proposition. The result in such cases is systematic ambiguity in some of Spinoza's arguments which involve a "bifurcation" of the meaning of the proposition; IP16 is a case in point,

foundational, a manifestation of the irreducible phenomenon of “expression” which grounds the relations between substance, attributes, and modes.²⁰ For now we can set aside questions of specific interpretation, and proceed with the understanding that ‘follows from’ in general intends some sense of dependence upon substance. What I want to emphasize here is that in IP21-23 Spinoza explicitly says that infinite modes follow from *attributes*; hence we must approach the issue by way of the doctrine of the attributes — that is, in terms of the thesis of radical mutual containment.

Why Attributes Must Also Be Modes

As I noted at the end of the last chapter, one particular problem with Deleuze’s contention that real distinction does not constitute numerical distinction is the obvious difficulty that we can claim to know of *two* attributes, those of thought and extension. Since these attributes are really distinct, it seems that strictly we should not be able to count them. But in fact Spinoza does count them, for he quite explicitly says that the human mind can know only these *two* attributes (Letter 64: G IV/277/29 – 278/5); and even if he misspeaks, and strictly speaking we should not count the attributes of which we are aware, there should at least be some explanation for how they *seem* denumerable. Any such explanation presumably must admit that counting attributes amounts to treating attributes as though they were modes, for numerical distinction only takes place in the context of modal distinctions. But given the conventional

according to Friedman, as it has the dual sense of implying that infinite modes and formal essences follow from the divine nature with logico-metaphysical necessity, whereas the finite modes follow from the divine nature with causal necessity. “How the Finite Follows from the Infinite in Spinoza’s Metaphysical System,” *Synthese* 69 (1986): 393.

²⁰ Deleuze, 105-6. Deleuze argues that expression grounds logical deduction itself (22).

interpretation of the conceptual independence of the attributes (IP10), any consideration of the attributes as modes is unacceptable.²¹

However, given an interpretation of the doctrine of the attributes according to which the attributes are in some sense involved in one another there is no difficulty in regarding the attributes, at least in some respect, as modes. James Thomas makes a rather simple argument that the definition of ‘attribute’ itself implies that attributes are modes of themselves and of other attributes:

The modes of substance are in and conceived through something else [*Ethics* ID5], i.e., an attribute, as the essence of substance, whereas substance as any attribute is in and conceived through itself [ID3]. To be a mode then seems to involve being other than substance and distinct from any of its attributes. Spinoza did, however, allow that the attributes are conceived through themselves [IP10], which suggests that in some aspect [*sic*] they are modes of themselves and that they are *ceteris paribus* modes of other attributes. Only as an intuitive grasp of the order of substance would the other attributes enter into the order conceived through thought; in as much as they constitute this order, they too are independently conceived through themselves.²²

Hence for Thomas the attributes insofar as they are immediate intuitions or “qualities of being” are modes of other attributes, but insofar as they individually constitute the “order of being” they are not modes but conceptually independent attributes of substance. We have already seen *why* the attributes must in some respect enter into one another: each attribute must adequately express the essence of substance as absolutely infinite, as consisting of infinite attributes. This argument constitutes the explanation of *how* the attributes can enter into one another: as modes.

Let me amplify Thomas’ argument. To regard the attributes as in some sense modes of themselves and of one another is far from illegitimate, and indeed necessary for it to be possible to conceive of the attributes *as attributes*. Recall Spinoza’s account of number implicit in Letter 12: numbers are beings of reason that enable us to imagine things more easily. In order to count

²¹ Harris, “The Problem of the Attributes in Spinoza’s System (James Thomas),” 212; Eisenberg, 4-7.

²² *Intuition and Reality*, 115.

something we must perform an abstraction that allows us to establish a unit for counting, and depending on which unit we establish we will count differently. The enumeration of the attributes of which we are aware, then, requires an act of abstraction: we must generate a concept ‘attribute’ that expresses what is common to all attributes, namely that they are what the intellect perceives as constituting the essence of substance (ID4).²³ This abstraction is the condition for the possibility of numbering the attributes of which we are aware, as Spinoza makes clear in Letter 12. But such an abstraction for purposes of enumeration requires that we make numerical distinctions, which can only be modal distinctions; therefore we can and do in fact regard the attributes as modes.

To regard the attributes as modes does not constitute an error of thinking, however; indeed, our ability to cognize the metaphysics of substance *requires* that we regard the attributes as modes. Consider IIP3: “In God there is necessarily an idea, both of his essence and of everything that necessarily follows from his essence” (G II/87/5-6). If God has an idea of his essence (or definition), and God is absolutely infinite, then the idea that God has of himself, if it is adequate, must be of an absolutely infinite being. This entails that God has an idea of himself as consisting of infinite attributes, whether one understands these attributes as each absolutely infinite or each infinite in its own kind. It follows that God must then have an idea of *each* of those attributes if his knowledge is to be adequate.

And we have already seen that Spinoza indeed draws this conclusion:

The formal being of ideas admits God as a cause only insofar as he is considered as a thinking thing, and not insofar as he is explained by any other attribute. I.e.,

²³ Since the concept ‘attribute’ is an abstraction, then it follows it is a “being of reason”; thus ID4 is not a genetic definition. Deleuze argues that in Part I of the *Ethics* only the definition of ‘God’ (ID6) is a genetic definition (20, 79). To argue that the concept ‘attribute’ is an *ens rationis* does not support the subjective reading of the attributes, but rather the opposite: if ‘attribute’ is an *ens rationis* then there is no independently existing “form” or essence informing the attributes; therefore the concrete reality of the infinite attributes must *be* the reality of substance, and not merely its appearance to the intellect.

ideas, *both of God's attributes and of singular things*, admit not the objects themselves, or [*sive*] the things perceived, as their efficient cause, but God himself, insofar as he is a thinking thing. (IIP5: G II/88/15-20; emphasis mine)

Spinoza explicitly states that God's attributes are expressed by ideas in the attribute of thought in a proposition that, incredibly, is often presented as evidence for the conceptual independence of the attributes, and as justification for regarding the attributes as *entirely* separate from one another.²⁴ I have already argued that there is no inconsistency between mutual containment and conceptual independence.²⁵ But now we see a positive reason for asserting that attributes can and should be conceivable as modes: if the attributes cannot be regarded as at least conceivable as modes of thought, then not even God could fully understand his own nature.²⁶ Since God could only know his own nature insofar as he is expressed in the modes of the attribute of thought, if the other attributes were not conceived through thought God could not know of any attribute other than that of thought. If God could not know other attributes, *a fortiori* we could not; under these circumstances the exposition of Spinoza's metaphysical system could not take the form it does. Thus it is crucial, given Spinoza's assumption that reality is intelligible, that at least the attribute of thought must comprehend all attributes as modes of itself. And even if we were to infer from this (on the basis of the customary interpretation of IP10) that only thought qualifies as a true attribute, in order for the attribute of thought to express knowledge of itself as an attribute it must involve an idea of itself; hence this attribute must still appear in some sense as a mode, even if only as a mode of itself.

²⁴ Harris, for example, rejects Thomas' claim that the attributes can be conceived through one another on grounds that it is "explicitly excluded" by IIP5 (along with IP10 and IIP6), apparently oblivious to the evident tension in this proposition. See "The Problem of the Attributes in Spinoza's System (James Thomas)," *Idealistic Studies* 25 (1995): 212.

²⁵ See Chapter Four, pp. 129-33; see also Thomas' own response to Harris' objection (*Intuition and Reality*, 115-6).

²⁶ Deleuze, 122-3.

How Attributes Are Also Modes, Part One: The Immediate Infinite Mode

So far we know that in order for Spinoza's metaphysical system to work the attributes must appear as modes at least within the attribute of thought. But the problem now is how attributes in fact come to be regarded as modes in the first place — that is, what “movement” in the metaphysical system effects this transition? The answer is to be found in the three propositions in the *Ethics* that explicitly discuss the production of the infinite modes, IP21-3. These propositions, which in themselves are rather obscure, become much clearer in import if we adopt the thesis of the radical mutual containment of the attributes. In this section I will focus on IP21, the proposition that characterizes the production of the immediate infinite modes; in the following section I will discuss IP22, which characterizes the mediate infinite modes.²⁷

IP21 presents the nature of the production of what commentators have traditionally called the “immediate infinite modes”:²⁸

All things which follow from the absolute nature of any attribute of God must have existed always and as infinite, or [*sive*] are through the same attribute eternal and infinite. (G II/65/12-14; Curley's translation, modified)

The Demonstration of IP21 is lengthy and rather difficult, and initially appears to be of little help in interpreting this proposition. The demonstration takes the form of a dual *reductio ad absurdum*, one for the infinity and the other for the eternity of the mode. First, suppose that there were something finite in existence and duration that followed from the absolute nature of one of the attributes — for example, “the idea of God in [the attribute of] thought [*ideam Dei in cogitatione*]” (G II/65/18-9). By IP11 (God necessarily exists as substance consisting of infinite attributes expressing infinite essence) the attribute of thought is infinite by nature. However, by

²⁷ IP23 asserts that the immediate and mediate infinite modes are the only forms of infinite mode.

²⁸ Spinoza himself never uses the terms ‘immediate infinite mode’ or ‘mediate infinite mode’; these terms were coined by later commentators, but are nearly universally accepted as reflecting genuinely distinct entities in Spinoza's metaphysical system. See Giancotti, 98.

hypothesis we have supposed that, since a finite idea of God follows from the absolute nature of the attribute of thought, so far as the attribute has this idea it is supposed finite. By ID2 (the definition of ‘finite in its own kind’) the only way that the attribute of thought could be finite would be if thought determined or limited itself (for it must be limited by something of the same nature, and the attribute of thought is the unique expression of its nature). But this cannot be the case so far as thought constitutes the idea of God, for “to that extent it is supposed to be finite” (G II/65/24). I find the argument obscure here, but I gather that Spinoza’s point is that the attribute cannot be self-limiting in virtue of constituting the idea of God. The attribute of thought insofar as it constitutes the idea of God has been supposed finite, so there must be something within the attribute that is distinct from the idea of God, and limits the idea of God and determines it as finite. Therefore thought must be determined so far as it does not constitute the idea of God, even though thought insofar as it is an attribute of God exists necessarily (by IP11). But if there must be some mode of thought which does not constitute the idea of God but instead limits it, it follows that the idea of God does not follow necessarily from the absolute nature of thought, for then thought in one respect constitutes and in another does not constitute the idea of God. Thus the initial supposition that the idea of God can follow from the absolute nature of thought and yet be finite contradicts itself. Therefore if the idea of God (or any other idea, for that matter) follows from the absolute nature of the attribute of thought, it must of necessity be infinite (G II/65/16-33).

The second *reductio* deals with the eternity of the modes that follow from the absolute nature of an attribute. Suppose again that the idea of God in thought follows from the necessity of the attribute of thought, but this time suppose that this idea has a determinate existence such that at some time it did not or will not exist. By IP11 the attributes of God exist necessarily, and

by the second Corollary to IP20 they are immutable. Thus beyond the limits of the hypothesized duration of the idea of God, thought will exist without it. Since we have supposed that this idea “follows necessarily from the given [attribute of] thought” (G II/66/9-10), this is contrary to hypothesis; that is, if the idea of God follows necessarily from the absolute nature of the attribute this idea must exist eternally as the attribute does. Therefore the idea of God (or whatever else follows necessarily from the absolute nature of an attribute of God), must be eternal (G II/65/34 – 66/13).

Yovel argues that IP21 constitutes the first step in the “depreciation” of the infinity of substance. The “eternity” appropriate to the immediate infinite modes seems in both proposition and demonstration strictly sempiternal, for the immediate infinite mode “must have existed always” (IP21: G II/65/13). Yovel opines that Spinoza is forced to reason this way because he “needs to go down the scale of being,” and so must posit lower forms of infinity; hence Spinoza fully intends to derive a sempiternal infinity from an eternal infinity. However, as Yovel points out, such a derivation is certainly problematic, for anything derived from the absolute nature of an attribute surely must have the same form of infinity as does the attribute.²⁹ I do not think Yovel is justified in linking the eternal/sempiternal and the infinite in this way, especially since the demonstration splits these into separate *reductio* arguments. More importantly, Yovel’s interpretation is guided by the customary inclination of Spinoza commentators to emphasize the infinite modes as the central mediating terms between substance and the finite modes. Yovel contends that a depreciation of the infinity of the attributes into “lower forms” of infinity in the modes is inexplicable.³⁰ But I think this only indicates that the more central question remains

²⁹ Yovel, “The Infinite Modes and Natural Laws in Spinoza,” 85-6.

³⁰ I think Yovel is also right that eternity cannot simply depreciate into sempiternity. It is not entirely clear that this in fact happens in the demonstration; since the idea of God in the second *reductio* is supposed counterfactually to have durational existence, Spinoza should not be in a position to infer that the immediate infinite modes “must have

unanswered — namely, the question of why attributes should produce any modes at all, even infinite ones.

I think Yovel's criticism of the argument really boils down to the following.

- (1) The immediate infinite modes follow from the absolute nature of an attribute of God.
- (2) The attributes of a substance are perceived as constituting its essence (ID4).
- (3) God is absolutely infinite.
- (4) Therefore the infinite modes must be absolutely infinite — that is, infinite in the same sense in which God is infinite.

That is, Spinoza's Demonstration to IP21 is invalid if he intends some sort of depreciation of the infinite in the transition from infinite substance to infinite mode. But as we have already seen in Letter 64 there is good textual evidence for thinking that at least the immediate infinite mode of thought is indeed absolutely infinite.³¹ The Demonstration to IP21, then, also supports a reading of the immediate infinite modes as absolutely infinite. Still, why should an attribute of God produce any mode at all, even an immediate infinite mode?

Since it is the "absolute nature" of the attribute that Spinoza emphasizes in IP21, the production of an immediate infinite mode should be explicable in terms of one attribute's productive power alone. As we have seen, it follows from Thomas' argument that the attribute must be regarded as in some sense a mode of itself if it is to be conceivable as an attribute at all. It is just this which constitutes the "movement" that explains the production of the immediate infinite mode. Consider the movement specifically under the attribute of thought. The attribute

existed always" (*semper...existere debuerunt*) (G II/65/13). Perhaps Spinoza makes a slip of the pen. The interpretation of Spinoza's conception of eternity is undeniably a problematic matter; see Martha Kneale, "Eternity and Sempiternity," in *Spinoza: A Collection of Critical Essays*, ed. Marjorie Grene (Garden City, New York: Anchor Books, 1973), 227-40, for a discussion of this issue.

³¹ See Chapter Four, pp. 152-3.

of thought is conceived through itself (IP10). Hence the attribute of thought must be both subject and object in a single act of self-reflection. As subject the attribute of thought presumably is a “thinking thing,” i.e., God expressed as thinking substance (IIP2). But then the attribute of thought so conceived as grasping itself as expressive of the essence of God must *be* the “intellect” referred to in the definition of attribute (ID4). Since intellect is a mode of thinking (IP31 Dem.), the attribute as subject is a mode of thinking. As we have appealed in this argument to nothing other than the attribute of thought, this mode of thought follows from the absolute nature of the attribute. Hence by IP21 it constitutes the immediate infinite mode of thought. And according to the thesis of radical mutual containment every attribute is absolutely infinite; therefore the immediate infinite mode of thought, as it follows from the absolute nature of thought, must also be absolutely infinite. Letter 64 confirms that it is indeed the “absolutely infinite intellect” that Spinoza identifies as the immediate infinite mode of thought (G IV/278/24-5).³²

This account of the immediate infinite mode generates an ambiguity — is God the *attribute* expressing God as thinking substance, or the *mode* which comprehends the essence and all that follows from it? Spinoza appears to deny that God is a mode, even of himself, for Spinoza quite explicitly associates God or substance with *Natura naturans*, the active aspect of Nature, and modes with *Natura naturata*, the passive aspect of Nature (IP29 Schol.). Thus it seems that from Spinoza’s standpoint there should be no ambiguity. Nevertheless this very ambiguity surfaces repeatedly in the text of the *Ethics*. ID6 and IP11 make it quite clear that God is substance, and indeed God is the only substance (IP14). But at the same time Spinoza

³² This conclusion also clarifies IIP3, the proposition that God, conceived as thinking substance, must necessarily know God’s own essence and everything which follows from it: because the attribute of thought expresses God’s essence as thinking substance, the attribute of thought and its expressive role is something that God as thinking substance must know. But this requires that God be conceived as an absolutely infinite intellect which comprehends God’s essence and all that follows from it.

argues in IIP3 that it follows from the fact that God is a thinking thing (IIP1) that God thinks infinite things in infinite modes, and hence has an idea of his essence and everything that follows from it (IIP3 Dem.: G II/87/5-10). This suggests that God at least has a mind; and in subsequent propositions such as the Corollary to IIP11 (“the human mind is part of the infinite intellect of God” (G II/94/30-1) Spinoza does indeed speak as though God possesses a mind consisting of intellect. Hence the ambiguity entailed by this reading of the immediate infinite mode of thought is consonant with Spinoza’s treatment of God insofar as he is expressed by the attribute of thought.

Furthermore, we should note that the immediate infinite mode is peculiar in that it *is* the attribute immediately conceived through itself as subject. In a certain sense the immediate infinite mode is a placeholder in our cognition standing for the formal reality of the attribute which contains all attributes (including itself) as objective reality. But in another sense we really are only dealing with the attribute itself, for this duality of subject and object is a necessary consequence of its absolute nature; perhaps we should say that the attribute in order to be conceived through itself must also be in some sense derivative of itself. This odd consequence is exactly the sort of thing we should expect given the thesis of radical mutual containment. If each attribute contains itself and every other attribute, then one and the same attribute can be regarded as a mode of itself as attribute, or as the attribute of which it is a mode. Or, to put it in more Spinozistic language, if each attribute explicates and involves every other attribute, then each attribute must explicate and involve itself, and hence must be the attribute *and* the mode of itself.

This ambiguity between attribute and immediate infinite mode is not a problem, but instead marks the distinguishing feature of the immediate infinite mode: we try to grasp the attribute as subject, as a formal reality, but in so doing we objectify it and render it an objective

reality. As a consequence attempts to transcend the attribute considered in so far as it is a mode must fail. That is, any attempt we make to escape the subject-object duality of the attribute of thought through some attribute-neutral, transcendent perspective remains nevertheless colored by the formal reality of the attribute of thought. It is for this very reason that Spinoza's definition of 'attribute' in ID4 emphasizes the perception of the *intellect*: since Spinoza tacitly develops his metaphysical system under the attribute of thought, all its elements have the formal character of thought. This has the puzzling and seemingly problematic consequence that the status of being an attribute is conceived through a *mode* of thought, an intellect.³³ But this is simply the necessary consequence of the fact that an absolute transcendence of the system of attributes is impossible in Spinoza's absolute immanentism. We may attempt to characterize the attribute of thought as somehow transcending the intellect which must be conceived through it, but we will nevertheless find ourselves contemplating the attribute in terms appropriate to intellect, and hence in terms of modes. This phenomenon is just one natural consequence of the thoroughgoing immanentism to which Spinoza adheres. The attribute of thought cannot be explicated except on its own terms — but this means that it can only be conceived through itself as a mode of thought. Thinking cannot transcend itself — but if the attribute of thought contains itself and all other attributes, then it has no need of such transcendence.

³³ Paul Eisenberg, "On the Attributes and Their Alleged Independence of One Another: A Commentary on Spinoza's *Ethics* IP10," in *Spinoza: Issues and Directions*, ed. Edwin Curley and Pierre-François Moreau (Leiden: E. J. Brill, 1990), 4. Eisenberg, who advocates a moderate form of the subjective reading of the attributes, considers this consequence of the subjective reading merely "odd," but preferable to an objective reading that he regards as ultimately self-contradictory. The thesis of radical mutual containment renders this "odd" result an intelligible consequence of an objective interpretation of the attributes.

How Attributes Are Also Modes, Part Two: The Mediate Infinite Modes

Spinoza introduces what has come to be called the “mediate infinite mode” in the next proposition, IP22:

Whatever follows from some attribute of God insofar as it is modified by a modification which, through the same attribute, exists necessarily and as infinite, must also exist necessarily and as infinite. (G II/66/17-20; Curley’s translation, modified)

By way of demonstration of this proposition Spinoza remarks only that it proceeds in the same way as the demonstration of IP21 (G II/66/22-3). Presumably Spinoza intends that a mediate infinite mode proceeds from the absolute nature of an immediate infinite mode in the same way that an immediate infinite mode follows from the absolute nature of an attribute. The fact that Spinoza thinks the demonstration works the same way seems significant; it suggests that in a way the mediate infinite modes are on the same footing as the immediate infinite modes, particularly with regard to their infinity.

Typically commentators have considered the mediate infinite mode to be a product of the immediate infinite mode, such that the immediate infinite mode serves as mediating term between substance as conceived under a given attribute and that attribute’s mediate infinite mode.³⁴ This reading is at least superficially satisfying, as it suggests a seemingly unproblematic transition: the immediate infinite mode serves as an intermediary between two entities which each exist necessarily and as infinite. However, there is a complication which is a consequence of the other side of the common interpretation of the mediate infinite mode, based on the lone example of a mediate infinite mode which Spinoza identifies in Letter 64, the “face of the whole Universe” (*facies totius Universi*) (G IV/278/26). Spinoza refers his correspondent to IIL7 for further explanation: the whole universe is one individual composed of all individuals (G

³⁴ See n. 6 above.

II/102/8-13). This has led many commentators to understand that the mediate infinite mode is infinite insofar as it involves an infinite plurality of finite modes as constituents.³⁵ As we have seen, Spinoza's main distinction in the sense of *infinitum* in Letter 12, between the indivisibly and uniquely infinite and the divisibly and plurally infinite, suggests that there is a radical difference between the indivisible absolute infinity of substance and the pluralistic infinity of the mediate infinite mode. Hence it is not satisfactory to think that the transition is unproblematic merely because both sides are "infinite." If they are "infinite" in radically different ways, then there is much more to the transition which remains unexplained. Again, I would like to suggest that part of the difficulty here is that the weight of the transition has been placed upon the infinite modes as intermediaries between absolutely infinite substance and finite modes, when the emphasis should really be upon the attributes as intermediaries between substance and modes as such.

In keeping with the stress on the intermediary role of the attributes, the thesis of radical mutual containment suggests a quite different understanding of the primary function of the mediate infinite modes. The immediate infinite mode is produced by the *absolute* nature of the attribute — clearly by the expressive power of that attribute alone. But mutual containment requires not only that each attribute contain itself, but also that each attribute contains all attributes whatsoever. As we have seen, this must necessarily be the case for the attribute of thought if Spinoza's metaphysics of substance is to be intelligible: the attribute of thought as absolutely infinite intellect must involve ideas of God's essence and everything that follows from

³⁵ Curley, *Spinoza's Metaphysics*, 61; Giancotti, 106-7; Harris, *Salvation From Despair*, 67; Friedman, 387-8; Richard Mason, "Spinoza on the Causality of Individuals," *Journal of the History of Philosophy* 24 (1986): 206-7. Most of these commentators are cognizant of the difficulty of regarding an infinite mode as infinite so far as it is *composed* of finite modes, since Spinoza in the Scholium to *Ethics* IP15 makes it quite clear that infinite quantities cannot be composed of finite parts (G II/58/16-29). For a lucid discussion of this problem and a solution to it based on Spinoza's distinction of intellectual and imaginative apprehension of the infinite in Letter 12, see Mason, *The God of Spinoza*, 32-4.

it (IIP3). It follows that each attribute must be conceivable through thought as a mode of thought — that is, that God must have an idea of each and every attribute (IIP5). And if these attributes are conceivable at all, they must be *qualitatively or objectively* contained in the attribute of thought. If these ideas of attributes were merely schematic representations of the attributes, then to have an idea of an attribute would not constitute knowledge of that attribute. As the external criterion for the truth of an idea is that it must agree with its object (IA6), schematic representation of the attributes in thought would not be sufficient as an account of how other attributes are reflected in the attribute of thought.

Thus we have a new model for understanding in what sense the mediate infinite modes are “mediated”: the attributes, insofar as they are conceived as an infinite plurality, must be conceived through some one attribute under which they constitute a plurality. It is here that we find the explanation for how the attributes, which are really distinct and hence (according to Deleuze) not numerically distinct, can nevertheless be treated as numerically distinct. In order for us to count the attributes of thought and extension as two, we must be able to regard them as modes, for if they are regarded as attributes they are really distinct and hence nondenumerable. We must abstract the concept ‘attribute’ from their concrete reality, but this is only possible if we regard the attributes as modes of a single attribute (in this case thought). Abstraction is possible only if the attributes have some *common nature through which they are conceived* which provides a context for abstraction. Therefore the attributes can be counted only if we conceive of them collectively as modes under some single attribute. These modes are the mediate infinite modes. They are mediate in two senses: first, the mediate infinite mode may be conceived under an attribute that is different from itself; second, its modal character is mediated not just by the attribute under which it is conceived, but by its status as one among many attributes

conceived as modes under the attribute under which they are all conceived. It is crucial to understand that according to the thesis of radical mutual containment the attributes can only be regarded as modes of some given *single* attribute. It follows that the enumeration of attributes, while it *prima facie* affirms a numerical plurality in terms of modal distinctions, tacitly affirms at the same time the non-numerical plurality of the attributes in terms of real distinction and hence their conceptual independence. Thus it is the fundamentally non-quantitative plurality of the attributes which underwrites their appearance as a denumerable plurality of mediate infinite modes.

The account of the infinite modes which follows from radical mutual containment abandons the conception of the attributes as producing infinite modes in some linear fashion — for example, the attribute of thought producing an immediate infinite mode of thought, and in turn a mediate infinite mode of thought. Instead, only the immediate infinite mode clearly follows the absolute nature of its attribute. The mediate infinite mode is far more complex in origin, because, while it clearly must be a mode of the attribute under which it is conceived as one attribute among many — for example, the idea of the attribute of extension is a mode of thought in virtue of its formal reality as an idea — it nevertheless may involve the nature of another attribute entirely. This characteristic of the nature of the mediate infinite modes produces a second level of ambiguity: is the idea of the attribute of extension really about thought, or extension? This new ambiguity, however, initially seems pernicious: if the mediate infinite mode involves two attributes in order to be conceived, then the conceptual independence of the attributes appears threatened.

The second ambiguity, however, is not a strike against the reading entailed by the thesis of radical mutual containment; in fact it is quite the opposite. First, it explains why in Letter 64

Spinoza provides only one, seemingly unidentified example of a mediate infinite mode while he provides specific examples of the immediate infinite modes of thought and extension. Second, the second ambiguity is just as deeply embedded in Spinoza's exposition of the doctrine of the attributes as is the first ambiguity involving the immediate infinite modes, for if the attributes do not in fact appear in one another as mediate infinite modes, Spinoza's account of the attributes is deeply contradictory. Third, the ambiguity suggests a plausible interpretation of Spinoza's problematic account of the union of the mind and the body. I will discuss the first two points here, and reserve discussion of the final point for Chapter Seven.

First, the account of the mediate infinite modes which follows from radical mutual containment perhaps explains an interpretive mystery from Letter 64, the only place in Spinoza's corpus where he identifies examples of immediate and mediate infinite modes. Recall that Schuller (on behalf of Tschirnhaus) asks Spinoza to provide explicit examples of the infinite modes discussed in *Ethics* IP21-23:

Fourth, I would like examples of those things which are produced immediately by God, and those which are produced by the mediation of some infinite modification. Thought and extension seem to me to be examples of the first kind; examples of the second kind seem to be, in thought, intellect, and in extension, motion, and so on. (Letter 63: G IV/276/1-4)

In his response Spinoza mentions only one mediate infinite mode:

Finally, the examples which you ask for: examples of the first kind are, in thought, absolutely infinite intellect, and in extension, motion and rest; an example of the second kind is the face of the whole universe, which, although it varies in infinite ways, nevertheless always remains the same, concerning which see the Scholium to Lemma 7 preceding P14, Part II. (Letter 64: G IV/278/24-26; Curley's translation, modified)

The Lemmata in Part II exclusively concern bodies and their motion, so it seems that Spinoza, in referring Schuller and Tschirnhaus to the Scholium to IIL7, has obliquely identified the face of

the whole universe (*facies totius universi*) as the mediate infinite mode of extension.³⁶ As a result there has been a great deal of speculation in the literature as to what the mediate infinite mode of thought might be. Some commentators plausibly suggest that it might be the infinite idea of God, since presumably there should be an idea of the entire extended universe.³⁷ Jean-Marie Beyssade argues that it is “the intellectual love of God” mentioned in Ethics VP36.³⁸ These readings leave as an open question why Spinoza did not bother to provide the corresponding mediate infinite mode of thought. Others, notably Emilia Giancotti, argue that the reason why Spinoza provided only one example of a mediate infinite mode is that it applies equally to both attributes — that is, *facies totius universi* is attribute-neutral, and could refer to the whole of extended nature or the whole of thinking nature.³⁹

However, a close look at the Scholium to IIL7 shows that the matter is more complicated than it initially appears:

But if we should *conceive* a third kind of Individual, composed of this second kind [i.e., individuals composed of individuals which are in turn composed of simple bodies], we shall find that it can be affected in many other ways, without any change of its form. And if we proceed in this way to infinity, we shall easily *conceive* that the whole of nature is one Individual, whose parts, i.e., all bodies, vary in infinite ways, without any change of the whole Individual. (G II/102/8-13; emphases mine)

The subject matter of this passage clearly involves changes in the motion and configuration of bodies, so that it is natural to think that this, if it is a mediate infinite mode, is a mode of extension. But this discussion is embedded in the language of *conceiving*; even if Spinoza is using this language colloquially, it nevertheless is the case that in this account of individual

³⁶ Curley, *Spinoza's Metaphysics*, 61.

³⁷ Harris, *Salvation From Despair*, 57. Jon Wetlesen suggests (less plausibly) that the mediate infinite mode of thought is the infinite will (*The Sage and the Way* (Assen, the Netherlands: Van Gorcum, 1979), 36, 42-3).

³⁸ Jean-Marie Beyssade, “Sur le Mode Infini Médiat dans l'Attribut de la Pensée: Du Problème (Lettre 64) à Une Solution (*Ethique* V, 36),” *Revue Philosophique* 1 (1994): 23-6.

³⁹ Giancotti, 106. Friedman more or less belongs to this group; however, he thinks that there is a distinction between an immediate and a mediate infinite intellect, and the mediate infinite intellect comprises the whole mental world (“How the Finite Follows From the Infinite,” 387-8).

bodies Spinoza, simply because he is engaged in philosophical argumentation, is working in terms of thought. Strictly speaking, then, *facies totius universi* must be a mode of *thought*. If it is not, and is genuinely a mode of extension, then the language of conceiving nevertheless entails that thought is necessarily involved in the account of *facies totius universi*. Either way, the mediate infinite mode discussed here involves *two* attributes.

I think that Giancotti is probably right to contend that Spinoza's identification of the "face of the whole Universe" as a mediate infinite mode applies equally to any attribute; however, I think that this is the case *because* each attribute contains or involves all attributes as mediate infinite modes. The "face of the whole Universe" plausibly can be identified with the causal order of the whole of nature conceived under a given attribute, as described in the Scholium to IIP7. A close look at the Scholium to IIL7 reveals that, even though it is couched in the language of conception and thought, its subject-matter is parts and individuals; these concepts, though *formally* they express thought, *objectively* could pertain to any mediate infinite mode. That is, though the Scholium to IIL7 concerns bodies as parts, it could equally well concern ideas as parts, or modes of some other attribute as parts. So in a sense this Scholium discusses something relevant to any mediate infinite mode of thought: how finite individuals can be regarded as composing an infinite individual.

This leads us to the second reason for thinking that the ambiguity intrinsic to the nature of the mediate infinite mode which follows from radical mutual containment is not a strike against it: Spinoza's account of the attributes is deeply self-contradictory if this sort of equivocity is not the case. Consider the crucial Scholium to IIP7, which asserts the explanatory adequacy of each attribute:

Hence, so long as things are considered as modes of thinking, we must explain the order of the whole of nature, or [*sive*] the connection of causes, though the

attribute of Thought alone. And insofar as they are considered as modes of Extension, the order of the whole of nature must be explained through the attribute of Extension alone. I understand the same concerning the other attributes. (G II/90/23-8)

Here Spinoza compares attributes in general, and concludes that each has adequate power to express the order of the whole of nature within its own kind. This conclusion is of course a consequence of IIP6, which asserts that each mode has God as a cause only insofar as God is expressed by the attribute to which the mode belongs. IIP6 in turn follows in part from IP10, the assertion of the conceptual independence of the attributes. But if the conceptual independence is interpreted as excluding other attributes from appearing in any given attribute, then Spinoza cannot make any assertion about the explanatory equality of the attributes in any coherent fashion. For if the attributes must be conceived through themselves exclusively, then it would be impossible to assert that they each express a common order of nature, as IIP7 claims, for there would be no common ground upon which to base such a comparison. Indeed, it would follow that Spinoza could make *no general claims about attributes at all*, for any such generalizations would contradict the conceptual independence of the attributes asserted in the exclusivist interpretation of IP10. If the attributes do not enter into one another as mediate infinite modes, then, it becomes impossible for Spinoza to express intelligibly any general doctrine concerning the attributes whatsoever.

Once we accept that attributes are involved in one another as mediate infinite modes, the equivocity concerning which attribute is in question becomes essential to the coherent explication of the doctrine of the attributes. In the Scholium to IIP7, for example, when Spinoza mentions “the attribute of Thought” and “the attribute of Extension,” strictly speaking he must consider these attributes in the guise of two *mediate infinite modes of thought* — that is, two attributes conceived objectively as modes under the formal reality of the attribute of thought.

Only in this way can Spinoza intelligibly compare these attributes and find them equally adequate in their power to express the order of the whole of nature. The equivocality is essential because what is here said about attributes considered as mediate infinite modes ultimately must be a doctrine of *attributes* rather than one of infinite *modes*. Hence what Spinoza speaks of (tacitly) in terms of mediate infinite modes must really *refer to the attributes themselves*. What is said about the attribute of extension, even as it is conceived as a mediate infinite mode of thought, equally applies to the attribute of extension expressed through itself. For in principle the same metaphysical system expressed in the attribute of thought must be expressible in the attribute of extension as well; the attribute of thought must appear as a mediate infinite mode of extension, and involve the same ambiguity. If there were no ambiguity intrinsic to the account of the mediate infinite modes, then the doctrine of the attributes could only be a doctrine of modes.

We have two alternatives if we reject the account of the mediate infinite modes which follows from the thesis of radical mutual containment. One is to admit that Spinoza's metaphysical account of the attributes is deeply and hopelessly contradictory. This is certainly possible, but I think that the problem is not so much one of the inadequacy of Spinoza's conceptual tools as of his commitment to a rational account of reality that can in some sense extend beyond the limits of thought. Hence to dismiss Spinoza on this point produces an unpleasant consequence for *all* metaphysical speculation: in this case the true nature of reality can be grasped adequately if and only if some form of idealism is the case. In this case, if reality involves things which are not ideas or thoughts, then in principle we can never possess an adequate metaphysical account of reality. The other alternative is that a metaphysical account of substance must appeal to some sort of transcendent, trans-attribute perspective that permits a coherent grasp of the system of the attributes despite their conceptual independence. This would

constitute more or less an appeal to a form of mysticism that transcends rationality. Spinoza would surely reject both of these alternatives.

The Immediate and Mediate Infinite Modes as Natural Laws

Having considered the infinite modes as expressions of the attributes insofar as they mutually contain or involve one another — which I have argued is their primary function — it is now appropriate to consider the infinite modes in terms of their secondary function: as mediators between the attributes and the finite modes. One popular reading is that the infinite modes are constituted by the sum totals of modes (the mediate infinite modes) and their formal essences (the immediate infinite modes).⁴⁰ This reading is not compatible with the thesis of radical mutual containment because it seems to regard the infinite modes as fundamentally aggregations of finite modes rather than as expressions of the attributes. I will consider how finite modes presumably “follow from” infinite modes in Chapter Six. However, there is another reading of the infinite modes which deserves consideration here, one which regards them as progressively more specific expressions of natural law.

Edwin Curley argues that the infinite modes in some sense represent a sequence of progressively more specific laws of nature as expressed under some attribute. Curley’s account has found enthusiastic acceptance among some noteworthy commentators.⁴¹ He argues that the attributes constitute the most universal laws of nature or basic “nomological facts,”⁴² and the

⁴⁰ Joel Friedman is the most explicit proponent of this reading and works it out in some detail; see “How the Finite Follows From the Infinite,” 373-382. Deleuze also appears to endorse this reading of the infinite modes (235-6); he even argues that a formal essence has its own existence (as a “physical reality”!) independent of the existence of the corresponding finite mode (192-3). Gueroult also seems to contemplate such a reading; see “Spinoza’s Letter on the Infinite,” 188.

⁴¹ Yovel defends and elaborates this reading at length in “The Infinite Mode and Natural Laws in Spinoza.” Delahunty considers Curley’s account of the doctrine of the infinite modes an “ingenious solution” to the problematic concept of immanent causation (*Spinoza* (London: Routledge and Kegan Paul, 1985), 130).

⁴² *Spinoza’s Metaphysics*, 54.

immediate and mediate infinite modes are derivative universal laws that can be deduced from the attributes.⁴³ So, for example, the basic nomological facts pertaining to extended things constitute the attribute of extension, and from these facts one can theoretically deduce derivative nomological facts concerning motion and rest — that is, the laws of motion — from the basic nomological facts of extension.⁴⁴ The basic nomological facts pertaining to thinking things, then, constitute the attribute of thought, and from these can be deduced universal laws of psychology and cognition.

This reading of the doctrine of the attributes is to some extent consonant with my reading based on the thesis of radical mutual containment. If the immediate infinite mode is the formal reality of the attribute of thought, then we can regard it as the principle under which we conceive modes of that attribute. So the principle governing the relations of modes of thought is absolutely infinite intellect, and correspondingly the rule governing relations of modes of the attribute of extension is the immediate infinite mode of extension, motion and rest (Letter 64: IV/278/24-6). If the absolutely infinite intellect is the rule under which we conceive modes of thought, and ideas are modes of thought, then God's ideas of other attributes must be conceived as modes of the attribute of thought, and absolutely infinite intellect is the principle or rule governing the expression of the infinite plurality of the attributes as an infinite plurality of ideas conceived through the attribute of thought.

The immediate infinite mode is the formal reality of the attribute — the basic law under which all its modes, mediate infinite modes and finite modes, are conceived. The mediate infinite mode, though it is the objective reality of a given attribute, nevertheless is conceived through an attribute under whose formal reality it is governed; hence the mediate infinite mode

⁴³ Ibid., 58-63.

⁴⁴ Ibid., 60.

appears as a distinct but derivative subcategory of natural law. However, where Curley's account focuses primarily on explaining how finite particulars could in some sense "follow from" infinite universals — that is, on infinite modes as mediators between the infinite attributes of substance and its finite modes — the thesis of radical mutual containment encourages us to focus on the infinite modes as aspects of the attributes, and as necessary conditions for the attributes to express the essence of substance adequately. That is, if the attributes were not also infinite modes, then they could not properly be conceived as attributes which are conceived through themselves, nor could they express substance as consisting of infinite attributes. The attributes could not succeed in mediating between substance and modes if they did not "produce" the infinite modes in the course of expressing the nature of substance.⁴⁵

One surprising consequence of this reading of the infinite modes as explained in terms of the thesis of radical mutual containment is that the distinction of formal and objective reality, which in its Cartesian form applies specifically to thought, must also apply to non-thought attributes on pain of violating the equality of expressive adequacy of the attributes, and in turn the parallelism of their modal orders. The formal reality of an idea is its intrinsic character of being an idea; its objective reality, however, is its representational content.⁴⁶ Our natural inclination is to regard objective reality as pertaining only to modes of thought, as it seems that only ideas can be intentional. However, if extension is an attribute and so by definition must be conceived through itself, then it follows that the attribute of extension must exhibit a duality in itself that serves the same function as the subject/object duality in the attribute of thought, and which gives rise to its own immediate infinite mode of extension. Moreover, if this were not the case then there would be something which the attribute of thought expresses as the essence of

⁴⁵ See Deleuze, 104-6.

⁴⁶ CSM II 28 n. 1. Spinoza accepts and makes use of this Cartesian conceptual distinction. See Chapter Four, p. 158 n. 30.

substance — namely, a self-reflective intentionality — which the attribute of extension would fail to express, and it would follow that their modal orders would not really be parallel. How the distinction between formal and objective reality manifests itself in the attribute of extension is certainly a difficult question; since, as I noted in the last chapter, Spinoza never fully worked out his physics, we probably do not have the tools to answer this question on Spinoza's terms.⁴⁷

However, we can see that if the mediate infinite modes can be regarded as derivative subcategories of natural law as conceived under the immediate infinite modes regarded as the formal principles of natural law, then it follows that, for example, the laws of psychology and cognition can be regarded as a subcategory of the most general physical laws. This would tend to imply that the laws of psychology in some sense should be reducible to physical law. However, the mutual containment of the attributes entails that the converse should also be the case — that physical laws are conceivable as a subcategory of psychological or cognitive laws. I will consider this rather peculiar consequence of the doctrine of the attributes and infinite modes in more detail in Chapter Seven.

Infinitem and the Infinite Modes

The final proposition concerning the infinite modes, IP23, indicates that the types of infinite modes described in IP21 and 22 are the only kinds there can be: “Every mode [*modus*] which exists necessarily and is infinite has necessarily had to follow from the absolute nature of some attribute of God, or from some attribute, modified by a modification which exists necessarily and is infinite” (G II/66/25-28). What remains, then, is a consideration of the sense in which each sort of infinite mode is infinite. This will allow us to determine decisively whether or not there is a “depreciation” of the infinite from the attributes to the infinite modes.

⁴⁷ See Chapter Four, pp. 159-61. See also Chapter Six, pp. 227-9.

The conclusion to the Demonstration of IP23 illustrates the issue appropriately:

Therefore, the mode, which exists necessarily and is infinite, has had to follow from the absolute nature of some attribute of God — either immediately (see IP21) or by some mediating modification, which follows from its absolute nature, that is (by IP22) which exists necessarily and is infinite. (G II/67/6-10; Curley’s translation, modified)

Here of course we see that the immediate infinite mode follows from the absolute nature of God, but it in turn evidently serves as a “mediating modification” from which the mediate infinite mode must follow. Of course, if the immediate infinite mode follows from the absolute nature of the attribute, it must be infinite in just the same way as the attribute is; and if another infinite mode in turn follows from the immediate infinite mode, and presumably follows from the “absolute nature” of that immediate infinite mode, then this mediate infinite mode must be infinite in just the same way that the attribute and the immediate infinite mode are. If the conventional interpretation of the infinity of the attributes is correct, then each attribute and its infinite modes are infinite in its own kind. On this reading, then, there is an unexplained depreciation of the infinite from substance to attribute, but no obvious further degradation. In the last chapter I argued that this reading leads to a serious inconsistency in the doctrine of the attributes; it also contradicts Spinoza’s identification of the immediate infinite mode of thought as “absolutely infinite intellect” (Letter 64: G IV/278/24-5).⁴⁸ However, it appears that on the reading that follows from the thesis of radical mutual containment there must be *no depreciation in the infinite whatsoever* — that everything is absolutely infinite from substance down to mediate infinite mode. This resolves the problem of depreciation, but apparently rather heavily-handedly, for it seems to entail that Spinoza’s assertions that each attribute is infinite in its own kind are wholly groundless.

⁴⁸ See Chapter Four, pp. 152-3.

However, this conclusion assumes that the production of infinite modes is an entirely linear affair, from attribute to immediate infinite mode to mediate infinite mode. In contrast, radical mutual containment involves non-linear production of infinite modes. Each attribute produces *one* immediate infinite mode — itself, grasped as the attribute’s own formal reality — in a linear fashion. But as each attribute contains every other attribute (including itself) objectively, then, assuming this can properly be called “production,” each attribute produces *a quantitatively infinite plurality* of mediate infinite modes. The sense in which these infinite modes are “mediate” is in fact dual: each as a mode of the containing attribute has the formal reality determined by the containing attribute, but as a mode with its own objective reality it is distinct from every other mediate infinite mode contained within the attribute. Hence in a sense the mediate infinite mode follows from the absolute nature of the containing attribute, for it is a mode possessing and expressing the formal reality of its containing attribute. In another sense, however, it does *not* follow from the absolute nature of the containing attribute, for its objective reality differs from the objective realities of every other mediate infinite mode. This dual mediation, then, has the consequence that each mediate infinite mode can be regarded as infinite in its own kind. And indeed this is the only way in which the attribute could be infinite in its own kind — for to be considered infinite in its own kind presupposes some sort of comparison of distinct kinds, and, as I argued above, the only way the attributes can be intelligibly compared is through their expressions as mediate infinite modes.

This provides a sense in which Spinoza is correct to regard each attribute as infinite in its own kind even as it seems he must deduce that each is absolutely infinite: the ambiguity between the mediate infinite mode and the attribute which it expresses objectively permits it. The only way that Spinoza can intelligibly claim in the *Ethics* that each attribute is infinite in its

own kind is if he compares them insofar as they are expressions of attributes insofar as they are mediate infinite modes conceived under the attribute of thought. If he compares them as “pure” attributes, then he must violate the conceptual independence of the attributes asserted in IP10. However, if he compares them as mediate infinite modes, then their ambiguity permits him to assert indirectly that each attribute is in a sense infinite in its own kind.

What follows in the doctrine of the infinite modes from the thesis of radical mutual containment of the attributes, then, is that absolute infinity and infinity in its own kind are not related as eminent cause to “depreciated” effect; rather, they are different perspectives on the character of the infinite. From the attribute’s own self-reflective perspective regarding its own formal reality it must be absolutely infinite, for it adequately expresses the essence of substance as an absolutely infinite being consisting of infinite attributes. However, from its perspective directed towards the infinite attributes it contains, each attribute is infinite in its own kind; indeed, since each attribute must contain itself as a mediate infinite mode as well as an immediate infinite mode, each attribute in a sense must regard itself as (objectively) infinite in its own kind as well. The immediate infinite mode, then, is the attribute considered as *the* ground of perspective, whereas the mediate infinite mode is the attribute considered as *a* ground of perspective. Hence the production of infinite modes, which on the usual interpretation of the infinity of the attributes must constitute a depreciation or degradation of the infinite, on the thesis of radical mutual containment involves no depreciation at all. Indeed, both sides of the infinity of the attributes are required for the “absolute affirmation” of the essence of substance.

Conclusion

The thesis of radical mutual containment provides an account of how and why substance must produce modes at all: if the attributes did not express themselves as infinite modes then they could not function as attributes at all. Hence the attributes serve as mediators between substance and modes in virtue of being both substantial and modal. In this way, I think, the very difficult issue of the relationship of substance and modes is resolved. There is another interesting consequence of this account. The doctrine of the infinite modes articulates the metaphysics of substance and its attributes in a way which begins to promise a means for Spinoza to produce a rational metaphysical system which need not appeal to transcendence in order to account for itself. If the attributes mutually involve one another as modes, then an account of the nature of reality can be adequately expressed in any attribute whatsoever. Hence Spinoza's metaphysics has the opportunity to be a system developed as a work of thought, and which yet may adequately express the nature of a reality that includes things that are, in themselves, not ideas. In other words, we have the basic structure for an account of reality that can be thoroughly immanentist without reducing all reality to thought: all the work that otherwise would require the transcendence of the intellect in order to accommodate things that exist outside of thought can be done immanently within a rational system of reality.

It remains, then, to account for how and why the finite modes "follow from" the attributes and the infinite modes. I discuss this in the next chapter.

CHAPTER 6

THE DERIVATION OF THE FINITE: THE FINITE MODES

Introduction

Thus far we have a fairly well-developed account of Spinoza's metaphysical system as a system of the infinite. The concept of *infinitum* is the thread of continuity linking substance and modes. Infinity is fundamentally "absolute affirmation" (as understood in terms of the attribute of thought), but manifests itself differently in different aspects of the reality described in Spinoza's system: it begins with the "absolute affirmation" that is the essence or nature of God or substance; this affirmation manifests itself in "infinite attributes, of which each expresses eternal and infinite essence" (ID6: G II/45/23-5), which is a "qualitative plurality" (as Deleuze puts it) of real distinction. I have argued that each attribute must also be intrinsically absolutely infinite if it is to express the essence of God adequately, and so the attributes must mutually "contain" one another. This thesis of radical mutual containment in turn provides a framework for understanding the immediate and mediate infinite modes as expressions of the attributes which make possible their intelligible explication in a metaphysical system. Thus we find a transition between substance and modes in the guise of the attributes, which stand in between the radically different senses of *infinitum* manifested in substance and modes, as discussed in Letter 12. The absolutely infinite, indivisible in substance, is imaginably divisible in the mediate infinite modes; a quantitatively plural infinity "follows from" a qualitatively plural infinity as the condition for the intelligibility of the latter. I have argued that in some respects there is no

depreciation or degradation of the infinite. Thus the difficult issue of how absolute infinity produces things which are each infinite in their own kinds is not as problematic as it initially appeared.

What remains is the more familiar problem of the derivation of the finite from the infinite.¹ In a certain sense this is less of a problem than the account of how the infinite modes follow from substance: if Spinoza provides an account of an infinite which is divisibly quantitative in character as manifested in the infinite modes,² and the infinite modes have been shown to “flow” necessarily from the nature of the indivisible real plurality of the attributes, then an account of finite “singular things” seems secured. Where real distinction does not constitute a division into parts, modal distinction constitutes numerical distinction, and hence infinite modes can be divided into parts, and presumably into finite parts. The “derivation of the finite” is a matter of deriving modes from modes, and thus the more radical existential difference between substance and mode is not part of the issue. In this chapter I will address the question of how the finite follows from the infinite in terms of the mutual involvement of the attributes: how does the thesis of radical mutual containment, which claims that absolute infinity only “depreciates” to infinity in one’s own kind at the level of the mediate infinite modes, finally “depreciate” into singular things each “finite in its own kind” (ID2: G II/45/8)? The thesis suggests an elegant answer to this question: finite modes themselves are infinite insofar as they exhibit a sort of

¹ Marjorie Grene remarks: “The *Leitmotif* of the *Ethics* is the grounding of our finitude in the Infinite” (*Spinoza: A Collection of Critical Essays*, ed. Marjorie Grene (Garden City, New York: Anchor Books, 1973), xiv). For other discussions of this problem, see Yirmiyahu Yovel, “The Infinite Mode and Natural Laws in Spinoza,” in *God and Nature: Spinoza’s Metaphysics*, ed. Yirmiyahu Yovel (Leiden: E. J. Brill, 1991), 79-96; Joel Friedman, “How the Finite Follows from the Infinite in Spinoza’s Metaphysical System,” *Synthese* 69 (1986): 371-407; Frank Lucash, “On the Finite and Infinite in Spinoza,” *Southern Journal of Philosophy* 20 (1982): 61-73; Marx W. Wartofsky, “Nature, Number and Individuals: Motive and Method in Spinoza’s Philosophy,” *Inquiry* 20 (1977): 457-79; and Richard V. Mason, “Spinoza on the Causality of Individuals,” *Journal of the History of Philosophy* 24 (1986): 197-210.

² The immediate infinite modes are divisible because as the formal reality of the attribute the immediate infinite mode contains the infinite plurality of mediate infinite modes; since the mediate infinite modes are modally distinct, they constitute a numerical plurality and hence a division of the formal reality of the infinite mode into separate individuals. I will discuss the sense in which the mediate infinite modes are divisible below.

mutual containment of the infinite. First, finite modes express a sort of “internal infinity” insofar as they contain the infinity of substance immanently, in their infinite divisibility. I will examine two interpretations of Spinoza’s account of infinite divisibility. First, I discuss Gueroult’s account of infinite divisibility based on Letter 12. Gueroult argues that the infinity of substance in virtue of its indivisibility must be complete and hence immanent in every part of a mode, and it follows that every mode is infinitely divisible. Second, I discuss Deleuze’s account of existing modes as individuals composed of an extensive infinity of “simple” parts; he argues that the parts of an existing finite mode constitute an actually rather than a potentially infinite plurality. The “external infinity” of the finite — that is, the finite mode as contained by the infinity of substance — appears most obviously in the participation of the finite modes of a given attribute within an infinite determinative causal sequence (IP28). But the thesis of radical mutual containment suggests a deeper account of how a finite mode can be regarded as in a sense contained by the infinity of substance: each finite mode is an expression within a given attribute of a thing as it is in itself (*res ut in se est*), an entity mentioned by Spinoza in the Scholium to IIP7. Thus finite modes can be regarded as members of sets of correlative expressions of “things as they are in themselves” which in a sense intersect the infinite plurality of mediate infinite modes. Hence finite modes, by means of their own infinite divisibility and their participation in the infinity of the infinite modes, both express and involve the infinite nature of substance.

What Does It Mean For a Mode to Be “Finite”?

It might be argued that the question of how Spinoza derives the finite from the infinite is illegitimate as posed and hence Spinoza need not answer it. Perhaps the fact that each finite thing in the series has a finite determining cause operating in conjunction with an infinite

efficient cause satisfies the Principle of Sufficient Reason as Spinoza understands it.³ If this is the unfolding of the being of substance, and substance is self-caused, then no further explanation can be offered. Or perhaps the sort of explanation our intuition seeks is tacitly teleological in character: why (in the sense of “to what end”) are there many finite things, rather than none? If so, then Spinoza surely rejects the question, for he rejects final causes as “human fictions [*figmenta*]” (G II/80/4) and argues that “this doctrine turns nature completely upside down....what is really a cause it considers as an effect, and conversely” (G II/80/10-1). But before we can evaluate this approach (which at least intuitively seems unsatisfactory) we must know what it means for something to be finite in the context of Spinoza’s system. If we have an adequate account of finitude, then perhaps the intuition that motivates the question regarding the derivation of the finite from the infinite will be satisfied in a way that does not do violence to Spinoza’s philosophy.

An unresolved question about Letter 12 remains that suggests an approach which might help: one of the forms of infinitude Spinoza enumerates is one which is infinite by virtue of its cause, but may be abstractly conceived as divisible and many, and hence “regarded as finite” (G IV/61/1-3). I have argued that this at least applies to the mediate infinite modes, which are the attributes considered as a collective plurality; if such things can be regarded as finite, then perhaps the finite modes in some sense manifest this category of *infinitum*. Another kind of infinite is “called infinite, or if you prefer, indefinite” because despite its explicit and known limits, its parts are such that their plurality cannot be equated with any number (G IV/61/3-5).

³ Michael Della Rocca argues that IA2 is an expression of the Principle of Sufficient Reason. See *Representation and the Mind-Body Problem in Spinoza* (New York: Oxford University Press, 1996), 131, 173 n. 10. Jonathan Bennett also believes Spinoza is committed to the principle, though Bennett refers to it as “explanatory rationalism”; see *A Study of Spinoza’s Ethics* (Indianapolis: Hackett, 1984), 29-30. There is the further possibility that Spinoza holds a version of the principle that has a *negative* application as well — i.e., that there must be sufficient reason why a thing does *not* exist. The first Alternate Demonstration to IP11 (G II/52/31 – 53/2) offers persuasive evidence for this reading. See Thomas, *Intuition and Reality*, 78-9.

Spinoza's example of the variations in the space between nested non-concentric circles certainly describes a finite geometrical figure, so in this case a finite entity is in a sense infinite, or at least indefinite. Hence Spinoza apparently thinks that at least some things which are regarded as finite are nevertheless in some respects infinite. Hence one line of interpretation open to us in determining how the finite follows from the infinite is to determine whether for Spinoza all finite things may be regarded as infinite in some way.

Spinoza has reasonable motivation for pursuing such a line of thought. After all, we require some explanation of how we may understand what it means for something to be infinite, and such an explanation would be difficult if we are *entirely* finite. As Karsten Harries puts it,

To think the finite as the finite is already to have some understanding of the infinite. But this is to say that we human beings are not totally imprisoned in the finite: we could not think the infinity of the infinite if the infinite, an openness to what transcends the reach of our finite understanding, were not somehow part of our own essence. Meditation on the infinity of God or the infinity of the world of which we are a part thus presupposes and awakens the human knower to the infinite within himself.⁴

Spinoza has made it quite clear that he thinks finite human beings can understand the nature of the infinite, both explicitly through Meyer's preface to *Descartes' Principles* (G I/132/25 – 133/4), and implicitly in Letter 12 through his claim that distinctions within the conception of infinity resolve all the problems surrounding the infinite (G IV/61/9-13). So Spinoza must admit that in some sense we can "transcend" our finite nature if he is to make a case for the intelligibility of his metaphysical system. But Spinoza's thoroughgoing immanentism prohibits him from positing any genuine self-transcendence; hence the only option open to Spinoza is to show that in some respects even finite beings are infinite. Given Spinoza's remarks about the infinite in Letter 12, it is quite likely that Spinoza thinks along these lines. However, these same remarks show that Spinoza does not think of finite beings, even if they are in some respect

⁴ Karsten Harries, *Infinity and Perspective* (Cambridge, Mass.: MIT Press, 2001), 148.

infinite, as infinite in the same way that God is, for substance and modes differ in existence so radically that what it means for each to be infinite is entirely different.

Spinoza is hardly alone if he thinks that finite modes are in some sense infinite.

Descartes and Leibniz think that individual substances — at least, individual human beings — are infinite in some respects. It is true that Descartes generally avoids referring to anything other than God as infinite, preferring instead to refer to unbounded created things as “indefinite.” So in the *Principles* Descartes suggests that the extended universe, the divisibility of bodies, and the number of stars is indefinite,⁵ because if these things have limits we cannot know them.⁶ Yet Descartes himself does not strictly adhere to his own requirement. In the *Principles* Descartes tentatively remarks that “The will...can in a certain sense be called infinite, since we observe without exception that its scope extends to anything that can possibly be an object of any other will — even the immeasurable will of God.”⁷ In the *Meditations* Descartes speaks of the will in terms that approach his definition of ‘infinite’ as that which we positively know has no limits:

It is only the will, or freedom of choice, which I experience within me to be so great that the idea of any greater faculty is beyond my grasp; so much so that it is above all in virtue of the will that I understand myself to bear in some way the image and likeness of God. For although God’s will is incomparably greater than mine, both in virtue of the knowledge and power that accompany it and make it more firm and efficacious, and also in virtue of its object, in that it ranges over a greater number of items, nevertheless it does not seem any greater than mine when considered as will in the essential and strict sense.⁸

This perhaps presents problems for Descartes,⁹ but in any case it indicates that he thinks that in at least one respect a finite being can be infinite. It seems likely that he would contend this feature is unique to human beings so far as they are created in the image of God.

⁵ *Principles* I, 26 (CSM I 202).

⁶ *Principles* I, 27 (CSM I 202).

⁷ *Principles* I, 35 (CSM I 204).

⁸ *Fourth Meditation* (CSM II 40).

⁹ In the context of the *Meditations* Descartes’ first argument for the existence of God rides on the claim that the ego cannot be cause of the idea of an infinite and perfect being, because the ego recognizes its own finitude and

Whereas Descartes admits that finite human beings are infinite in some respect — though it does not appear to be a feature of his system intended to account for our capacity to grasp the infinite, or to provide a transition between the finite and the infinite — Leibniz’s system requires that individuals in general be infinite evidently for this reason. An individual substance (or “monad”) contains traces of everything that has happened to it and of everything that ever will happen to it. Moreover, everything in the universe reflects or perceives everything else in the universe to some degree; thus an individual carries traces or marks of everything else, both in time and space.¹⁰ This is required by the nature of individuals, as all their causal relations must be internal to them; the result is a freedom for each individual, at least in the sense that nothing external determines any of the events in the individual — all happenings unfold within the individual itself. This lack of external limitation suggests a freedom which at least in some sense is infinite. So Leibniz also allows that individuals are in some sense metaphysically infinite.

So in what respect could Spinoza’s finite modes be infinite? Spinoza cannot directly align himself with Descartes or Leibniz. Spinoza denies Descartes’ claim that the will extends more widely than the intellect;¹¹ the will is nothing other than the intellect (IIP49 Cor.), and we cannot will options which we cannot perceive (IIP49 Schol.: G II/133/32-5). For similar reasons

imperfection (*Third Meditation* (CSM II 31)). However, it could be argued that if the ego is infinite insofar as it possesses freedom of the will, and this freedom cannot be limited and hence cannot be other than perfect, then the ego does have an idea of something infinite and perfect, which in imagination it could conjoin with the idea of a being all of whose properties have the character of being infinite and perfect. Therefore Descartes’ admission of the infinite capacity of the will to affirm or deny apparently undermines his first argument for God’s existence. Descartes does seem to recognize the problem, as he attributes the infinite capacity of the will to the creation of human beings in God’s image (*Fourth Meditation* (CSM II 40)). Interestingly, if Descartes had considered the will finite, as Spinoza does (because affirmation and negation are intrinsic to the nature of particular ideas (IIP49)), or at least indefinite, he could have avoided this difficulty.

¹⁰ G. W. Leibniz, “Discourse on Metaphysics,” §§ 8, 9 (in *G. W. Leibniz: Philosophical Essays*, ed. Roger Ariew and Daniel Garber (Indianapolis: Hackett, 1989), 41-2). See also “The Principles of Philosophy, or the Monadology,” § 60 (*Philosophical Essays*, 220-1).

¹¹ More precisely, Spinoza agrees that the will extends more widely than the intellect only if ‘intellect’ refers exclusively to clear and distinct ideas; however, if it refers to our ability to perceive or conceive of things in general (which is what Descartes intends by ‘intellect’ in this context (*Principles* I, 32 (CSM I 204))), then the will does not extend any more widely. See the Scholium to IIP49 (G II/133/23-6).

Spinoza cannot take the Leibnizian approach of positing that each individual is its own independent world, lacking external causal relations with other individuals; Spinoza clearly thinks each finite mode is externally causally determined by other finite modes (IP28). For Descartes and Leibniz an individual possesses a certain metaphysical independence from other individuals, and this provides the basis for considering the individual infinite (or at least not externally limitable) in certain respects. But Spinoza's finite modes do not enjoy this sort of metaphysical independence.

On the other hand, Descartes and Leibniz share with Spinoza the commitment that these individuals are inescapably dependent upon God for their existence. The ways in which individuals are dependent upon God differ for each philosopher, but in each case it is safe to say that any infinite character a finite individual possesses is ultimately due to God: for Descartes the infinite character of the will is a way in which we are images of God, and for Leibniz it is the fact that each individual reflects the entire universe, and human individuals in particular reflect God.¹² In the case of Spinoza all finite modes depend upon God simply in virtue of the fact that God is substance, through which ultimately all things exist and are conceived. Thus an obvious way of recognizing the infinite in finite modes would proceed from the customary interpretation of Spinoza as a monist: finite beings are infinite insofar as they are fundamentally identical with God. There is textual support for such a position, which incidentally suggests that this accounts for how finite things can grasp the infinite: Spinoza consistently speaks not of human beings knowing, but of God knowing, insofar as he constitutes the essence of a given human being:

From this it follows that the human Mind is a 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 human Mind, or [*sive*] insofar as he constitutes the

¹² "Discourse on Metaphysics," §§ 9, 35 (*Philosophical Essays*, 42, 66); "Monadology," § 83 (*Philosophical Essays*, 223).

essence of the human mind, has this or that idea.... (IIP11 Cor.: G II/94/30 – 95/2)

So Spinoza makes God the subject of all knowledge whatsoever, in which case perhaps finite minds grasp the infinite in virtue of ultimately *being* God, who is absolutely infinite.

This hypothesis is unsatisfactory. It must be granted that any sense in which a finite mode is infinite will depend ultimately upon the absolutely infinite nature of God. So we can legitimately say that finite things are infinite because God is infinite. But since Spinoza has also said that we conceive substance and modes to exist in entirely different ways (Letter 12: G IV/54/15-6) they cannot be identical. Indeed, in Letter 12 he argues that modes and substance cannot be “infinite” in exactly the same sense. Moreover, to assert that God is identical with a finite mode is to say that God insofar as he is considered as finite constitutes the being of a given finite mode. But according to Letter 12 substance is such that it “cannot in any way [*modo*] be conceived to be finite” (G IV/61/1) without destroying the concept of substance (G IV/55/9-11). Thus to contend that finite modes are infinite merely because they are identical with God is unsupportable. A reductionist substance monism — that is, one that reduces modes to substance, finite things to God — ignores the radical distinction between the ways of existing of modes and of substance; this radical distinction has a significant role to play in the later parts of the *Ethics*, where Spinoza argues that the degree of eternity which one can acquire depends upon improving upon the adequacy of one’s ideas (VP39 and Dem.). If we grasp the infinite simply in virtue of being identical with God, then it is not at all clear why human beings (or any finite thing, for that matter) must *acquire* adequate ideas, or why they would have inadequate ideas in the first place.

Considering that the modes are expressions of the attributes,¹³ and the attributes are expressions of substance, then given the thesis of radical mutual containment it is reasonable to

¹³ Deleuze, 105.

expect that the finite modes, in expressing the attributes, in turn express mutual containment in their own way. I think that this is in fact the case: the finite modes both contain the infinite and are contained within the infinite. The finite modes contain the infinite insofar as, though they have limits, their parts cannot be expressed by any number — that is, insofar as they are infinitely divisible.

Gueroult on Infinite Divisibility

Infinite divisibility is an obvious respect in which finite things may be regarded as infinite. Martial Gueroult's discussion of how infinite divisibility in modes follows from the indivisible infinity of substance, based on his reading of Letter 12, is succinct and quite persuasive. The foundation for his argument is that substance is indivisibly infinite; any division of substance, were it possible, would destroy its substantiality. Gueroult infers from this that "what is indivisible by nature can only be complete wherever it is"; therefore it is complete in each mode, "equally in the part and in the whole."¹⁴ This completeness in each mode is manifested in two ways. First, the attribute which expresses substance's essence is complete in every part of the mode; thus, for example, extension is indivisibly infinite, and must be a common property of all modes of extension — it is not possible to divide a body and produce components that are not themselves extended.¹⁵ Second, the substance itself is complete in every part of the mode, as indivisible cause of its existence; therefore "the idea of this substance is enveloped equally in the idea of the whole and in that of the part."¹⁶ In each of these manifestations the mode cannot be "really" separated from other modes of the same attribute, nor from substance itself, but only "modally" separated.

¹⁴ Martial Gueroult, "Spinoza's Letter on the Infinite," in Grene, 195 (emphasis removed).

¹⁵ Ibid.

¹⁶ Ibid., 196.

From this account Gueroult deduces several consequences. First, the mode has a certain “integrity” based in the indivisible infinity of substance which underwrites its infinite divisibility. Second, “there are as many different infinitely divisible infinities as there are different modes,” which, since there are greater and lesser modes, explains how there can be greater and lesser infinities as described in Letter 12 (though strictly this comes from “the same identical Infinite” of substance).¹⁷ Finally, the same argument applies to modes of any other attribute, including that of thought: the idea of substance must equally be in the whole and in the part, which explains how every soul can know the infinite from its own nature in the same way as God knows it.¹⁸ Hence this account of infinite divisibility is fundamental for Spinoza’s theory of knowledge and adequate ideas.¹⁹

While Gueroult’s reading is speculative relative to Letter 12, several propositions toward the end of Part II of the *Ethics* support it. Gueroult himself cites IIP37 and 38 as evidence for his reading; these propositions emphasize that there are properties which are equally in the part and the whole. Spinoza does not give any explicit indication in these propositions just what these properties are, only that they are the basis for “common notions” which are ideas which all human beings possess (IIP38 Cor.). Gueroult finds in IIP46 the evidence that the infinity of God is one such common property. IIP45 remarks: “Each idea of each body, or of each singular thing which actually exists, necessarily involves the eternal and infinite essence of God” (G II/127/2-4; Curley’s translation, modified). This proposition already strongly suggests that the infinite is in some sense “enfolded” within any singular or finite idea, but the Demonstration for IIP46 makes the claim more explicit: “The demonstration of the preceding Proposition is Universal, and whether the thing is considered as a part or as a whole, its idea, *whether of the*

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ Ibid., 197.

whole or a part (by IIP45), will involve God's eternal and infinite essence" (G II/127/29-32; emphasis mine). Thus it is clear that Spinoza thinks the infinite essence of God is "involved" in any idea, part or whole. Hence Gueroult's suggestion that the indivisibility of the infinite relative to substance is the basis for the infinite divisibility of modes has some textual support. The Scholium to IIP45 also connects this discussion with Letter 12, specifically with respect to the conception of duration: "By existence here I do not understand duration, i.e., existence insofar as it is conceived abstractly, and as a certain species of quantity" (G II/127/15-7). The connection is obscure, since Letter 12 characterizes time as an abstraction from duration, whereas in this Scholium duration is an abstraction from existence itself. By "existence" Spinoza presumably intends eternity, given that in ID8 he characterizes eternity as "existence itself, insofar as it is conceived to follow necessarily from the definition alone of the eternal thing" (G II/46/13-5). But Letter 12 does not explicitly claim that duration is an abstraction.

Gueroult cites one other passage as support for his reading, the Scholium to IP15. Here Spinoza reiterates some themes from Letter 12, specifically his rejection of arguments made in favor of regarding corporeal substance as finite. These arguments rely on what Spinoza regards as the false presupposition that substance is composed of parts. Interestingly, while this passage supports Gueroult's account with respect to the indivisibility of the infinity of substance, it does not obviously entail that modes are in fact infinitely divisible. Indeed, Spinoza, in emphasizing the distinction between quantity as conceived concretely by the intellect and quantity as conceived abstractly through the imagination, suggests that divisibility is simply imaginary:

This will be sufficiently plain to everyone who knows how to distinguish between the intellect and the imagination — particularly if it is also noted that matter is everywhere the same, and that parts are distinguished in it only so far as we conceive matter to be affected in different ways, so that its parts are distinguished only modally, but not really. (G II/59/30-5)

How far the modes as parts are considered divisible seems an open question. If the imagination regards substance as consisting of parts, and it regards their quantity abstractly, then perhaps the imagination has nothing to stop it from dividing modes in substance infinitely. But does this mean that the finite modes are only potentially infinite as far as divisibility is concerned, or are they ever, in fact, actually infinitely divided?

Deleuze on the Extensive Infinity of “Simplest Bodies”

Gilles Deleuze argues that the finite modes of the attribute of extension are *actually* infinitely divided — that is, that each finite individual body is composed of an infinite plurality of what Deleuze refers to as “extensive parts.” Deleuze bases his reading on Spinoza’s discussion of the “simplest bodies” (*corpora simplicissima*) that appears in IIL1-3 and the two axioms that immediately follow these Lemmata,²⁰ in conjunction with a passing comment Spinoza makes in Letter 6. Deleuze’s reading is rather unusual, but I think he is right to think that Spinoza must accept actual infinite divisions, and that the simplest bodies are the resultant components of such a division.

The Lemmata in Part II constitute a brief account of the nature of bodies (IIP13 Schol.: G II/97/16-8); Spinoza admits that the matters he discusses in the Lemmata deserve demonstration in more detail, but in the *Ethics* he is not primarily interested in providing a full account of physics (IIL7 Schol.: G II/102/14-8). Hence his account of bodies is sketchy.

²⁰ In his discussion of the nature of bodies in the Lemmata in Part II, Spinoza inserts two additional sets of axioms, the first a set of two and the second a set of three. Unfortunately he (or his editors) rather than numbering these axioms continuously with the five axioms from the beginning of Part II instead renumbers each set, and indicates the axiom to which he refers by mentioning where they appear in the text — for example, when referring to the first axiom of the second set Spinoza cites “Axiom I following the Corollary to Lemma 3” (G II/104/4; my translation). Since Spinoza’s use of these axioms is localized in the Lemmata to Part II and the propositions following immediately thereafter, it is not a significant problem for interpretation; nevertheless, it is at least awkward. To avoid confusion Curley adopts the convention of marking the first set of axioms with single primes and the second with double primes; I follow Curley’s notation here. Hence the axioms discussed in this section will be referred to as to as IIA1” and IIA2”.

Lemma 1 asserts “Bodies are distinguished from one another by reason of motion and rest, speed and slowness, and not by reason of substance” (G II/97/25-6). In IIA2” Spinoza makes clear that he has only the simplest bodies in mind here: “This will be sufficient concerning the simplest bodies, which are distinguished from one another only by motion and rest, speed and slowness. Now let us move up to composite bodies” (G II/99/23-5). In Lemmata 4 through 7 Spinoza makes clear that each composite body has a “nature” or “form” which can persist through certain changes in the number, motion, or disposition of the composite body’s parts. Deleuze notes that Spinoza must intend, then, that the simplest bodies are distinguished *only* in terms of motion and rest, which means that their character is exclusively extrinsically determined — they cannot be distinguished in terms of intrinsic characteristics.²¹ However, this appears to produce a serious problem for Spinoza: if the simplest bodies are differentiable only in terms of the extrinsic characteristic of being in a state of motion or rest as determined by other bodies, then none of these bodies has a nature or form intrinsic to it; therefore no simple body has an individual essence. On Spinoza’s terms it follows that these simple bodies could not be modes, and therefore could not exist.²² Deleuze’s curious solution to this problem is to concede that these simple bodies are indeed essenceless, and hence strictly speaking “have no existence of their own” singly or in any finite number; rather, these simple bodies are “extensive parts” of every existing individual, and must always appear in actually infinite pluralities.²³ The nature or form of the composite individual, then, is a modal essence, which is a “degree of intensity” or an intensive quantity of power which cannot be distinct from other essences in any extrinsic way;

²¹ Deleuze, 205.

²² Ibid., 206.

²³ Ibid., 207.

the essence thus serves as the principle which unites an extensively infinite plurality of simple bodies as an individual body.²⁴

Thus Deleuze argues that for Spinoza “all existence by definition is composite”: every individual consists of an infinite plurality of extensive parts informed by a singular essence which is a specific “degree of intensity.”²⁵ According to this distinctively Leibnizian reading every individual must involve a plurality of other individuals, which in turn must involve a plurality of still other individuals, and so on to infinity. Conversely, each finite individual is involved in another individual as a component, and at the limit is an infinite individual, the face of the whole universe (*facies totius universi*), which comprehends all other individuals whether they are contemporaneous or successive.²⁶ In Deleuze’s view the infinity of extensive parts which underwrites his interpretation corresponds to the third kind of infinity delineated in Letter 12, the “indefinite,” whose parts are inexpressible by any number. The indefinite has three negative characteristics: (1) it is not “equal to itself,” yet can be conceived as greater or less, (2) it is not unlimited because it relates to something limited by a maximum and minimum, and (3) it is not infinite through the multitude of its parts because its parts exceed any number whatsoever.²⁷

Deleuze’s reading seems implausible because the concept of simple entities appears inconsistent with the assertion of infinite divisibility. But Deleuze, remarking that he is puzzled at one commentator’s contention that simple bodies and infinite division are incompatible,²⁸ points out that there is no inconsistency so long as one assumes an *actual* infinite division.²⁹ If

²⁴ Ibid., 196-7.

²⁵ Ibid., 207.

²⁶ Ibid., 204.

²⁷ Ibid., 202-3.

²⁸ Deleuze has Albert Rivaud in mind; see *ibid.*, 381 n. 11.

²⁹ *Ibid.*, 205.

the individual is actually infinitely divided, there must be resultant component entities which are not “nothings” or abstract mathematical points. Though Deleuze does not discuss the historical background for justification of his reading, this sort of thinking is hardly unprecedented in early modern thought. Galileo Galilei argues (through the character of Salviati) in *Dialogues Concerning Two New Sciences* that every solid body consists of an infinite plurality of indivisible parts which envelop an infinite plurality of infinitely small “vacua” or empty spaces.³⁰ Galileo intends this physical model to account for the empirical phenomena of condensation and rarefaction as well as that of cohesion, but his introduction of the infinite into the account is clearly motivated by rational considerations. Galileo argues that infinite divisibility of any continuous quantity necessarily presupposes that it is composed from an infinite plurality of indivisible quantities that are not of finite size: if there were not an infinite plurality then division would come to an end, and if each component of this infinite plurality were of finite size then the continuous quantity necessarily would be of infinite magnitude.³¹ Galileo relies on a geometrical example as support for his claim that there can be actual infinite divisions: a circle is a polygon consisting of infinitely many sides, and because the vertices of a polygon constitute actual divisions, a circle constitutes an actual infinite division.³² Galileo denies that we can understand the infinite, but nevertheless thinks that we cannot help but deal with it even if only “in a roundabout way”;³³ since he contends that “where the senses fail us reason must step in” it seems likely that Galileo thinks that in some way we can grasp by means of reason that bodies are composed of infinitely many infinitely small parts.³⁴

³⁰ Galileo Galilei, *Dialogues Concerning Two New Sciences*, trans. Henry Crew and Alfonso de Salvio (New York: Dover, 1954), 25.

³¹ *Ibid.*, 33-4.

³² *Ibid.*, 47-8.

³³ *Ibid.*, 26.

³⁴ *Ibid.*, 60.

Deleuze clearly thinks that Spinoza holds something similar to Galileo's position, and his evidence is a passage from Spinoza's Letter 6. This letter is a critique of Robert Boyle's *Certain Physiological Essays*; in response to a remark of Boyle's regarding the confirmation by chemical experimentation of the smallness of parts of fluids, Spinoza objects:

No one will ever be able to confirm this by Chemical experiments, nor by any others, but only by demonstration and computation. For it is by reasoning and calculation that we divide bodies to infinity, and consequently also the Forces required to move them. But we can never confirm this by experiments. (G IV/29/13-17; Curley's translation, modified)

Though this could be interpreted to suggest that reason performs divisions of bodies to infinity, and hence that such divisions may not be real, it is more likely that Spinoza really intends that there are such infinite divisions that account for the observable characteristics of fluids, but that this can only be grasped by reason. The difference between Galileo and Spinoza on this point is that Galileo thinks that we are incapable of understanding the infinite (even as we cannot help but discuss matters concerning it) whereas Spinoza thinks matters of the infinite are perfectly intelligible.³⁵

Though Deleuze does not appeal to it, there is indeed concrete textual evidence that Spinoza accepted that at least some extended bodies are actually infinitely divided into infinitely small simple particles, in particular those bodies which are perfectly fluid. This support comes from Spinoza's account in *Descartes' "Principles"* of the changes a fluid must undergo as it passes through a circular pipe of varying width — essentially a three-dimensional version of the nested non-concentric circles Spinoza discusses in Letter 12. It is worthwhile to compare Descartes' and Spinoza's versions, for where Descartes' account of the division of particles in a

³⁵ Determining Spinoza's knowledge of the thought of other philosophers is a difficult task, as little is known of his formal education, and Spinoza is notorious for omitting the names of the thinkers whom he criticizes for fear of provoking conflicts. I have found no concrete evidence that Spinoza ever read Galileo's *Dialogues*. However, Steven Nadler thinks that Spinoza may have been exposed to the works of Galileo and Giordano Bruno (who also has interesting things to say about the nature of infinity) during his tenure as a student of Franciscus van den Enden (*Spinoza: A Life* (Cambridge, England: Cambridge University Press, 1999), 111).

fluid as “indefinite” to some degree marks an avoidance of characterizing the metaphysical status of the division, Spinoza evidently thinks of it as an actually infinite division.

Descartes’ example appears in his discussion of motion in the plenum. Since for Descartes matter is identical with extension, and hence cannot be condensed or rarified, all motion involves pushing other bodies out of the way, and can only happen in circles: the moving body pushes into another body’s place, the body moved out of that place pushes into another’s place, and so on until some body pushes into the first moving body’s place. All of these motions are simultaneous with one another.³⁶ But suppose an “imperfect” (as Descartes puts it) pipe or ring governs the circular motion of a fluid, a ring which undergoes continuous changes in width, such that, for example, its widest section is four times as wide as its narrowest section. Since equal amounts of matter must pass through every part of the space in the ring in any given period of time,³⁷ Descartes deduces that “the variations in the spaces can be compensated for by variations in speed”; thus the speed of the motion of the matter in this ring is four times as fast at the narrowest space as at the widest space.³⁸

There are some interesting consequences involved in Descartes’ use of the term ‘indefinite’ in this scenario. If the change in the width of the space is continuous, then it follows that the moving particles of matter must experience “an infinite, or indefinite, division” in order for the matter to be able to move into the continuously narrowing sections.³⁹ If none of the particles of matter were so divided then the particles would wedge or jam into a narrower section and the motion could not continue — indeed, it could not start in the first place since the motions are simultaneous. Thus some portion of the particles must be so subdivided that “however small

³⁶ *Principles* II, 33 (CSM I 237-8).

³⁷ *Principles* II, 33 (CSM I 239).

³⁸ *Principles* II, 33 (CSM I 238).

³⁹ *Principles* II, 34 (CSM I 239).

we make a particle in our thought, we always understand that it is in fact divided into other still smaller particles.”⁴⁰ Descartes is quick to point out that not all of the matter in the ring need be indefinitely divided for motion to occur; some of the particles can be as wide as the narrowest section, and hence of definite extension and number. Still, there must be some portion of the particles which are indefinitely divided and thus can “somehow bend and change shape” so that they can fill any interstices.⁴¹ In essence Descartes is positing that a fluid “subtle matter,” consisting of particles which are divided beyond our capacity to divide them even in thought, must exist if motion through such “imperfect” spaces is possible.

The problem for Descartes is that he is forced to admit that “we come upon something the truth of which our mind perceives, while at the same time being unable to grasp exactly how it occurs.”⁴² We cannot grasp the indefinite division because we are finite, but we know that it must occur.⁴³ This is consistent with Descartes’ distinction between the infinite and the indefinite, where the infinite is positively understood as an attribute of God, whereas the indefinite involves a negative acknowledgement that there are things which may or may not have limits but we cannot discover them.⁴⁴ Descartes explicitly claims that the divisibility of bodies is indefinite.⁴⁵ Nevertheless there is a tension: Descartes distinguishes the indefinite from the infinite along epistemological lines, describing the indefinite in terms of a limitation of our knowledge grounded in our finitude.⁴⁶ This is acceptable if we say only that we cannot find any smallest particle, or any number that will represent the plurality of particles in a fluid, because finite beings are incapable of carrying out analyses indefinitely. Nevertheless at base there is a

⁴⁰ Ibid.

⁴¹ *Principles* II, 35 (CSM I 239).

⁴² *Principles* II, 34 (CSM I 239).

⁴³ *Principles* II, 35 (CSM I 239).

⁴⁴ *Principles* I, 27 (CSM I 202).

⁴⁵ *Principles* I, 26 (CSM I 202).

⁴⁶ Gueroult argues that “the Cartesian indefinite is eminently subjective, resulting above all from our inability to decide between the finitude or objective infinity of the thing” (“Spinoza’s Letter on the Infinite,” 185).

piece of positive knowledge here which requires no endless analysis: in the case of the “imperfect” ring there must be an actual division in the subtle matter in order for there to be any motion at all. This is as clear and distinct as we could desire.

Spinoza appears aware of this tension. In IIP11 of *Parts I and II of Descartes’ “Principles of Philosophy”* Spinoza asserts that the matter in a circular pipe of continuously changing width is divided into “indefinite parts [*particulas*]” (G I/199/27). Interestingly, Spinoza draws attention not only to the indefinite division of the parts of the fluid, but also (in IIP10) to the “indefinite degrees of speed” that the fluid undergoes in its travel through the pipe (G I/199/14-5). Descartes mentions that “all the variations in the spaces can be compensated for by variations in speed,”⁴⁷ but says nothing of the variations in speed being indefinite in number, though it is surely implied; Spinoza appeals to the indefinite variations in speed in order to demonstrate the indefinite division of the particles themselves. The demonstration argues that since the widths of the pipe are “unequal everywhere” (IIP10 Dem.: G I/199/17), the flowing matter “acquires...indefinite degrees of speed (by P10)” (IIP11 Dem.: G I/200/2-3). Given the axiom that matter must be “actually divided” into as many parts as there are different degrees of speed (IIA16: G I/185/6-8), it follows that the matter in the pipe has “indefinite parts which are really divided” (IIP11 Dem.: G I/200/4).

Since this work is an exposition of Descartes’ philosophy and not his own, Spinoza here uses the Cartesian term ‘indefinite’ faithfully. But Spinoza’s description of the indefinite plurality of parts as “actually” and “really” divided emphasizes that underlying any epistemically negative characterization of such a division is the positive understanding that there is a real division. If to say the division of the particles is “indefinite” means that we can grasp that we are

⁴⁷ *Principles II*, 33 (CSM I 238).

incapable of finding a limit to the division of particles of matter because of our finitude, we nevertheless must grasp that this matter is “actually” divided without limit.

In all fairness, Descartes could not have intended that the status of the “indefinite” division of matter in a fluid is purely mind-relative, or that this is only an epistemological issue. Clearly there is something about the nature of extension that not only allows but also requires division that cannot be conceived to come to an end through some finite procedure. Indeed, Descartes himself obliquely admits that there is an actual division of these parts of matter when he remarks that the shifting of position of innumerable particles is “a true case of division.”⁴⁸ The fact that he characterizes the indefinite in epistemological terms, as our inability to find any limits to division of extension, does not entail that there is no deeper metaphysical structure to the nature of extension that explains our inability to find any indivisible atoms. But there remains the question of why we should not, using Descartes’ own distinction, consider this division an infinite one. Descartes’ motivation for calling it indefinite respects his requirement that we reserve the infinite as properly an attribute of the nature of God alone.⁴⁹ But, lacking this motivation, why should we accept that there is an “indefinite” division of matter rather than an “infinite” one?

Descartes is aware of this problem, but apparently wishes to sidestep it as much as possible. Asserting that divine revelation trumps our finite understanding,⁵⁰ Descartes classes the infinite as something more or less philosophically off-limits: “Thus we will never be involved in tiresome arguments about the infinite. For since we are finite, it would be absurd for us to determine anything concerning the infinite; for this would be to attempt to limit it and grasp

⁴⁸ *Principles* II, 34 (CSM I 239).

⁴⁹ *Principles* I, 27 (CSM I 202). It should be noted that Descartes is not entirely consistent on this count, particular in his account of the human will; see *Principles* I, 35 (CSM I 204). See also n. 9 above.

⁵⁰ *Principles* I, 25 (CSM I 201).

it.”⁵¹ In this way Descartes dismisses various puzzles concerning the infinite, such as whether half an infinite line is infinite, or whether an infinite number is odd or even; things for which we cannot find a limit we describe as “indefinite” and leave it at that.⁵² Thus for Descartes our finitude constitutes a reason for avoiding the problems of the infinite.

But Spinoza does not share Descartes’ hesitance to articulate the nature of the infinite; Letter 12 shows that Spinoza thinks the infinite and the indefinite can be intelligibly distinguished. Spinoza’s account differs from Descartes’ mainly in its tacit claim that the finitude of the human knower is irrelevant to his or her understanding of the infinite. We should understand the distinction between infinite and indefinite as a distinction between qualities which pertain to different kinds of things. The only aspect of the division of fluid particles in the imperfectly circular pipe that evidently qualifies as unknowable is the *number* of parts into which the fluid is divided; however, the reason we cannot know the number of parts is not because we are finite, but because number simply does not apply to quantity of parts in such a division.

In Letter 12 Spinoza deemphasizes the element of fluid motion from the example of the imperfect circular pipe; he mentions that the “variations” in the moving matter must “exceed every number” (G IV/59/15-16), but from there treats the model as two-dimensional, simply two nonconcentric circles. Spinoza apparently wishes to focus on the root cause of the “indefinite” division of the particles, which is not anything in the particles themselves but rather is in the nature of the space between the two circles. The space between the circles is not of “excessive size [*magnitudine*]” (G IV/59/17), nor are the maximum and minimum widths unknown. Then why is it the case that the inequalities of width present between these circles, no matter how small a portion we consider, “exceed every number” (G IV/59/19 – 60/1)? It is simply because

⁵¹ *Principles* I, 26 (CSM I 201-2).

⁵² *Principles* I, 26 (CSM I 202).

“the nature of the space between two nonconcentric circles does not admit anything of the kind” (G IV/60/4-6). To assign a definite number to the inequalities would require that one “bring it about that a circle is not a circle” (G IV/60/7-8).

Thus Spinoza draws a very different conclusion from the case of the imperfect circular pipe than Descartes does, and this reflects their difference with respect to the matter of our ability to grasp the infinite. Descartes concludes that when a division exceeds any given number this primarily illustrates the fact that our ability to determine such a division is finite. Hence Descartes’ characterization of the difference between infinite and indefinite has an epistemological flavor: ascribing either of these qualities to something only emphasizes the limits of our knowledge due to our finite nature. By contrast Spinoza contends that there are things that exceed any given number because number, a “being of reason” that enables us to imagine certain things more easily, has no proper application to those things. Thus the problems we face in dealing with the infinite are not caused by our attempts to comprehend the infinite despite our finitude, but rather by our confusion about what sorts of infinitude there are and when and where they apply. Hence Spinoza continues by remarking that, for example, if one were to attempt to enumerate all the motions of matter there have been up to the present moment, and to represent their duration with some definite amount of time, this would amount to “depriving corporeal Substance...of its Affections and bringing it about that it does not have the nature which it has” (G IV/60/12-5).

In sum, I think that Spinoza more or less accepts the Cartesian concept of the indefinite, but provides a clearer sense of its conceptual continuity with the infinite than Descartes does. For Descartes the property of being indefinite obtains in circumstances (such as the “imperfect” circular pipe) where a finite being is incapable in principle of finding any limit, and this must be

considered separately from the infinity of God, which we positively know has no limit. While Spinoza would agree that finite beings can find no limit to the division of matter, he nevertheless sees this phenomenon as a species of the infinite, for the “actuality” of the division of the fluid in the circular pipe is intelligible and necessary: we positively know that at least some of the matter is completely divided, for otherwise the matter could not move at all. The fact that we cannot find a limit to the number of parts or variations of speed need not be attributed to the limitations of a finite understanding; rather, it is because in the case of this sort of plurality number does not properly apply. Hence it is unsurprising that Spinoza in Letter 12 considers it appropriate to call the division of particles infinite: “...some things, finally, are called infinite, or if you prefer, indefinite, because they cannot be equated with any number, though they can be conceived to be greater or lesser” (G IV/61/3-5; Curley’s translation, modified).

Spinoza’s understanding of the nature of the indefinite tends to support Deleuze’s reading. However, there are problems. The most significant is that it is not clear that in order for a body to be “simple” it must be the product of an actual infinite division. In the *Ethics* Spinoza says only that the simplest bodies “are distinguished from one another only by motion and rest, speed and slowness” (IIA2”: G II/99/23-4). Hence it appears that simplicity in this context really consists in a uniformity of motion: a body could be of finite size and yet be “simple” if its virtual parts all move with the same velocity (that is, at the same speed and in a common direction). Such a “simple” body is in principle infinitely divisible, because its simplicity consists only in the fact that the motion of its internal virtual parts is completely uniform. By contrast, an individual has real parts, ultimately composed of simple bodies with different velocities, yet the causal interactions between these parts maintain a certain “ratio [*rationem*] of motion and rest” (IIL5: G II/101/2) — that is, the interactions are such that the whole individual

maintains a certain homeostasis of overall structure. Thus Spinoza need not contend that *every* individual consists of an infinite plurality of extensive parts — only those that have fluid parts would have an infinite plurality of extensive parts, and if the individual is not completely fluid in structure some of those parts would be of finite size.

Perhaps one could defend Deleuze's reading by arguing that if the simplest bodies can be distinguished *only* by motion and rest, then they cannot be distinguished in terms of other properties such as shape or size. This entails that either all of the simplest bodies have the same shape or size, or all have no determinate shape or size. If the simplest bodies that compose a fluid have some shape or size, then if there were other simple bodies that were not products of an infinite division, these would be larger than the particles of fluid, and hence could be distinguished by other means than that of their motion or rest. Since the circular pipe example shows that Spinoza thinks there must be simple bodies that are actually infinitely divided, if these have some shape or size and yet can only be distinguished from other simple bodies in terms of motion and rest then there can be no simple bodies that are not constituents of an actual infinite division. The alternative is that the simplest bodies have no determinate shape or size; again Deleuze's reading seems to fit the bill best, for there is no clear way of attributing a shape or size to the parts of an infinitely divided body. However, one could reply that shape is also an extrinsic determination, because it is determined by the forces of other bodies impacting the given body; that is, the body has its shape relative to the determinative causal action of surrounding bodies. Moreover, the shape would be a function of the common motion of the simple body's virtual parts and not of any intrinsic character.

This problem is difficult to resolve because we do not have a complete account of Spinoza's physics. Spinoza was strongly influenced by Descartes' physics, but in the end he felt

that Descartes' emphasis on extension as the basic characteristic of matter was not adequate.

This is evident from an exchange between Spinoza and Tschirnhaus in their correspondence less than a year before Spinoza's death. Tschirnhaus wishes to know how distinct individuals can be derived from extension:

I would like you to oblige me in this matter by indicating how, according to your meditations, the variety of things can be shown *a priori* from the concept of extension. For you recall Descartes' opinion: he maintained that he could not deduce it from extension in any other way than by supposing that this was brought about in extension by a motion started by God. (Letter 82: G IV/333/6-11)

Spinoza replies:

You ask whether the variety of things can be demonstrated *a priori* from the concept of extension alone. I believe I have already shown sufficiently clearly that this is impossible, and that therefore Descartes defines matter badly by extension, but that it must necessarily be defined by an attribute which expresses eternal and infinite essence. But perhaps I will treat these matters more clearly with you some other time, if life lasts. For up till now I have not been able to set out anything concerning them in an orderly way. (Letter 83: G IV/334/22-8)

We can perhaps speculate that, given Spinoza's emphasis on motion-and-rest as the principle that allows for the distinction of simple bodies, that Spinoza thinks Descartes' error is to begin with extension understood as shape and size. This forces Descartes to appeal to an introduction of motion by God in order to derive variations in extension, and hence individuation of bodies.

Perhaps Spinoza would instead begin with motion-and-rest, and then turn to the derivation of individuals of varying shape and size. That is, if the simplest bodies were differentiated primarily in terms of definite shape and size then they would have some intrinsic character by means of which they could be distinguished. But Spinoza contends that they are differentiated in terms of their motion and rest, which as Deleuze argues is an extrinsic determination.

Meanwhile, a composite individual is a homeostatic pattern of motion-and-rest; hence motion-and-rest is the principle which allows for the actualization of this pattern, which is the individual's intrinsic nature. The simplest bodies are the basic components of motion-and-rest,

and have no intrinsic nature of their own, since they are participants in the actualization of the essence of an individual. Hence we might speculate that for Spinoza only an individual can have size and shape, and this is a consequence of the particular pattern of motion and rest which that individual instantiates. Perhaps Spinoza at the end of his life was moving towards replacing the attribute of extension with an attribute of motion-and-rest.

In any case, it seems that there is good evidence for thinking that Spinoza regarded at least some individuals as compositions of infinite pluralities of parts. This, then, accounts for the third sense of *infinitum* discussed in Letter 12, and its continuity with the infinity of substance consists in the immanence of God in each mode: the indivisibility of God's infinite essence underwrites the infinite division, or at least divisibility, of extension.

The Infinite Modifications of Substance

The infinite divisibility (or perhaps even infinite division) of extended bodies accounts for the third way of being infinite discussed in Letter 12, and the immanence of the infinity of God as substance in the finite modes constitutes the continuity between these two senses of *infinitum*. What remains, then, is the second way of being infinite: those things which are infinite “in virtue of the cause in which they inhere, though when they are conceived abstractly they can be divided into parts and regarded as finite” (Letter 12: G IV/61/1-3; Curley's translation, modified).

Perhaps Spinoza here has in mind the infinite as manifested in the infinite modes. Spinoza speaks so little of the infinite modes that there are few textual resources for supporting a reading of the infinity of the infinite modes as abstractly or imaginably finite. One line of reasoning takes advantage of the ambiguity of the phrase *infinita infinitis modis* in IP16 (G

II/60/17). This phrase can be translated as “infinite things in infinite modes,” which could mean infinitely many *finite* things contained or involved in the infinite modes. This reading is supported by Spinoza’s claim in the Scholium to IIL7 that the whole of nature is an infinite individual composed of all individuals whatsoever (G II/102/8-13), to which he evidently refers when he designates “the face of the whole universe [*facies totius Universi*]” as a mediate infinite mode in Letter 64 (G IV/278/26). This reading is motivated by the assumption that the infinite modes serve as the principal mediators between substance and the finite modes, and so some commentators think the infinite modes mediate by constituting the infinite totality of all finite modes under a given attribute. For example, Joel Friedman argues that the immediate infinite mode of an attribute contains the formal essences of finite modes while the mediate infinite mode contains the actual finite modes themselves.⁵³ Friedman argues that there are two senses of necessity implicit in the locution “follows from” in propositions such as IP16, one of “logico-metaphysical necessity” and one of “causal necessity,” and that these senses operate simultaneously, generating a “systematic ambiguity” in Spinoza’s thought which makes certain propositions “bifurcate” into two statements.⁵⁴ The result is that the structure behind the production of the finite modes involves intersecting lines of logico-metaphysical and causal entailment: the finite modes follow jointly from the causal powers of the divine nature and antecedent finite modes in the causal series, whereas their formal essences follow logico-metaphysically from the divine nature yet follow causally from other finite formal essences in

⁵³ “How the Finite Follows from the Infinite in Spinoza’s Metaphysical System,” 388. Friedman also provides graphical representations of his account of the metaphysical relationships of the attributes of thought and extension and their infinite and finite modes (402-3).

⁵⁴ *Ibid.*, 371; Friedman discusses the bifurcation of IP16 on p. 393.

their own series.⁵⁵ It follows, then, that the infinite modes are the collective results of these causal intersections.

I have argued that the primary function of the infinite modes is not to serve as mediators between substance and the finite modes, but rather as the conditions for the intelligibility of substance in so far as it is expressed in infinite attributes. I think it is plausible that the infinite modes are infinite in the second sense Spinoza enumerates in Letter 12; however, I think that while this sense of *infinitum* does serve as the articulation point for a relationship between substance and finite modes, the infinite modes are not the manifestation of this relationship. Rather, the finite modes themselves are infinite in this second sense: they are abstractly regarded as finite, but as apprehended by the intellect they are more fundamentally infinite.

A few commentators regard the finite modes as in some sense infinite. Frank Lucash argues that for Spinoza infinity is a matter of degree. Substance is infinite in the highest degree; the immediate infinite mode, limited only by substance, is infinite in a lower degree; the mediate infinite mode is limited by substance and the immediate infinite mode and so is infinite in a still lower degree; finally the finite modes are limited by all of these as well as by other finite modes, but according to Lucash this really means that they are infinite in still lower degrees.⁵⁶ Hence reality is a scale of degrees of infinity ranging from substance to the finite modes, in which some finite modes are more infinite and less finite than other finite modes; the portion of the scale that contains the finite modes constitutes “an infinite series which is contained in substance and whose members are progressively less infinite than substance.”⁵⁷ Though James Thomas does not discuss the nature of the finite modes in any detail, he too thinks that they are infinite in one respect. His distinction between the order of being and the quality of being allows him to

⁵⁵ Ibid., 390-2.

⁵⁶ “On the Infinite and Finite in Spinoza,” 70.

⁵⁷ Ibid., 71.

explain Spinoza's assertion in Letter 12 that some things are infinite as grasped by the understanding yet finite as grasped by the imagination. Thomas contends that the attributes insofar as they are infinite modes are infinite with respect to the order of being — for each adequately expresses the entirety of nature — yet they are finite with respect to the quality of being, for each attribute as an infinite mode “is a certain determinate quality of being.”⁵⁸ The converse is the case for the finite modes: “Within the complete order intuited [there] is also a system of finite modes that are finite with respect to order and infinite with respect to being. Spinoza usually referred to these as finite.”⁵⁹

My own reading follows Thomas insofar as the second sense of *infinitum* seems to apply to the finite modes as well as the infinite modes. It is clear in Letter 12 that this second way of being infinite is perceived as finite and divisible only “abstractly” — that is, it is perceived this way only by the imagination. On the reading of radical mutual containment this plausibly is attributable to the mediate infinite modes, as each is infinite in its own kind but is not infinite absolutely. That is, the mediate infinite modes can be regarded as finite relative to one another, but this is to consider them only abstractly: each mediate infinite mode is really one and the same with some attribute, and each attribute contains every other attribute as modes. Thus there is a sense in which an infinite mode can be imaginatively regarded as finite and as at least a product of the imaginative division of substance into distinct attributes. Meanwhile the finite modes are similarly only imaginatively finite and divisible, but as grasped by the understanding are recognized as infinite. Finite things as they are in themselves are infinite insofar as they are expressed in an infinite array of corresponding modes across the infinite plurality of attributes.

⁵⁸ *Intuition and Reality*, 92.

⁵⁹ *Ibid.*

The evidence for my reading can be gleaned from the Scholium to IIP7. In an important but ambiguous passage Spinoza remarks:

Before we proceed further, we must recall here what we showed, viz., that whatever can be perceived by an infinite intellect as constituting the⁶⁰ essence of substance pertains to one substance only, and consequently that the thinking substance and the extended substance are one and the same substance, which is now comprehended under this [*hoc*] attribute, now under that [*illo*]. So also a mode of extension and the idea of that mode are one and the same thing, but expressed in two ways. (G II/90/2-9; Curley's translation, modified)

This passage might be read as though Spinoza, though he specifically discusses the two attributes of which we have knowledge, ultimately speaks indifferently of any attribute of substance: that is, substance is one and the same regarded under this or that attribute — which would include not only thought and extension, but any of the other attributes as well. Interpreted this way, the passage suggests that the same situation holds for the mode that is one and the same, but regarded in two ways: in principle each finite thing can be conceived as a mode of any of the infinite plurality of attributes, and so any mode under the attribute of extension (for example) is one and the same thing as some corresponding mode in each of the other attributes. If this is the case, then a finite mode is infinite in the sense that it is expressed across the infinite attributes which express the essence of God.

However, this passage by itself does not positively support this interpretation. The Latin terms *hoc* and *illo*, which suggest indifference to the attribute under which substance is considered, more likely in this context have the force of “the latter” and “the former,” respectively. That is, they refer back specifically to the attributes of thought and extension as mentioned earlier in the sentence, and thus assert nothing about other attributes of substance. It

⁶⁰ Curley follows Charles Appuhn and inserts the indefinite article here; see Curley, *Collected Works*, 451 n. 10. I follow most others, including Shirley, in supplying the definite article; the indefinite article suggests that substance has a plurality of essences, which is implausible given the indivisible unity of substance. See Donagan, “Essence and the Distinction of Attributes in Spinoza's Metaphysics,” 176-7.

seems clear from the early propositions in the *Ethics* that Spinoza would agree that substance is one and the same regarded under any attribute, whether it is one we know of or not. But here he restricts himself to discussing the two attributes which we in fact know. Since his inference that an extended mode and its idea are one and the same derives from this restricted statement about the two known attributes of substance, we should only infer that the mind and body are one and the same, not the further claim that there are corresponding modes in other unknown attributes which are one and the same with these.⁶¹ Considering that Spinoza's primary interest in the *Ethics* is the nature of human well-being, it is unsurprising that he speaks only of the relationship between mind and body, and ignores the issue of corresponding modes from other attributes.⁶² Since these are unknown to us (and perhaps unknowable (Letter 64: G IV/278/3-5)) and we need not know anything of them to attain the highest human well-being (*beatitudo*), Spinoza has little reason to discuss them.

Nevertheless, as Spinoza continues his discussion in the Scholium to IIP7 he gestures towards the other attributes in a way that shows that the parallelism of order between thought and extension extends to all attributes. Clearly this follows from the claim that the diversity of attributes must express a single substance.

Therefore, whether we conceive nature under the attribute of Extension, or under the attribute of Thought, or under any other attribute, we shall find one and the same order, or [*sive*] one and the same connection of causes, i.e., that the same things follow one another. (G II/90/14-8)

These shared causal orders are, however, causally separate from one another. In the last part of the Scholium Spinoza draws this further conclusion tacitly from IIP6, "The modes of each

⁶¹ A similar passage in the Scholium to IIP2 which refers back to the Scholium to IIP7 makes the same use of *hoc* and *illo* (G II/141/23-30); since in this context Spinoza is again exclusively interested in the relationship of mind and body, again I think we should read *hoc* and *illo* here as "the latter" and "the former," respectively.

⁶² The thesis of radical mutual containment entails a specific *metaphysical* reason for Spinoza to deal with the human individual as a duality of mind and body rather than as an infinite multitude of corresponding modes across the infinite attributes. I will discuss this further in Chapter Seven, pp. 268-71.

attribute have God for their cause only insofar as he is considered under the attribute of which they are modes, and not insofar as he is considered under any other attribute” (G II/89/4-6).

Hence, so long as things are considered as modes of thinking, we must explain [*explicare*] the order of the whole of nature, or [*sive*] the connection of causes, through the attribute of Thought alone. And insofar as they are considered as modes of Extension, the order of the whole of nature must be explained [*explicari*] through the attribute of Extension alone. I understand the same concerning the other attributes. So of things as they are in themselves, God is really the cause insofar as he consists of infinite attributes. For the present, I cannot explain [*explicare*] these matters more clearly. (G II/90/23-30)

The penultimate sentence is of particular interest. Spinoza’s allusion to “things as they are in themselves [*rerum, ut in se sunt*]” suggests some reality other than modes of particular attributes; where Spinoza has been considering modes as considered under a given attribute, which (by IIP6) are caused by God as considered exclusively under a specific attribute, here Spinoza refers *res ut in se sunt* to God insofar as he consists of infinite attributes. It appears that Spinoza thinks things as they are in themselves are realities that underlie the modes of attributes, and these things are expressed as sets of corresponding modes across the infinite plurality of attributes. This accounts for why the order and connection of modes of thought is the same as the order and connection of modes of extension, and further implies that the order and connection of modes of any attribute whatsoever must also be the same.

Most important is Spinoza’s remark that things as they are in themselves are caused by God insofar as he consists of *infinite attributes*. ID6, the definition of ‘God’, defines God as a substance consisting of infinite attributes; only later does Spinoza speak of God as substance considered under a given attribute (i.e., God as an extended thing (IIP2) or as a thinking thing (IIP1)). Hence, ‘things as they are in themselves’ refers to God’s power not insofar as God is considered as a thinking thing or an extended thing, but insofar as God is considered as consisting of infinite attributes. This amounts to saying that things as they are in themselves are

not intrinsically modes of any given attribute, but instead are expressed as corresponding modes across the infinite plurality of attributes. So from his early emphasis in the Scholium to IIP7 on the parallelism of corresponding modes of the attributes of thought and extension, in the last two paragraphs Spinoza segues briefly into the parallelism of the orders of the infinite plurality of attributes. *Res ut in se sunt* are expressed as correlative finite modes in each attribute, and hence a finite mode is infinite insofar as it is an expression grounded in a certain thing-as-it-is-in-itself that is expressed in every attribute.

Here we face an apparent problem: things as they are in themselves seem to transcend the correlative modes across the infinite attributes which express them. Hence Spinoza appears to have violated his commitment to immanentism. But this is only apparent, for on the thesis of radical mutual containment the account of things as they are in themselves requires no more appeal to transcendence than the metaphysical account of substance does. The Scholium to IIP7 asserts that all systematic explanation of the nature of reality must take place within the confines of one attribute. In metaphysical philosophy we conceive reality through the attribute of thought. Hence in our metaphysical thinking the metaphysical concept of a thing as it is in itself is strictly speaking a mode of thought. But as conceived under the attribute of thought this mode has a peculiar character, for it consists in a set of correlative modes in each of the other attributes insofar as these attributes are conceived through the attribute of thought — that is, insofar as the attributes are mediate infinite modes. So we might regard the thing as it is in itself as the totality of corresponding positions in the order of causes which is one and the same as expressed in each mediate infinite mode. The thing as it is in itself here is expressed as an infinite mode of thought, but since any given attribute can express the entirety of reality adequately, it follows that the thing as it is in itself is also expressed as an infinite mode in the attribute of extension,

and similarly for every other attribute. Therefore Spinoza's account of things as they are in themselves can be (and must be, if an adequate metaphysics is at all possible) expressed entirely immanently within the attribute of thought.

This account entails, then, that things as they are in themselves constitute a *second* variety of mediate infinite mode which in a metaphorical sense can be said to cut orthogonally across the mediate infinite modes which constitute the attributes *qua* contained. Where the attribute as mediate infinite mode is infinite in its own kind in virtue of its own formal reality, that is, its own intrinsic qualitative character, the thing as it is in itself as mediate infinite mode is infinite insofar as it is one totality of corresponding causal positions in the parallel causal orders that are ultimately one and the same for all attributes. The thing as it is in itself, expressed in finite modes across the infinite plurality of attributes, is a single entity for the same reason that the attributes express the essence of a single substance. Just as the real distinction of attributes does not entail a plurality of individual substances (IP10 Schol.), the distinction of the correlative modes — which, being grounded in the distinction of the attributes, ultimately must be a *real* and not a modal distinction — does not entail a plurality of individuals, but only a plurality of expressions of the same individual thing as it is in itself. It follows that each thing-as-it-is-in-itself is one entity, expressed as a non-denumerable plurality of really distinct correlative finite modes. As, for example, an individual mode of the attribute of thought is conceived independently of its correlative individual mode under the attribute of extension, fundamentally there is no context within which we could count them as two really separate individuals — that is, correlative modes are not numerically distinct. This also explains why Spinoza claims in the Scholium to IIP7 that the mind and body are one and the same, despite the fact that they are conceived completely separately.

Strictly speaking, the attributes are not numerically distinct. Nevertheless there is a sense in which they may be enumerated — but only insofar as they are conceived as mediate infinite modes conceived through a given attribute. By the same token, the correlative finite modes which express a thing as it is in itself strictly speaking are not denumerable, but so far as they are regarded as finite modes involved in distinct mediate infinite modes, they are denumerable. So, for example, the mind and body are not numerically distinct in any fundamental sense, and yet insofar as they are conceived of as correlative modes of distinct attributes — that is, insofar as they are considered as involved in the mediate infinite modes of thought and extension conceived under a given attribute, and hence insofar as both are modes of the given attribute — they can be conceived as two distinct entities.

To continue the metaphor of the metaphysical orthogonality of the two kinds of mediate infinite modes, a finite mode is constituted by the intersection of two orthogonal mediate infinite modes — that is, the intersection between an attribute conceived as a mediate infinite mode, and a particular thing as it is in itself. For example, the finite mode which constitutes a particular mind is the metaphysical intersection of a particular position in the causal order, determined by the mediate infinite mode which constitutes some particular thing in itself, with the formal reality of thought, determined by the attribute of thought conceived as the mediate infinite mode of a given attribute. Hence every finite mode can be regarded as in a sense the point of intersection between two infinite modes. It is in this sense that the finite is “derived” from the infinite.

The hypothesis that the finite modes are infinite insofar as they are expressions of things as they are in themselves presents a significant interpretive problem. The understanding of *res ut in se est* as one fundamentally real entity expressed in a mode of extension, a mode of thought, and corresponding modes across the infinite attributes implies that Spinoza could have derived a

far more general proposition than the one expressed in IIP7: the order and connection of modes of any attribute is the same as the order and connection of modes of any other attribute. This is apparently a serious problem for this reading of Spinoza, as it suggests that either the mind is not only the idea of the body, but also represents every other corresponding mode across the attributes, or else modes of no other attributes than thought or extension are represented by ideas. The latter option is explicitly excluded by IIP3, which contends that “In God there is necessarily an idea, both of his essence and of everything that necessarily follows from his essence” (G II/87/5-6). But if the former is the case, then it seems in principle that every mind should represent correlative modes of every other attribute, and hence we should be aware of all the other attributes, and not just those of thought and extension, for our mind as a mode of thought should represent corresponding modes from all of them. I will return to this problem in the concluding chapter.⁶³

For now I wish to consider the question of whether or not there is any evidence that Spinoza in fact regards the finite modes as expressions of things as they are in themselves. Deleuze does not argue this in any detail, but it is part of his position, and follows from his interpretation of the relationship of substance and attributes as one of “expression.” According to Deleuze, expression consists in a triad: that which expresses itself, the expression, and what is expressed. Deleuze contends that in Spinoza’s philosophy this triad recapitulates itself on a number of levels. The initial triad is that of substance, attribute, and essence: substance expresses itself, the attributes are the expressions, and the essence of substance is what is expressed. This first level of expression constitutes the essence of substance; a second level constitutes the production of singular things. This second triad is the expression of the attribute: the attribute expresses itself, and the modes are the expressions. But Deleuze introduces a third

⁶³ See Chapter Seven, pp. 268-71.

term for what is expressed, a “modification” of the attribute.⁶⁴ Deleuze identifies modifications with the things as they are in themselves mentioned at the end of the Scholium to IIP7: it is the ontological affection of substance corresponding to the formal affection of an attribute (i.e., a mode). What is expressed has no existence outside of the expression; hence the modification has no existence outside of its expression in correlative finite modes.⁶⁵ Hence for Deleuze the modification which is expressed in the modes is roughly analogous to the essence of substance which is expressed in the attributes.

Spinoza’s occasional use of the Latin *modificatio* appears to motivate Deleuze’s choice of the term ‘modification’. While Deleuze insists that it is important to distinguish between the terms ‘mode’ and ‘modification’,⁶⁶ he does not make any sort of argumentative case for *modificatio* having some sort of systematic use in the *Ethics* different from *modus*. This is probably because there is in fact no such systematic distinction in their use; Spinoza treats them as synonyms. Spinoza first speaks of “modifications of substances” (*modificationes substantiarum*) in Scholium 2 to IP8 (G II/49/29). Deleuze contends that while *modus* refers to the affection of a given attribute, *modificatio* refers directly to the affection of substance without respect to any given attribute,⁶⁷ and this passage supports such a reading. But other occurrences of *modificatio* in the *Ethics* refer to the attributes, not to substance. In IP23 Spinoza speaks of the mediate infinite mode as following “from some attribute, modified by a modification” (G II/66/27); the corollary to IIP10 asserts that “the essence of man is constituted by certain modifications of God’s attributes” (G II/93/12-3). The decisive evidence is that Spinoza defines *modificatio* along the same lines as the definition of *modus* from ID5: “But by modifications

⁶⁴ Deleuze, 14.

⁶⁵ *Ibid.*, 110-1.

⁶⁶ *Ibid.*, 110.

⁶⁷ *Ibid.*

they [i.e., those who correctly grasp the nature of substance] would understand what is in another, those things whose concept is formed from the concept of the thing in which they are” (IP8 Schol. 2: G II/50/6-7). Hence Spinoza must consider them synonyms.⁶⁸

Interestingly, it is in fact Tschirnhaus who gently suggests to Spinoza that some sort of systematic distinction between *modus* and *modificatio* might be useful. Tschirnhaus, struggling to understand Spinoza’s doctrine of the modes, apparently considers something akin to Deleuze’s account as a possible interpretation, though perhaps he is not entirely consistent in his usage of *modus* and *modificatio*.

Here is how things stand. Although I gather from that scholium [to IIP7] that the world is absolutely unique, still it is no less clear also from that scholium that it is expressed in infinite modes [*modis*]. And therefore each singular thing is expressed in infinite modes. From this it seems to follow that that Modification [*Modificatio*] which constitutes my Mind and that Modification which expresses my Body, although it is one and the same Modification, is nevertheless expressed in infinite modes, in one mode through thought, in another through extension, in a third through an attribute of God unknown to me, and so on to infinity, since there are infinitely many Attributes of God, and the Order and Connection of the Modifications seem to be the same in all. (Letter 65: G II/279/14-24; Curley’s translation, modified)⁶⁹

Spinoza’s letter of reply gives no indication that he endorses the terminological distinction, and indeed suggests that perhaps he would reject it. In the end, however, the terminological importance of *modificatio* is beside the point at issue. Whether Spinoza equates *res ut in se sunt* with modifications of substance does not have any bearing on the fact that Spinoza clearly thinks

⁶⁸ Curley considers *modus* and *modificatio* synonyms without argument. See *Collected Works*, 413 n. 15. A defender of Deleuze’s interpretation could plausibly contend that the text is silent on this interpretive issue: given the subtlety of the relationship of expression between *modificatio* and *modus*, Spinoza could easily speak of modifications as agreeing with the definition of mode. But even if we grant that Deleuze can slip out of this problem by contending that since *modificationes* exist only as expressed in *modis* the terms really are interchangeable in discussion, this nevertheless undermines the point of making such a terminological distinction in the first place.

⁶⁹ In his translation of this letter Curley (*A Spinoza Reader: The Ethics and Other Works* (Princeton: Princeton University Press, 1994), 272) renders *modis* as the nonsystematic ‘ways’. But I think Tschirnhaus, who is a careful and insightful reader of Spinoza, here attempts to make sense of Spinoza’s claim that the mind and body are “one and the same.” It seems to me quite likely that Tschirnhaus is using the term *Modificatio* to denote an underlying and unitary thing which the correlative modes of distinct attributes express. Hence I think translating *modis* as ‘ways’ in this context only obscures Tschirnhaus’ interpretive work.

that the causal order and connection of the modes in each attribute is one and the same as that of each other attribute, and this is in virtue of the fact that they all express the same world, grounded in substance. Since there are infinitely many attributes, and correlative modes in each attribute, these modes insofar as they are ontologically connected with one another, even though they are causally independent, participate in something infinite.

The elucidation of Spinoza's account of *res ut in se sunt* is difficult. I think that Spinoza has little to say about it because he is primarily interested in providing an account for the one-and-the-sameness of the mind and body, but has no desire to address the status of modes of other attributes. Since we know nothing of other attributes, nor can we learn anything of them from our knowledge of the attributes of thought and extension (Letter 64: G IV/278/1-3), they can have no bearing on the attainment of well-being (*beatitudo*).

Conclusion

Thus we have two contenders in the *Ethics* for ways in which finite modes are infinite: the indivisible infinite of substance is immanent in the infinite divisibility of modes, and the nondenumerable infinite plurality of the attributes is immanent in the nondenumerable infinite plurality of correlative modes which expresses *res ut in se sunt*. These two hypotheses are not mutually exclusive; modes could conceivably be both infinitely divisible within a given attribute and expressed infinitely across the attributes as well without contradiction. Thus there is no compelling reason to contend that finite modes must be infinite in only one of these ways, or to favor either of these accounts of the infinite character of finite modes over the other. Each must be considered independently on its own merits.

CHAPTER 7

SPINOZA'S SYSTEM OF THE INFINITE

Introduction

Throughout the course of this dissertation I have attempted to address what I think is the most interesting, and most difficult, problem in Spinoza's metaphysics: how can we understand the relationship between substance and its modes? The problem is especially difficult because substance and modes exist in entirely different ways, and yet modes, according to Spinoza, nevertheless "follow" from the essence of substance. My overarching thesis has been that we can resolve this problem by understanding Spinoza's conception of infinity as the key to understanding the relationship between substance and modes in his metaphysical system.

In this concluding chapter I wish to take stock of what I have argued over the course of the dissertation, and provide an overview of how the metaphysical transition from substance to modes is effected by means of the attributes, and how the thesis of the radical mutual containment of the attributes helps us to resolve the difficult problem of relating substance and modes. To start, I will return to the three questions that I introduced at the end of Chapter One, and discuss how the dissertation has addressed those questions. I will also discuss how the dissertation has provided concrete explanations of some of the more obscure claims that Spinoza makes in Letter 12, the "Letter on the Infinite." Then I will explain why I chose to use the metaphor of containment in my account of the attributes. I will argue that the metaphor is useful as a means to grasping the multilinear, symmetrical metaphysical relation in which the attributes

find themselves. I will also argue that the metaphor of mutual containment suggests a potentially fruitful approach for investigation into the nature of metaphysical reductionism. In particular, idealism and physicalism, the two main varieties of metaphysical reductionism, each seem to enjoy a considerable degree of success on their own terms. But if, as is usually assumed, only one of these positions can be correct, then their independent successes are difficult to explain. However, if these qualitatively distinct modes of explanation in some sense involve one another, it is possible that each may function as an adequate explanation of the phenomena of the other. Next I will consider a less radical alternative to the thesis of the radical mutual containment of the attributes, that the attributes “reflect” or represent one another. I will argue that Spinoza must reject this account because of his commitment to the explanatory independence of the modal orders of each attribute, and that in any case an account involving trans-attribute representation must presuppose the more radical account it proposes to replace. Finally, I will address an issue which has not been a guiding problem for the dissertation, but which my account of Spinoza’s metaphysics should have something to say about: the union of mind and body. I will not provide a fully-developed account, but only show that the dual status of the mediate infinite modes, based on the distinction between the formal and objective sides of their reality, implies that finite modes will similarly exhibit a dual status. This suggests the basis for a rough account of the mind-body union.

Spinoza’s System of the Infinite

At the end of Chapter One I argued that Spinoza’s arguments in Letter 12 and *Ethics* IP16 present three questions:

- (1) What is the deeper common structure of Spinoza's conception of the infinite that allows the infinity of substance to remain in some sense univocal with the infinity of modes, despite the fact that these two manifestations are wholly opposite to one another in character? In other words, what is the underlying *definition* of 'infinite'?
- (2) How can the infinity of substance be indivisible and unique and yet consist in an infinite plurality of independent attributes? In other words, how can substance consist of a plurality and yet be undivided?
- (3) Why and how does the intellect infer a plurality of properties, and in turn a plurality of things, from a singular essence, when the intellect should grasp reality primarily as indivisible and unique substance? In other words, what role does definition play in the "derivation" of the plurality of modes from the unity of substance?

In Chapter Two I argued that the definition of 'infinite' is "absolute affirmation," but that this cannot be a "definition" in the sense that a definition expresses the true nature of something. For definition itself, which is one and the same with essence, *is* the affirmation of some nature. Hence infinity, which is affirmation itself, is fundamentally the expressive power *of* definition. If definition itself is the expression of the infinite, then to say that the infinite is absolute affirmation cannot sufficiently capture the nature of the infinite; the definition of *infinitum*, expressed as the verbal product "absolute affirmation," rests upon the expressive power of the infinite itself. Indeed, if to "de-fine" is to "de-limit" then any definition of the infinite would be intrinsically contradictory. Yet even as we recognize that any definition of the infinite must be inadequate, we at the same time grasp the reason why this is so, and so we adequately grasp the nature of the infinite even though we cannot truly define it. Hence to regard the infinite as absolute affirmation is to understand it as the ground of definition, and indeed the ground of

everything, even as it cannot be fully expressed by any definition. Much as substance involves existence itself, and yet at the same time can be said to exist,¹ infinity underwrites all definition, and yet in a certain sense is verbally expressible as “absolute affirmation.” This answers the first question: infinity is not definable, but is the absolute affirmation of definition or essence as such.

The common ground between the infinity of substance and the infinity of modes, then, is the expressive power of absolute affirmation. But how absolute affirmation can manifest itself at one and the same time as an indivisible unity in substance and as a diverse multiplicity in modes remains unanswered until we discover the special position that the attributes must have in Spinoza’s system. They are substantial insofar as each attribute must be conceived through itself (IP10), and yet they appear in an infinite plurality which constitutes the absolute affirmation of the nature of substance. Hence the attributes must have a dual character — unified and yet diverse, substantial and yet modal — in order to provide the link of univocity in Spinoza’s system. In Chapter Three I argued that the weight of this requirement does not sit well with some of the conventional readings of the doctrine of the attributes. For example, according to Wolfson’s “subjective interpretation” the attributes are the finite intellect’s distorted and pluralistic characterizations of the truly simple and unique nature of God or substance. But this reading is untenable because the intellect grasps quantity as indivisible and unique.

Spinoza’s solution to the problem of how there can be a diversity of attributes without entailing a diversity of substances constitutes a radical reconceptualization of the nature of plurality, and is a first step towards a radical reconceptualization of foundational metaphysics. Spinoza’s solution explains how the attributes are “really distinct” in what Deleuze calls a “qualitative plurality,” and yet each attribute expresses the indivisible unity of substance. The

¹ See Chapter Two, pp. 56-8.

plurality of attributes does not entail a numerical plurality of substances because such a plurality of substances is in fact unintelligible. It would constitute the reduction of substance to modes. A numerical plurality of substances would entail a numerical plurality of realities; but even this hypothetical possibility is intelligible only if it is grounded in a unified context or foundational reality within which such an enumeration can be carried out. Enumeration requires abstraction into units, and such abstraction presupposes a common context within which all the individuals that satisfy the characterization of the unit have a common ground. But this is to say that the individuals are not substances, but rather are modes of some still more fundamental substance. Therefore the plurality of the attributes cannot entail a division of substance. The plurality of the attributes is in fact indivisible, and so their infinity is compatible and even identical with the infinity of substance. This constitutes an initial answer to the second question: substance exists as the nondenumerable, indivisible plurality of attributes — that is, the plurality to which number does not apply — and therefore real distinction in itself cannot constitute a division.

However, this is only a first step in the explication of the doctrine of the attributes, and at this point Spinoza hesitates. As I argued in Chapter Four, we must radically reconceptualize Spinoza's account of the attributes in order to show that it is possible for him to hold consistently that the attributes are independent, each adequately expressive of the absolutely infinite essence of substance, and "parallel" in modal order. I think Spinoza himself understood that the infinite plurality of the attributes is unique in that it is indivisible and thus infinite in the substantial sense. However, he does not seem to recognize that this account of the nature of the attributes ultimately entails that what it means for them to be conceptually independent must be understood in a very radical way. In order for any attribute to be conceived through itself alone, it must have all the resources to function fully as an attribute. Each attribute must express the essence of

substance. Since the essence of substance consists of infinite attributes, it is necessary that each attribute must have the resources with which to express this essence — that is, each attribute must in some way involve the infinite attributes. Thus Spinoza’s commitment to the conceptual independence of the attributes entails what I have called the thesis of radical mutual containment. I have argued that Spinoza could not reject this thesis upon pain of a deep inconsistency within the doctrine of the attributes, and that the thesis is latent within his argumentation. Spinoza’s correspondence with Tschirnhaus reveals the inconsistency in his thinking about the doctrine of the attributes, and had Spinoza lived longer perhaps he might have deduced the thesis himself. Here, then, the second question receives a deeper answer: substance consists of an indivisible plurality of attributes, but this indivisible plurality is absolutely infinite — that is, it is an “absolute affirmation” of the essence of God or substance — because each really distinct attribute expresses every attribute whatsoever. Substance’s absolute indivisibility requires that it be absolutely undivided in each of its expressions, and this manifests itself as the mutual involvement of the attributes.

In Chapter Five I argued that this thesis of radical mutual containment accounts for the dual nature of the attributes simply as a function of the requirement that attributes be capable of expressing adequately the entirety of the essence of substance. An attribute cannot adequately express the nature of substance if it cannot in some way involve or express the infinite plurality of really distinct attributes. However, the only way an attribute can accommodate other attributes is to “contain” them as modes of itself. Hence each attribute must be substantial insofar as it contains, and must be modal insofar as it is contained. The absolute infinity of the attributes is therefore at the same time a modal infinity. Yet, as Letter 12 indicates, these are *not* identical infinities, for the former is indivisible whereas the latter is divisible. The divisible

infinity “follows” or “flows” from the indivisible infinity because this “entailment” *is* the act of absolute affirmation. The infinite attributes cannot *be* infinite attributes if they do not appear in one another as modes of one another; the indivisible infinity cannot be infinite if it does not at the same time express itself as a divisible infinite. This, then, constitutes the basic answer to the third question: the absolute affirmation of substance expresses itself in an indivisible infinite plurality of attributes, and the attributes in turn express themselves in divisible infinite pluralities of infinite modes. Substance cannot be substance if it is not expressed in infinite attributes, and the infinite attributes cannot be attributes — expressions of substance — if they are not expressed in modes. The main question of the dissertation is thus answered. How do we understand the relationship between substance and its modes? We must grasp it as the succession of expressions of the absolutely infinite essence of substance: if substance did not express itself through the attributes, and the attributes did not express themselves in modes, substance could not exist at all. Indeed, in a sense substance’s existence *is* this expression in attributes, and in turn the attributes’ expression in modes.

In Chapter Six I pursued the consequences of this account of Spinoza’s metaphysical system to its conclusion in the finite modes. The radical mutual containment of the attributes is echoed in the finite modes in that the finite modes both contain and are contained by the indivisible infinity of substance. The modes are infinitely divisible because the infinity of substance is itself indivisible; hence the infinite is always immanent within the finite. Moreover, as the finite modes are the intersection of the mediate infinite modes and the infinite “modifications” of substance, they are also contained within the infinite expressions of substance. Hence the finite modes too are in their way expressions of the infinity of substance, and reveal a basis for optimism in our (finite) capacity for grasping the nature of the infinite.

The continuing theme throughout the development of the metaphysical system that relates substance, attributes, and modes has been the nature of the infinite. We have seen that the infinite as “absolute affirmation” drives Spinoza’s metaphysical system. It is the force that powers the “flow” of modes from substance. The absolutely affirmative nature of substance is expressed in an infinite plurality of attributes, a plurality which is fundamentally nondenumerable. Each of these attributes must adequately express the entirety of the absolutely infinite essence of substance, and as such each attribute, even as it is a constituent of an absolutely infinite plurality, must at the same time be absolutely infinite in itself. Hence I have argued that each attribute must contain and be contained by every other attribute. It is this radical mutual containment that produces the “flow” of modes from substance, for if the attributes must be contained in one another, then they must appear as modes in one another. The peculiar character of radical mutual containment provides the framework in which substance and mode can exist radically differently and yet inseparably: each attribute is a formal expression of the ground of all existence, and therefore each must be conceived through itself — yet at the same time the attribute’s radical independence requires that every attribute appear in it, and it appear in every attribute. *Because* of the attribute’s very independence it can neither exclude the other attributes, nor exclude itself from the other attributes. Hence the independence and adequacy of each attribute as an expression of substance requires its simultaneous existence as a mode. The attributes could not express substance at all if they were not expressed in one another as infinite modes. Hence the radical independence of substance as attribute not only coexists harmoniously with the sheer dependence of the modes, but substance and mode are quite inseparably linked. The infinite as absolute affirmation makes this relationship possible.

Radical Mutual Containment and the “Letter on the Infinite” (Letter 12)

I have argued that the thesis of radical mutual containment concretely characterizes Spinoza’s conception of infinity as it is expressed in substance, attributes, and modes. At this point we can return to Spinoza’s remarks in Letter 12, the “Letter on the Infinite,” to see if we can now make more sense of them. There, as we have seen, Spinoza contends that the infinity of substance is indivisible and unique. But radical mutual containment suggests a radical plurality, as each attribute involves an infinite plurality of attributes. This initially appeared inconsistent with the characterization of substance. However, following Deleuze, we found that the plurality of the attributes is a peculiar sort of “qualitative plurality” which is fundamentally nondenumerable and indivisible, and hence is consistent with Spinoza’s characterization of substance. The thesis of radical mutual containment provides more detail to this explanation. In order for the attributes to be understood as an infinite plurality (which means that in some sense they *can* be regarded as denumerable) they must be conceived under a single given attribute. Thus the ground for conceiving the infinite plurality of the attributes is a single attribute under which they are subsumed. Therefore the radical plurality unavoidably assumes an indivisible and unique context through which it is grasped, and this context is an attribute which expresses the indivisible and unique nature of God, or substance.

Another remark Spinoza makes in the “Letter on the Infinite” (IV/56/5-15), and repeats in the *Ethics* in the Scholium to IP15 (G II/59/20-30), is that there are two ways of conceiving of quantity: one under the intellect as infinite and indivisible, and another under the imagination as finite and divisible. Spinoza claims that this intellectual sense of quantity is difficult to grasp. But I think the thesis of radical mutual containment provides some insight into his remarks. Clearly the radical plurality that is manifested in mutual containment, a fundamentally

nondenumerable plurality, is not quantity in the sense of ‘quantity’ which we encounter in our ordinary experience. Thus it is not quantity as we encounter it in what Spinoza, following Descartes, would call the ‘imagination’. To understand this variety of quantity clearly requires considerable intellectual effort, and is something that hardly can be mentally pictured with any clarity or precision. Thus the hypothesis of radical mutual containment, in contrast with our ordinary sense of containment, provides a concrete explanation of Spinoza’s distinction between intellectual and imaginative quantity.

Finally, Spinoza remarks that we conceive of the existence of substance and that of modes entirely differently (G IV/54/15-6). This suggests a remedy for our impulse to balk at the thesis of radical mutual containment as contrary to the conception of what it means for something to be contained. Our ordinary conception of ‘containment’ prohibits any object from containing any thing in which it is contained. But arguably the ordinary conception applies only to things that are conceivable as finite — that is, it is only applicable to modes and their way of existing. Since substance exists entirely differently from the modes, and attributes immediately express the essence of substance, and hence express a nature that is absolutely infinite, the restrictions upon the concept of containment relative to finite modes do not apply to attributes. Thus the thesis of radical mutual containment is not only consistent with Spinoza’s distinction between the existence of substance and that of modes, but it also indicates more concretely just how these ways of existing are radically different.

The Metaphor of Containment

One of the difficulties with the thesis of radical mutual containment is its apparently oxymoronic, or at least paradoxical, nature: containment seems intrinsically an asymmetrical

relation, and so if we regard it as mutual it seems that we really substitute a new relation instead. In the end “radical mutual containment” must be understood as a metaphorical characterization of a fundamentally non-linear metaphysical relation. However, I do have reasons for selecting ‘containment’ rather than ‘involvement’, ‘reflection’, or the like.

The metaphor of containment has certain liabilities, to be sure. One is that we do not usually think of containers as giving form to their contents in any thoroughgoing way. A container holds its contents together, places limits upon them, and perhaps even organizes them, but it does not make its contents the sorts of things that they are. In the case of the attributes, however, the containing attribute “informs” the attributes it contains; its formal reality constitutes a metaphysical space which, as an immanent principle or fundamental law of nature, holds the attributes together in one substance. Hence the containing attribute in a sense provides a background of laws that allows for the comparison of its contents, and in so doing gives a formal character to each contained attribute as an objective expression of reality. So the unique relation of the attributes is more mutual *contextualization* than “containment,” in this respect.

Nevertheless, the radical mutual containment of the attributes cannot be construed as a dependence relation. Dependence is a fundamentally asymmetrical, unidirectional linear relation, and IP10 clearly rules out any dependence relation between the attributes. Hence it is incorrect to think that an attribute insofar as it is contained by another attribute is dependent upon this attribute; it only takes on the formal reality of the containing attribute in order to enter into it as a mode. The relationship of containment is convertible in every case, so it is impossible to conceive of the relations between the attributes as fundamentally linear and asymmetrical. No attribute can be reduced to absolute metaphysical dependence upon any other attribute.

Containment as a concept derived from our ordinary experience is indeed linear and asymmetrical: the container cannot be contained in turn by its contents. If containment is a concept that must be exclusively attributable to our sense experience, or for whatever reason must be an asymmetrical unidirectional linear relationship, then strictly speaking the relationship between the attributes cannot legitimately be termed ‘containment’. Nevertheless, I think that containment is a useful metaphor for purposes of introducing the metaphysical nature of the relationship between the attributes. The attributes must appear as modes of other attributes because this is the necessary condition for each attribute to serve adequately as the context for the expression of the entirety of nature. Thus in some sense the attributes must be “in” one another. Of course the term ‘in’ (especially in the Latin in which the *Ethics* was originally composed) designates a variety of relations, including the spatial and conceptual. The ‘in’ at issue here must permit — indeed *requires* — a certain symmetry. To the extent that ‘containment’ cannot express such a symmetry, it does not adequately express the relationship between attributes. Hence ultimately my use of ‘containment’ as the term expressing this relationship is only a convenient means to introduce its nature, and in the end ‘containment’ must be cast away because it does not adequately reflect the true nature of the relationship between the attributes.

As I remarked above, there are alternative metaphors I might have used to characterize the mutual connections between the attributes. One term which I have also used, and which is especially true to Spinoza’s usage, is ‘involvement’. Spinoza tends to use the verb *involvere* and its variants in contexts concerning the nature of a thing’s existence. In particular, IA4 (“The knowledge of an effect depends on, and involves [*involvit*], knowledge of its cause” (G II/46/27-8)) and IA7 (“If a thing can be conceived as not existing, its essence does not involve [*involvit*]

existence” (G II/47/2-3)) tend to suggest that Spinoza conceives of involvement as central to explanations for the existence of particular things. In the Scholium to IP10 Spinoza suggests that the attributes are in some sense “in” substance, as the content of its reality:

For it is the nature of substance that each of its attributes is conceived through itself, since all the attributes it has have always been in it together, and one could not be produced by another, but each expresses the reality, or [*sive*] being of substance. (G II/52/6-7; Curley’s translation, modified)

If each attribute expresses the essence of substance, and substance’s reality consists in its expression in its attributes, then it would not stretch the use of the word too far to apply the sense of ‘involvement’ that Spinoza explicitly uses when discussing the existence of things and their reasons for being to the case of the attributes as well. If the attributes must appear in one another as modes, as I have argued, then it is appropriate to say that the attributes are “involved” in one another.

Nevertheless, I prefer the metaphor of containment for two reasons. First, containment conveys a sense of the radically inclusive nature of the relationship between attributes: each attribute must express each other attribute *wholly* if any one attribute may adequately express the essence of God (ID6: G II/45/22-5), or if the whole of nature must be explained exclusively under one attribute (IIP7 Schol.: G II/90/23-8). If the attributes only express one another partially then it follows that not even God can fully understand God’s own essence, for any account of reality in terms of thought, for example, must be carried out immanently within the attribute of thought, and need not (and cannot) transcend that attribute. A fully adequate cognitive account of reality is possible if and only if the attribute of thought expresses each other attribute in its entirety. ‘Containment’ as a concept expresses the wholesale nature of the sense in which attributes are “in” other attributes. ‘Involvement’ does not immediately or intuitively

capture this important aspect of the relationship between the attributes in the way that ‘containment’ does.

Second, the metaphor of containment is to some degree inspired by a problem of cosmology which Edward Harrison calls the “containment riddle.” Harrison poses the riddle as the question “*Where in a universe is the cosmologist studying that universe?*”² The cosmologist’s task is to construct a world picture that contains *everything* – including the mind of the cosmologist. But this entails an infinite regression: the universe contains the mind of the cosmologist, but the mind of the cosmologist contains an image of the universe containing the mind of the cosmologist, and so on. But then where is the cosmologist within the regression? Is the cosmologist in the universe, or is the universe in the cosmologist? Harrison refers to this puzzle as the “containment riddle,” then, because the cosmologist faces the difficult task of trying to establish whether the universe contains the mind of the cosmologist, or the mind of the cosmologist contains the universe.

Harrison initially poses this riddle as a problem grounded in dualism: the physical world and the physical body and brain of the cosmologist conveniently fit into the picture of the universe, but the consciousness and self-awareness of the cosmologist do not readily admit of physical explanations.³ It is when the mind considered as psychological enters into the picture of the universe that the infinite regress of containment begins. However, Harrison notes that the same problem follows for the cosmologist who considers the mind as reducible to the physical brain, for either way the problem is one of whether the cosmologist contains the universe or the universe contains the cosmologist.⁴ Is the cosmologist’s depiction of the universe, as a product

² Edward Harrison, *Cosmology: The Science of the Universe*, 2d ed. (Cambridge, England: Cambridge University Press, 2000), 161.

³ Harrison, 161.

⁴ Harrison, 161-2.

of the mind (regardless of whether the mind is fundamentally physical or mental), capable of adequately explaining the mind? Harrison regards the resulting regress as an “absurdity,”⁵ but it is only vicious if one regards the only possible adequate explanation of the universe as fundamentally reductionist. For if mental phenomena cannot be explained fully in terms of physical phenomena, or vice versa, then there is no final ground for explanation. (The mental explains the physical explains the mental explains....)

In the case of Spinoza’s philosophy the containment riddle takes a metaphysical rather than a cosmological form. The cosmologist must find where cosmological explanation “bottoms out,” whereas for the metaphysician it is a matter of how much we can know about reality given that knowledge pertains especially and apparently uniquely to thought. Moreover, as I have posed the problem facing Spinoza, it is not fundamentally a problem concerning thought, but rather concerning the explanatory adequacy of *any* attribute whatsoever.

Harrison’s solution to the containment riddle is “that we, who create the universes, occupy the unknown Universe. We, the image makers, occupy the Universe and our images are the universes that often, mistakenly, we believe we live in.”⁶ Hence Harrison essentially takes a Kantian stance and admits that the discipline of cosmology is a creative activity of the mind that can never adequately represent the fundamental reality in which the activity of the mind takes place. Spinoza cannot accept such a conclusion, for it would entail that not even the infinite intellect of God could adequately know reality. I think that *no* metaphysician can accept such a conclusion without becoming either a skeptic or an idealist. If the mind cannot know any reality other than that which is fundamentally thought, then either we cannot know the reality in which thought participates along with other forms, or else thought is all there is to reality. Considered

⁵ Harrison, 161.

⁶ Harrison, 162.

in this way, the only metaphysical project that has any hope of succeeding is idealism. And if there is more to reality than thought, then even it cannot succeed.

My second reason for using the metaphor of containment, then, is grounded in the hypothesis that Spinoza's metaphysics may have something interesting to say about the feasibility of metaphysical reductionism. Spinoza seems to eschew reductionism when he contends in the Scholium to IIP7 that the entirety of nature can be explained in terms of extension and the physical, or entirely in terms of thought and the cognitive, but that these different venues of explanation should not be commingled. And yet my extrapolation of the doctrine of the attributes suggests that Spinoza is not quite in a position to reject reductionism out of hand, for if the entirety of nature can be explained (or expressed) in terms of a single attribute, and the other attributes must be expressed (or explained) in terms of that attribute as well, then in some sense thought is expressed in the physical, and vice versa as well. This metaphysical rationale for thinking that Spinoza's rejection of reductionism should be qualified in some way can be supplemented by a more mundane observation: if thought and extension are wholly independent explanatory contexts, why is it the case that it at least seems that so much of thought can be explained in physical terms, and that so much of physical reality can be explained in psychological or cognitive terms? I will develop this line of thought in the next section.

Radical Mutual Containment and Metaphysical Reductionism

In Chapter Five I noted that the doctrine of the infinite modes that "follows" from the doctrine of the attributes entailed by the thesis of radical mutual containment is consonant with Edwin Curley's account of the infinite modes as fundamental laws of nature. If the attribute insofar as it contains other attributes is a formal principle governing the objective expression of

the attributes it contains, then it is appropriate to think of the containing attribute as a law governing the objective realities expressed within it. I also noted that there is an odd consequence: from the standpoint of the attribute of extension as the formal principle serving as the ground for all expressions of substance, it follows that the attribute of thought is expressed within extension as a class of natural law subordinate to the laws of physics — but that from the standpoint of the attribute of thought the reverse is the case, and physical law is a subordinate class embedded in cognitive law.⁷ Hence, according to my reading of the doctrine of the attributes, reductionism should work in *both* directions — thought can be regarded as reducible to extension, and extension reducible to thought. In this section I will briefly discuss the possibility that this consequence of my reading of the doctrine of the attributes may in some respects prove a helpful way of analyzing the nature of metaphysical reductionism. It should be understood that this discussion is merely provisional and not intended to be a fully-developed articulation of the consequences of mutual containment upon metaphysical reductionism; I hope only to suggest that such a project may be fruitful.

The traditional reading of Spinoza's doctrine of the attributes avoids the unusual result of a bidirectional reductionism because the conceptual independence of the attributes is interpreted in an "exclusivist" manner. According to this reading no reduction is possible, for thought excludes extension and extension excludes thought. By the same token, this reading concludes that Spinoza avoids the metaphysical variant of Harrison's regress because mind and matter cannot explain one another, but are elements taken from completely independent ways of explaining reality. I have argued that the traditional "exclusivist" reading is unsatisfactory because it generates intolerable inconsistencies within Spinoza's system. But there are empirical grounds for regarding such an exclusivist attribute dualism with suspicion. Arguably both

⁷ See Chapter Five, pp. 197-8.

physicalist and idealist reductionists have experienced considerable success (up to a point) in explaining the mental in terms of the physical and the physical in terms of the mental, respectively. If an exclusivist dualism is the true state of affairs, then it is difficult to see how reductionists could have *any* degree of success.

As a metaphysical programme, reductionism seeks to articulate a linear, asymmetrical dependence relationship between some form of existence which is foundationally real and another apparently qualitatively distinct form of existence which nevertheless is really qualitatively the same. The usual candidates for the forms of existence are the physical and the mental, and reductionists of either stripe attempt to ground the relationship in terms of the form of existence they favor as foundationally real. The physicalists and the idealists each seem to experience a certain degree of success, but I think that both programmes ultimately stagnate because they face the same problem: how is it that a reality which only consists of one qualitative form of existing nevertheless *seems* to consist of two (or more)? That is, it is incumbent upon the metaphysical reductionist not only to explain one apparently qualitatively distinct form of existence completely in terms of the truly foundational form of existence, but also to explain *why they appear to be qualitatively distinct in the first place*. It is here that reductionists seem reduced to hand-waving, asserting that some phenomenon such as emergence or supervenience is at work without really being able to provide any account for why such a phenomenon would take place at all.

Considerations such as these should lead us to ask not simply whether or not reductionism is a viable project, but rather *what are the necessary conditions for reductionism to be possible at all?* If we can articulate these conditions, then we should be able to determine whether or not reductionism is possible. My interpretation of Spinoza's doctrine of the

attributes, I think, suggests a provisional hypothesis for what these conditions might be. If reductionism presupposes linear, asymmetrical dependence relations, then reductionism is only possible if metaphysics in fact grounds such relations. My hypothesis is that linear, asymmetrical dependence relations are not self-sufficient, but can only exist within multilinear, symmetrical relations, which are self-sufficient. The thesis of radical mutual containment describes what I think to be a metaphysics grounded in multilinear, symmetrical relations.

This hypothesis faces an immediate objection insofar as it is grounded in my reading of Spinoza's metaphysical system: it seems it would ground reductionism by *reducing* it to a phenomenon emerging from radical mutual containment. That is, it would subsume the reductionist relation within a symmetrical multilinear relation, but this apparently amounts to simply reasserting a reductionist foundation. But it is important to note that I do not mean to suggest that reductionism is unreal, or supervenient upon the symmetrical multilinear relation which is radical mutual containment; indeed, I have asked the question of how reductionism could have any degree of success at all, and this assumes that reductionism is in some respect a legitimate programme. The reductionist relation is an essential moment within radical mutual containment — that is, an attribute can adequately express substance only if that attribute adequately expresses the infinite attributes as subordinate classes of natural law. Hence I hypothesize that not only does a reductionist programme presuppose a system of symmetrical multilinear relations, but that such a system could not function at all if reductionist relations were not embedded within it.

The point I am trying to make will be clearer if we look at it in the context of the whole of Spinoza's metaphysical system. Spinoza's metaphysics superficially appears to be a metaphysically reductionist system: substance and modes seem to be elements in a linear,

asymmetrical dependence relationship. But this account is too simplistic. Deleuze's most significant contribution to the understanding of Spinoza's metaphysics is that substance and modes are elements in a relation of "expression" which is not simply a reductionist relationship of dependence. It is true that there can be no modes without attributes, nor can there be attributes without substance. But at the same time substance *cannot be substance* if it does not express itself in infinite attributes, nor can the attributes *be attributes* if they do not express themselves in infinite modes. It is for this very reason that Spinoza argues rather vehemently that God *must* produce all that he understands, and that it constitutes no limitation on God's power as a free cause that God must do so (IP17 Schol.: G II/62/7-30). Substance is not substance if modes do not "flow" from it. It is not quite right to regard this relationship between substance and modes as one of mutual dependence, because in a sense it is one movement which has two poles. But it is clearly incorrect to regard this relationship as simply the dependence of modes upon substance.

According to my provisional hypothesis, then, Harrison's infinite regress of mind and universe in the containment riddle is an *artifact* of the assumption that reductionist thinking is self-sufficient. The linear infinite regress is the consequence of assuming that the relationship of thought and extension must be fundamentally linear and asymmetrical. Reductionism is fundamentally linear and unidirectional, but I have argued that for Spinoza the relationship of the attributes of thought and extension must be a form of "containment" that is *mutual*. Therefore under these circumstances the attempt to establish a fundamentally reductionist metaphysical account engenders an infinite explanatory regress. Indeed, *the fact that we find such an infinite explanatory regress when we attempt a reductionist explanation suggests that the relationship we are trying to explain is fundamentally symmetrical.*

Harrison's paradox, then, may result from the assumption that an adequate cosmological account of reality must "bottom out" somewhere. But it seems impossible to decide between an idealism in which the cosmological theory resides, or a physicalism which the cosmological theory is intended to express; as a result cosmological explanation seems trapped in an oscillation. As we have seen, Spinoza faces a similar difficulty in his metaphysical account of nature. If everything, including the system of the attributes, can be adequately understood within the context of thought, then it seems that Spinoza's metaphysics must reduce to some variety of idealism. But plainly Spinoza intends that thought is only one attribute of reality, and that there are infinitely many other attributes that also express reality, so that thought as an attribute is ultimately embedded within a deeper metaphysical context. The conceptual independence of the attributes expressed in IP10 is intended at least in part to rule out wholesale metaphysical reduction to idealism or physicalism. But clearly this deeper metaphysical context, since Spinoza seems to think its nature is intelligible, is nevertheless accessible to thought. The only way that this capacity of thought can be accounted for (ruling out appeal to some form of mystical transcendence) is that all reality appears within the context of thought as its modes. Just as Harrison's containment paradox oscillates between idealism and realism, Spinoza's immanentist metaphysics seems forced to oscillate between an immanent idealism and a metaphysical reality that transcends thought. The apparent existence of this oscillation requires an explanation, and I think "mutual containment" of the attributes offers just such an explanation.

Metaphysical reductionism as a programme makes an assumption that is rarely questioned: that the multiplicity of phenomena must ultimately collapse into one simple, qualitatively homogeneous reality. But the question that this assumption provokes is the very

question that is so often asked of Spinoza: how is it that a simple, homogeneous reality nevertheless expresses itself as a diverse multiplicity of phenomena? That is, if reality is fundamentally simple and uniform, how could we make the mistake of thinking it is pluralistic (i.e., that there are different kinds of substances)? It seems that if metaphysical reductionism is possible, such a mistake should be in principle impossible. I have hypothesized that the linear, asymmetrical/unidirectional relation of reductionist explanation presupposes a multilinear and symmetrical relation such as mutual containment or involvement. Thus the answer to the question of how we could make the “mistake” of pluralism is that it is not a mistake: even though the entirety of Nature can be adequately expressed in any given attribute, it does not follow that this attribute is the *only* way that the entirety of Nature can be adequately expressed or explained. In other words, from the fact that Nature is fundamentally indivisible and unified, it does not follow that it is blankly uniform. Reality is diverse and pluralistic, and yet simultaneously unified in the sense that the entirety of Nature can be comprehended adequately within the “confines” of a single attribute of substance. This indivisible diversity is the “qualitative plurality” of the really distinct attributes. Reductionism could not work *at all* if it were not the case that reality is both pluralistic and unified — there would either be no diversity to reduce, or no unity to which the diversity could be reduced. Spinoza’s metaphysics, interpreted in light of the thesis of radical mutual containment, allows for diversity in the essence of substance and a unity in this diversity.

To return to my second reason for using the metaphor of “containment” (whose explanation I left incomplete at the end of the last section), it is because I think the doctrine of the attributes suggests an interesting way of understanding the nature of metaphysical reductionism that I find the metaphor of “mutual containment” a helpful way of grasping the

relationship between the attributes. Mutual containment serves decently as a means of mentally picturing a fundamental metaphysical relation that is not strictly susceptible of being mentally pictured. Containment inevitably suggests a linearity to the relation of the attributes which cannot really be the case. Once we have achieved the understanding of how the attributes must be “in” one another in a metaphysically non-linear sense, then the metaphor must be cast aside; ‘radical mutual containment’ must become a mere terminological label for this relationship, and not a picture of it.

Again, this discussion of metaphysical reductionism is only a very brief exploration of one interesting consequence of thinking in terms of mutual containment or involvement. As it assumes a particularly controversial Spinozistic commitment — that physical and cognitive forms of explanation can independently and adequately express all of reality — this discussion must be considered hypothetical and provisional. The project requires a great deal more investigation than I have sketched here, but it seems to me that such a project should bear some fruit.

The Attributes and Representation

Here I will deal with one more objection to the thesis of the radical mutual containment of the attributes. Suppose we grant that the attributes must in some respect involve one another. Why contend that the attributes “contain” one another wholly when we might more easily regard them as “reflecting” or *representing* one another?⁸ Such a solution seems much less drastic, and perhaps is ultimately less problematic.

There are two reasons for rejecting this proposed solution. First, Spinoza prohibits such a solution in the Scholium to IIP7. There Spinoza contends that the whole of nature must be

⁸ I am indebted to Wes Yonamine for bringing this line of objection to my attention.

explained (or expressed) entirely in terms of one attribute. In other words, ideas must be explained exclusively in terms of the attribute of thought, bodies must be explained exclusively in terms of the attribute of extension, and similarly for modes of other attributes. Representation as we usually understand it is an idea-object relation. However, if we regard the idea of the body (that is, the mind) as the *representation* of the body, then we have a trans-attribute relation, and any account of that relation would require transcendence of the attributes. The Scholium to IIP7 prohibits any sort of explanation of such a relation, because we cannot appeal to multiple attributes. Hence the relation, understood in terms of representation, must be unintelligible. It is clear that Spinoza would not accept this result.

It follows that for Spinoza representation must be an *intra*-attribute relation. Consider, for example, his claim (as can be gleaned from Letter 66 and the Scholium to IIP7) that ideas are modes in the attribute of thought which are correlates of objects in other attributes. For Spinoza an idea is really a *mind* (IIP11 and Cor.); this is not clearly a representation in any ordinary sense. Our ordinary sense of representation presumably involves a transitive causal relation of some sort between an object and its representation; thus for Spinoza this sense of representation must be a relationship between two modes of the *same* attribute. For example, a photograph of an object is a representation of the object in virtue of a certain causal relation between the physical photograph and the physical object which is represented by the configuration of the pigments on the surface of the photograph. In the case of a physical account of human sense-perception, the brain has certain neural configurations which are causally connected to the actions of external bodies upon the human body; thus the brain represents objects in terms of a causal relation between it and the external physical world. Correspondingly, my idea of some object of perception is strictly a part of my mind which is causally connected with that (ideal)

object of perception, and this part of my mind takes part of its character from the effect that the configuration of the (ideal) object has on that part of my mind. Hence, for Spinoza explanations of representation must be segregated by attribute; there can be no crossover in explanation from bodies to minds.

Still, for Spinoza the mind is the idea of the physical body (IIP13). Thus the relation of correlation still requires explanation, and appears to be a trans-attribute relation. Perhaps we might simply define ‘representation’ (insofar as it is trans-attribute) as this correlation, whatever its explanation. But, as I have argued, this “trans-attribute relation” is intelligible and consistent within Spinoza’s system only if the thesis of radical mutual containment is the case. Radical mutual containment is what is required if we are to have non-transcendent trans-attribute relations: we can compare modes of different attributes only insofar as those attributes appear as mediate infinite modes within some containing attribute. Moreover, if representation simply is this correlation between modes of different attributes, then every representation is by definition a true and adequate representation — which is a problem, since the correlative modes are qualitatively different! In any case, I think that the purportedly less drastic solution nevertheless presupposes the solution which it is intended to replace.

The second reason for rejecting the notion that attributes “represent” rather than “contain” one another is that Spinoza’s notion of adequate expression does not presuppose a representational theory of truth. Rather, it is the reverse: the “agreement” of an idea with its object presupposes the adequacy of the idea. I cannot provide a full account of this rather difficult aspect of Spinoza’s thought, but it is at least clear that for Spinoza truth is a consequence of adequacy. This is clear from IID4, Spinoza’s definition of ‘adequate idea’:

By adequate idea I understand an idea which, insofar as it is considered in itself, without relation to an object [*objectum*], has all the properties, or [*sive*] intrinsic denominations of a true idea.

Explication: I say intrinsic to exclude what is extrinsic, viz. the agreement of the idea with its object [*ideato*].⁹ (IID4: G II/85/3-9)

In the Explication Spinoza has in mind IA6, “A true idea must agree with its object [*ideato*]” (G II/47/1). The fact that this is an axiom and not a definition suggests that Spinoza does *not* endorse a representational theory of truth — or at least that truth, if it is by definition an extrinsic feature of an adequate idea, is in some way a consequence of the idea’s intrinsic adequacy. Hence an idea’s adequacy does not presuppose a representational relation with its object, but instead must be intrinsic to the idea itself. By implication, if, as I have argued, the attributes must *adequately* express the essence of substance, then this adequacy must be intrinsic to the nature of the attribute, and cannot be determined in terms of the external relation of a given attribute to other attributes. This entails that the attribute cannot be adequate in virtue of faithfully representing other attributes external to itself, but instead must in some way involve those other attributes *within* its own nature. Again, the more conservative solution appears to presuppose the more radical solution.

The Union of the Mind and Body

This discussion leads us to one remaining difficulty, to which I alluded in the last chapter: if each finite mode correlates to an infinite plurality of finite modes across the attributes, then how is it that Spinoza considers only the human mind and body, a pair of correlative finite modes, as “one and the same” thing, to the exclusion of all other finite modes correlative to

⁹ Spinoza makes a terminological distinction which I think reflects the distinction between an object as such (*objectum*) and the object of a given idea (*ideatum*). Since Spinoza contends that every object has an idea of its own (see Letter 66, and IIP7 and its Corollary), it follows that every *objectum* is also the *ideatum* of some idea. Thus this terminological distinction does not seem to reflect any significant metaphysical distinction, and these terms can be used more or less interchangeably. Indeed, Curley (without argument or even comment) translates both terms as ‘object’; Shirley does the same, though he indicates in brackets when ‘object’ translates *ideatum*.

them? That is, the parallelism of the attributes suggests that the mind should no more be the idea exclusively of the body than it is of any other correlative mode in any other attribute — and yet the human mind has knowledge only of itself and of the body, and no knowledge of the other attributes.

As I have discussed elsewhere, in Letter 65 Tschirnhaus asks this very question of Spinoza, and receives the rather unpersuasive answer that the human mind is exclusively the idea of the extended human body, and that modes of attributes other than the attribute of extension have their own minds or ideas in the attribute of thought.¹⁰ Spinoza's failure in Letter 66 to address Tschirnhaus' question satisfactorily reflects the fact that Spinoza had not fully understood the ramifications of his commitments to the expressive adequacy, parallelism, and conceptual independence of the attributes. Still, the thesis of radical mutual containment at first glance does not seem to be in a better position, as a reading of Spinoza's metaphysics, to account for why the human mind is exclusively the idea of the human body. The mind and body appear to be two correlative finite modes, involved in two attributes conceived as mediate infinite modes. But why *these* two mediate infinite modes, and not two others? If the basis for saying they are one and the same is the fact that they are expressions of the same thing-as-it-is-in-itself, then there is no reason which accounts for why the mind and body are not one and the same with an infinite plurality of other correlative modes.

But this is to misconstrue how the union of mind and body is represented in this metaphorical framework of radical mutual containment. So far as the mind is an idea in the mediate infinite mode of thought and the body is a mode within the mediate infinite mode of extension, they are *not* one and the same thing. They are quite separate expressions of a single

¹⁰ See Chapter Three, pp. 97-8; see also Chapter Four, pp. 153-5.

thing-as-it-is-in-itself. So how, according to the thesis of radical mutual containment, can Spinoza deduce that the human individual consists of a mind and body (IIP13 Cor.)?

Spinoza's claim in Letter 66 that there are independent minds for every mode of every attribute provides the clue to how the thesis of radical mutual containment might address this question. This passage constitutes Spinoza's tacit attribution of a special status to the attribute of thought. Since Spinoza admits that God has ideas of the attributes themselves (IIP5) it follows that the attribute of thought involves the other attributes as modes. I have argued that radical mutual containment takes the special status that Spinoza accords to the attribute of thought and carries it over to the other attributes. The alternative to doing this is to abandon the conceptual independence of the attributes, or else their expressive adequacy, or else the parallelism of their modal orders. I have also argued that mutual containment grants the mediate infinite modes a peculiar dual status: the mediate infinite mode of extension as conceived under the attribute of thought *is* one and the same with the attribute of extension, and yet at the same time it is formally a mode of thought, i.e. an idea. I think that this dual status must carry over to the finite modes contained within the mediate infinite modes: the finite body which is a part of the mediate infinite mode of extension is strictly speaking a mode conceived through the attribute of thought. This means that it is at one and the same time a body and an idea.

The unity of the mind and body, then, is the identity of the formal nature of the containing attribute and the objective nature of the contained attribute. That is, regarded in this way the mind is the formal reality and the body is the objective reality of a single entity. Hence the unity of mind and body does *not* consist in the fact that they are expressions of a single thing-as-it-is-in-itself, but in the equivocal status of the attribute insofar as it is contained in another attribute.

Thus every finite mode, insofar as it is a participant in some mediate infinite mode, must exhibit a dual status based on the duality of the formal and objective sides of its reality. In this respect a finite mode is one among infinitely many correlative modes that have the same formal reality, but a different objective reality. At the same time, however, the finite mode is a participant in a “modification” of substance, or a single thing-as-it-is-in-itself. In this respect the finite mode is one expression among a nondenumerable infinite plurality of correlative modes expressing the same modification; that is, these correlative modes have the same objective reality, but each expresses it in a formally (and really) distinct way. In other words, in the framework of radical mutual containment *modal correlation participates in multilinear relations*. Correspondence is not simply a one-to-one relation but also a one-to-infinite relation.

The relationship of mind and body as presented in Spinoza’s philosophy is not yet entirely clear to me, and it has not been a driving question for the dissertation. However, since the mind-body relationship is of considerable interest to Spinoza scholarship, and the thesis of radical mutual containment seems to entail this much about it, I say only this much and leave its development for the future.

Conclusion

The heart of my reading of Spinoza’s metaphysics of the attributes, the thesis of radical mutual containment, amounts to a radical perspectivalization of the infinite. Other readings posit an objective “depreciation” of the infinite, or a descent from the infinite into the finite. This sort of reading is of course highly problematic, for there is no account of why there should be such depreciation or degradation. Moreover, these readings offer no account for why infinite substance *must* give rise to finite modes. However, when we seriously consider the attributes as

adequate perspectives on substance, then the variety of ways of being infinite all find a place within a system of the infinite. Absolute infinity consists in adequate perspective as such, indivisible and unique: the perspective of the attribute insofar as it contains and expresses all attributes as modes of itself. But this perspective is in turn embedded within absolute infinity as one perspective among others, and so the same infinity also appears as infinite in its own kind. I have argued that this is not an illusion or depreciation, but a necessary consequence of the perspectivalization of absolute infinity: absolute infinity could not be an adequate perspective if it did not encompass itself and all other perspectives as each infinite in its own kind. Hence what appears superficially as a depreciation of the infinite is really a system of perspectives in which nothing could be adequately expressed or conceived if infinity was not manifested in terms of these perspectives.

The results seem paradoxical. The absolutely infinite, in order to be absolutely infinite, must express itself wholly and indivisibly in infinitely many entities, each of which is in one respect absolutely infinite, but in another respect only infinite in its own kind. Moreover, the absolutely infinite must express itself wholly and indivisibly within even the finite as the immanent principle of infinite divisibility. But this peculiar unfolding of absolute infinity is what is required in order to characterize the unique relation between substance and modes. Given Spinoza's claim that modes "follow" from substance in the same way as properties follow from a definition (IP16 Dem.), this relation must be in some fundamental sense logical and intelligible. Substance, which exists in itself and is conceived through itself, must express itself by entailing the existence of modes, which exist in another through which they are conceived. The need for substance to *express* itself, and so to exist through itself, takes the form of the absolute mutual involvement of its attributes, which in turn express themselves and their mutual

involvement in the form of the modes of substance, which must exist through another. It is in this way, through the absolute affirmation of the infinite, that this unique relation is expressed.

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APPENDIX A
ABBREVIATIONS AND CITATION

My citations of Spinoza's works refer to Carl Gebhardt's 1925 edition of Spinoza's collected works and correspondence, *Spinoza Opera*. In this dissertation I cite Spinoza's works parenthetically within the main body of the text. In the case of the *Ethics* (and, on occasion, *Parts I and II of Descartes' "Principles of Philosophy"*) I have adopted the convention of citing the elements of the geometrical demonstration format. These citations start with a Roman numeral indicating the Part in which the element is found, followed by a letter indicating what sort of element it is, and then an Arabic number following Spinoza's numbering of the elements.

The abbreviations for these elements are:

D = Definition

A = Axiom

P = Proposition

Post. = Postulate

An additional abbreviation may follow this citation, indicating that I refer to a supporting passage to the element in question. The abbreviations for these items are:

Dem. = Demonstration

Alt. Dem. = Alternate Demonstration

Cor. = Corollary

Schol. = Scholium

Exp. = Explication

A number may follow the second abbreviation if there are multiple instances of the same kind of supporting passage. So, for example, the abbreviation “IP33 Schol. 2” indicates the second Scholium following Proposition 33 in Part I of the *Ethics*. Unless I indicate otherwise, all such citations refer to the *Ethics*.

For Spinoza’s other works, and those occasions where the standard citation of the elements of the geometrical demonstration in the *Ethics* make locating the relevant part of the passage difficult (as is often the case with some of the longer scholia), I cite the location in the Gebhardt edition of Spinoza’s collected works. The citation begins with a “G,” indicating the Gebhardt edition, followed by the volume number given in Roman numerals, then a slash and the page number, and finally another slash and the line number(s). So “G II/90/28” refers to Volume II, page 90, line 28 in the Gebhardt edition.

All translations, unless I indicate otherwise, are those of Edwin Curley, either from Volume I of his *The Collected Works of Spinoza* or from *A Spinoza Reader*. On occasion I use the translations by Samuel Shirley from *Complete Works*. In general I do not cite page numbers from Curley’s translations because he indicates the volume and page numbers of the Gebhardt edition in the margins; Shirley’s translations in *Complete Works*, however, do not indicate the Gebhardt pagination, and so wherever I use Shirley’s translations I provide the page number from *Complete Works*. In some instances I found the existing translations deficient and either modified them or provided my own translation from the Latin; I indicate these situations in my citations.

All other citations appear in footnotes. There are sufficiently many instances where I discuss the arguments of René Descartes that I have adopted an abbreviated form for citing his works. In this dissertation I make use of the English translations of Descartes edited by John Cottingham, Robert Stoothoff, and Dugald Murdoch. Citations of this edition of Descartes' works are indicated by the abbreviation "CSM," followed a Roman numeral indicating volume number and an Arabic numeral indicating page number. So for example "CSM II 32" indicates Volume II, p. 32 of the Cottingham/Stoothoff/Murdoch translations.