

Substance and System: Perplexities of the Geometrical Order

By Margaret D. Wilson

THE EARLY MODERN PERIOD WAS ONE OF THE great eras for philosophical systems. Of course there were major philosophers of the period who did *not* produce systems. Locke was, I suppose, an unsystematic philosopher, and Pascal an anti-systematic one. Both are radically original, quite comprehensive, and still-challenging thinkers; yet in different ways their thought defies the classification “systematic”. It seems clear, however, that Descartes, Hobbes, Spinoza, Leibniz, and Kant were all “system-builders”; and (though one might get an argument here) Berkeley and Hume were, too.¹

These classifications come to mind readily, intuitively. But is it really so clear what we mean by ‘a systematic thinker’? *Should* a philosopher be systematic, or not? Does “systematicness” (or the contrary) tend to correlate with other important aspects of a philosopher’s thought, such as dogmatism or skepticism; foundationalism or perspectivism; “scientific” or “common-sense” identifications?² To what extent is it a feature of the *content* of the thought, to what extent a feature of the manner of presentation? (And *which* features, specifically, are at issue in either case?) Can one be a systematic philosopher while believing (a) that the various areas of knowledge do not, and will never form a unified whole; or (b) that there are no fixed and certain principles of human knowledge; or (c) that major areas of human experience cannot be adequately articulated or explained? To what extent does systematicness correlate with credibility or *incredibility* in philosophical writing?

Intriguing as I think these questions are, they are of course too broad to be pursued here in any worthwhile way. I pose them mainly as background to some remarks I want to offer on what is undoubtedly (though, again, intuitively) one of the “most systematic” philosophical works ever devised, Spinoza’s *Ethics*. I will begin by trying to isolate some of the features that lie behind the intuitive judgement that Spinoza’s work is an extraordinarily developed instance of *system* in philosophy. I will go on to point out and briefly discuss certain kinds of interpretive problems that arise out of the most conspicuous of its several major “systematic” features: namely, the *ordo geometrico*.

In his recent study of the *Ethics*, *Behind the Geometrical Method*, Edwin Curley attributes to both Descartes and Spinoza “the ideal of a unified science”, which Curley explains as follows:

...it is necessary, in a properly constructed philosophy, to proceed systematically, from metaphysical first principles, through an account of

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man and his place in nature, to a theory of the good for man.³

Curley goes on to specify that the systematic organization is required to be “deductive.”⁴

To expand on this statement a bit, with respect to Spinoza, we may note that the account of human virtue and blessedness, in which the *Ethics* culminates, rests on the unique accounts of the passions, of perception and knowledge, and of the mind-body relation generally, which are developed through the middle portions of the work. These in turn of course depend on his general theory of nature, which is worked out primarily in Part I - particularly the concept of substance, the view of the substance-attribute relation, and the thoroughgoing determinism or necessitarianism. Curley sees this structure as expressing a general “ideal” concerning the “unity of science” - a sort of meta-position. Alternatively, we could view it as simply the manifestation of Spinoza’s specific philosophical allegiances: for instance, to naturalism in ethics and theology. It is clear, in any case, that Spinoza’s peculiarly rationalistic ethical and eschatological principles would be incomprehensible considered apart from his peculiar theories of nature and knowledge.

We may now specify a few of the “systematic” aspects of Spinoza’s philosophy, as expounded in the *Ethics*. First, Spinoza conceives knowledge as an organized, interrelated structure, with a proper internal order. Second, his philosophy is comprehensive: all the major traditional divisions of philosophy - metaphysics, rational theology, philosophy of mind, epistemology, moral theory, etc. - have their place within the structure. (Spinoza even works some political philosophy and a touch of aesthetics into the logical fabric of the *Ethics*.) Third, the *Ethics* is cumulative, in that doctrines propounded later in the work depend not only for their force but even (in large degree) for their sense on the highly original principles and concepts presented earlier.

This list of features, though, fails fully to capture the reason that the *Ethics* appears so *uniquely, exceptionally* - even *relentlessly* - systematic. Even Curley’s mention of the “deductive” organization doesn’t quite take us to the heart of the matter: as he notes, Descartes (when not following the “analytic” method) proceeds “deductively”, too; yet the effect is very different. It is the specifically Euclidean character of Spinoza’s presentation that marks his philosophy as, so to speak, a system in spades. I want first to comment very briefly on the general significance of Spinoza’s use of the *ordo geometrico*, then enunciate some special interpretive problems that it seems inherently to present.

MUCH HAS BEEN WRITTEN ABOUT SPINOZA’S use of the geometrical method. Many have noted that its appearance of rigor is specious: as Leibniz wryly commented (in his elegant notes on *Ethics* I), Spinoza was “not a great master of the art of demonstrating.”⁵ A more recent commentator, Joel Friedman, undertook to derive rigorously all the Propositions of Part I, and found that he needed 165 axioms, beyond the seven that Spinoza gives.⁶

Some have speculated about Spinoza’s reasons for adopting this quite constraining, if impressive, format. No doubt the appearance of rigor - deceptive as it may be - was an important factor: as Thomas Mark has noted, Spinoza had some highly unorthodox ideas to get across, and presenting

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them as derivable from supposedly evident principles could count as shrewd strategy.⁷ (Mark supposes that Spinoza had reason to believe that the axioms would be accepted as self-evident by “many” readers. I’m not entirely convinced by his argument for this point, especially given the character of Leibniz’s critical remarks.)⁸

Spinoza himself offers another insight, which connects his use of the Euclidean method with the content of his philosophy. At the beginning of his discussion of the affects in Part III he notes that many “prefer to abuse or deride the emotions and actions of men rather than to understand them.” He continues:

They will doubtless find it surprising that I should attempt to treat of the faults and follies of mankind in the geometric manner, and that I should propose to bring logical reasoning to bear on what they proclaim is opposed to reason, and is vain, absurd, and horrifying. But my argument is this: in Nature nothing happens which can be attributed to its defectiveness, for Nature is always the same, and its force and power of acting is everywhere one and the same; that is, the laws and rules of Nature according to which all things happen and change from one form to another are everywhere and always the same. So our approach to the understanding of the nature of things of every kind should likewise be one and the same; namely, through the universal laws and rules of Nature. Therefore the emotions of hatred, anger, envy, etc., considered in themselves, follow from the same necessity and force of Nature as all other particular things. So these emotions are assignable to definite causes through which they can be understood, and have definite properties, equally deserving of our investigation as the properties of any other thing, whose mere contemplation affords us pleasure. I shall, then, treat of the nature and strength of the emotions, and the mind’s power over them, by the same method as I have used in treating of God and the mind, and I shall consider human actions and appetites just as if it were an investigation into lines, planes, or bodies.⁹

This passage clearly reveals that in Spinoza’s own mind the ideal of *knowledge* as an ordered, comprehensive system is bound up with the conception of *reality* as one substance, “everywhere the same”; and with the doctrine that everything whatsoever is brought about with necessity, under general laws and rules accessible to reason. It also reveals that he sees the use of the geometrical method as a natural expression of these views - especially as they relate to those supposedly irrational, absurd, or “defective” features of the world that are the human passions. It further foreshadows Spinoza’s conception of the power of the mind over the passions, as consisting precisely in the rational understanding through “causes” that he takes the geometrical exposition to provide.⁹

This lovely marriage of form and matter presents, however, some special problems for Spinoza’s interpreters. I have already touched on one of them: the issue of invalid “proofs”. Sooner or later one must come to terms with such questions as the following: To what extent can (or should) the arguments be interpreted as enthymematic? To what extent are they *misleading* with respect to Spinoza’s real grounds for his views?¹⁰ To what extent do they show that Spinoza was confused, or had failed to think out his position adequately? To what extent do the problems arise from resolvable ambiguity (as opposed to essential equivocation)? To what extent does superficial understanding on the reader’s part contribute to the appearance of fallacy?

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Applying oneself to the problems of Spinoza's texts does sometimes yield results; to this extent one has to conclude that one's own initial understanding may often be at fault. Yet the egregious difficulties that remain, despite the long efforts of a legion of dedicated Spinoza scholars, strongly tempt one to the conclusion that this cannot be the whole answer. A *locus classicus* of this type of problem is the proof of Ip5 ("In the universe there cannot be two or more substances of the same nature or attribute").¹¹

Here, though, I want to stress two less obvious sources of perplexity inherent in Spinoza's demonstration of his *Ethics ordine geometrico*. The first we may characterize as the "*cumulative determination of sense*." To quote Curley's recent work again:

if we would understand what Spinoza means by saying that the mind and body are one and the same thing, conceived under different attributes, then we must see what consequences Spinoza thinks follow from this. (BGM, 74)¹²

I have elsewhere argued a similar point at length, in a paper concerned with the interpretation of Iax4, "Knowledge of an effect depends on knowledge of a cause, and involves it."¹³ I claim to show in that paper that one commentator after another has provided readings of this key axiom which are completely irreconcilable with Spinoza's *use* of it, in arguments against mind-body interaction, in his account of sense perception, etc. Particularly unsatisfactory are attempts to explain the axiom in terms of ordinary notions of understanding things through their causes, or their constituents. But more sophisticated readings of Iax4 also run into difficulty when measured against its role in Spinoza's proofs from Part I0b: through Part V. For instance attempts to construe the axiom as restricted to *adequate* knowledge, in the hopes of avoiding certain common-sense objections, run afoul of its function in the proof of IIp16, concerned with the (inadequate) perceptions of the senses.)

ABOVE I NOTED, AS AN ASPECT OF THE systematicness of the *Ethics*, that the understanding of later Propositions depends strongly on knowledge of principles and concepts presented earlier. This is no doubt as it should be, in an original, systematic philosophical work. What we are considering now, however, is in effect the converse of this point: that understanding *earlier* principles (definitions, axioms, propositions, etc.) may require very careful attention to their *later* career in the *Ethics*. Although this does not seem an intrinsically surprising notion, it does cut against reading the work in what seems the intended way: as a linear development from the more evident, general, and easily grasped, to the more abstruse, special, and difficult. Some of the problems we encounter in reading Spinoza, then, may arise from the fact that the geometrical format *falsely* encourages the assumption that the initial principles of any part are self-standing, bear their meaning on their face, are meant to be unmistakable, obvious, directly accessible to any open and attentive mind. In any case, I do want to suggest that a substantial amount of Spinoza interpretation has been hampered by some such



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assumption.¹⁴

A third important source of interpretive uncertainty and conflict is the issue of *inadvertant generality*, or other unintended results. With respect to some of the arguments concerning the mind in Part II, for instance, there is reason to wonder whether the deductive machinery, once set in motion, yields consequences far broader than Spinoza actually desires.

Curley, confronting the “paradoxical” quality of some of the doctrines of Part II, writes of one of them (IIp13s):

What of the claim that all things are animate? Partly, I think, this must be simply a deduction from preceding propositions. If there must be in God an idea of every thing that exists (P3), and if, in the case of human beings, that idea constitutes the soul of the thing (P11), then we would need some reason to deny that other things have a soul. And it’s not clear what that reason would be. (BGM, 72-3)

I take Curley to be suggesting here that the doctrine that everything is animated sort of falls out of the system, without being a particularly desired or intended consequence. And I suspect that Curley would *like* to hold something similar about the doctrine of “ideas of ideas.” That is, he would like to hold - and did hold in an earlier book - that this doctrine provides a way of distinguishing the minds that we would normally regard as conscious or self-conscious from mere ideas of non-conscious entities. As he noted in *Spinoza’s Metaphysics*,

...while every individual thing has a “mind” containing ideas of the affections of its body (E II, P13S), the existence of ideas of ideas is proven only for human minds (E II, P20). I infer from this that, although Spinoza is willing to assert that everything is animate (in a very odd sense of the term), he is not prepared to say that anything except a human being is conscious. (128)

TO THIS REASONING I ONCE OBJECTED THAT although the proof of ideas of ideas *mentions* only human minds, the argument rests on a principle that Spinoza tells us applies *generally*, and not just to human minds, so the restriction Curley seeks is foreign to the *logic* of the argument.¹⁵ Curley now admits the force of this objection, but reluctantly.¹⁶ The point I want to make here is that the issue between us turns partly on certain interpretive perplexities attendant on the geometrical structure of the *Ethics*. How strictly should one hold Spinoza to the literal *implications* of his proofs when they seem undesirable? To what extent is it acceptable to blunt the force of Spinoza’s “paradoxes” by observing that they are “simply a deduction from preceding propositions”? At stake is not only the weight of Spinoza’s claim that “everything is animate,” and the role of ideas of ideas, but other significant implications about the mind as well. Thus (as I have also argued elsewhere) Spinoza is *formally committed* to the claims that *every body* has (not only a “mind” but) *distinct or adequate perceptions*, and that the “mind” of *every body represents everything* that causally interacts with its body.¹⁷ Although I stand by this claim, I have come to hesitate about the rigorous interpretive principle I previously joined with it: that one cannot legitimately spare Spinoza from the consequences of the apparatus of his system. φ

ENDNOTES

¹At the Mexico conference Maria del Carmen Silva in fact argued vigorously against the interpretation of Hume as a system-builder.

²The terms 'systematicness' and 'systematicity' are both rather cumbersome. I use the former (which I managed to find in an unabridged dictionary) mainly because it is shorter by one syllable.

³(Princeton, NJ, Princeton University Press, 1988), pp. 4-5. Curley mentions that this perspective derives from Stuart Hampshire; he further notes that it inspired his own earlier reading of the *Ethics* in *Spinoza's Metaphysics* (Cambridge, MA, Harvard University Press, 1969).

⁴BGM, p. 6. With respect to Descartes, Curley of course has in mind the "tree of knowledge" figure from the preface to the French edition of the *Principles*, and the "synthetic" presentation of that work itself (later improved on by Spinoza, in his exposition of it).

⁵"Certe Spinoza non est magnus demonstrandi artifex." "On the Ethics of B. d. Sp.", in *Die philosophischen Schriften von Gottfried Wilhelm Leibniz*, ed. C.J. Gerhardt, vol. I, p. 148. The translation is Leroy E. Loemker's, from his edition of Leibniz's *Philosophical Papers and Letters*, second edition, Dordrecht-Holland, D. Reidel, 1969), p. 203.

⁶"A Formalization of Spinoza's *Ethics*, Part I" (Davis, California, 1975). As far as I know this paper has not been published. See also Michael Hooker, "The Deductive Character of Spinoza's *Metaphysics*," in R. Kennington, ed., *The Philosophy of Baruch Spinoza* (Washington, DC, Catholic University Press, 1980).

⁷T.C. Mark, "Ordine geometrico demonstrata: Spinoza's use of the axiomatic method," *Review of Metaphysics*, 29 (1975), 263-86.

⁸In his commentary on *Ethics* I, already

cited, Leibniz then observes that Spinoza's definitions - of 'cause of itself' and 'substance' - require conceptions contrary to the common ones. He appears to grant just two of the axioms, commenting of the others that one is obscure, one is apparently inconsistent, and three can be proved. (Gerhardt, vol. I, pp. 139, 143, 140; Loemker 196, 199, 197.)

⁹This is not to say that Spinoza's deterministic system "requires" the geometrical form of exposition: Mark is clearly right to dispute such a strong claim. He is also right to endorse the point that Spinoza was under no illusion that only his own, "true" philosophy was susceptible of such presentation: he himself rewrote Descartes's rival system into geometrical form. But I think the passage quoted leaves no doubt that Spinoza himself was aware of strong *affinities* between his monism, determinism, and rationalistic theories of virtue and salvation on the one hand, and the geometric order of presentation on the other hand.

¹⁰It is often observed that the geometrical format can be a distraction from both the real movement of Spinoza's thought and the underlying intellectual motivation (with respect to historical influences, for example). Thus Curley, after criticizing Spinoza's presentation ("The definitions are typically obscure, the axioms frequently not evident, and the demonstrations all too often unconvincing"), goes on to propose that one can get at what is worth understanding in the *Ethics* by uncovering, beneath the surface of the work,

the dialogue Spinoza was conducting with his predecessors, a dialogue the geometric presentation served to conceal, and was, perhaps, partly designed to conceal. (BGM, xi)

¹¹For discussion of the interpretive problems posed by this Proposition see Don Garrett, "*Ethics* IP5: Shared

Attributes and the Basis of Spinoza's Monism," in *Central Themes in Early Modern Philosophy*, ed. J.A. Cover and Mark Kulstad (Indianapolis and Cambridge: Hackett, 1990), 69-107.

¹²Curley connects this observation with a general methodological principle to the effect that the meaning of a statement is partly determined by the context in which it is embedded. (cf. BGM, xiv)

¹³"Spinoza's Causal Axiom (*Ethics* I, Axiom 4)," in *God and Nature: Spinoza's Metaphysics* ("Spinoza by 2000" series), ed. Yirmiyahu Yovel; Brill, 1991, 133-60.

¹⁴Although Jonathan Bennett's study of the *Ethics* (*A Study of Spinoza's Ethics*, Hackett, 1984) is unquestionably impressive in many ways, I feel that his approach is particularly subject to this objection. (I substantiate this criticism with respect to Iax4 in the paper mentioned in the text.)

Mark Rollins has said (in conversation) that it is wrong to suppose that even Euclid's *Elements*, or contemporary axiomatized mathematical systems, can be understood in a strictly linear manner (the axioms independently of the theorems, etc.). I suspect he is right. If so, I must qualify my suggestion that Spinoza's Euclidean format is misleading *qua* Euclidean. But clearly, if (as Thomas Mark, for instance, assumes, in the article cited above) an axiom is supposed to be *initially accepted as self-evident by the reader*, it is supposed to be *semantically accessible* to the reader, independently of propositions presented later. The interpretive assumption is a natural one, whether or not it is strictly Euclidean.

¹⁵"Objects, Ideas, and 'Minds': Comments on Spinoza's Theory of Mind," in Kennington (see n. 7).

¹⁶BGM, 72.

¹⁷*Ibid.*