

## Extension

Spinoza lists Extension (*extensio*) as one of God's infinite attributes: "Extension is an attribute of God, *or* God is an extended thing" (E2p2). In fact, Extension and Thought are the only attributes of God that Spinoza explicitly names, and the only ones he thinks humans are aware of (Ep64). Extension is, roughly speaking, the attribute through which the physical world, or matter, is expressed. For example, it is the attribute through which such standardly physical notions such as motion and rest are understood (I/114, E2a1'). Since attributes are independent ways of conceiving substance (E1p10), and substance is the bedrock of reality (E1p1), it follows that we can conceive of the world as being irreducibly physical (in addition to being irreducibly thinking, and so on for every attribute).

How do we know that Extension is an attribute of God, rather than a mode of some other attribute of God? Spinoza takes it as axiomatic that extended things exist: "We feel that a certain body is affected in many ways" (E2a4). But it does not follow from the existence of bodies that Extension is an attribute. After all, warm things exist and yet Warmth is not an attribute. So, even granting that extended modes exist, how do we know that Extension is not dependent on Thought, or some other attribute, for its conception? Spinoza, unfortunately, does not explicitly answer this question. Instead, he offers two proofs for why Thought is an attribute of substance and then claims that the proofs for Extension proceed in the same way (E2p2d). So, we are forced to speculate a bit. In the first proof that Thought is an attribute, Spinoza argues that since individual ideas are determinate expressions of God's nature (as all modes are), there must be an attribute whose concept individual ideas involve and through which they are also conceived (this attribute being Thought). Applied to Extension, the idea seems to be that since individual bodies exist and are determinate expressions of God's nature, there must be an attribute whose concept individual bodies involve and through which they are also conceived. Extension is, presumably, just this attribute: its concept is necessary to conceive of individual bodies. For example, we need to think of a triangle as in space in order to think of it at all. But this proof is only so convincing, since it leaves untouched our original question: is Extension the end of the conceptual line, or does it too need to be conceived through some other concept? After all, that *x* is necessary to conceive *y* doesn't entail that *x* is an attribute: the concept of a basketball is necessary to conceive of that of a cross-over dribble, but Basketballhood is not therefore an attribute. The second proof of Thought as an attribute is more promising in this respect. It starts from the fact that God is an infinite being and any concept that suffices to conceive of an infinite thing must identify an attribute. Since we can conceive of an infinite thinking being, Thought must be an attribute. Applying the proof's basic idea to Extension, the proof seems to be that because we can conceive of an infinite extended thing—perhaps by conceiving of space extending forever in all directions—Extension must be an attribute of God.

By including Extension as one of God's attributes, Spinoza departs rather drastically from traditional conceptions of God, according to which God is a thinking or spiritual substance, but not a physical one. The inclusion of Extension as an attribute of substance is a major cause of controversy for Spinoza. By calling God extended, Spinoza opens himself up to charges that he has rendered God composite and, therefore, mutable and destructible. Spinoza ultimately dedicates almost all of E1p15s—one of the longer scholia in the *Ethics*—to explaining and rebutting this charge. There Spinoza argues that, despite being extended, God is not divisible: "these arguments are founded on their supposition that corporeal substance is composed of parts, which I have already shown to be absurd" (II/58). It is only when conceived through the imagination, an inadequate form of knowledge, that extended substance is 'found to be finite, divisible, and

composed of parts” (II/59). When “we attend to it as it is in the intellect, and conceive of it insofar as it is a substance...it will be found to be infinite, unique, and indivisible” (ibid.). In other words, conceived as it really is, extended substance is perfectly simple, or without parts. As such, Extension is not inconsistent with divine nature: we can attribute it to God without attributing anything like mutability or destructibility to him.

But what is Extension exactly, besides being the attribute of substance that grounds or explains the physical world? Perhaps the traditional interpretation is that Spinozistic Extension is equivalent to Cartesian Extension: three-dimensionality or extension in space. On this interpretation, Spinoza departs from Descartes by allowing one and the same substance to have both Thought and Extension, and by attributing Extension to God, but follows Descartes in how he thinks about what Extension itself is. Bennett (1984: ch. 4) seems to fall into this camp when he says that Spinozistic Extension is just space itself, and individual bodies merely qualitatively different regions of that space. There are many reasons, however, to think that this is not in fact Spinoza’s view of Extension. First of all, he never says as much. For example, outside of the merely expository PCP, Spinoza never offers a definition of Extension as dimensionality. Second, the fact that Spinoza thinks of Extension as lacking parts, whereas Cartesian space is indefinitely divisible (CSM I 202), is a strong indication that the two conceptions of Extension are likely quite different. Third, Spinoza in fact explicitly *denies* that Extension can be understood as mere three-dimensionality. In one of the last letters of his life (Ep.83), written to Tschirnhaus in 1776, he distances himself from the Cartesian concept of Extension: “Descartes defines matter badly by Extension [in space]...it must necessarily be explained by an attribute which expressed eternal and infinite essence” (487). Cartesian Extension fails to express eternal and infinite essence because it is passive or inert—for example, it needs a transcendental God to get it a shove in order to move and generate effects. But Spinoza’s God or substance is necessarily active (E1p34).

So, whatever Extension is, it is at least the kind of thing that must express infinite essence. Beyond that, however, little is clear. One might be tempted to think of Extension as simply a more active version of Cartesian three-dimensionality. However, several recent commentators have denied that Extension even involves three-dimensionality at all. In other words, the point is not that Extension is not *mere* three-dimensionality—it’s that it is not even dimensionality to begin with. For example, Schmaltz (1999) argues that three-dimensionality is a feature of finite bodies, but a feature that exists in substance only eminently, or in some potential or primordial form. On this reading, Spinoza’s God resembles Malebranche’s God, in whom three-dimensionality exists eminently, as a divine idea. Peterman (2015) goes even further and argues that neither substance nor modes truly exist in three-dimensional space. Rather, three-dimensionality is a confused, imaginative representation of Extension, even when applied to modes of Extension. While there are strong textual bases for denying three-dimensionality of substance (and perhaps of modes too), there is a sense in which this is a Pyrrhic victory. After all, without a positive alternative for what Extension is, one begins to worry that Spinoza does not have much of a view in the first place. It is not enough to characterize Extension as infinite causal power, or as self-explanatory, etc. since—though true—this fails to distinguish Extension from Thought or other attributes. This worry about the lack of a positive view is compounded by the fact that Spinoza admits in his letter to Tschirnhaus that he has not yet worked out his theory of Extension: “perhaps I will pursue 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” (487).

Let me end by highlighting a few questions for further research. First, and most importantly, there is the question of what Extension is. This is a question that is probably impossible to answer directly from his remarks on Extension. But perhaps it is possible to do so

indirectly. A second question could provide an avenue for such an indirect strategy: how is it that derivative properties of Extension follow from the essence of Extension? For example, motion is a mode and all modes follow, directly or indirectly, from their respective attributes, and yet it isn't obvious how it does so. Explaining the nature of this relation is not only worthwhile in itself—it is an explanation that John Toland (*Letters to Serena*) later takes Spinoza to task for not providing—but also a potential clue for understanding Extension more generally. For if it's possible to identify what it is about Extension that gives rise to motion, it's possible to identify something about Extension's nature. Third, there is the question of the relationship between the structure of Extension and that of Thought. Both Thought and Extension are attributes and therefore independently conceivable, and so there will inevitably be features of each that are truly unique to, or distinctive of, each. But because the mind is the idea of the body, the two realms inevitably stand in structurally similar relations. So, perhaps it is possible to better understand the nature of Extension by looking to the nature of Thought, especially as it is manifested in the structure of ideas. This strategy seems to be one that Spinoza himself would potentially endorse, insofar as he explicitly uses the nature of the human body as a guide to understanding the nature of the human mind (E2p13s). Of course, the *attributes* of Extension and Thought might not be as closely related as the *modes* of each (ideas and bodies), but there are only so many entry points to understanding what Spinozistic Extension is. And since Spinoza dedicates a lot more space to discussing topics related to Thought than he does to topics related to Extension, it is perhaps a promising strategy to try to reverse engineer Spinoza's views on Extension by considering his views on Thought, including his views on modes of Thought.

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Key passages:

E1p15

E2p1/2p2

Ep. 12

Ep. 80-83

Secondary readings:

Bennett, J. 1984. *A Study of Spinoza's Ethics*. Indianapolis: Hackett Publishing Company.

Cover, J. 2003. Spinoza's Extended Substance. *New Essays on the Rationalists*, (eds.) Rocco J. Gennaro and Charles Huenemann. Oxford: Oxford University Press: 105-33.

Gueroult, Martial. 1997. *Spinoza I & 2*. Paris: Aubier Montaigne.

Peterman, A., 2015. Spinoza on Extension. *Philosophers' Imprint*. April 2015, Volume 15, No. 14, pp. 1-23

Schmaltz, T. 1999. Spinoza on the Vacuum. *Archiv für Geschichte der Philosophie* 81(2), pp. 174–205

Related entries:

Body

Substance

Attribute

Physics

Mathematics (including number, unity, measurement)