

BOOK REVIEWS

Valtteri Viljanen: *Spinoza's Geometry of Power*. Cambridge: Cambridge University Press, 2011, pp. 208. £53 (hb). ISBN 978-1-107-00780-2.

Monographs on Spinoza's metaphysics traditionally begin with a discussion of his two ontological categories, substance and mode. Valtteri Viljanen's *Spinoza's Geometry of Power* approaches Spinoza's metaphysics from a different direction, focusing instead on his view of essences. One can think of it as an extended comparison of Spinoza's essences with the scholastics' substantial forms. The scholastics often took a thing's substantial form to: activate it by giving it power; direct it by giving it a goal; and individuate it by establishing necessary and sufficient conditions for its existence. Viljanen examines whether, and the extent to which, essences play the same roles in Spinoza's metaphysics.

Chapters 2 and 3 are about what gives a thing its power. Just as the scholastics claimed that a thing's substantial form gives it power, Spinoza claims that a thing's essence gives it power. For example, he claims that a sprinter's essence gives him the power to move quickly from one place to another, a mathematician's essence gives her the power to infer rapidly from one idea to another, and a sapling's essence gives it the power to grow into a mature oak. According to Viljanen's Spinoza, these are examples of formal causation: the sprinter's essence is a formal cause of her motion, the mathematician's essence is a formal cause of her inference, and the sapling's essence is a formal cause of its growth. Viljanen says that Spinoza is led to this conclusion by using geometrical examples as his paradigm. Spinoza says that the essence of a circle is captured by the following definition: a figure constructed from a line by holding one end of the line in place while rotating the other end. From that definition we can infer that a circle has the following property: all its radii have equal measure. We can thus infer that circles have this property from a definition that captures the circle's essence. Viljanen classifies this as an instance of formal causation, and he claims that Spinoza endorses a similar view of the sprinter, mathematician, and sapling. Just as we can infer the circle's property from its definition, we can at least partly infer the sprinter's motion, the mathematician's inference, and the sapling's growth from their definitions. But according to Viljanen there are three important dissimilarities. First, the essence of a sapling is also an efficient cause of its properties; the essence of a sapling formally and efficiently causes new branches to sprout. In

contrast, the circle's essence is only a formal cause of its properties. Second, it is the sapling's *actual* essence, rather than its timeless and unchanging *formal* essence, that generates new branches (though as we will see its formal essence plays a role). In contrast, circles only have formal essences. Third, a carpenter's saw can abbreviate the sapling's growth. In contrast, nothing can stop a circle from having radii with equal measure.

While many details of this historical narrative are familiar, and while his claims in these chapters are mostly uncontroversial, Viljanen's synthesis is clear and well-executed. His discussion of expression (as in: 'modes are expressions of God') is particularly helpful (98–100). One controversial claim is that formal causation is independent of efficient causation (44). This is grounded in Viljanen's claim that geometrical entities are not efficient causes of their properties. But this seems to contradict the text. In a letter to Tschirnhaus Spinoza says that the essence of a circle must include its efficient cause (Ep60), and in the *Treatise on the Emendation of the Intellect* he says that the essence of a circle must include its cause and the context suggests he is talking about efficient causes (TIE 95-6). Likewise, Spinoza says that God is the efficient cause of all his properties (1P16C1), and shortly afterward says that God's relation to his properties is like a triangle's relation to its properties, suggesting that the triangle is likewise an efficient cause of its properties. Finally, in *Short Treatise on God, Man, and His Well-Being* Spinoza seems to treat efficient causation as the genus to which all other kinds of causation belong (ST I.iii.2). Of course, none of this establishes that Viljanen is wrong. Still, additional discussion would have been helpful.

Chapters 4 and 5 are about what if anything directs a thing's activity towards a goal. Some scholastics claim that an oak tree potentially exists within a sapling and is responsible for coordinating its growth. Spinoza denies that the sapling's growth is directed in that way. This leads Viljanen and others to wonder what if anything directs the sapling upward and outward until it is a mature oak, and what if anything directs the mathematician towards an understanding of Pascal's theorem. This discussion centres on Spinoza's conatus doctrine, which we can liberally translate: things strive to keep existing (3P6). More literally: things strive to persevere in their being. Does Spinoza's conatus doctrine imply that a thing's activity is sometimes directed towards a goal?

Carriero's view is that it does not.¹ According to this view a thing strives only in the sense that unimpeded it will continue moving in the same direction at the same speed. If that is all there is to a thing's striving to keep existing, Spinoza's conatus doctrine does not commit him to the view that a

¹John Carriero, 'Spinoza on Final Causality', in *Oxford Studies in Early Modern Philosophy*, Volume II, edited by D. Garber and S. Nadler, 105–47, Oxford: Clarendon Press, 2005. This is Viljanen's interpretation of Carriero. I have reservations.

thing's activity is directed towards a goal. Viljanen aptly brings out what is implausible about this view. Among other problems: Spinoza takes the conatus doctrine to imply that things strive to *increase* their power, not just to keep moving in the same way as before, retaining the same level of power. Consequently, there must be more to a thing's striving than mere inertia. To my mind, this is one of the book's finest moments (109–12).

Garret's view is that a thing's activity is often directed towards goals in virtue of its efforts to keep existing.² For example, we might explain a mathematician's rumination on Pascal's Theorem as follows: (i) it is essential to her that she strives to keep existing; and (ii) it follows from her essence that she believes that understanding Pascal's theorem will increase her power to keep existing. This explanation is an instance of what Spinoza calls the second kind of knowledge (2P40S2). We can give similar explanations of the activities of all things, though when it comes to more rudimentary things, like rocks, their representation of what will increase their power might not be sophisticated enough to call a belief.

Viljanen objects that these kinds of explanations violate the 'ontological priority of essences' (124–5). I did not understand his objection. As best I can tell, he is worried that Garrett is trying to explain a thing's essence by appealing to facts about what would benefit that thing. For example, he is apparently worried that Garrett is trying to explain why: it is essential to the mathematician that she strives to understand Pascal's theorem, by appealing to the fact that understanding Pascal's theorem would be beneficial to the mathematician. That would be problematic because it reverses the proper order of explanation; the mathematician's essence is supposed to explain why understanding Pascal's theorem would be beneficial to her, not the other way around, just as the sapling's essence is supposed to explain why sunlight would be beneficial to it, not the other way around.

If this is Viljanen's objection, it misses the mark. Garrett would deny that it is essential to the mathematician that she strives to understand Pascal's theorem, and consequently would not try to explain it. Garrett does not claim that the essence of a thing includes specific goals, like understanding Pascal's theorem. Rather, he claims that the mathematician adopts this goal because her essence is to strive to keep existing (see (i)) and she believes that understanding Pascal's theorem will help (see (ii)), a belief that, like all true beliefs, follows from her essence. Thus, her rumination is explained entirely by her essence. In contrast, if the mathematician decides to pursue drunkenness instead of understanding, her behaviour would be partially explained by her externally caused and false belief that drunkenness will increase her power to keep existing. In that case, her drunkenness would not be explained entirely by her essence.

²Don Garrett, 'Spinoza's *Conatus* Argument', in *Spinoza: Metaphysical Themes*, edited by O. Koistinen and J. Biro, 127–58, Oxford: Oxford University Press, 2002.

Significantly, Viljanen's own proposal (see 141–2) closely approximates Garrett's actual position. Nonetheless, Viljanen improves on Garrett's discussion by nicely integrating Spinoza's theory of the emotions. Moreover, the fact that these first-rate scholars independently converge on the same interpretation is a strong vote in its favour.

Chapter 6 concerns how a thing's essence individuates it; that is, how it establishes when the thing is created, sustained, and destroyed. Viljanen's proposal is that as long as God's power is constituted in accordance with a thing's formal essence, that thing exists. I would have liked more speculation about formal essences, particularly the formal essences of complicated bodies and minds. What is it about a sapling's formal essence such that it can survive some changes but not others? Does its formal essence just include a list of the changes it can survive, or does that list follow from something deeper? I do not think it is enough to say its bodily formal essence specifies a pattern of motion and rest. We would like to know what kind of pattern of motion is shared by the sapling and the oak, and whether in virtue of its physical cohesion a felled tree still counts as striving towards the same goal. Of course, the fault here is squarely Spinoza's. He tells us almost nothing about formal essences. Still, I would have appreciated more informed speculation.

Spinoza's Geometry of Power will appeal to a broad audience. It will serve as a clear, thorough, and succinct introduction for those unfamiliar with Spinoza's views on power, geometry, and essence. It will also inform and stimulate the expert. I highly recommend it.

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Anthony Ashley Cooper, Third Earl of Shaftesbury: *Standard Edition: Complete Works, Correspondence and Posthumous Writings*, edited with German Translations and a Commentary by Wolfram Benda, Christine Jackson-Holzberg, Patrick Müller, and Friedrich A. Uehlein, Vol. II,6 *Askêmata*. Stuttgart/Bad Cannstatt: Frommann-Holzboog, 2011, pp. 552. €318 (hb). ISBN 978-3-7728-0764-0.

When the Third Earl of Shaftesbury died he left behind a pair of notebooks (now in The National Archives at Kew) containing a series of philosophical reflections inspired by the work of (and including extensive quotations from) the ancient Stoics Epictetus and Marcus Aurelius. They address topics such as natural affection, the self, simplicity, the passions, God, nature, providence, and the nature of philosophy itself.