

5. GOD, MIND, AND THE MECHANICAL PHILOSOPHY

In the previous sections, I have outlined Leibniz's physics and its grounding in his program for dynamics. In this final section, I would like to address some larger questions about the place of Leibniz's physics in his system.

5.1 God, final causes, and the world of physics

The discussions earlier in this essay have shown the extent to which Leibniz's physics, his mechanical philosophy, and his dynamics are intimately intertwined with his conception of God, benevolent ruler of the world, who has chosen to create this best of all possible worlds, governed by the metaphysical principles that determine the laws of motion that bodies in the world obey. As Leibniz often puts it, everything within the world is explicable mechanistically but the

laws themselves, which require appeal outside the world of the mechanical philosophy to a divine creator. In this way, Leibniz quite self-consciously reintroduces into physics the final cause that had been banished by earlier mechanists.

The final cause was, of course, a central notion in Aristotelian natural philosophy; indeed, for many, including perhaps Aristotle himself, it was the most important of the four causes.¹³⁶ But when the philosophy of the schools came under attack, so did final causes. Descartes, for example, argued in his *Principles of Philosophy*:

When dealing with natural things we will, then, never derive any explanations from the purposes which God or nature may have had in view when creating them and we shall entirely banish from our philosophy the search for final causes. For we should not be so arrogant as to suppose that we can share in God's plans.¹³⁷

For Descartes, then, our ignorance of God's intentions prevents us from appealing to final causes in physics. Spinoza goes Descartes one better and denies that God has any intentions at all. He writes in his *Ethics*:

[There is] a widespread belief among men that all things in Nature are like themselves in acting with an end in view. Indeed, they hold it as certain that God himself directs everything to a fixed end, for they say that God has made everything for man's sake and has made man so that he should worship God. . . . There is no need to spend time in going on to show that Nature has no fixed goal and that all final causes are but figments of the human imagination. For I think that this is now quite evident [from discussions earlier in the *Ethics*] . . . that all things in Nature proceed from an eternal necessity and with supreme perfection.¹³⁸

Not all mechanical philosophers followed Descartes and Spinoza in rejecting final causes, of course.¹³⁹ But final causes were clearly under attack, and Leibniz saw his role as defending them.

Leibniz's defense of final causes is, in a way, at the center of his metaphysics, and stands behind his whole account of contingency and divine freedom. But it also has a dimension that relates more specifically to his physics. We have already seen the way in which God's action reaches to the determination of the laws of motion; God creates substances in the world in such a way that they satisfy certain metaphysical principles like the principle of the equality of cause and effect and the principle of continuity, and because of that,

they satisfy the sorts of conservation principles that Leibniz posits as basic in the world of bodies. But Leibniz sees final causes as more generally relevant for physics as well. Leibniz writes in the SD:

In general, we must hold that everything in the world can be explained in two ways: through the *kingdom of power*, that is, through *efficient causes*, and through the *kingdom of wisdom*, that is, through *final causes*, through God, governing bodies for his glory, like an architect, governing them as machines that follow the *laws of size or mathematics*, governing them, indeed, for the use of souls. . . . These two kingdoms everywhere interpenetrate each other without confusing or disturbing their laws, so that the greatest obtains in the kingdom of power at the same time as the best in the kingdom of wisdom. (SD, part I, par. 14, GM VI 243: AG 126–27)

A special domain, as it were, within the kingdom of wisdom is what Leibniz calls the kingdom of grace. He writes in the *Monadology*:

Since earlier we established a perfect harmony between two natural kingdoms, the one of efficient causes, the other of final causes, we ought to note here yet another harmony between the physical kingdom of nature and the moral kingdom of grace, that is, between God considered as the architect of the mechanism of the universe, and God considered as the monarch of the divine city of minds. . . . This harmony leads things to grace through the very paths of nature. For example, this globe must be destroyed and restored by natural means at such times as the governing of minds requires it, for the punishment of some and the reward of others.

(*Monadology*, pars. 87–88, G VI 622: AG 224)

The world of the mechanical philosophy is in harmony with the kingdoms of wisdom and grace, Leibniz claims. Everything in the physical world that can be explained through God can be explained mechanically (assuming the laws of motion), and everything that can be explained mechanically can be explained through God as well. This amounts to saying that everything that the mechanical philosophy explains is a direct consequence of God's choice and design, not just the laws of mechanism, but *every particular* as well.¹⁴⁰ Leibniz writes in the *Discourse on Metaphysics*:

Anyone who sees the admirable structure of animals will find himself forced to recognize the wisdom of the author of things. And I advise those who have any feelings of piety and even feelings of true philosophy to keep away from the phrases of certain so-called free-thinkers, who say that we

see because it happens that we have eyes and not that eyes were made for seeing. (Discourse, par. 19, G IV 445: AG 52–53)

As a result, Leibniz suggests that we can appeal to God's wisdom in dealing with specific problems in physics, where proceeding by way of efficient causes is too complicated, particularly in optics (see SD, part I, par. 14, GM 243: AG 126; G III 51–52: L 351; Discourse, par. 22, G IV 447–48: AG 54–55).¹⁴¹ Furthermore, the harmony between the two kingdoms means that when God realizes his intentions in the world he created, he realizes them through mechanical means; God has reasons for everything in his creation, but this does not undermine the scope of Leibniz's mechanism. As Leibniz suggests in the passage quoted above, even Noah's flood can be explained mechanically.

But even though everything *can* be explained in terms of God, Leibniz doesn't think that everything *should* be so explained. In the May 1702 essay, Leibniz writes:

It is empty to resort to the first substance, God, in explaining the phenomena of his creatures, unless his means or ends are, at the same time, explained in detail, and the proximate efficient or even the pertinent final causes are correctly assigned, so that he shows himself through his power and wisdom. (G IV 397–98:AG 254)

Everything can, of course, be explained in terms of God, Leibniz holds. But unless specific details are given, the explanation is without content; to say that there was a universal deluge because God willed it to be so is an explanation that can be used to explain *anything* at all in the world. What we need to turn such an explanation into something with content is the specific reason that God had for flooding the world when he did, and the means by which he accomplished that end.