**Paul Feyerabend**

*Philosophy of Nature* (Cambridge: Polity, 2016)

Since Paul Feyerabend died in 1994, a steady stream of new ‘Feyerabendiana’ has appeared. His autobiography, *Killing Time*, appeared in 1996, followed by *Conquest of Abundance* in 1999, and *The Tyranny of Science* in 2011. The third and fourth volumes of his philosophical papers also appeared in 1999 and 2016, covering epistemology and relativism, and philosophy of physics, respectively. At the same time, a vigorous new body of scholarship has appeared, reassessing the ideas of this much-misunderstood ‘epistemological anarchist’. Once we remove the polemical fireworks, much of what Feyerabend said turns out to be more sensible than one might imagine—or, at least, so Feyerabend scholars argue.

This latest piece of new Feyerabendiana originally appeared in German in 2009 under the title *Naturphilosophie*, edited by Eric Oberheim and Helmut Heit, respected scholars of Feyerabend’s works. The book had an interesting genesis. While writing the book *Against Method*, in the early 1970s, Feyerabend was also simultaneously writing a multi-volume history of conceptions of nature in the Western tradition. The scope was ambitious, starting with the Stone Age and moving, chronologically if not wholly systematically, through the Homeric and Presocratic periods, through to modern quantum theory. Unfortunately the project was never completed, although, in retrospect, traces of its ideas and researches run through the later writings. However, until the publication of its German edition, its existence was unknown. Oberheim and Heit discovered it in the Philosophical Archive at the University of Constance, which holds Feyerabend’s papers, as a 245 page typescript, later augmented by a longer 305 page version held by Helmut Spinner, who for a time was due to edit the work.

*Philosophy of Nature* is a carefully edited combination of these two editions, supplemented by an informative introduction, and two additional documents (a long letter by Feyerabend to a colleague, and a research description detailing his work during the period when *Naturphilosophie* was being written). The result is a boon for Feyerabend scholars and an interesting contribution to both history of philosophy and philosophy of history. The historical story is rich, complex, and engaging, if also uneven in its detail and scope. Five of the six chapters are devoted to ancient European and near Eastern astronomy, Hesiodic and Homeric cosmogony and mythology, and several of the Presocratics. These chapters are dense, detailed, and bristling with footnotes—indeed, at the risk of alarming enthusiasts for Feyerabend’s’ irreverence, these chapters are very *scholarly*. But the sixth chapter – ‘Western Philosophy of Nature from Aristotle to Bohr’ – is a fifty-odd page whirlwind tour of … well, Aristotle, Descartes, Galileo, Bacon, Agrippa, Hegel, Newton, Leibniz, and the late-19th and early 20th century philosopher-physicists, like Bohr, that Feyerabend loved so.

Feyerabend’s project might nowadays arouse alarm, for two reasons. One is its reliance on ‘Great Man’ historiography, a consistent *appeal* for focus on to intellectual and cultural context, but an actual *focus* on the lives, personalities, and interactions of eminent individuals. Indeed, Feyerabend explicitly endorses this approach (p.227), despite his wisely noting, three pages later, several other historiographical sins. The other historiographical alarm bell is, of course, the grand *scale* of the project. Granted, this book was intended only as the *first* of a multi-volume work: the sixth chapter would have been realised fully in the other planned volumes, covering post-Aristotelian philosophies of nature in thirty or so chapters, rather than one busy chapter. But, even so, such ambitious historical projects are very rare these days; other contenders might include A.C. Crombie’s three-volume *Styles of Scientific Thinking in the European Tradition* (1994) and Stephen Gaukroger’s on-going, six-volume project, *The Emergence of a Scientific Culture*, the first of whose volumes appeared in 2009.

Feyerabend, to his credit, was self-reflexively modest about the prospects of the project. The history of Western philosophies of nature is ‘too extensive even for a sketchy outline’, such that he could only ‘*highlight* aspects of this development without claiming any completeness’ (p.169). Later works that contain this deep historical narrative inherit this modesty: *Conquest of Abundance* adopts an ‘historical and episodic’ approach, relating only ‘selected events and developments’ (1999, p.17). A related source of modesty is, of course, the fact that the book was written in the early ‘70s and never revised in the light of subsequent scholarship. As a result, much of what Feyerabend says is at risk of being out-of-date in the light of new discoveries and developments. (Commentators like S.R.L. Clark, Helmut Heit, and John Preston have all, politely, criticised Feyerabend’s scholarship on ancient Greek thought and culture). I leave assessments of this to experts in the relevant historical periods – an engagement that Feyerabend invites (p.168) – and, instead, focus the remainder of my remarks on a theme more directly relevant to the philosophy of history. This theme is *contingency*.

*Philosophy of Nature* is interesting at three levels. First, for scholars of Feyerabend’s work and the wider community of historians of philosophy of science. Second, for intellectual, social, and cultural historians interested in science, philosophy, the arts, and other more tractable categories. Third – my present concern – with philosophers of history and of science, for the reason that Feyerabend was not trying to tell a story of the history of Western philosophies of nature for the sake of historical interest alone. For sure, he loved history and a good tale well told. But, as we know from *Against Method*, history in Feyerabend’s hands was always being put to work (for instance, to challenge ‘abstract’ philosophical models of science, detached from scientific practice). I want to suggest that *Philosophy of Nature* had a deep, if latent, philosophical motive: to emphasise the historical contingency of what has come to be the modern scientific form of life and its guiding picture of the world. (Note the Wittgensteinian terminology: we know that Feyerabend was deeply influenced by his fellow Viennese, who was also alert to the contingency of the modern scientific *Weltbild*).

The aim of *Philosophy of Nature*, explains Feyerabend, is to ‘understand the contingencies that helped the [modern scientific] endeavour to succeed’ (p.205). Underlying the book is a constant emphasis on the vastly complex array of ‘development chains’ – material, social, political, artistic, technological, intellectual – that emerge and interact. Such developments are contingent, insofar as they might have happened very differently, or not at all. Crucially, such developments were rarely the results of careful, systematic design, deliberation, and decision, that being a ‘rationalist’ conceit. Instead, a survey of the history of philosophies of nature shows us that the ways we have inherited of experiencing and engaging with the world are contingent inheritances, not deliverances of reason. Alternatives to that inheritance were not carefully investigated and removed by argument, but often just lost, swept away in a melange of ‘reasons, facts, prejudices, social pressures’ (p.168).

This isn’t the quick and dirty argument, popular amongst many postmodernists and constructionists, that tries to infer the falsity of scientific claims from their historical contingency. For all we know, the rivals to what became the entrenched scientific theories, conceptions, and visions were, in fact, false, so their exclusion was sensible. But that phrase, ‘for all we know’ is crucial: the possibility remains that many of those rivals were removed without proper appraisal of their merits, after sustained critical contact with well-developed alternatives (this being a key component of Feyerabend’s epistemology, as articulated by Eric Oberheim in his 2006 book, *Feyerabend’s Philosophy*). Contingency may have done more of the work than critical reason.

Still, what’s needed is a more systematic argument, able to show the critical epistemological force of a sense of contingency. In this book, Feyerabend does not provide that argument. To find it, we have to turn to later writings—or, rather, to remarks scattered throughout his later writings. A careful reader of the third edition of *Against Method* (in 1993) and *Conquest of Abundance* and other writings of the late 1980s and early 1990s will find the components of a genuinely novel contingentist argument. A review isn’t the place to run through it, nor is it necessary to. The philosophical point to take from *Philosophy of Nature* concerns the implications of an informed appreciation of the vast historical contingency of Western philosophies of nature. This book describes the startlingly complex story of how a dynamic array of mythical, artistic, conceptual, religious, technological, and intellectual events and processes messily interacted, creating a broad set of visions of the nature of reality—a ‘scientific worldview’.

An obvious legacy of this contingentist sensibility is Feyerabend’s subsequent interest in the epistemic authority of the sciences in late modern societies. If that authority was a contingent development, it might not have come to be, and might still be fragile—vulnerable to change, not the inevitable feature of an enlightened society. Contingency challenges complacency, pushing us to tell grittier, messier stories about the emergence and development of our epistemically authoritative institutions, if not of the deep vision of the nature of reality animating our form of life.

If this seems to bring us back to the provocative, ‘big picture’ character of Feyerabend’s work, then that will reassure his fans, but prompt wearied sighs from his critics who fear business as usual from the arch *provocateur* of philosophy of science. How better to supercharge polemical claims about separating science and the state then harping on about the deep contingency of science? Neither the fans nor the critics should be hasty, however. *Philosophy of Nature* lacks the punchy, polemical mood of Feyerabend’s other writings, being soberer, calmer. (Looking through my notes, I only found half a dozen exclamation marks in the margin). It shows many of Feyerabend’s virtues (the wide reading, diverse interests, and deep understanding of physics) and few of his vices (the overheated rhetoric, wild exaggerations, and snipes against friends-turned-foes). For these reasons, critics and admirers of Feyerabend alike might find that his new role as historical philosopher of nature shows him in a new, more flattering light.

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