Paul Feyerabend

The Tyranny of Science. Ed. with Introduction by Eric Oberheim. Cambridge, UK: Polity Press 2011. 165 pages US\$54.95 (cloth ISBN 978-0-7456-5189-7); US\$17.95 (paper ISBN 978-0-7456-5190-3)

For readers who expected (maybe even hoped for) another deliberatively provocative and contentious work from the 'wild man' of philosophy of science, *The Tyranny of Science*, the latest published attempt to exhume the intellectual remains of Paul Feyerabend, will be disappointing. It consists of a pretty much direct transcript of four rambling lectures that Feyerabend gave in Trent, Italy in 1992, a couple of years before his death in 1994. (The lectures were published in Italian in 1996, but were presumably delivered in English.) The working title for the collection was 'Conflict and Harmony' (135, n.1), but the editors of Polity Press changed that to the current title and offer readers a cover page with a blood-red image of bombs—I assume they're nuclear ones—falling on a city, perhaps to make the book more seductive.

What to make of this? Feyerabend's freestyle lectures are essentially a lot of offthe-cuff remarks about a great many things—from Greek tragedies and early Greek philosophy to the social and political problems of the modern age. He doesn't want to offer any 'systematic' account, which he derides as abstracting from the concrete details of life (12, 95, 112-13). Instead, he tells stories, fairytales (13, 95), which have vaguely historical foundations (13). At the risk of being a bit systematic, allow me in this review to provide some context.

Feyerabend's best-known work is his book *Against Method* (London: Left Books 1975). Here Feyerabend argued for 'epistemological anarchism'. The epistemological anarchist is opposed to all systems of rules and constraints in science. Great scientists are *opportunistic* and *creative*, willing to make use of any available technique for discovery and persuasion. Any attempt to establish rules of method in science will result only in a straitjacketing of this creativity. The only rule that we can be *sure* will not impede imagination and progress is this: anything goes.

There are actually two claims here. One is descriptive, the other prescriptive. The first says that good scientists have *in fact* been bold and unrestricted in their thinking; the second says that they *should* be. Feyerabend was not, as he is sometimes portrayed, an 'enemy of science.' He was an enemy of *some kinds of science*. In the 17th century, according to him, science was the friend of freedom and creativity and was heroically opposed to the stultifying grip of the Catholic church. Feyerabend admired the scientific adventurers of this period, especially Galileo. But the science of Galileo is not the science

of today. Science has gone from being an ally of freedom to being an enemy. Feyerabend saw Thomas Kuhn as encouraging the worst trends in 20th-century science toward professionalization, narrow-mindedness, and the exclusion of unorthodox ideas. In the closing pages of *Against Method*, he declares that society now has to be freed from the strangling hold of a domineering scientific establishment, just as it once had to be freed from the grip of the One True Religion (*Method*, 307; cf. *Tyranny*, 89-90, 112).

What is important in all intellectual work, including science, is the free development of creativity and imagination. Nothing should be allowed to interfere with this. Some pedestrian work (Kuhnian 'normal science') is needed to help develop the existing ideas, but this should not interfere with the imaginative work. In essence, anything goes means "don't restrict your imagination" because a very silly idea can lead to a very solid result.... You cannot foresee what kind of silly move will lead you to a new insight or to a new discovery.... And don't restrict your imagination by logic' (130-31; cf. 54). In *Against Method*, Feyerabend is even more provocative: 'Neither blatant internal inconsistencies, nor obvious lack of empirical content, nor massive conflict with experimental results should prevent us from retaining and elaborating a point of view that pleases us for some reason or another' (*Method*, 183; also 284-5).

Clearly, something has gone wrong here. Even if theoretical pluralism is a good thing (and often it is) on the creative side of science, there has to be a means on the critical side of weeding out unpromising proposals, else everything proposed remains on the table as deserving serious consideration. The hypothesis of continental drift, once dismissed as silly, *is* now orthodoxy; but when it was originally proposed by Alfred Wagener in 1912, there was no convincing evidence for it. Now there is a lot. The same can't be said for the effectiveness of witchcraft or voodoo.

Feyerabend has a reply: 'The progress of science depends on an openness of world views which conflicts with ... totalitarian pronouncements World views may take a long time, even centuries, before they show results.... [I]ntroducing and defending world views that clash with established principles of modern science is not irrational and may even produce discoveries in the distant future' (43-4; also 53, 124-5). May produce discoveries in the *distant* future. Is that a sufficient reason for cultivating them? Feyerabend thought so. For him science *always* benefits from the presence of a range of alternative ideas and perspectives (e.g., 126). After Against Method, Feyerabend argued that his refutation of methodological monism challenged the presumed unity and superiority of scientific knowledge and practices. His later philosophy was therefore dedicated to a reassessment of the merits of a wide range of 'non-scientific' traditions present throughout non-Western indigenous cultures. The consequence of this reassessment was a radical epistemic pluralism that saw as much potential merit in astrology, witchcraft, voodoo, and alternative medicines as in conventional science. In support of that pluralism, Feyerabend (misleadingly) drew upon John Stuart Mill's claim that both human well being and the growth of knowledge are best served by a diversity of forms of life and modes of inquiry.

Feyerabend's later philosophy was thus a sustained defense of cultural and epistemic diversity. What is missing in his proposal, however, is some mechanism for the *rejection* and *elimination* of options. Feyerabend gives a recipe that, if followed, would lead to the accumulation of an ever-increasing range of ideas being discussed in every scientific field. Some ideas would probably become boring and might be dropped for that reason. But aside from that, there is *no* way in his recipe for an idea to be taken *off* the table. If anything goes, everything (or nearly everything) stays, since there is no mechanism for elimination. But if science is to be applied to problems, there must be a mechanism of selection, a mechanism for the *rejection* of some ideas. Proliferation of alternatives is plausibly a *part* of science, but another part is certainly a reasonable means of selecting among the alternatives.

Science is sometimes rapped for being unimaginative by comparison with literature or poetry. It's a bad rap. Good science is certainly imaginative, is certainly creative; but what is distinctive about science is its manner of *bridling imagination* by insisting that it be brought to experimental test. Feyerabend, in his radical defense of freedom and creativity, ignores that. *If* science *is* 'tyrannical', part of the reason is that scientists reject the dictum that anything goes.

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