**‘“What’s So Great about Science?” Feyerabend on**

**Science, Ideology, and the Cold War**

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In a 1976 paper, entitled ‘On the Critique of Scientific Reason’, the iconoclastic philosopher of science Paul Feyerabend argued that two fundamental questions ought to be at the core of the philosophy of science.[[1]](#footnote-1)mocked the who often st to the most overt and authoritarian - chement and ns

 The first question, ‘What is science?’, was hardly surprising, given the importance of the investigation and description of the theories, methods, and practices of scientific enquiry to that discipline. The second question, ‘What’s so great about science?’, might be more surprising, depending how it is taken: if read as a call for clear articulation of the epistemic merits of scientific enquiry, then it is a jocular statement of another typical task of the philosophy of science—namely, the evaluation of those theories, methods, and practices. But coming from Feyerabend, a self-confessed ‘epistemological anarchist’ who was later memorably described as the ‘worst enemy of science’, that second question might set off alarm bells.

 Indeed, the year after this paper was published, Feyerabend published *Science in a Free Society*, where he called for a separation of science and the state, and for a radical demotion of the cognitive and cultural authority of science – on the grounds that its ‘hegemonic’ authority was an active threat to a ‘free society’.[[2]](#footnote-2) At this point in his career, Feyerabend’s emerging ambition was ‘to defend society … from all ideologies, science included’.[[3]](#footnote-3)

 Such critical claims took on an increasingly political or ideological character from the mid-1970s onwards. In the first edition of the book, *Against Method*, published in 1975, Feyerabend emphasises how ‘Western rationalism’, superlatively manifested in science, has enabled and encouraged policies of intellectual and cultural imperialism. In a set of charges familiar in a ‘post-colonial’ world, Feyerabend declares that ‘non-Western tribes’ are ‘physically suppressed [and] lose their intellectual independence’, while, closer to home, the hegemony of science is ‘restricting the lives … thoughts [and] education’ of developed world societies’.[[4]](#footnote-4)

 Naturally these proclamations and denunciations were rapturously received by legions of critics of science and scientific culture, and made Feyerabend ‘a hero of the anti-technological counter-culture’.[[5]](#footnote-5) This was, after all, the time of *Silent Spring*, *Small is Beautiful*, of early pangs of ‘postcolonial guilt’, and the decolonisation of vast areas of the globe by the retreating European colonial powers. Feyerabend’s remarks therefore resonated within a social and political context characterised by critical revolt against established authorities, ideologies, and traditions, and marked by a growing interest in, and sympathy towards, oppressed and marginalised groups, ideas, and ways of life. Although many of Feyerabend’s criticisms were better made by other counter-cultural critics—Herbert Marcuse, say, or Martin Heidegger—his status, at this period at least, as a distinguished philosopher of science indicates that his own critical contributions may be original and worth exploring.

 The purpose of this chapter is, therefore, to offer a sympathetic interpretation of Feyerabend’s question, ‘What’s so great about science’, and to argue that, despite its proximity to his polemics, it does reflect a sincere and important conviction. My suggestion is that Feyerabend aimed to inspire and enable critical reflection on the cognitive and cultural authority of the sciences in late modern societies – and, indeed, that much of his work from the late 1960s until his death in 1994, can be understood as orbiting around that theme. Such critical vigilance is necessary because any cognitive and cultural authority—political, religious, scientific—is liable to lapse into complacency and dogmatism, certainly in principle, if not in practice. In Feyerabend’s dramatic term, the possibility of *tyranny* is always present, and, this being so, our best defence is to establish effective means of identifying and interdicting ‘tyrannous’ tendencies. And, as I go on to argue, in the case of science, this defence is best mounted by the discipline of the philosophy of science. For a core purpose of that discipline, in Feyerabend’s view, was that it ought to enable such critical vigilance by providing resources and an arena for asking and answering the question, ‘What’s so great about science’.

 This conception of the philosophy of science was not original to Feyerabend, and it has recently been enjoying a revival, in the form of ‘socially engaged philosophy of science’.[[6]](#footnote-6) Such a development is to be deeply welcomed, given the numerous obvious examples in which philosophical insight the sciences can play a role, such as the denial of climate change. Many factors fed into its emergence within Feyerabend’s own work, including a genuine enthusiasm for ‘socially engaged’ scientists such as Ernst Mach, and growing acquaintance, especially during the 1980s, with cultural anthropology and development studies.[[7]](#footnote-7)

 Oddly enough, though, certain relevant contemporaneous academic disciplines and political movements are not cited by him, such as feminist philosophy, critical race theory, or critical development theory. Such blind spots are curious, to say the least, given Feyerabend’s sincere commitment to what Eric Oberheim calls his ‘philosophical pluralism’.[[8]](#footnote-8) Still, it is equally clear that his pluralism was typically pointed in certain disciplinary directions: there is plentiful discussion of the history of physics, classics, and art, but practically nothing on moral philosophy or feminism, despite their proximity to issues – like social justice – that did interest him. (Actually, in a 1994 interview, he partly explained this puzzle by distinguishing professional philosophical ethics, which ‘bored him to tears’, from ‘moral questions’, concerning, say, ‘matters of politics and knowledge’.[[9]](#footnote-9) Quite how one explores morals, in this sense, without a discipline of ethics was, alas, left unclear).

 The focus of this chapter, however, is upon one contextual factor that did influence Feyerabend – namely, the Cold War. It is clear that his favoured idiom - of ‘ideology’, ‘tyranny’, and so on – was a reflection of the charged ideological conflicts of the mid-twentieth-century, and certainly it is clear that Feyerabend’s deep concern was with deep themes—liberty, say, and authority—that had a special resonance during the Cold War, for academics as much as for ‘the general public’. A further aim of this chapter, then, is to situate Feyerabend in historical context, and to explain how the Cold War informed his views on science and its place within late modern societies.

 Specifically, I argue that the Cold War played two roles. The first is that the Cold War influenced the agenda of mid-twentieth-century Anglophone philosophy of science, by proscribing debate about social and political issues.[[10]](#footnote-10) It was to this narrowed agenda that Feyerabend was critically reacting by explicitly calling for a socially engaged philosophy of science. The second is that *science* played a central role in the ideological struggle of the Cold War. Both the US and USSR were both competing for the cultural prestige of being preeminent exemplars of a scientific culture, as well as competing, at a more pragmatic level, for technological superiority. Feyerabend’s calls for critical reflection on the prestige of science therefore resonated within a wider ideological context: within this framework, to be a scientific culture is to be progressive, ‘modern’, and especially capable of beneficent governance of the world. Therefore to seriously ask the question, ‘What’s so great about science?’, is to call into question one of the foundational values central to the ideological struggle of the Cold War. Taken together, these two points indicate that Feyerabend was calling into question both the disciplinary remit of the philosophy of science, and a wider set of ideological issues concerning the authority and value of science.

 There is also a further aspect, albeit one that Feyerabend tends to leave implicit, which is that the programme of critical reflection that he calls for applies to *all* authorities - democracy just as much as communism, the left wing just as much as the right. A free society, of the sort Feyerabend seems to envisage, is one whose members are freed from unreflective and presumptive commitment to any set of epistemic and political ideals; and this means, in practice, that no special exemptions ought to be extended to liberal democracy and science.

 It should be added, too, that Feyerabend’s call for active critical reflection upon both the value of science and the aims of the discipline of philosophy of science are not confined to the long-gone days of the Cold War. Though Feyerabend does not put his claim quite like this, his call is, I think, for critical enquiry into prevailing cognitive and cultural authorities as part of epistemically and socially responsible citizenship. Granted, his interests were usually more critical than constructive, and he often lapsed into charged polemics rather than careful persuasion – but, still, once separated from the rhetoric, a sensible and defensible claim can be constructed.[[11]](#footnote-11)

 If so, then Feyerabend’s conception of the philosophy of science as a discipline that enables and inspires critical reflection on the place of the sciences within late modern societies enjoys a continuing importance. It origins may lie in the Cold War, but its impetus is provided by the fact that ours is, and will likely continue for some time to be, a scientific culture.

## ‘Two fundamental questions’

The significance of the two questions that Feyerabend identifies as fundamental to the philosophy of science can be appreciated once they are place in the context of the historical development of that discipline. Clearly enough, philosophers have devoted great time and energy to asking and trying to answer the question, ‘What is science’, for instance by constructing models of science, or studying scientific practice, and so on. Feyerabend, of course, made his own contributions through his studies of scientific realism, methodology, and empiricism, among other topics.[[12]](#footnote-12) But for Feyerabend this first question cannot be separated from the further question of the value and significance of science – not least, since prevailing conceptions of ‘the nature of science’ are often false or distorting, and so liable to lead people to misestimate the scope and value of science. A main claim of *Against Method* was, after all, that the authority of science is typically premised on the idea that it is epistemically privileged by virtue of its employing a single, formalised methodology—‘The Scientific Method’—that granted it a special epistemic and social authority. But as Feyerabend argued, methodological monism finds little support in the realities of the history and practice of science, for what one finds are, in fact, a plurality of diverse and changing methodologies. Naturally, he chose to dramatize this by using the label ‘epistemological anarchism’, but the idea if more soberly described in terms of the ‘disunity of science’ and, more recently, ‘scientific pluralism’. (Oddly, though, few advocates of the disunity or plurality of science cite Feyerabend as a precursor to their views, with a few honourable exceptions).[[13]](#footnote-13)

 It was this perception of the neglect of one of its core purposes that led Feyerabend to backhandedly describe the philosophy of science as ‘A Subject with a Great Past’ – but, pointedly, no future.[[14]](#footnote-14) The reason for this harsh judgment was that philosophers of science were failing to engage with the relationship between science and wider social and political concerns, such as education and policymaking. Philosophers of science—of the mid-1970s, at least—were, complained Feyerabend, producing ‘castles in the air’, and had abandoned ‘the intention of influencing the development of science’ and thereby ‘making a contribution to … the world’.[[15]](#footnote-15) In section four of that paper, in fact, Feyerabend goes on to praise the philosopher-physicist Ernst Mach as an excellent example of a practicing scientist who reflected philosophically on his practice, while also engaging with social and political issues—preserving freedom of thought, say. The philosopher being presented, albeit unsystematically, for admiration and emulation is therefore socially and practically engaged with science.

 Contemporary scholarship in the history of the philosophy of science largely corroborates these criticisms of the direction and agenda of the discipline in the mid-twentieth century, and the further implicit claim that, prior that period, the discipline had indeed been socially engaged. A good example is the Vienna Circle. Despite the diversity and development of the Circle’s views, a shared commitment was to the articulation of a ‘scientific world-conception’ able to ‘transform, enlighten, and invigorate culture’, and so to achieve – as three of its lead figures put it – ‘a rational transformation of the social and economic order’.[[16]](#footnote-16) But by the 1960s, these sorts of robust social and political ambitions had largely disappeared from philosophy of science, owing largely to the changing intellectual and ideological climate.

 This is especially clear in the emergence of the ‘value-free ideal’ of science during the 1950s, which has been brilliantly documented by Heather Douglas.[[17]](#footnote-17) A value-free science can be presented as a politically neutral, ‘objective’ science, free from contamination by partisan purposes and prejudices, and this in turn enables the discipline of philosophy of science to present a similarly depoliticised professional self-image. In Douglas’ words, ‘a focus on the logic of science, divorced from scientific practice and social realities, was an increasingly attractive approach for the philosophy of science as the cold war climate intensified’.[[18]](#footnote-18) At a time of ‘McCarthyism’ and the co-optation of science and academia as battlegrounds in the many-sided conflict with the Soviet Union, the longevity, if not survival, of the philosophy of science was judged to lie in its strict neutrality on political matters. It was stripped of its social and political content and, as Reisch puts it, ‘effectively forced … to take [an] apolitical, highly abstract form’.[[19]](#footnote-19)

 My suggestion is that it was this abstract, apoliticised conception of the philosophy of science to which Feyerabend was critically responding. In a neglected 1968 paper, he complained that science had abandoned social and political discussion of ‘the good life’, despite the obvious relevance of science to the topic.[[20]](#footnote-20) Several of his papers during the 1960s and 1970s gesture to socially-engaged topics and themes, though usually as asides to some more ‘technical’ point, and it is only really from about the late 1960s that such themes really come to the fore. It is worth asking, then, why Feyerabend kept such a close focus upon the social and political themes that so many of his peers in the philosophy of science were neglecting.

 There are, I suggest, at least two main points to consider, with the first being Feyerabend’s temperamental iconoclasm. It is obvious to anyone who reads his work that he was, if nothing else, attracted to radical stances, devil’s advocacy, and was relatedly deeply resistant to conformism, dogmatism, and ‘group-think’. It is plausible that if he judged that his peers were reluctant to engage with social and political issues – and likely to be alarmed if he did – that he would enthusiastically do so. Throughout his correspondence with ImréLakatos, one often finds Feyerabend adopting the alternative view to whomever he was debating with—defending the American Constitution against radicals, say, or defending witchcraft against enthusiasts for modern physics.[[21]](#footnote-21) Indeed, where criticism as concerned, the rule does seem to have been *anything goes*. In 1974, for instance, John Krige recalls, that Feyerabend began his lecture course at Sussex by posing three questions: ‘What’s so great about knowledge? What’s so great about science? What’s so great about truth?’[[22]](#footnote-22)

 The second point is that Feyerabend enjoyed the professional and institutional freedom to direct his interests as he wished. In 1958, he was appointed as a professor at the University of California in Berkeley, but over the next fifteen years took a succession of visiting professorships at University College London, Berlin, Yale, and Auckland. Such professional mobility and institutional diversity gave Feyerabend a special freedom, and he explains his constant moves partly in terms of a resistance to being confined to any single institution or culture.[[23]](#footnote-23) Moreover he had the special advantage of being based at Berkeley, a bastion of left-wing liberalism and activism, both then and, albeit perhaps less so, now.[[24]](#footnote-24) It is, of course, much easier to pursue political interests within an institution that is appropriately politically engaged, especially when one has the advantage of easily moving to alternative institutions.

 These two points of course pull together in the image of Feyerabend as a temperamental iconoclast who, by achievement and good fortune, enjoyed a professional status that allowed him to pursue his interests untrammelled. During his time at Berkeley, for instance, much of his teaching was highly unconventional: he lectured on church dogma and witchcraft; set essay questions such as ‘What is the meaning of the ‘Age of Aquarius?’ and ‘How was the coldness of the Devil’s penis explained by St Thomas Aquinas?’; and invited ‘guest lecturers’, including warlocks, astrologers, and members of the Gay Liberation Front.[[25]](#footnote-25) I suppose that if, at the height of one’s career, one can teach at a top American university a philosophy of science course whose syllabus includes the Council of Trent, where students can answer exam questions on an astrological age popularised by the popular musical *Hair*, and hear guest lectures by the daughter of the founder of the Church of Satan, then one must have a suitably secure sense of one’s professional and institutional status.[[26]](#footnote-26)

 It might be objected that few of these topics pertain to the social and political aspects of the philosophy of science, and that Feyerabend may be retreating into eclectic evasion of a theme that, all the while, was still proscribed by the philosophy of science. To label Feyerabend an ‘anarchist’ or ‘relativist’ is, after all, a standard strategy used by those who want to impugn him—for who would take seriously a criticism of science by a philosopher who, a few pages later, might praise voodoo? Certainly Feyerabend does not always do himself many favours where credibility is concerned, but there was, perhaps surprisingly, a reasoned philosophical rationale for the ‘anarchistic’ topics and pedagogy that Feyerabend employed, and it is related to his conception of the purposes of the philosophy of science.[[27]](#footnote-27)

 The core idea is, again, that of critical reflection on the authority of science. Feyerabend played with different arguments to support his call for such critical vigilance, of which I will quickly summarise just four.[[28]](#footnote-28) The first is that judgements about the ‘excellence’ of science—to use Feyerabend’s preferred term—are often the results of *assumption* rather than *argument*, and so are therefore vulnerable to criticism – though this does not, of course, mean that they cannot subsequently be supported by arguments.[[29]](#footnote-29) The second is that judgements about the excellence of science are often grounded in false, naïve, or otherwise untenable conceptions of the history, methods, or practices of science, such as the ‘myth’ of methodological monism challenged in *Against Method*. The third is that the sciences are, says Feyerabend, ‘surrounded by an aura of excellence’ that tend to ‘check enquiry into their beneficial effects’, owing to their entrenchment within late modern society, and to the latent scientism that this can encourage.[[30]](#footnote-30) During the 1980s, for instance, much of Feyerabend’s work drew on examples in which the environmental and agricultural knowledge of aboriginal peoples had been displaced without due consideration of their merits. The fourth is that the scientific establishment can, at least in certain cases, exploit its cognitive and cultural authority to negate or minimise scrutiny, for instance by implicitly defining evaluative criteria in its own terms—‘dice-loading’, in other words—which Feyerabend suggested was the case with appraisals of Chinese acupuncture by the medical establishment.[[31]](#footnote-31)

 Though they have been only quickly presented, it should be clear that these four styles of argument do not constitute a systematic critique of the cognitive and cultural authority of the sciences in late modern societies. They are problematic for several reasons. For a start, the object of these criticisms is, too often, ‘science’ in the singular, rather than to specific disciplines, research programmes, and so on. Though Feyerabend embraced a pluralistic, ‘disunified’ picture of the sciences, this did not stop him from regularly invoking it for polemical purposes. Indeed, he explicitly criticises those who talk of ‘“science” as a single uniform entity’, though he also concedes that it can be useful, at least at certain times, for ‘tactical reasons’.[[32]](#footnote-32) Next, certain of these styles of argument are contingent upon contestable presuppositions, for instance, that judgements about the excellence of science are generally presumptive rather than the results of careful deliberation and reflection. Perhaps this is true if one thinks that it is *individuals*—the ‘man-on-the-street’, perhaps—who ought to make these judgements, but this is an absurd view. Typically judgements about the excellence of particular scientific products, such as theories or technologies, are undertaken by specialist groups such as peer review panels, science policy committees, healthcare bodies, and so on. And finally, Feyerabend generally neglects to do the careful sociological work that is required for a robust appraisal of public attitudes towards the sciences: or rather, of the attitudes of diverse publics to particular sciences, and to the institution of science more generally. ‘The Public’ is no more singular than ‘Science’, and it is invariably sociologically to naïve to speak, as Feyerabend does, of what The Public think about Science; a good contemporary example is of course the diverse and complex attitudes towards climate change in the United States.

 Other concerns could be offered, of course, but my point is that even Feyerabend failed to fully develop many of these arguments, the general claim that appraisals of the value, authority, and ‘excellence’ of science are too insufficiently robust is defensible. In the last few decades, the sorts of concerns that Feyerabend broaches about the values and authority of the sciences have, after all, been taken up by a diverse range of disciplines. Many of the main movements in contemporary philosophy of science surely speak to these concerns, such as political philosophy of science, philosophy of science in society, science and values, and feminist and ‘postcolonial science and technology studies’.[[33]](#footnote-33) These areas of enquiry can be interpreted as different ways of engaging with the question, ‘What’s so great about science?’

 The emerging claims, then, are that Feyerabend argued that the discipline of philosophy of science was, at least in the 1960s, abrogating its core imperative to engage with social and political claims about the authority of the sciences. The Cold War had, at least in the United States, helped to confine the agenda of the discipline, and it was this construction that prompted Feyerabend’s talk of its having a ‘great past’. The restoration of a socially engaged philosophy of science is now increasingly being achieved, as evidenced by Philip Kitcher’s recent remark that an ‘urgent task’ for contemporary philosophers of science is the production of a ‘theory of the place of Science in a democratic society’.[[34]](#footnote-34) Indeed, the title of the book in which Kitcher makes this remark, *Science in a Democratic Society*, is an obvious allusion to Feyerabend’s own *Science in a Free Society*.

 The first way that the Cold War affected Feyerabend’s philosophy of science is therefore that it artificially narrowed the agenda of the discipline to proscribe engagement with social and political concerns. Clearly enough, Feyerabend was only partly successful at this, owing to his lapse into polemics, among other things. But it is easy to see how he was reacting against a narrow ‘technical’ agenda when he called for the ‘separation of science and the state’ as part of his ambition of ‘protecting society from all ideologies’. Indeed, such declarations were radical precisely because they directly challenged a disengaged and apolitical conception of the discipline of philosophy of science. In the words of one perceptive commentator:

‘What makes his argument relatively unique and provocative is the way he employs his conceptual insights from the history and philosophy of science to defend a view of human freedom and self-determination which is directly at odds with any form of dogmatism or closed society.’[[35]](#footnote-35)

In the next section, I discuss a further way in which Feyerabend’s calls for a socially engaged philosophy of science was shaped by the Cold War.

## Science, modernity, and ideology

The call for critical appraisal of the prestige of science can be located within the context of wider ideological debates during the Cold War. A distinguished historian has described the Cold War as fundamentally a ‘battle of ideas’—of competing ideological visions that consisted of ‘explicit ideas and implicit assumptions that provided frameworks for understanding the world and defining actions in it’.[[36]](#footnote-36) At a deep level, these ideological battles involved competing claims, by the US and USSR, to represent a privileged position in the intellectual and cultural development of human societies. Science, of course, played a central role in these disputes, in two distinct ways. The first is the instrumental valuation of science as a source of new military and industrial technologies – hydrogen bombs, stealth aircraft, ‘spy satellites’ – and, second, as a powerful honorific status symbol. The ideological struggle between the Cold War powers was, at a suitably deep level, a struggle for the privileged status of being a *modern* culture – progressive, rational, advanced – which meant, in practice, a scientific culture.

 Such ideological deployments of science were not original to the Cold War. During the Second World War, vigorous efforts were made, by both the Allies and the Axis powers, to associate science with the preferred political ideologies. The American sociologist, Robert Merton, argued, in an influential series of papers, that science and democracy were ‘indissolubly bound up in a single cultural mode’.[[37]](#footnote-37) The virtues of scientific enquiry were intimately related—even ‘spiritually’, perhaps—with the values of a democratic society. In fact, Merton’s paper, ‘A Note on Science and Democracy’, has been praised by one American intellectual historian as ‘one of the most robust and firmly grounded of its era’s contributions to the intellectual defence of science and democracy’.[[38]](#footnote-38) At the same time, Soviet academicians and leaders made parallel claims. No less a figure than Joseph Stalin took an active role in Soviet academic and scientific life, positioning himself as the ‘coryphaeus of science’, arguing that both Marxism and the sciences were engaged in a common project of identifying the ‘objective processes which take place independently of the will of man’, with physics handing the ‘laws of natural science’ and Marxism dealing with the ‘laws of political economy’.[[39]](#footnote-39)

 In the late 1940s and into the 1950s, ideological appeals to the sciences continued unabated, most obviously with the Space Race, and if anything, the ideological import of being – and of being seen to be – a scientific culture only intensified. Perhaps the American chemist, James Conant, later to be President of Harvard University, offered the most forthright statement on the part of the democratic West. ‘Scholarly inquiry and the American tradition’, he wrote, ‘go hand in hand’, for the reason that ‘science and the assumptions behind our politics are compatible; in the Soviet Union, by contrast, the tradition of science is diametrically opposed to the official philosophy of the realm.’ [[40]](#footnote-40) Such claims of an intimacy between ideology and science continued unabated throughout the remainder of the Cold War, and it was judged, by many Americans after the collapse of the Soviet Union, that their scientific and technological superiority was a proof of their rightful status as *the* pre-eminently modern scientific culture.[[41]](#footnote-41)

 The Cold War, then, helped to determine ‘what science was, what it did, and what it meant’, and this shaped both public and political perceptions of the significance of science.[[42]](#footnote-42) Science is, after all, open to a plurality of alternative, often-competing perceptions and evaluations, ranging from the vehicle of a technocratic utopianism, to a source of spiritual and cultural disenchantment, to offer just two. To be a scientific culture is not simply to enjoy the technological fruits of insights into the nature of reality, but to enjoy a privileged historical and political status – hence, the premium placed upon a proper respect for, and pursuit of, science.

 It was within this wider and deeper context that Feyerabend’s question, ‘What’s so great about science?’, resonated: for to ask seriously that question was, even if only potentially, to call into question a major component of competing ideological self-images for which the Cold War had been waged. The West, for instance, has projected an ideological vision of a democratic liberal scientific culture—progressive and plentiful, enquiring and emancipated—that, if achieved, would indicate a deep convergence of its definitive epistemic and political values. The citizens and the scientists of a free society would share common ideals and qualities: freedom of thought, unbiased and unprejudiced, free from dogmatic diktat and a corrupting ideology grounded in a false philosophy that found no support in objective scientific enquiry.

 Feyerabend also identified certain common features of political and of epistemic freedom, including an imperative upon critical scrutiny of prevailing authorities, resistance to self-serving ‘myths’, and an active hostility to dogmatism. A large part of his criticism of Thomas Kuhn’s model of science—of paradigms, ‘normal science’, and so on—was, after all, grounded in the worry that contained a dogmatic, authoritarian ideology, disguised as the objective results of historical enquiry.[[43]](#footnote-43) More obviously, there is the immense and genuine admiration that Feyerabend had for John Stuart Mill’s essay, *On Liberty*, which he praises as a ‘magnificent essay’, and as the ‘outstanding example of a libertarian epistemology.[[44]](#footnote-44) Indeed, Mill is one of the few figures whom Feyerabend consistently and approvingly cites, which is impressive, given his proclivity for retroactive revision of his intellectual debts.[[45]](#footnote-45) Moreover, we know that Feyerabend taught *On Liberty*, alongside essays by Lenin and Mao, during the ‘student revolution’ in Berkeley.[[46]](#footnote-46)

 Given the admiration for freedom and liberty, the hatred of dogmatic ideology, and the admiration for Mill, it might be supposed that Feyerabend’s political sympathies lay broadly with the West—or, more precisely, with a socially liberal democratic system of government. Oddly enough, things are more complicated, for several reasons. The first is that it is often very difficult to identify Feyerabend’s own political views, given his tendencies to exaggeration, polemic, and devil’s advocacy; during lectures, for instance, he would sometimes use Millian arguments to call for greater tolerance of fascism.[[47]](#footnote-47) The second is that, if one consults his writings, it is difficult to identify any sustained or overt political commitments or affiliations, beyond a general enthusiasm for freedom and liberty, though even this shades, too often, into rhetoricised calls for ‘anarchism’. (Often, though not always: after all, *Against Method* opens with the declaration that ‘*anarchism*, while perhaps not the most attractive *political* philosophy, is certainly excellent medicine for *epistemology*, and for the *philosophy of science*).[[48]](#footnote-48)

 The third reason, perhaps the most important, is that Feyerabend’s resistance to membership of groups, schools, or parties was too entrenched a feature of his character to allow him to explicitly align himself with either the left or the right. Around 1948, Feyerabend declined an opportunity to work as the assistant of the poet, playwright, and theatre director Bertolt Brecht, but declined, describing this decision, at the time, as ‘the biggest mistake of my life’. But his initial regret dissolved once he discovered, some years later, the ‘collective pressure of the partly fearful, partly dedicated … group that surrounded him’.[[49]](#footnote-49) Likewise, his criticisms of both Popper and the ‘Popperian school’ were often couched in terms of their collective dogmatism: according to his account, they required ‘declarations of faith’, and asked him to ‘put Popper on every page and into every footnote of everything’ that he wrote’.[[50]](#footnote-50) The accuracy of these reports is not my concern, since they are cited to make the point that Feyerabend was deeply and inveterately hostile to identification with, or membership of, groups, parties, or organisations.

 The main point to take from these remarks is that Feyerabend’s hostility to group membership precluded his commitment to, and certainly participation in, any formalised political cause or party, and prevented him from aligning himself with any ideology.

## Ideological monism

Feyerabend’s reluctance to endorse or embrace a political ideology – to place himself on either the ‘right’ or ‘the left’, however tentatively – might seem puzzling. It seems clear enough that he had a stable, if unsystematic, commitment to a broadly liberal stance, coupled to an acute sense of, and respect for, the diversity of lifestyles. Clearly his inspiration here was Mill’s liberalism, whose influence becomes increasingly obvious into Feyerabend’s later period, even if his reading of Mill is lacking in certain respects.[[51]](#footnote-51)

 A good statement of this are the essays collected together as *Farewell to Reason*. These reflect his views of the 1980s, and together defend the claim that ‘cultural diversity … is beneficial while uniformity reduces our joys and our (intellectual, emotional, material) resources’.[[52]](#footnote-52) The concern with praising and protecting cultural diversity in fact helps to explain Feyerabend’s reticence about adopting a defined political ideology, and his principled indifference to the Cold War conflicts that were, at this time, coming to an end. Early in *Farewell to Reason*, Feyerabend complains that ‘quarrels’ about the competing ideological merits of liberal democracy and communism ‘shrink into insignificance’ when compared to a deeper, underlying phenomena, which one might call *ideological monism*.

 As Feyerabend complains,

‘This is an international phenomenon; it characterises capitalist as well as socialist societies; it is independent of ideological, racial or political differences and it affects an increasing number of peoples and cultures ... What is being imposed, exported, and again imposed is a collection of uniform views and practices which have the intellectual and political support of powerful groups and institutions.’[[53]](#footnote-53)

As this passage makes clear, what Feyerabend was opposed to was not simply this or that ideology, but to the very idea underlying ideological conflict: that there is a single uniform way of conceiving and organising social and political life - just as he opposed the idea of a single, uniform scientific method and Kuhn’s monistic model of science.

 It might be supposed that Feyerabend might at least guardedly welcome the eventual emergence of the West as the dominant ideological power, given its formal commitment to democratic freedom and liberty. Though Feyerabend quoted Mao, he praised Mill, and his admiration for the latter was genuine. Yet later in the passage, Feyerabend goes on to make clear his hostility to ‘the West’:

‘By now Western forms of life are found in the most remote corners of the world and have changed the habits of people who only a few decades ago were unaware of their existence. Cultural differences disappear … replaced by Western objects, customs, organisational forms.’[[54]](#footnote-54)

The real focus of Feyerabend’s political concern was not, then, with the triumph of this or that ideology, but rather with the deeper framework of ideological monism. Though Feyerabend did not, of course, deny the significant differences between the West and the Soviet Union, his constant concern is with the presupposition that there is, or indeed could be, a single framework, ideology, or ‘form of life’ to which geographically and culturally diverse communities of human beings ought to adopt. Moreover, any ideology, no matter how good its intentions and principles, can deteriorate if its members lapse into dogmatism and intolerance.

 In fact, it was precisely the perpetual risk of a lapse into dogmatism that Feyerabend perceived not just in the political ideologies of the Cold War, but in any area of intellectual activity and culture. If there is any stable feature of Feyerabend’s philosophy, it is that strict dogmatic commitment to any single set of doctrines, theories, or methods is therefore a route to myopia, dogmatism, and the implicit elevation of the particular interests of the relevant group, school, or party.

 The danger, as Feyerabend saw it, was that the enthusiasts for a given theory or paradigm or ideology, inevitably, ‘looks at life through the spectacles of his own technical problems and recognises hatred, love, happiness, only to the extent that they occur in these problems’, but given the complexity of ‘human interests and … human freedom’, such a person—whether they be a diehard conservative, or a card-carrying socialist—is ‘proceeding in the worst possible fashion.’[[55]](#footnote-55) An ideological commitment would, on this view, be a folly; indeed, ‘there is nothing inherent in science or in any other ideology that makes it *essentially liberating*’, since any of them, however well-intentioned, can ‘deteriorate and become stupid religions’.[[56]](#footnote-56)

 With these remarks in place, I suggest that Feyerabend’s stance on the Cold War was therefore doubly critical, for it presupposed an ideological monism to which he was temperamentally and philosophically opposed. And at a deeper level, both of the competing ideologies shared an imperialistic spirit. In fact, many of his criticisms are directed, not at the USSR or the US, or ‘East’ or ‘West’, but rather at something more general—usually ‘Western Civilization’, ‘Western culture’, or other cognate terms. As late as the early 1990s, one finds him fulminating against the ‘onslaught of Western civilization’ upon aboriginal communities, and the ‘elitism which has so far dominated’ its intellectual and political culture’.[[57]](#footnote-57)

 Such criticisms, grounded in a grand historical narrative, had in fact been a slumbering project of Feyerabend’s for over twenty years. From at least the mid-1970s, Feyerabend was engaged in a never-completed project, a grand historical study of ‘the rise of Western rationalism’, from the ancient to the modern world.[[58]](#footnote-58) Since the study was never completed, its merits cannot be assessed, but the main claim was that the historical development of Western intellectual and cultural development indicates a progressive trend towards ‘abstraction’, culminating in the modern sciences, with ruinous social, environmental, and spiritual consequences.

 Consider, for instance, Feyerabend’s complaint that ‘Western civilization’ has, gradually, ‘spread all of the world’, driven by, and bringing in its wake, ‘knowledge ... weapons, and monotony’, directed by ideologists with a zeal for ‘technological projects’ aimed at the ‘rebuilding of cities and countries’, despite the protests and preferences of the ‘wishes and values’ of the people whose lives are thereby transformed.[[59]](#footnote-59) This is a classic form of a broad style of critical narrative that became popular in several different traditions throughout the last century—in Theodor Adorno and Max Horkheimer’s *Dialectic of Enlightenment*, say, of the later Heidegger’s fulminations against the ‘technological’ stance that, on his analysis, dominates late modernity.[[60]](#footnote-60)

 The point to make in the case of Feyerabend, however, is that both of the ideological superpowers waging the Cold War were instances of the trends he evidently deplored: the large-scale restructuring of societies, ecologies, and cultures according to a particular ideological conception. Feyerabend was always opposed to monism, whether scientific or ideological, and to anything that smacked of a conviction that, despite the world’s ontological complexity and cultural diversity, there exists some single theory, method, or ideology—some grand ‘abstraction’, in his derogatory sense of that term—that can and should be imposed, firmly and even forcefully, upon that world.

 So, if Feyerabend was on neither the ‘left’ nor the ‘right’, and neither a champion of liberal democracy nor of state socialism, it is because of a powerful suspicion of ideological monism, and of people’s tendency to ‘deteriorate’ into a stance of uncritical acceptance of prevailing convictions, values, and ideals—and these suspicions were, in his view, equally applicable on both sides of the Iron Curtain. Crucially, though, these criticisms of dogmatic ideological monism in the political sphere directly paralleled Feyerabend’s interventions in the philosophy of science; for instance, in his axiom that there is a ‘totalitarian element’ in any doctrine—political or scientific—which aspires to be, or which presents itself as, a ‘single uniform entity’ that can, in principle or in practice, be ‘universally accepted’.[[61]](#footnote-61)

 During the twentieth century, then, the domains of both philosophy of science and of political ideology offered instances of the conflicts premised upon ideological monism. By contrast, what Feyerabend wanted, in both cases, was not to argue for one side against the other; instead, it was to attempt something more foundational, and no less radical: to try to compel people to disengage from their default, unreflective commitment to their cognitive and cultural authorities—the sciences, say, or a particular political ideology—and instead to enable people to become critically reflective.

 This sentiment is nicely expressed in a 1976 dialogue, whose tone is both exasperated and sincere, and which offers a clear insight into Feyerabend’s character:

‘You see – I don’t just want to replace maniacs of one kind by maniacs of a different kind – Jews by Christians, dogmatists by sceptics, scientists by Buddhists, I want to put an end to all manias and to the attitudes in people that support manias and make it easy for their prophets to succeed.’[[62]](#footnote-62)

Feyerabend therefore urges people to become properly critical, by which he meant being informed, self-critical, and free from ‘myths’, false images—of science, say—and actively alert to their inherited prejudices and presumptive certainties. Though this may sound boringly thin - ‘Be informed!’, ‘Argue, don’t ridicule!’ - in most cases, argued Feyerabend, even these basic preconditions of reasoned enquiry were not fulfilled. Though there are many reasons for this, the one that most concerned Feyerabend was the failure of academics to perform their proper, socially-engaged purposes—philosophers of science, say, who peddle false images of science, and who try to isolate their discipline from social and political concerns.

 In late modern societies, where science is intimately implicated in ideological disputes, the wilful failure of philosophers of science to become socially engaged was both a professional and an intellectual *debacle*. Yet the Cold War created a climate that was hostile to the possibility both of those debates, and of the sort of discipline able to initiate and pursue them.

## Conclusions

In this chapter, I’ve argued that the Cold War influenced Feyerabend’s philosophy of science in two related ways, both related to his question, ‘What’s so great about science?’ The first is that this question is a serious question—an opportunity, not for a perfunctory rehearsal of celebratory sentiments, but rather for sustained critical reflection on the history, methods, scope, and value of the scientific enterprise. But to ask this question properly requires careful engagement with the cognitive and cultural authority of science, including its complicity with social and political values and concerns, and this in turn requires a socially engaged conception of the philosophy of science that had been nullified during the Cold War. It was this artificially delimited conception of the disciplinary remit of mid-twentieth-century Anglophone philosophy of science to which Feyerabend was critically reacting against. The second is that Feyerabend was also challenging a presumptive evaluation of the honorific status of science, as a mark of a modern, progressive culture, and so was calling into question a core point of ideological contention between the US and the USSR.

 Moreover, Feyerabend gradually extended this radical critical stance from science to a wider set of political values and ideals, including the ideological monism that sustained the Cold War. The real danger, for Feyerabend, lay, not with science or any given ideology, but with a fundamental faith in a single authoritative vision of society, of history, or indeed of reality. Though he doubtless had reservations about particular political ideologies, the deep object of his concern was ideological monism—the faith in the ideal of a single, uniform vision, whether of science, history, society, or reality itself. The role of the philosopher of science was to inspire and enable critical reflection on prevailing conceptions and estimations of science, but the Cold War militated against both this project and this conception of the role of the discipline. As Douglas puts it, the Cold War demanded ‘strict dichotomies: either one was with the United States, its capitalism and its democracy, or one was with the Soviet Union, its communism, and its totalitarianism.’[[63]](#footnote-63) It was such absolutist dichotomising that Feyerabend was so deeply opposed to, and it is this sentiment that flows through his philosophical and political thought.

 Modern day philosophers of science, living in a post-Cold War world, should therefore better appreciate the role that Feyerabend played in helping to restore a socially engaged conception of the discipline of the philosophy of science—a central question of which is, surely, ‘What’s so great about science?’[[64]](#footnote-64)

1. Paul Feyerabend, ‘On the Critique of Scientific Reason’, in Robert  Cohen, Paul Feyerabend, and Marx Wartofsky (eds.), *Essays in Memory of Imré Lakatos*, (Dordrecht: Springer, 1976) 109-143. [↑](#footnote-ref-1)
2. Paul Feyerabend, *Science in a Free Society* (London: New Left, 1978). On his conception of a ‘free society’, see my ‘Feyerabend on Politics, Education, and Scientific Culture’, *Studies in History and Philosophy of Science*, forthcoming. [↑](#footnote-ref-2)
3. Paul Feyerabend, ‘How to Defend Society Against Science’, *Radical Philosophy* 11 (1975): 3-8. [↑](#footnote-ref-3)
4. Paul Feyerabend, *Against Method: Outline of an Anarchistic Theory of Knowledge*, 1st edition (London: New Left), 299. [↑](#footnote-ref-4)
5. John Preston, ‘Paul Feyerabend’, The Stanford Encyclopedia of Philosophy, Edward N. Zalta (ed.), <http://plato.stanford.edu/archives/win2012/entries/feyerabend/>, §2.17. [↑](#footnote-ref-5)
6. See, e.g., the papers in Carla Fehr and Kathryn Plaisance (eds.), *Socially Relevant Philosophy of Science*, *Synthese* 177/3 (2010). [↑](#footnote-ref-6)
7. At several places, Feyerabend offers useful intellectual autobiographical sketches, including *Farewell to Reason* (London: Verso, 1987), ch.12 and *Against Method*, 3rd ed. (London: Verso, 1993), ch.20. [↑](#footnote-ref-7)
8. Eric Oberheim, *Feyerabend’s Philosophy* (Berlin: Walter de Gruyter, 2008). [↑](#footnote-ref-8)
9. Paul Feyerabend, ‘Last Interview’, conducted by Joachim Jung, in John Preston, Gonzalo Munévar, and David Lamb (eds.), *The Worst Enemy of Science* (Oxford: Oxford University Press, 2000), 159-168. Quotations from page 167. [↑](#footnote-ref-9)
10. I say ‘Anglophone’, to mark the fact that philosophical reflection on the sciences is also a feature of other philosophical traditions that are typically, if inelegantly, classified as ‘Continental’. See, further, Gary Gutting, *Continental Philosophy of Science* (Oxford: Blackwell, 2005). [↑](#footnote-ref-10)
11. On Feyerabend’s rhetoric and polemics, see Oberheim, *Feyerabend’s Philosophy*, ch.1 [↑](#footnote-ref-11)
12. These are the topics of the first two volumes of Feyerabend’s collected papers: *Realism, Rationalism, and Scientific Method: Philosophical Papers, Volume One* (Cambridge: Cambridge University Press, 1981) and *Problems of Empiricism: Philosophical Papers, Volume Two* (Cambridge: Cambridge University Press, 1981), respectively. [↑](#footnote-ref-12)
13. These are John Dupré, *The Disorder of Things: Metaphysical Foundations of the Disunity of Science* (Cambridge, Mass.: Harvard University Press, 1993), 263f and Hasok Chang, *Is Water H2O? Evidence, Realism and Pluralism* (Dordrecht: Springer, 2012), 269f. [↑](#footnote-ref-13)
14. Paul Feyerabend, ‘Philosophy of Science: A Subject with a Great Past’, in R.H. Steuwer (ed.), *Minnesota Studies in the Philosophy of Science*, volume five (Minneapolis: University of Minnesota Press, 1970), 172-183. [↑](#footnote-ref-14)
15. Paul Feyerabend, ‘Philosophy of Science: A Subject with a Great Past’, 172. [↑](#footnote-ref-15)
16. Neurath, Carnap, and Hahn, quoted in George A. Reisch, *How the Cold War Transformed Philosophy of Science: To the Icy Slopes of Logic* (Cambridge: Cambridge University Press, 2005), 43 and 305. [↑](#footnote-ref-16)
17. Heather Douglas, *Science, Policy, and the Value-Free Ideal* (Pittsburgh: University of Pittsburgh Press, 2009). [↑](#footnote-ref-17)
18. Douglas, *Science, Policy, and the Value-Free Ideal*, 48. [↑](#footnote-ref-18)
19. Reisch, *How the Cold War Transformed Philosophy of Science*, 6. [↑](#footnote-ref-19)
20. Paul Feyerabend, ‘Science, Freedom, and the Good Life’, *Philosophical Forum* 1: 127-135. [↑](#footnote-ref-20)
21. See ImréLakatos and Paul Feyerabend*,* ***For and Against Method: Including Lakatos's Lectures on Scientific Method and the Lakatos-Feyerabend Correspondence*, ed. Matteo Motterlini (Chicago: University of Chicago Press, 1999), 179 and 190.** [↑](#footnote-ref-21)
22. John Krige, *Science, Revolution, and Discontinuity* (Brighton: Harvester, 1980), 106. [↑](#footnote-ref-22)
23. Paul Feyerabend, *Killing Time: The Autobiography of Paul Feyerabend* (Chicago: University of Chicago Press, 1995), 112-113ff. [↑](#footnote-ref-23)
24. An engaging historical study is W.J. Rorabaugh, *Berkeley at War: The 1960s* (Oxford: Oxford University Press, 1969) [↑](#footnote-ref-24)
25. See *Killing Time*, 137 and *For and Against Method*, 331, 302 and 190. [↑](#footnote-ref-25)
26. See *For and Against Method*, 249. [↑](#footnote-ref-26)
27. I say more about Feyerabend’s views on education and criticism in my ‘Feyerabend on Science and Education’, *Journal of Philosophy of Education*, 47/3 (2013): 407–422. [↑](#footnote-ref-27)
28. Feyerabend, *Against Method*, 3rd ed., ch.19. [↑](#footnote-ref-28)
29. Feyerabend, ‘On the Critique of Scientific Reason’, 112. [↑](#footnote-ref-29)
30. Paul Feyerabend, ‘Consolations for the Specialist’, in *Imré* Lakatos and Alan Musgrave (eds.), *Criticism and the Growth of Knowledge* (Cambridge: Cambridge University Press, 1970), 197-230. Quotation at 209. [↑](#footnote-ref-30)
31. For a sustained case study and discussion, see my ‘A Pluralist Challenge to ‘Integrative Medicine’: Feyerabend and Popper on the Cognitive Value of Alternative Medicine’, *Studies in History and Philosophy of Biological and Biomedical Sciences* 44/3 (2013): 392-400. [↑](#footnote-ref-31)
32. Paul Feyerabend, *Conquest of Abundance: A Tale of Abstraction versus the Richness of Being*, ed. Bert Terpstra (Chicago: University of Chicago Press, 1999), 264 and 243. [↑](#footnote-ref-32)
33. See, e.g., Philip Kitcher, *Science, Truth, and Democracy* (Oxford: Oxford University Press, 2001); Harold Kincaid, John Dupré, Alison Wylie (eds.), *Value-free Science? Ideals and Illusions* (Oxford: Oxford University Press, 2007); Heidi E. Grasswick (ed.) *Feminist Epistemology and Philosophy of Science: Power in Knowledge* (Dordrecht: Springer, 2011); Sandra Harding, *Sciences From Below: Feminisms, Postcolonialities, and Modernities* (Durham, NC: Duke University Press, 2008). [↑](#footnote-ref-33)
34. Philip Kitcher, *Science in a Democratic Society* (New York: Prometheus Books, 2012), ch.1 *passim*. [↑](#footnote-ref-34)
35. Paul Tibbetts, ‘Feyerabend on Ideology, Human Happiness, and the Good Life’, *Man and World* 9/4 (1976): 362-371. [↑](#footnote-ref-35)
36. David Engerman, ‘Ideology and the Origins of the Cold War, 1917-1962’, in Melvyl Leffler and Odd Arne Westad’, *The Cambridge History of the Cold War* (Cambridge: Cambridge University Press, 2010), 20-43. Quotation from page 20. [↑](#footnote-ref-36)
37. See Robert K. Merton, ‘Science and the social order’, *Philosophy of Science* 5 (1938): 321-337 and ‘A note on science and democracy’, *Journal of Legal and Political Sociology* 1 (1942): 115-126. [↑](#footnote-ref-37)
38. David A. Hollinger, *Science, Jews, and Secular Culture: Studies in Mid-twentieth-century American Intellectual History* (Princeton: Princeton University Press, 1996), 82. In fact, earlier on this page, Hollinger notes that Feyerabend is notable for his claim that ‘science [can be] part of a system of domination’. [↑](#footnote-ref-38)
39. Quoted in Ethan Pollock, *Stalin and the Soviet Science Wars* (Princeton: Princeton University Press, 2006), 11. [↑](#footnote-ref-39)
40. Quoted in Peter Novick, *That Noble Dream: The ‘Objectivity Question’ and the American Historical Profession* (Cambridge: Cambridge University Press, 1988), 297. On the Cold War context of American social science, see especially chapters 10-12. [↑](#footnote-ref-40)
41. See, further, Audra J. Wolfe, *Competing with the Soviets: Science, Technology, and the State in Cold War America* (Baltimore, MD: The John Hopkins University Press, 2012). [↑](#footnote-ref-41)
42. Mark Solovey, ‘Science and the State during the Cold War: Blurred boundaries and a Contested Legacy’, *Social Studies of Science* 31/2 (2001): 165-170. Quotation from page 168. This issue of the journal is dedicated to science in the Cold War. [↑](#footnote-ref-42)
43. See, especially, ‘Consolations for the Specialist’. [↑](#footnote-ref-43)
44. See Feyerabend, *Against Method*, 3rd ed., 38; *Farewell to Reason*, 281. [↑](#footnote-ref-44)
45. Oberheim notes that Feyerabend ‘systematically removed his acknowledgements to Popper from the two volumes of collected papers published in 1981, sometimes replacing them with acknowledgements to Duhem or Mill.’ *Feyerabend’s Philosophy*, 3. [↑](#footnote-ref-45)
46. *Killing Time*, 123; *For and Against Method*, 169 and 351. [↑](#footnote-ref-46)
47. *For and Against Method*, 242. [↑](#footnote-ref-47)
48. *Against Method*, 3rd ed., 9. [↑](#footnote-ref-48)
49. *Killing Time*, 73. [↑](#footnote-ref-49)
50. *Killing Time*, 97. [↑](#footnote-ref-50)
51. See, e.g., Struan Jacobs, ‘Misunderstanding John Stuart Mill on Science: Paul Feyerabend’s Bad Influence’, *Social Science Journal* 40/2 (2003): 201-212; Elizabeth A. Lloyd, Elizabeth A., ‘Feyerabend, Mill, and Pluralism’, *Philosophy of Science: Supplement* 64/4 (1997): 396-S407; Kent Staley, ‘Logic, Liberty and Anarchy: Mill and Feyerabend on Scientific Method’, *Social Science Journal* 36/4 (1999): 603-614. For a summary of this debate, and my own views on it, see my *Pluralism and the ‘Problem of Reality’ in the Later Philosophy of Paul Feyerabend*, PhD thesis, Durham University, 2010. [↑](#footnote-ref-51)
52. Paul Feyerabend, *Farewell to Reason* (London: Verso, 1987), 1. [↑](#footnote-ref-52)
53. Feyerabend, *Farewell to Reason*, 3. [↑](#footnote-ref-53)
54. Feyerabend, *Farewell to Reason*, 3. [↑](#footnote-ref-54)
55. *Against Method*, 3rd ed., 154. [↑](#footnote-ref-55)
56. Feyerabend, ‘How to Defend Society against Science’, 4. [↑](#footnote-ref-56)
57. Feyerabend, *Conquest of Abundance*, 159 and 241. [↑](#footnote-ref-57)
58. See Paul Feyerabend, *Einführung in die Naturphilosophie*, edited by Helmut Heit and Eric Oberheim (Frankfurt am Main: Suhrkamp Verlag, 2009). See, further, Helmut Heit, ‘Reasons for Relativism: Feyerabend on the ‘Rise of Rationalism’ in Ancient Greece’, and John Preston, ‘The Rise of Western Rationalism: Paul Feyerabend’s Story’, both forthcoming in *Studies in History and Philosophy of Science*. [↑](#footnote-ref-58)
59. *Conquest of Abundance*, 261-262. [↑](#footnote-ref-59)
60. See, e.g., Theodor Adorno and Max Horkheimer, *Dialectic of Enlightenment*, trans. J. Cumming (London: Verso, 1979); Martin Heidegger, *The Question Concerning Technology, and Other Essays*, trans. William Lovitt (London: Harper, 1977). [↑](#footnote-ref-60)
61. Feyerabend, *Conquest of Abundance*, 264. [↑](#footnote-ref-61)
62. Paul Feyerabend, *Three Dialogues on Knowledge* (Oxford: Blackwell, 1991), 76. [↑](#footnote-ref-62)
63. Douglas, *Science, Policy, and the Value-Free Ideal*, 49. [↑](#footnote-ref-63)
64. I am grateful to Donald Gillies and Paul Hoyningen-Huene for helpful discussions, and also to the Editors for their kind invitation to contribute to this volume and for their helpful comments on earlier drafts. [↑](#footnote-ref-64)