

Chapter 10

Feyerabend and Wittgenstein



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Abstract In this chapter I consider the ambivalent relation between Feyerabend and Wittgenstein. I first recount the facts that pertain to this relation and then focus on Feyerabend's philosophical work and the influence it received from Wittgenstein's. I argue that Feyerabend remained much closer to Popper, and his Viennese positivist roots, than to Wittgenstein in the greater part of his career, but was idiosyncratically influenced by Wittgenstein's later philosophy in his own early and late writings. In his early work, Feyerabend used Wittgenstein's discussion of perception to challenge the theory-observation dichotomy while in his late work he appropriated Wittgenstein's focus on particulars to combat abstract theorizing and Wittgenstein's understanding of meaning to contest the view that meanings are determined by phenomena. Yet, despite the influence, I argue that the orientations of the two philosophers diverge. Feyerabend, a staunch reformist, criticized Wittgenstein as a conformist and contrasted his pluralism to Wittgenstein's considerations of alternative games. Finally, I question whether Feyerabend's anti-scientism and emphasis on the sense of wonder at the mysteriousness of life and the world match ostensibly similar remarks made by Wittgenstein.

Keywords Paul Feyerabend · Ludwig Wittgenstein · Karl Popper · Theory-observation dichotomy · Meaning

The Feyerabend-Wittgenstein relation is a contentious and, yet, marginal issue in the Feyerabend literature. It is non-existent in the Wittgenstein literature. Why is it marginal in the Feyerabend literature? Because Feyerabend's philosophy is most commonly discussed in relation to the philosophy of science figures and literature, and, more particularly, in relation to Popper's philosophy. Feyerabend used to be in

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183

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Popper's circle for quite some time, either, initially, as his student, or later as his associate, for a long time as his defender, and finally as his vociferous and unsparing critic. It is also marginal because Wittgenstein was phased out from philosophy of science, especially in the United States where, and during the time, Feyerabend was active publishing and lecturing. The logical positivists who had emigrated to the United States and influenced the development of philosophy of science there, left behind most of their European roots and forgot their indebtedness to Wittgenstein, while Wittgenstein's influence on the historical turn in philosophy of science in the 1950s and 1960s, was played down and rarely appreciated (Glock 2008, 2013, 586; Kindi 2017, 592 – 593). Why is the Feyerabend-Wittgenstein relation contentious? Because both Feyerabend and the major Feyerabend scholars do not concur as to whether Feyerabend was indeed influenced by Wittgenstein and his philosophy. In his "Autobiographical Remarks" (2020, 28), Feyerabend admitted that Wittgenstein had influenced him "more than [he, Feyerabend] perhaps realise[d]," and thought that there were "sometimes objectionable, but often enlightening traces" of Wittgenstein's influence in his later work.¹ And yet, he said that it was a lucky coincidence that he did not have Wittgenstein as a supervisor because, in that case, he would have become a Wittgensteinian for the rest of his life (ibid, 28–29). Feyerabend both praised and belittled Wittgenstein's philosophy. On the one hand, he said that he admired Wittgenstein's philosophy and he regarded Wittgenstein "as one of the great philosophers of the twentieth century" (Feyerabend 1991a, 50). On the other, he said that Wittgenstein's philosophy "contains important (though by no means original) contributions" (Feyerabend 1960, 247), and wrote in a letter to Thomas Kuhn, that he refused to talk about Wittgenstein when asked. He said that when asked whether one should read the *Philosophical Investigations*, he used to reply: "If you want to waste your time, yes" (Hoyningen-Huene 1995, 384).

The Feyerabend scholars, on their part, disagree among themselves as to whether there was any significant influence and, if any, what the affinities between the two philosophers are. Eric Oberheim, devotes a chapter in his *Feyerabend's Philosophy* (2006, 43–76) to the Feyerabend-Wittgenstein relation and contends that Wittgenstein influenced Feyerabend's semantic views even though Feyerabend was critical of Wittgenstein's account of meaning as use. Oberheim also contends that "[t]he deepest and most lasting impact that Wittgenstein's ideas had on Feyerabend's philosophical development concerns nominalism ... [i.e.,] that our concepts are not uniquely correct descriptions of the real structures of the world" (ibid., 76). Feyerabend says in his autobiography (1995, 94) that he became a Wittgensteinian nominalist, while Joseph Agassi (2008, 200n56) thought that Feyerabend, mistakenly, took Wittgenstein to be a nominalist, i.e., an anti-essentialist about meaning. Ian James Kidd (2017), on his part, claims that what the two philosophers most significantly share is their rejection of scientism which is blamed for eliminating a sense of mystery and wonder from our worldview.

¹ Cf.: "They [i.e., discussions with Elizabeth Anscombe about Wittgenstein's later writings] had a profound influence upon me though it is not at all easy to specify particulars." (Feyerabend 1982, 116).

We've seen why Wittgenstein is marginal in the Feyerabend literature and why the Feyerabend-Wittgenstein relation is contentious. But why is it virtually non-existent in the Wittgenstein literature, especially given the fact that Elizabeth Anscombe, Wittgenstein's student and literary executor, was very encouraging and very instrumental in getting Feyerabend engaged with Wittgenstein's philosophy? Feyerabend himself thought that Wittgensteinians were mere followers and he, a free spirit, was not to be welcomed in their midst.² That is why he said that it was a lucky accident that he did not become a Wittgensteinian (Feyerabend 2020, 28–29). But, the fact is that Feyerabend, apart from a couple of early papers and his review of the *Philosophical Investigations* in 1955, did not work on Wittgenstein's philosophy either approvingly or disapprovingly. He may have made use of some Wittgensteinian ideas that he adapted to his purposes, but he did not really dwell on it. Maybe, the fact that he met the philosopher himself and studied Wittgenstein's philosophy very early on, made him think that he knew it too well and assumed a cavalier attitude towards it. Yet, despite some perceptive comments regarding Wittgenstein's philosophy,³ the truth is that Feyerabend interpreted it in an idiosyncratic way and had a different philosophical orientation than Wittgenstein. He said, for instance, that, "Popper's ideas were similar to Wittgenstein's," and that he [Feyerabend] was inclined towards the dogmatic and the abstract in contradistinction to Wittgenstein's emphasis on the concrete and the particular (Feyerabend 1982, 115–116).

In what follows, I will, first, give some facts regarding Feyerabend's relation to Wittgenstein and then proceed to discuss some themes that have been pointed out as showing affinities between Feyerabend's and Wittgenstein's philosophy.

10.1 The Facts

Matteo Collodel (2016) and Eric Oberheim (2006) have given us a detailed account of Feyerabend's relation to Wittgenstein. Feyerabend met Wittgenstein only once in early 1950 in Vienna, when Wittgenstein's student, Elizabeth Anscombe, who was in Vienna to learn German to translate the *Philosophical Investigations*, mediated, and Wittgenstein was invited and gave a lecture at the "Kraft Circle," which was formed by Viktor Kraft's students. Viktor Kraft, a founding member of the Vienna Circle, was Feyerabend's dissertation advisor, and Feyerabend had a leading role in these meetings. Feyerabend remembers from Wittgenstein's lecture that

² Cf.: "... Wittgensteinians neither seek nor are in need of great numbers of followers and so they do not claim me as one of their own" (Feyerabend 1991a, 50). Cf. also what Feyerabend says in a letter of 1974 to Imre Lakatos: "... Popperianism is very much like Wittgensteinianism: in both cases philosophy seems to start with the master ..." (Mottetlini 1999, 365).

³ For instance, Feyerabend writes that Wittgenstein had "emphasized that science contains not only formulae and rules for their application but entire traditions" (Feyerabend 1982, 66).

Wittgenstein was very impressive in his way of presenting concrete cases, such as amoebas under a microscope (I cannot now recall the reason this example was used), but when he left we still did not know whether or not there was an external world, or, if there was one, what the arguments were in favor of it. ‘You philosophers’ said one of the participating engineers in despair, ‘are all alike. There you tell us that Wittgenstein turned philosophy upside down. He talks just as much as everyone in this profession and can’t give a straightforward answer to a straightforward question.’ (Feyerabend 1966, 4)⁴

Subsequently, Feyerabend went to England, allegedly to study, as a post doc, with Wittgenstein at Cambridge. Since Wittgenstein had in the meantime passed away, Feyerabend had to find a new post and moved to London to work with Popper at LSE (see, for instance, Feyerabend 1995, 86; 2020, 28). Collodel, however, has shown that, from the beginning, as it is stated in Feyerabend’s application to the British Council for a scholarship at the end of 1951, i.e., after Wittgenstein’s death, Feyerabend’s first choice was to work with Popper at LSE (Collodel 2016, 36).

In 1949 Elizabeth Anscombe gave Feyerabend manuscript copies of the *Philosophical Investigations* and of the *Remarks on the Foundations of Mathematics* (Feyerabend 2020, 28),⁵ and in 1955 Feyerabend published a review of the *Philosophical Investigations* (Feyerabend 1955), which Norman Malcolm partly approved of (Feyerabend 2020, 161), Feyerabend found “*much* too talkative (ibid., 185, his emphasis), and Ryle said it was an “efficient condensation, not a review” (Feyerabend 1995, 93). Feyerabend (1995, 93) also thought that his rendering of Wittgenstein’s ideas in the review “falsified Wittgenstein’s intentions”. Anscombe herself translated the review from German to English. Feyerabend also had the opportunity to present his views on incommensurability (without yet the term), at a meeting at Anscombe’s house with Peter Geach, H.L.A. Hart, and Georg von Wright because he thought that Wittgenstein’s ideas of meaning “were a very essential ingredient of the idea of incommensurability” that he had eventually developed (Feyerabend 2020, 28).

10.2 The Philosophy

Feyerabend (2020, 28) confessed in his “Autobiographical Remarks” of 1976, that Wittgenstein set him afire while Popper left him cold. Yet, Juliet Floyd (2005, 105) has claimed that “Feyerabend remained to the end a Popperian,” while John Preston (2000, 99) maintained that Feyerabend “*does* deserve to be thought of as Wittgensteinian” (emphasis in the original). I will argue that Feyerabend remained much closer to Popper, and his Viennese positivist roots, than to Wittgenstein in the

⁴Feyerabend, in his biographical sketch of Herbert Feigl (1970, 4), says that Wittgenstein’s visit to the Kraft Circle took place in 1952. Wittgenstein passed away in 1951 and Matteo Collodel (2016, 36) has persuasively shown that Wittgenstein gave a lecture at the Kraft Circle in early 1950.

⁵Eric Oberheim (2006, 65n72) writes that Anscombe gave Feyerabend German manuscripts of the *Investigations* in 1952 in London.

greater part of his career, but I will agree with Preston that, Wittgenstein's philosophy was, perhaps idiosyncratically, appropriated by Feyerabend, especially in his late writings.

10.2.1 Feyerabend's Statement View of Theories

Feyerabend may have bragged about his "Wittgensteinian upbringing" (Mottterlini 1999, 272), but his upbringing was actually logical positivist. His doctoral dissertation, entitled *Zur Theorie der Basissätze*, which was supervised by Viktor Kraft, intervened in the protocol sentence debate and challenged the sharp theory-observation dichotomy, so crucial for testing theory against experience. He defended the view that observation sentences are thoroughly theoretical and that there is no unadulterated *Given* (Feyerabend 2020, 25).⁶ In two unpublished letters to Thomas Kuhn in the 1980s, when Kuhn was working again on the concept of incommensurability trying to address the criticism of those "who made a mess of it," Feyerabend explains how his concept of incommensurability was tied to the so-called "statement view" of theories. In the first letter, dated April 4, 1983,⁷ after he refers Kuhn to chapter 17 of his *Against Method*, Feyerabend writes:

...I came to incommensurability (one narrow aspect of it) via a critique of the double language model. In Minnesota where I spent two years (in installments) the situation was presented thus: there is a theoretical language, there is an observation language and meaning flows from the observation language to the theoretical language by "upward seepage"⁸ (this is how Paul Meehl, the psychologist expressed the matter). In my thesis (1951) I tried to show that observations taken by themselves cannot determine meanings. I therefore suggested a "downward seepage" theory, i.e. I suggested that all there is are theoretical meanings, all terms are, semantically speaking, theoretical terms and the difference between observation and theory has nothing to do with meaning. (Kuhn Papers MC 240, Box 21, Folder 28)

Feyerabend repeats the same claim in his letter of February 21, 1988:

You [Kuhn] say that quantum theory must have played a role in my way towards incommensurability. I am not so sure, for I don't remember all the details. The idea that there exists no semantic distinction between observation statements and theoretical statements (observation statements are not merely theory-laden but fully theoretical) came from the protocol-statement discussion of the Vienna Circle; just good old positivism. What I added was a discussion and refutation of what I called the 'stability thesis', viz. that some meanings are unaffected by theoretical change. In my 1958 paper [Feyerabend 1958], I discussed two ways of defending that thesis, one being connected with Bohr's version of

⁶Feyerabend defended a pragmatic theory of observation. For more on this see Feyerabend (1958, 1962), and Kuby (2018).

⁷Feyerabend's own letter bears the date "4.4.83" but, on the copy in the archive there is also a seal stamp with the date "April 14 1983". Probably the latter is the date the letter reached Kuhn.

⁸Cf. Feigl's diagram (1970, 6–7) for the "upward seepage" of meaning from the observational terms to the theoretical concepts.

complementarity. But this was only an example and I don't remember how much it meant to me at the time. The objection that crucial experiments would now be incomparable because theories would be incomparable came from Feigl; it did not bother me at all for I interpreted crucial experiments as practical decisions not as theoretical comparisons of statements with stable meanings. (Kuhn Papers MC 240, Box 21, Folder 28)⁹

In both excerpts, Feyerabend traces the origins of his idea of incommensurability and shows how connected it is to the positivist debates. In a handwritten note in the second letter, Feyerabend clarifies this issue further:

All this was carried out within the anti- (or a-) historical framework of Neopositivism up to Quine. The historical approach I adopted only later—and there *you* were my teacher. (Kuhn Papers MC 240, Box 21, Folder 28, emphasis in the original)

The statement view of theories was matter-of-factly adopted in Popper's philosophy and, in that respect at least, Popper was very close to the positivists. Feyerabend shared this view about theories for quite some time.¹⁰ In his influential paper "Explanation, Reduction and Empiricism" (1992), Feyerabend discusses and criticizes the formal accounts of explanation and reduction, then dominant in philosophy of science, which considered relations between statements. In the same paper, Feyerabend explicitly draws upon Popper's philosophy and is critical of linguistic

⁹Feyerabend gives the same account in his "Concluding Unphilosophical Conversation" (1991b, 526–7). Retrospectively, after Kuhn's emphasis on the practice of science, Feyerabend criticized the approach that saw only statements in science:

For the logical positivists, ... science was a system of statements and theories ... Can you imagine that? There are these philosophers, and they are intelligent people and all they see when looking at science is *statements*. They do not see laboratories; they do not see the fights scientists and politicians engage in to settle financial questions; they do not see the large telescopes, the observatories, the staff buildings, the staff conferences, the effects of an asshole in power on his underlings—they see only statements. [...] the thesis that science is system of statements, i.e., a grandiose text. It is an absurd caricature of what science is. (Feyerabend 2011, 64, 129)

¹⁰Feyerabend says that, contrary to Kuhn's approach to science, his own research "concerned theories only" (1982, 67). Yet, in his "Reply to criticism: comments on Smart, Sellars, and Putnam" (1985a, 105–6n5), Feyerabend compares his 'theories' to, among other things, Wittgenstein's 'language-games' and Kuhn's 'paradigms,' and says that, by 'theories,' he also means myths, political ideas, and religious systems. So, it may be thought that he does not share the logical positivist and Popperian idea of theories as sets of statements. I believe that in comparing his 'theories' to Wittgenstein's 'language-games' and Kuhn's 'paradigms,' Feyerabend underestimates or ignores the practical dimension of Wittgenstein's and Kuhn's concepts. Language-games and paradigms are not just larger, more comprehensive, or more spacious entities than sentences. They are imbedded in practice in a way that cannot be captured by sentences. Given his understanding of paradigms or language-games (i.e., as larger than sentences), Feyerabend continues to operate within the statement view of theories. His approach continues to differ from Kuhn's. I thank an anonymous reviewer for drawing my attention to Feyerabend's comment on 'theories'.

philosophers, just like Popper was,¹¹ for their “long-winded inquiries,” which may be uninteresting, but may also hide methodological presuppositions (ibid., 61n71). He calls them scholastic, and had most probably in mind the ordinary language philosophers, mainly J. L. Austin, whom he had met at Berkeley in 1958.¹² But, at the same point in his paper, he mentions disapprovingly Wittgenstein and his remark in *Philosophical Investigations* (§124) that philosophy must not interfere with the actual use of language and “leave everything as it is” (ibid., 61). Feyerabend thinks that this attitude encourages conformism and suppresses criticism which is vital for the advancement of science. His whole paper aims to show that, despite the all-pervasiveness of theories which permeate even observation statements, theories can be criticized and tested.

Now, this particular understanding of Wittgenstein shows that Feyerabend thought that language games are closed systems with their own concepts and standards. That Feyerabend had this view is also shown by what he says in the same article about his “contextual theory of meaning”. According to this theory, “the meaning of a term is not an intrinsic property of it but is dependent upon the way in which the term has been incorporated into a theory” (ibid., 68). The context, Feyerabend adds, extends beyond one specific theory to all the theories that are empirically adequate, are tested with it, and are incompatible with it (ibid., 69). Feyerabend credits Wittgenstein for “defending most forcefully” this view in the twentieth century, but criticizes him for “restrict[ing] this theory to the inside of his language games: Platonism of concepts is replaced by Platonism of (theories or) games.” (ibid., 68n83). Platonism for Feyerabend means stability of meaning.¹³ However, Wittgenstein did not hold this view. Language-games have a practical dimension, and are not mere sets of statements. The practice that makes possible and sustains each one of them extends indefinitely into the future. Language games are open, and their concepts, which are uses of words in particular circumstances,

¹¹ See, for instance, Popper (1992, 90):

I may perhaps say here that what I regard as the ultimate cause of the dissolution of the Vienna Circle and of Logical Positivism is not its various grave mistakes of doctrine (many of which I had pointed out) but a decline of interest in the great problems: the concentration upon *minutiae* (upon “puzzles”) and especially upon the meanings of words; in brief, its scholasticism. This was inherited by its successors, in England and in the United States.

¹² In several letters to Karl Popper from Berkeley, Feyerabend discusses Austin both positively and negatively. In one of these letters (Nov. 19, 1958), he says the following: “Whatever philosophical thesis Austin may hold—and he is very careful not to commit himself—is pure Wittgenstein, only a watered down Wittgenstein. I got this admission out of some very ardent admirers of his.” (Collodel and Oberheim 2020, 304) Maybe Feyerabend got this idea about Austin from Stanley Cavell who was his colleague at Berkeley and a very ardent admirer of both Austin and Wittgenstein.

¹³ Cf. Feyerabend (1962, 31): “it is one of the basic assumptions of Platonism that the key terms of sentences expressing knowledge (episteme) refer to unchangeable entities and must therefore possess a stable meaning.”

are flexible and fluid (see Kindi 2012a).¹⁴ Feyerabend thinks of a set context conferring meaning upon words, and confines context to theories, i.e., sets of statements. For Wittgenstein, on the other hand, language use is embedded in practice, and things are more dynamic. While there are established uses of words that can be taught, each new use contributes to the building and extension of the respective practice, which remains in a state of flux, encompassing a dense network of activities.

So far, I have tried to show that Feyerabend has held the so-called statement view of theories which brought him close to the logical positivists and Popper. He even said that his concept of incommensurability is connected to this view (Feyerabend 1991b, 526). However, Feyerabend has also said, without elaborating, that Wittgenstein's idea of meaning had a decisive influence on his concept of incommensurability (Feyerabend 1982, 115; 2020, 28). Given that Wittgenstein's later work cannot be assimilated to the statement view of theories, which of the two options, as regards incommensurability, should one opt for? Was Feyerabend's notion of incommensurability connected to the positivists' statement-view or originated in Wittgenstein's philosophy? There is no doubt that, Feyerabend's attack on the theory-observation distinction, intervened in the protocol-sentence debate which concerned the statement-view of theories that was held by the logical positivists and Popper. Observation statements, of critical significance for transmitting empirical content to theoretical terms and for testing theories, became Neurath's protocol statements and Popper's basic statements. Feyerabend, as already noted, challenged this distinction arguing that observation sentences are fully theoretical. This is where Wittgenstein's philosophy enters. Feyerabend had heard Wittgenstein's lecture at the Kraft Circle's seminar where Wittgenstein spoke about what one sees when looking through a microscope (Feyerabend 1995, 76). Feyerabend has said that "Wittgenstein was very impressive in his way of presenting concrete cases, such as amoebas under a microscope" (Feyerabend 1966, 4). The amoeba example is the first N. R. Hanson uses in the first chapter of his book *Patterns of Discovery* (1958, 4) in order to illustrate his view about the theory-ladenness of observation. According to Hanson, two microbiologists observing an amoeba, depending on the theories they have, see either a one-celled or a non-celled animal. So, Feyerabend used Wittgenstein's discussion of perception in order to undermine the role of observation statements in the statement-view of theories. If perception is

¹⁴Feyerabend refers in his footnote (1962, 68, n.83) to his review of N.R. Hanson's *Patterns of Discovery* for a criticism of "this attitude". It's not very clear whether "this attitude" refers to Wittgenstein's alleged Platonism or to Wittgenstein's alleged contextual theory of meaning. In Feyerabend's review of Hanson's book, we find several criticisms of Wittgenstein, but not of Wittgenstein's supposed Platonism. Actually, we find Feyerabend's criticism of the idea that "differences in use indicate differences of meaning," which may be taken to imply that Wittgenstein is criticized for not allowing for the stability of meaning. The other critical remarks against Wittgenstein in this review target Wittgenstein's use of examples and his many qualifications in stating a view.

theory-laden as Wittgenstein was taken to suggest,¹⁵ then observation sentences cannot test the theories and their testing is left to be carried out by other, alternative incommensurable theories that may or may not be empirically adequate. Still, Feyerabend oversimplified and, thus, misinterpreted Wittgenstein's remarks about seeing. Contrary to Wittgenstein and Hanson who rejected a two-layer account of perception (observation plus interpretation), Feyerabend seems to uphold the view that observations are interpreted with the help of a theory (Feyerabend 1965, 204).¹⁶ He may say that all observations are theoretical, but he seems to imply that there is a separate act of interpretation to make observations theoretical.¹⁷

10.2.2 *Wittgenstein's Influence on Feyerabend's Later Work: Emphasis on Particulars, the Possibility of Alternatives, the Significance of Tradition*

If Wittgenstein's influence on Feyerabend was overshadowed by the statement-view of theories which brought him closer to the logical positivists and Popper, how did it resurface in Feyerabend's later work? We have noted above the ambivalent attitude Feyerabend had towards Wittgenstein's philosophy. Originally, though fascinated, he distanced himself from it, given his connections to Popper's milieu. Popper considered Wittgenstein his "eternal arch rival," (Collodel 2016, 37), and Joseph Agassi (2008, 170) has reported that Wittgenstein was "the most popular—the only really popular—leader of philosophy in England at the time, professional and amateur alike," and, as such, was Popper's "only *bête noire*": there could be no greater public expression of loyalty to him than to lunge at Wittgenstein." Feyerabend, in several letters in the 1950s, expressed his loyalty to Popper by keeping him posted

¹⁵For Wittgenstein's discussion of *seeing* and *seeing as* and their relation to the theory-ladenness of observation, see Kindi (2021).

¹⁶Feyerabend (1991b, 526) thinks that his thesis that observation sentences are fully theoretical is more radical than the theory-ladenness thesis of Hanson, Toulmin and Kuhn who were influenced by Wittgenstein. He, however, retains the two-layer account of perception. In his view, theories are used to explain what we observe (ibid.).

¹⁷An anonymous reviewer noted that Feyerabend, in his book *Against Method*, introduces the concept of 'natural interpretation' which puts observations and theories much closer together. Indeed, Feyerabend (2010, 57–60) compares 'natural interpretations' to Bacon's "mental operations which follow so closely upon the senses," and claims, *pace* Bacon, that it is nearly impossible to separate sensations from interpretations. He even says that, were we to remove the interpretations, we wouldn't be able to perceive (ibid., 60). Similarly, he says that "[t]here are not two acts - one, noticing a phenomenon; the other, expressing it with the help of the appropriate statement- but *only one* [...] for the speaker, ... statement and phenomenon are firmly glued together" (ibid., 57, his emphasis). Still, it seems that Feyerabend takes observation statements to involve two distinct elements: a clear sensation and a connection with theory and language (ibid., 57, 59). Feyerabend does not deny the distinctness of the two elements; he only points to the difficulty of separating them and arriving at the pure sensations.

as to how he [Feyerabend] dealt with Wittgenstein's philosophy and assured Popper that his attitude towards *Philosophical Investigations* remained critical and similar to Popper's critical attitude towards the *Tractatus* (Collodel and Oberheim 2020, 83, 94–96, 161).¹⁸ Later, in the early 1960s, Feyerabend appropriated what he understood as Wittgenstein's account of perception to challenge the then dominant philosophy of science with its models of explanation and reduction which relied on the theory-observation dichotomy.¹⁹ In his late writings, aspects of Wittgenstein's philosophy provided the backbone of Feyerabend's take on knowledge, science and the world. Wittgenstein's influence is not explicitly acknowledged and, in some cases, it need not be, as Feyerabend's views, although influenced by Wittgenstein's work, move in a different direction.

What does Wittgenstein's influence consist in? Feyerabend had always thought of Wittgenstein as a critic of fundamentalist doctrines (Feyerabend 1985b, 36n2), but this concern, i.e., combating monolithic, abstract theorizing, became more pronounced and central in Feyerabend's late work. Feyerabend could achieve this goal by relying on Popperian and Millian liberal ideas (and, to a certain degree, he did; see Feyerabend 1982), but Wittgenstein's philosophy offered a broader palette: among others, the emphasis on particulars, the possibility of alternatives, and the significance of tradition. As mentioned already, Feyerabend was relying originally on the statement-view of theories, but came to defend a richer approach that presupposed a practical dimension of language use, which results in the formation of traditions. This is very much in line with Wittgenstein's stress on the practical aspect of language games, "the practice of the use of language" (PI §7), "linguistic practice" (PI §21), "the practice of the language" (PI §51), and on the idea that following a rule (for instance, in the employment of words) is a practice (PI §202).

Feyerabend also advanced a pluralistic worldview, which dethroned science from its privileged position wherefrom it exclusively pronounced on knowledge. Feyerabend may have drawn, in this respect, on Wittgenstein's concern for the possibilities of phenomena (PI §90), and Wittgenstein's presentation of a variety of language games (PI §23), but Feyerabend's investigation is not grammatical, i.e., logical, as Wittgenstein's, but more political and polemical against the unique advantage that science enjoys on epistemic matters in contemporary societies, over other forms of knowledge. Feyerabend, in his late work, was not appreciative of purely logical investigations. He thought that logic makes crude distinctions and is far removed from the actual practice of scientists and human beings to be really helpful. Philosophers, he said, "deal with a never-never land that has hardly any point of contact with the actual lives of scientists, politicians, people like you and me."

¹⁸ Feyerabend was even preparing a collection of Popper's remarks on Wittgenstein (Collodel and Oberheim 2020, 94).

¹⁹ Cf.: "[Wittgenstein] saw that whenever we observe and report observations we make use of traditional elements ('forms of life')." (Feyerabend 1985a, 37) Wittgenstein did not really say that forms of life have a role in how we observe things. One may only presume that a certain training in a culture may shape our observations.

(Feyerabend 1991b, 492).²⁰ He was particularly frustrated with philosophers that used references to logic “not just to clarify but to evade scientific problems. “We are making a logical point,” the philosophers would say when the distance between their principles and the real world became rather obvious.” (Feyerabend 1995, 143) Feyerabend also contrasted his approach to Wittgenstein’s in disputing Herbert Feigl’s claim that there are “neo-Wittgensteinian traces” in his reasoning. Feyerabend said that in Wittgensteinian analyses,

[a]lternatives are brought in, not in order to arrive at a better theory through the criticism of the existing one, but rather *in order to get better insight into the existing theory*. [...] A Wittgensteinian uses alternatives with a *dogmatic*, or a *conservative*, purpose. Knowing where the argument is going to lead, he does not really take them seriously, although he may admit that they possess an important therapeutic function. Our own point of view is radically different. Alternatives are taken seriously. They are all candidates for a better theory in the future. Their function is critical and progressive, that is, they are used with the purpose of finding the weaknesses of the customary set of ideas. (Feyerabend 1965, 227n20, emphases in the original)

Here, Feyerabend criticizes the purely logical considerations in order to recommend practical and reformist solutions. Alternatives have for him practical value; they are not supposed to solely illustrate the diversity of language use in the effort to attack essentialism, as is the case with Wittgenstein who marshals, not just actual, but also imaginary examples of different language use. Wittgenstein is portrayed by Feyerabend as conservative, as unwilling to allow or explain how language games, traditions, or cultures change. For instance, he says that Wittgenstein “has failed to indicate how traditions can be improved and created the impression that such improvement is impossible” (Feyerabend 1985b, 37–38). He pauses at Wittgenstein’s remark about philosophy leaving everything as it is (PI §124) and claims that, from such a point of view, criticism is quite impossible (Feyerabend 1965, 246n114; cf. *ibid.*, 252n137). He also says that Wittgenstein does not allow revisions of conceptual schemes because, allegedly, Wittgenstein sticks with ordinary language and precludes its reform (Feyerabend 1985a, 159n29). But, this take on Wittgenstein’s philosophy shows a misunderstanding. Wittgenstein may have been characterized as conservative,²¹ but he was not complacent with the status quo, nor was he dogmatically attached to any particular ordinary language. Wittgenstein only thought that it was not philosophy’s job to change whatever language people commonly use

²⁰ Cf. Feyerabend (1991a, 44): “a purely logical discussion is not only naive, it does not even make sense.” He also said: “as a student I had mocked the intellectual tumors grown by philosophers.” (Feyerabend 1995, 143) Note here the resemblance with Wittgenstein’s reference to bumps: “The results of philosophy are the discovery of some piece of plain nonsense and the bumps that the understanding has got by running up against the limits of language. They—these bumps—make us see the value of that discovery” (PI §119).

²¹ See the subchapter “Wittgensteinian Quietism and Conservatism” in Virvidakis and Kindi (2012).

as if it were defective. He did not believe that philosophy ought to dictate what is right or wrong to do, what to improve or what to leave unchanged.²²

Feyerabend, unlike Wittgenstein, is more of an activist. He portrays science as a loose collection of heterogeneous subjects, with diverse approaches, with no firm structure, and suggests that other traditions and practices that are commonly deemed unscientific, should not be dogmatically dismissed (Feyerabend 1999, 193–196; 1987, 281). They can legitimately be considered as candidates for improving knowledge. Feyerabend castigates “monster science” which is understood as speaking with a single voice, delivering a coherent message that determines the nature of reality (1987, 27, 155; 2011, 55). With this metaphor, Feyerabend attacks a metaphysical understanding of science that erases differences in the name of oneness. Here, Feyerabend meets Wittgenstein on the significance of particulars and the differences they exhibit. In Feyerabend’s view, universals are tyrants, the aggressors that annihilate the variegated landscape of particulars, and conquer the abundance of being (1999, 252–264). Yet, Feyerabend finds that in Homer they function in a different way. Not as tyrants, but as mediators between particulars, without superseding or annihilating them. Universals in that context, connect particulars as in lists. In that connection, Feyerabend criticizes Socrates’s insistence on getting definitions instead of lists from his interlocutors in response to his questions. For instance, Socrates dismisses Theaetetus’s answer to the question “what is knowledge?” which included a list of kinds of knowledge (geometry, astronomy, harmonics, arithmetic, cobblery). Similarly, in *Meno* where Socrates asks for a definition of virtue, Meno gives a list of kinds of virtue and is criticized by Socrates. Feyerabend writes that Socrates’s quest reduces the complexity of things and of the world to simple formulas.

The answers given by Theaetetus and Meno take this complexity into account. They provide *examples* and thereby invite us to consider more than one type of action; they use a *variety* of examples and thereby prevent a uniform interpretation of the material; and they are imprecise, for matters are in flux and cannot be nailed down. (Feyerabend 1999, 259)²³

It should be noted here that Wittgenstein also comments on Socrates’s quest for definitions in the Platonic dialogues and stresses the significance of giving examples.

I cannot characterize my standpoint better than by saying that it is opposed to that which Socrates represents in the Platonic dialogues. For if asked what knowledge is I would list examples of knowledge, and add the words ‘and the like’. No common element is to be found in them all. (cited in Hallett 1977, 33 from Wittgenstein’s manuscripts)

²² In his later years, Feyerabend came to appreciate this view:

Scientists have their own way of doing things. In some of my earlier writings I wanted to interfere in their activity and I said: you won’t make discoveries unless you proliferate. Now I would say that the only interference that counts is interference by the people on the spot. Why? Because they know the details including the details that are not written down but reside in their experience. (Feyerabend 2011, 126–127)

²³ Note, however, that in his review of Hanson’s book *Patterns of Discovery*, Feyerabend expresses his disapproval for what he takes to be the Wittgensteinian practice of burying important points beneath concrete examples (Feyerabend 1960, 252).

Wittgenstein also says: “A main cause of philosophical disease -a one-sided diet: one nourishes one’s thinking with only one kind of example.” (PI 593) So, here, Feyerabend and Wittgenstein meet.

10.2.3 *Look and See*

Feyerabend appeals to two more Wittgensteinian themes: Wittgenstein’s injunction not to think but look (PI §66) and Wittgenstein’s comments on secondary meaning. Let’s consider, first, what use Feyerabend made of Wittgenstein’s emphasis on looking rather than thinking. Feyerabend thought that Wittgenstein’s injunction, not to think but look, is an invitation for empirical research. He says, for instance, that a paper by Michael Polanyi on the world view of the Azande. “was a concrete application of Wittgenstein’s advice to look and see and not to wander off on an abstract tangent” (1991b, 492), and he avows that he himself will give preference to historical considerations over abstract models and theorizing.²⁴ This interpretation of Wittgenstein’s remark is quite common,²⁵ but again does not chime well with Wittgenstein’s philosophy. Wittgenstein was contrasting looking to theoretical, i.e., philosophical, thinking, but he was not inviting us to do empirical research.²⁶ He always insisted on distinguishing logic from the empirical and he explicitly denied that his philosophy was any kind of natural science (PPF §365). Regardless of Feyerabend’s disapproval, Wittgenstein’s investigations are grammatical, that is logical, not empirical, even when Wittgenstein asks us to look at how language is used.²⁷ His target in remark PI §66 is essentialism, and he asks us to look and see how various the use of the term ‘game’ is. He did not find this out by empirical research; the task of the philosopher, he says (PI §127), “consists in marshalling recollections,” or, as it was put in the older translation of the first three editions of the *Philosophical Investigations*, in “assembling reminders”.²⁸ Feyerabend (1982, 115) said that the Wittgensteinian invitation to look and see clashed with his own inclinations, which were theoretical, and, as a result, his papers that were influenced by Wittgenstein, are “mixtures of concrete examples” (Wittgenstein’s influence

²⁴ Cf. Feyerabend (1991b, 515): “I look at history as an empiricist and I find that the empirically identifiable actions of individuals always break through even the most delicate theoretical scheme.”

²⁵ See, for instance, Bloor (1983) and Lynch (1992), but also Jamie Shaw (2021, 467) who says that Wittgenstein’s influence led Feyerabend to reject the conceptual analysis of statements and opt for a naturalistic approach that turns philosophy into an empirical investigation.

²⁶ Note also that Wittgenstein, in his *Remarks on Colour* (RC III.72) questions whether looking by itself can “teach us anything about the concepts of colour.” My colleague Fay Zika has drawn my attention to this comment by Wittgenstein.

²⁷ For criticism of the view that Wittgenstein’s philosophy can be interpreted as encouraging empirical investigations, see Kindi (2012b), Friedman (1998), and also Kuusela (2019), especially Chap. 6, “Non-Empiricist Naturalism: The Uses of Natural History in Logic”.

²⁸ Wittgenstein also noted that he used imaginary examples and scenarios for his purposes (PPF§365): “we are not doing natural science; nor yet natural history a since we can also invent fictitious natural history for our purposes.”

which he eventually rebuffed),²⁹ and “sweeping principles” (his own inclinations that he also eventually resisted). On the other hand, in his last book (1999, 84), Feyerabend criticizes the same Wittgensteinian injunction to “look and see” for not taking into account that “looking is not a simple matter,” implying that it involves theoretical considerations. Feyerabend and Wittgenstein, however, are talking about different things. Wittgenstein criticizes the sublimation of logic and the inclination of philosophers to make idealizations and speak metaphysically. He urges them to look and see what they already know as users of language, to see what his philosophy draws attention to and tries to make visible. Feyerabend, on the other hand, is interested in challenging the logical positivists’ reliance on pure observation statements for the testing of theories and for the conference of meaning, and is eager to point out that seeing needs interpretation and will not, by itself, achieve anything significant. Wittgenstein does not offer any theory about observation and, though he does not believe in pure observation, he actually reserves *seeing as* (which is often assimilated to the theory-ladenness of observation) for special occasions of seeing (see Kindi 2021, 172–174).

10.2.4 Secondary Meaning

Feyerabend makes an explicit reference to “secondary meaning” in order to combat the view that meaning is given to terms directly by the phenomena to which they apply. Feyerabend (1965, 205) thinks that “the idea that meanings are determined by phenomena, and the corresponding idea that the truth of observation statements is determined by attention to phenomena, must be rejected.”³⁰ Phenomena alone, in his view “cannot even select interpretations,” cannot select, that is, which sentence correctly describes the respective phenomenon (ibid.).³¹ Accordingly, Feyerabend

²⁹In his review of Hanson’s book *Patterns of Discovery*, Feyerabend (1960, 252) expresses his disapproval for what he takes to be the Wittgensteinian practice of burying important points beneath concrete examples.

³⁰The reason he gives is that, in the absence of a teacher to help,

[t]he phenomena must speak for themselves. This means that there must be, in addition to *S* and *P*, a further phenomenon *R*, indicating that *S* fits *P*. Moreover, it is not enough that there is just another element in the visual (or in the mental) field. The element *R* must be relevant, it must fit the whole situation in such a manner that it enables us to say that *S* fits *P*. We therefore need still a further phenomenon, guaranteeing relevance *R*’; the same arguments apply to this phenomenon, hence we need still another phenomenon *R*”; and so on, *ad infinitum*. (Feyerabend 1965, 204)

The same discussion is repeated in Feyerabend (1985a, 26–27).

³¹Cf. Feyerabend 1985a, 27):

Phenomena cannot determine meaning, although the fact that we have adopted a certain interpretation may (psychologically) determine phenomena. That is, the strict adherence to an interpretation and the rejection of all accounts which are different from it may lead to a situation where the relation between phenomena and propositions will be one to one. In such a situation a distinction between phenomena and interpretations on the one hand and phenomena and objective facts on the other cannot readily be drawn...

appeals to Wittgenstein's discussion of 'secondary meaning' to show that listening to the sound *e* does not determine the meaning of 'yellow' in the example that both Wittgenstein and Feyerabend use, namely, that of having the "strong inclination to call the vowel *e* "yellow." "Yellow" is not applicable to sounds and so, its meaning is not derived from the phenomenon it is supposed to describe. "Yellow" carries its usual meaning, which is fixed, according to Feyerabend, by conventions or by the conventions of the language that it belongs to and is chosen as a means of communication (ibid., 206–207). Wittgenstein does not speak of meaning in terms of conventions, but in terms of use. In that connection, he presents examples, such as calling the vowel *e* "yellow," in order to underline that, even in such extreme cases where meaning is supposedly derived from some idiosyncratic inner experience (namely, synaesthetic experience), inaccessible to others, that is not the case. The term "yellow" has still its primary meaning which is fixed by the practice of using color words.³² So, Feyerabend's appeal to Wittgenstein in relation to secondary sense in order to point out that outer or inner phenomena cannot by themselves fix meaning, is not unsuitable, although Wittgenstein does not speak of interpretations of phenomena, as Feyerabend does, and does not think of meaning in terms of conventions.

10.2.5 *Scientism*

Finally, I will consider two other issues that have been noted in the literature as common between Feyerabend's and Wittgenstein's philosophy. The first is the opposition of both philosophers to scientism. Ian Kidd (2013, 92) writes that both Feyerabend and Wittgenstein shared a "deep and abiding anti-scientism," while.

Juliet Floyd (2005, 102) observes that the two thinkers believed that

part of the task of philosophy ... [is] to investigate and critique certain symbolic, dogmatic, and/or empty pronouncements that arise about and within science, but without preaching about "truth" from on high, dreaming of a purified scientific method or language, or attempting to speak in general terms about technological thinking or science as such.

Scientism is a certain ideology about science, one that inflates its powers and scope, and gives license to science's imperialistic tendencies and its pretensions to speak with authority about almost anything. It's true that both philosophers denounced this ideology: Feyerabend was critical, for instance, of the manifesto of 186 scientists, including Nobel Laureates, that condemned astrology (see Feyerabend 1982, 91–96),³³ and Wittgenstein was jestingly collecting newspaper clippings that were

³² For more on Wittgenstein's discussion of secondary sense see Kindi (2009).

³³ Feyerabend (1982, 92, 95) said that the 186 scientists "neither know the subject they attack, astrology, nor those parts of their own science that undermine their attack. ... [The Manifesto against astrology] shows the extent to which scientists are prepared to assert their authority even in areas in which they have no knowledge whatsoever."

about, among others, scientists meandering in areas they did not belong to. In Wittgenstein's "Collection of Nonsense," as it was called, there were cuttings featuring, for instance, Sir Oliver Lodge, a distinguished physicist, who believed that "the mind of Edison was directing work from beyond the grave" (2008, 195), and Albert Einstein, whom Wittgenstein called "a bloody journalist" (ibid, 201).³⁴ It's also true that Feyerabend's and Wittgenstein's criticism of scientism did not imply that they did not have respect for science.³⁵ Still, the two philosophers differed significantly. Feyerabend undertook an almost political task to undermine science's rising hegemony in contemporary societies by questioning the privileged trust we reserve for scientific claims. Wittgenstein, honoring his view to leave things as they are and not to meddle with particular practices, did not issue any recommendations as to how we should treat science, nor did he pronounce on its merits in comparison to other types of knowledge, as Feyerabend did.

10.2.6 *Wonder and Mysticism*

A second theme that has been said to be common between Feyerabend's and Wittgenstein's philosophy has been noted by Ian Kidd who, drawing on David Cooper's work (2017), argues that both Feyerabend and Wittgenstein "affirm a mysterious background to human life," and value a sense of wonder at something mysterious about life and the world (Kidd 2017, 107–109). Kidd connects this appreciation of wonder, and even mysticism, by the two philosophers, with their anti-scientism. The idea is that the scientific world conception is blamed for being

³⁴ Brian McGuinness, editor of Wittgenstein's letters, notes that the clippings on Einstein were illustrating "Einstein's love for publicity and clowning, others his views on politics, the future of man, religion, and other general matters" (Wittgenstein 2008, 201). Wittgenstein's friend, the physicist W. H. Watson, apart from sending Wittgenstein cuttings, also recommended in his letters that Wittgenstein read *Nature* for gems of nonsense (ibid., 195).

³⁵ Cf. Feyerabend (1991a, b, 74–75):

I have no special love for astrology and much that is written in this area bores me to tears. But astrology is an excellent example of the way scientists deal with phenomena outside their area of competence. They don't study them, they simply curse them, insinuating that their curses are based on strong and straightforward arguments.

It should also be taken into account that Feyerabend's theoretical pluralism was supposed to advance sound knowledge. In criticizing the 186 scientists, Feyerabend defended a certain scientific ethos.

Wittgenstein, who had studied mathematics and engineering and had great appreciation for the rigor of the scientific way of thinking, had dismissed Carnap's interest in parapsychological phenomena as not serious. Carnap remembered that Wittgenstein "was shocked that any reasonable man could have any interest in such rubbish" (Carnap, 1963, 26). We see here that Wittgenstein did not share Feyerabend's belief that the proliferation of theories of any kind, and their mutual criticism would advance knowledge.

hostile to, and for eroding the sense of wonder at the mysteriousness of the world (ibid., 109, 112, 113).

I see two problems with this view. The scientific world conception should not be identified and confused with scientism. Science, and versions of scientific philosophy, i.e., philosophy inspired by science, or philosophy that has science as a model, are responsible for a disenchanted world conception which has become dominant in contemporary times. It may be said that it is a defining characteristic of contemporary science to drive out of the world any kind of mystery.³⁶ Scientism, on the other hand, which usually puffs up whatever has to do with science, cannot really outdo science in this particular matter. Science's disenchanting of the world is so definitive, that no room is left for scientism to exceed it. So, if both Feyerabend and Wittgenstein embrace wonder and mysticism, i.e., some form of enchantment of the world, they should not just target scientism, but also science itself. But, we have already agreed that they both respect science and what it does as science. Their criticism of science is mostly restricted to its presentation as monolithic and unitary.

The second point of contention concerns the thesis that Feyerabend and Wittgenstein do indeed invite and welcome a sense of wonder at the mysteriousness of life and the world. Feyerabend says explicitly in his "Letter to the Reader," published posthumously in Ian Hacking's review of *The Conquest of Abundance* (Hacking 2000),³⁷ that if a name is to be given to his very late view, it could be "mysticism, though it is a mysticism that uses examples, arguments, tightly reasoned passages of text, scientific theories and experiments to raise itself into consciousness." Ever a pluralist and an effective opportunist, Feyerabend does not shy from using anything in his panoply of ways to tackle the issues that concern him. Wittgenstein, on the other hand, does not affirm "a mysterious background to human life," as Ian Kidd puts it (Kidd 2017, 108), at least in the same way that Feyerabend did. According to Kidd, human life for Wittgenstein "is ultimately mysterious because it consists of forms of life or ways of experiencing and describing the world that presuppose and so cannot explain their own conditions of possibility" (ibid.). It is true that Wittgenstein does not believe that our forms of life or our worldviews can be ultimately justified. But this view does not commit him to a metaphysical understanding of some ultimate reality or Being. He may say in *Culture and Value* (CV 16) that "[p]erhaps what is inexpressible (what I find mysterious and am not able to express) is the background against which whatever I could express has its meaning," but what he means by that phrase is that he is unable to go any further than saying "This is simply what I do"; he has exhausted the justifications and he

³⁶ According to Ian Kidd (2017, 110), Wittgenstein thinks that science's erosion of our capacity for wonder, is not an inevitable feature of the scientific world picture, but is rather connected to "what has come to be the 'spirit in which science is carried on nowadays' (CV 5)." Wittgenstein, however, in this remark from *Culture and Value*, does not talk generally about the essential or accidental characteristics of science. He makes a specific point, namely, that people nowadays are not likely to fear natural phenomena because of the way science is nowadays practiced.

³⁷ The letter has also been published in the 4th edition of *Against Method* (Feyerabend 2010).

has reached bedrock (PI 217).³⁸ Wittgenstein does not have a robust idea of what reality consists in/of, unlike Feyerabend who argues in favor of ontological pluralism, a view that he thinks “seems closer to facts and to human nature” (Feyerabend 1999, 215).

10.3 Conclusion

I have presented several areas where one can trace affinities between Feyerabend’s and Wittgenstein’s philosophy. The influence from Wittgenstein’s work was not straight forward and involved inconsistencies, tensions and misreadings. Yet, even where it was resisted by Feyerabend, it was always present either as an inspiration or as a sounding board.

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Bibliography

- Agassi, J. 2008. *A Philosopher’s Apprentice in Karl Popper’s Workshop*. Amsterdam: Rodopi.
- Bloor, D. 1983. *Wittgenstein. A Social Theory of Knowledge*. New York: Columbia University Press.
- Carnap, R. 1963. Intellectual Autobiography. In *The Philosophy of Rudolf Carnap: The Library of Living Philosophers*, ed. P.A. Schilpp, vol. 11. La Salle: Open Court.
- Collodel, M. 2016. Was Feyerabend a Popperian? Methodological Issues in the History of the Philosophy of Science. *Studies in History and Philosophy of Science* 57: 27–56.
- Collodel, M., and E. Oberheim. 2020. *Feyerabend’s Formative Years. Feyerabend and Popper*. Vol. I. Cham: Springer.
- Cooper, D. 2017. Superstition, Science, and Life. In *Wittgenstein and Scientism*, ed. J. Beale and I.J. Kidd, 28–38. New York: Routledge.
- Feigl, H. 1970. The Orthodox View of Theories. In *Minnesota Studies in the Philosophy of Science*, ed. M. Radner and S. Winokur, vol. IV, 3–16. Minneapolis: University of Minnesota Press.
- Feyerabend, P. 1955. Wittgenstein’s *Philosophical Investigations*. *The Philosophical Review* 64 (3): 449–483.
- . 1958. An Attempt at a Realistic Interpretation of Experience. *Proceedings of the Aristotelian Society* 58: 143–170.
- . 1960. Review: Patterns of Discovery. *Philosophical Review* 69: 247–252.
- . 1962. Explanation Reduction and Empiricism. In *Scientific Explanation, Space, and Time: Minnesota Studies in the Philosophy of Science*, ed. H. Feigl and G. Maxwell, vol. III, 28–97. Minneapolis: University of Minneapolis Press.

³⁸ It should be noted that this is an early remark, made in 1931, and it may reflect the spirit of Wittgenstein’s early work, as expressed mainly in the *Tractatus*, where the efforts to state the conditions of possibility of language are characterized as nonsensical. Wonder at the conditions of possibility of language is not so prominent in Wittgenstein’s later work.

- . 1965. Problems of Empiricism. In *Beyond the Edge of Certainty. Essays in Contemporary Science and Philosophy*, ed. R.G. Colodny, 145–260. Englewood, NJ: Prentice Hall.
- . 1966. Herbert Feigl: A Biographical Sketch. In *Mind, Matter, and Method: Essays in Philosophy and Science in Honor of Herbert Feigl*, ed. P. Feyerabend and G. Maxwell, 4–13. Minneapolis: University of Minnesota Press.
- . 1982/1978. *Science in a Free Society*. London: Verso Editions.
- . 1985a/1981. *Realism, Rationalism, and Scientific Method. Philosophical Papers Vol. 1*. Cambridge: Cambridge University Press.
- . 1985b/1981. *Problems of Empiricism. Philosophical Papers Vol. 2*. Cambridge: Cambridge University Press.
- . 1987. *Farewell to Reason*. London: Verso Editions.
- . 1991a. *Three Dialogues on Knowledge*. Oxford: Blackwell.
- . 1991b. Concluding Unphilosophical Conversation. In *Beyond Reason: Essays on the Philosophy of Paul Feyerabend*, ed. G. Munévar, vol. 132, 487–527. Dordrecht: Springer. (Boston Studies in the Philosophy of Science).
- . 1995. *Killing Time*. Chicago: The University of Chicago Press.
- . 1999. In *Conquest of Abundance. A Tale of Abstraction versus the Richness of Being*, ed. Bert Terpstra. Chicago: The University of Chicago Press.
- . 2010. *Against Method*. 4th ed. London: Verso Editions.
- . 2011. In *The Tyranny of Science*, ed. E. Oberheim. Cambridge: Polity Press.
- . 2020/1976. Autobiographical Remarks. In *Feyerabend's Formative Years. Feyerabend and Popper*, Vol. I., ed. M. Collodel and E. Oberheim, 19–44. Cham: Springer.
- Floyd, J. 2005. Homage to Vienna: Feyerabend on Wittgenstein (and Austin and Quine). In *Paul Feyerabend (1924–1994) – Ein Philosoph aus Wien*, ed. F. Stadler and K.R. Fischer, 465–470. Berlin: Springer Verlag.
- Friedman, M. 1998. On the Sociology of Scientific Knowledge and Its Philosophical Agenda. *Studies in the History and Philosophy of Science* 29: 239–271.
- Glock, H.-J. 2008. The Influence of Wittgenstein on American Philosophy. In *The Oxford Handbook of American Philosophy*, ed. C.J. Misak, 375–402. Oxford: Oxford University Press.
- . 2013. Wittgenstein's Later Philosophy. In *The Oxford Handbook of Analytic Philosophy*, ed. M. Beaney, 572–593. Oxford: Oxford University Press.
- Hacking, I. 2000. 'Screw You, I'm Going Home. Review of Paul Feyerabend's *The Conquest of Abundance*. *London Review of Books*, vol. 22: 12, 22 June 2000.
- Hallett, G. 1977. *A Companion to Wittgenstein's Philosophical Investigations*. Ithaca: Cornell University Press.
- Hoyningen-Huene, P. 1995. Two Letters of Paul Feyerabend to Thomas S. Kuhn on a Draft of *The Structure of Scientific Revolutions*. *Studies in History and Philosophy of Science* 26: 353–387.
- Kidd, I.J. 2013. Review: Paul Feyerabend, *Against Method*, 4th ed., Paul Feyerabend, *the Tyranny of Science*, ed. Eric Oberheim. *Philosophical Investigations* 36 (1): 90–94.
- . 2017. Reawakening to Wonder: Wittgenstein, Feyerabend and Scientism. In *Wittgenstein and Scientism*, ed. J. Beale and I.J. Kidd, 101–115. New York: Routledge.
- Kindi, V. 2009. Second Thoughts on Wittgenstein's Secondary Sense. In *Language and World*, ed. Volker A. Munz, Klaus Puhl, Joseph Wang, 202–204. 32nd International Wittgenstein Symposium, Kirchberg am Wechsel.
- . 2012a. Concept as Vessel and Concept as Rule. In *Scientific Concepts and Investigative Practice*, ed. U. Feest and F. Steinle, 23–46. Berlin: De Gruyter.
- . 2012b. The *Structure's* Legacy: Not from Philosophy to Description. *Topoi* 32 (1): 81–89.
- . 2017. Wittgenstein and Philosophy of Science. In *A Companion to Wittgenstein*, ed. Hans-Johann Glock and John Hyman, 587–602. NY: Wiley Blackwell.
- . 2021. Kuhn, the Duck and the Rabbit – Perception, Theory-Ladenness and Creativity in Science. In *Interpreting Kuhn. Critical Essays*, ed. K. Brad Wray, 169–184. Cambridge: Cambridge University Press.

- Kuby, D. 2018. Carnap, Feyerabend, and the Pragmatic Theory of Observation. *HOPOS* 8 (2): 432–470.
- Kuusela, O. 2019. *Wittgenstein on Logic as the Method of Philosophy*. Oxford: Oxford University Press.
- Lynch, M. 1992. Extending Wittgenstein: The Pivotal Move from Epistemology to the Sociology of Science. In *Science as Practice and Culture*, ed. A. Pickering, 215–265. Chicago: Chicago University Press.
- Motterlini, M., ed. 1999. *For and Against Method*. Chicago: The University of Chicago Press.
- Oberheim, E. 2006. *Feyerabend's Philosophy*. Berlin: De Gruyter.
- Popper, K. 1992/1976. *Unended Quest. An Intellectual Autobiography*. London: Routledge.
- Preston, J. 2000. Science as Supermarket: 'Postmodern' Themes in Paul Feyerabend's Later Philosophy of Science. In *The Worst Enemy of Science. Essays in Memory of Paul Feyerabend*, ed. J. Preston, G. Munevar, and D. Lamb, 80–101. Oxford: Oxford University Press.
- Shaw, J. 2021. Feyerabend on Naturalism, Pluralism, and the Foundations of Philosophy. *Logique et Analyse* 256: 467–486.
- Virvidakis, S., and V. Kindi. 2012. Quietism. In *Oxford Bibliographies in Philosophy*, ed. Duncan Pritchard. New York: Oxford University Press. <https://www.oxfordbibliographies.com/display/document/obo-9780195396577/obo-9780195396577-0184.xml?rskey=BzuyWk&result=1&q=quietism#firstMatch>. Last accessed 16 Feb 2023.
- Wittgenstein, L. 1980. In *Culture and Value*, ed. G.H. von Wright. Chicago: The University of Chicago Press. Abbreviated as CV page.
- Wittgenstein, L. 1990/1977. *Remarks on Colour*, ed. G.E.M. Anscombe. Oxford: Blackwell. Abbreviated as RC paragraph.
- Wittgenstein, L. 2008/1995. *Wittgenstein in Cambridge. Letters and Documents 1911–1951*, ed. B. McGuinness. Oxford: Blackwell.
- Wittgenstein L. 2009/1953. *Philosophical Investigations* (G.E.M. Anscombe, P.M.S. Hacker and J. Schulte, Trans.). 4th edition. Blackwell, Oxford. References to the first part of the book are abbreviated as PI paragraph, and to the second part, which in the 4th edition is given the title "Philosophy of Psychology-A Fragment," as PPF paragraph.

Archival Material

- Letter from Paul K. Feyerabend to Thomas S. Kuhn April 4, 1983. Thomas S. Kuhn Papers, MC 240, box 21, Folder 28. Massachusetts Institute of Technology, Department of Distinctive Collections, Cambridge, Massachusetts.
- Letter from Paul K. Feyerabend to Thomas S. Kuhn February 24, 1988. Thomas S. Kuhn Papers, MC 240, box 21, Folder 28. Massachusetts Institute of Technology, Department of Distinctive Collections, Cambridge, Massachusetts.