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## **Feyerabend's Realism and Expansion of Pluralism in the 1970s**

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### **1. Introduction**

This chapter addresses some outstanding historical issues concerning Paul Feyerabend's positions on realism and relativism in the 1970s. In the Feyerabend literature, there is general agreement that there is a discernible shift in Feyerabend's philosophical thinking sometime in the mid-1970s (Preston, 1997; Tsou, 2003; Brown, Brown and Kidd, 2016). John Preston (1997b) characterizes this shift as Feyerabend's 'retreat from realism to relativism': after the publication of the first edition of *Against Method* (1975) Feyerabend shifts away from realism towards a relativist position, as exemplified in *Science in a Free Society* (1978). Eric Oberheim (2006) contests Preston's presentation, suggesting that there's no discontinuity in Feyerabend's views on the issue of realism. On Oberheim's reading, Feyerabend consistently defended a pluralist metaphilosophical view (see Kuby 2021a), but this metaphilosophy did not commit Feyerabend to any specific philosophical positions, such as scientific realism. Hasok Chang (2021) also rejects Preston's narrative, arguing that Feyerabend never abandoned realism in his career. For Chang, Feyerabend began with a narrow view of realism ('pluralist realism') and broadened it over time.

My aim in this chapter is to clarify the nature of the shift in Feyerabend's philosophical thinking in the 1970s, focusing on issues of realism, relativism, and pluralism. Contra-Preston, I argue that realism-relativism is a misleading variable for characterizing Feyerabend's shift in the 1970s. Rather, I characterize this shift as Feyerabend's *expansion of pluralism* and suggest that this shift appears in Feyerabend's publications starting in the late-1960s (e.g., Feyerabend 1968b, 1969b, 1970a, 1970c). Adopting the terminology of Brown and Kidd (2016), this shift is characterized by a move from arguments for *pluralism within science* to broader arguments for *pluralism in society*. I argue that this shift was largely due to: (1) Feyerabend's rejection of an empiricist demarcation criterion for science in the mid-1960s, and (2) Feyerabend's incorporation of Mill's arguments for pluralism into his own publications starting in 1970. This

shift can be characterized as a *broadening or expanding the scope of Feyerabend's arguments for pluralism* from contexts of scientific knowledge to the broader context of social or cultural (including ethical) knowledge. I articulate this argument with reference to the framework for classifying Feyerabend's works formulated by Brown and Kidd (2016). Against Brown and Kidd (and Preston), I argue that realism-relativism is a red-herring as a variable for distinguishing Feyerabend's early and middle works. Brown and Kidd's distinction between pluralism within science and pluralism in society is a more useful variable for characterizing Feyerabend's shift in thinking in the 1970s. Whereas Preston (1997) and Brown and Kidd (2016) identify the *beginning* of Feyerabend's pluralism in society phase in 1978 with the publication of *Science in a Free Society* (Feyerabend 1978), I suggest that the relevant shift occurs much earlier, and it appears in Feyerabend's publications starting in 1970 (Feyerabend 1970a, 1970b). On this understanding, Feyerabend's philosophical shift (c. 1970) should be viewed as an expansion (or broadening) of the scope of application of his pluralist arguments, inspired by Mill's ethical arguments for pluralism in society (Mill 1859/1977).

With respect to Feyerabend's apparent shift to relativism in works after *Against Method* (Feyerabend 1975a), I present Feyerabend's path to relativism in terms of his changing position on the superiority of empirically testable scientific methods compared to the methods adopted in non-scientific theories (e.g., myths, metaphysical theories, religious theories). In works prior to 1966, Feyerabend assumed some Popperian demarcation criterion (scientific theories are distinguished by their empirical testability), and he held that non-scientific theories were useful resources for criticizing accepted scientific theories, but they themselves did not possess meaningful (cognitive) content. In works after 1966, Feyerabend rejects the idea of a demarcation criterion for science, and he regards non-scientific theories *as full-fledged epistemic alternatives to science* that possess their own specific forms of cognitive content. This shift marks Feyerabend's abandonment of empiricism insofar as he no longer views the empiricist methodology characteristic of modern science as epistemically superior to alternative 'non-scientific' methods. Feyerabend's retreat from empiricism in the mid-1960s forms the philosophical basis for his expansion of pluralism and eventual defense of 'anarchism' in the 1970s (Feyerabend 1970a, 1970d, 1975a). On the basis of these considerations, I date the beginning of Feyerabend's 'middle works' in 1970.

## 2. A Framework for Classifying Feyerabend's Works

Matthew J. Brown and Ian James Kidd (Brown and Kidd 2016) propose a promising theoretical framework for distinguishing different phases of Feyerabend's published work.<sup>1</sup> In their taxonomy, Feyerabend's work is divided into early, middle, and later phases:

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<sup>1</sup> For convenience, I follow Brown and Kidd's periodization of Feyerabend's career in terms of his *published works*, which simplifies historical issues regarding exactly when Feyerabend arrived at various views. However, this methodology creates some complications given that the first edition of *Against Method* (Feyerabend 1975a) was largely compiled from Feyerabend's 1960s publications (see Feyerabend, 1995, pp. 139-140) that were published between 1963-1970 (Feyerabend, 1963, 1965b, 1970a, 1970d). Regardless of the chronology of Feyerabend's published work, there are good reasons for following Brown and Kidd's proposal that *Against Method* is a 'transitional work' that features substantial aspects of his early work, but also touch on some themes from his middle

- *Early Work* (c.1951—1975): Here Feyerabend defends a type of semantic realism that is opposed to phenomenism or verificationism, argues for pluralism within science, and his main goal is to defend science against philosophies of science that would damage it.
- *Middle Work* (c.1978—1987): Here, Feyerabend argues for pluralism in society, with science understood as one social tradition amongst others, and calls the view “relativism.” His main goal is to defend society from science, in the sense of its having undue authority over society.
- *Later Work* (c.1989—1994): Feyerabend returns to an interest in realism and what he calls ‘the problem of reality’, explicitly denies relativism, and takes up metaphysics in earnest. The period is marked by a broader agenda of engaging with classics and the arts in addition to science and society. (Brown and Kidd 2016, p. 3)

This framework is useful for categorizing different phases of Feyerabend’s work. Brown and Kidd identify two main variables, which distinguish Feyerabend’s early works from middle works: (1) realism versus relativism, and (2) pluralism within science versus pluralism in society. Like Preston, Brown and Kidd identify a significant shift in Feyerabend’s works sometime between *Against Method* (Feyerabend 1975a) and *Science and a Free Society* (Feyerabend 1978).

Brown and Kidd (2016) argue that their framework can reconcile Preston’s and Oberheim’s contrasting positions on Feyerabend’s alleged shift in publications after *Against Method* (Feyerabend 1975a). In particular, they agree with Oberheim that there is significant continuity throughout Feyerabend’s career, but they agree with Preston that there are noteworthy shifts of *emphasis* and *strategy* in Feyerabend’s works. Regarding the question of whether there is a significant shift in Feyerabend’s philosophical thought after 1975, Brown and Kidd argue that Feyerabend shifts towards relativism (and away from realism) and towards questions about how to defend society from science. In this regard, they largely endorse Preston’s argument that Feyerabend makes a shift from realism to relativism in the 1970s and the beginning of this shift is marked by Feyerabend’s publication of *Science in a Free Society* (Feyerabend 1978).

### 3. Problems with Brown and Kidd’s Framework

In broad strokes, Brown and Kidd’s framework offers an illuminating picture of different phases of Feyerabend’s career arc and central topics that motivated his projects. While their framework is useful in identifying variables for distinguishing Feyerabend’s works, I want to quibble with the details of their periodization of Feyerabend’s early and middle phases.

With respect to Brown and Kidd’s periodization of Feyerabend’s early works (c. 1951-1975), I argue that Feyerabend is committed to a deflationary methodological ideal of realism (“pluralistic realism”) that appears in his published works as late as 1981. Pluralistic realism is an unorthodox and deflationary *methodological ideal of realism*, which recommends that *scientists* should interpret scientific theories realistically rather than instrumentally. In his early

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work (Brown and Kidd 2016, p. 3). For a more comprehensive discussion of methodological issues involved in interpreting Feyerabend, see Collodel (2016, pp. 35-36) and Shaw (2020, p. 110). The usual exegetical disclaimers regarding interpreting Feyerabend apply in this chapter: Feyerabend is difficult to interpret given: (1) his frequently changing views and claim that he has “no position” (Feyerabend, quoted in Horgan 1996, p. 50), and (2) his tendency to joke, posture, and exaggerate (Feyerabend 1995, p. 142).

arguments for pluralistic realism, Feyerabend (1958, 1960, 1962, 1964, 1965a, 1965c) defends a fallibilist and methodological ideal of scientific realism intended to *facilitate criticism in science*. Feyerabend's methodological realism falls in the tradition of Popper's conjectural realism (Preston 1997a) insofar as it is formulated to promote *criticism* in science and actualize the self-critical ideal of science prescribed by Popper's method of conjectures and refutations (Popper 1963). Feyerabend's defense of realism is summarized by the methodological recommendation that scientific theories should be interpreted realistically (i.e., as descriptions of the world), rather than instrumentally (i.e., as useful instruments for summarizing observations or making predictions). Evidence that Feyerabend was a pluralistic realist as late as 1981 stems from Feyerabend's introduction to volumes 1 and 2 of his *Philosophical Papers* (Feyerabend 1981b). Therein, Feyerabend presents his earlier arguments for realism under the banner of pluralistic realism with no indication that he no longer accepts this form of realism. Hence, if scientific realism is a relevant variable for distinguishing different phases of Feyerabend's published work, there are compelling reasons to date the end of his 'early works' later than Brown and Kidd's analysis presents (e.g., 1981 rather than 1975). In this chapter, I argue that realism-relativism is a red-herring for distinguishing different phases of Feyerabend's corpus.

With respect to Brown and Kidd's periodization of Feyerabend's middle works (c. 1978-1987), Feyerabend presents arguments for pluralism in society in published works as early as 1968 (e.g., Feyerabend, 1968b, 1969b, 1970a, 1970c). In this regard, it is important to note that Feyerabend's arguments for pluralism in society coincide with when he read John Stuart Mill's *On Liberty* (Mill 1859/1997) and started incorporating Mill's arguments for pluralism in his own. Based on materials from Feyerabend's correspondence (see Collodel 2016), Feyerabend read and started incorporating Mill's arguments for pluralism sometime around 1968 or 1969. In published work, Feyerabend's first discussion of Mill's *On Liberty* appears in his (book-length) chapter "Against method" (Feyerabend 1970a), which was published in the *Minnesota Studies in the Philosophy of Science* book series. Hence, if Feyerabend's shift from arguments for pluralism within science to arguments for pluralism in society is a relevant variable for distinguishing phases of Feyerabend's work, then there are compelling reasons to date the beginning of his middle works much earlier than Brown and Kidd's analysis presents (e.g., 1968 rather than 1978).

The discrepancies between Brown and Kidd's framework for classifying Feyerabend's works and Feyerabend's published works highlighted above indicate that Brown and Kidd's variables of (1) realism-pluralism within science and (2) relativism-pluralism in society do not coincide as neatly as their framework suggests. In separating these variables, I argue that the more salient variable for distinguishing Feyerabend's early and middle works is the variable of pluralism within science versus pluralism in society. In what follows, I explicate Feyerabend's pluralistic realism, and I argue that realism vs. relativism is a red-herring for distinguishing different phases of Feyerabend's work. By contrast, Feyerabend's shift from arguments for pluralism within science to pluralism in society does represent a major shift of emphasis in his philosophical thinking. I call this shift Feyerabend's *expansion of pluralism* and offer historical reasons for dating the start of this shift in 1970.

#### **4. Feyerabend's Pluralistic Realism (c. 1958-1981)**

In published works from 1958 to 1981, Feyerabend defends a fallibilistic and pluralistic *methodological ideal* of scientific realism, which is formulated against instrumentalist and logical empiricist views on the interpretation of scientific theories. Retrospectively, Feyerabend

(1981b) calls this methodological realist ideal “pluralistic realism” (p. xi), which is the first and only time that he uses this phrase.<sup>2</sup> Pluralistic realism holds that scientific development (and epistemological development more generally) requires the proliferation of competing theories of reality (‘scientific theories,’ ‘forms of thought,’ ‘forms of life’), which function to *criticize accepted scientific theories* and *promote the formulation of better theories of reality*. Within this broadly realist (and Popperian) picture of evolutionary epistemology, Feyerabend (1981b) presents the epistemological benefit of alternative theories (e.g., Copernicus’s cosmology, quantum theory) in terms of their capacity to criticize or overturn firmly accepted scientific theories:

The procedure is always the same: attempts to retain well-entrenched conceptions are criticized by pointing out that the excellence of a view can be asserted only after alternatives have been given a chance, that the process of knowledge acquisition and knowledge improvement must be kept in motion and that even the most familiar practices and the most evident forms of thought are not strong enough to deflect it from its path. The cosmologies and forms of life that are used as alternatives need not be newly invented; they may be parts of older traditions that were pushed aside by overly eager inventors of New Things. The whole history [of ideas] is mobilized in probing what is plausible, well established and generally accepted. (p. xi)

In pluralistic realism, the proliferation of *alternative theories of reality* provides a means for criticizing currently accepted scientific theories, while a realistic understanding (‘interpretation’) of theories encourages *genuine criticism* and *metaphysical engagement* among alternative theories (Feyerabend 1958, 1960, 1962, 1964). With respect to the latter, the motivation to *resolve conflicting (metaphysical) accounts of reality*, for Feyerabend, is a crucial element of scientific criticism and the articulation of *better theories of reality* (see Feyerabend 1963, 1965a). By contrast, instrumentalists judge the merits of competing theories exclusively in terms of predictive accuracy or some other empiricist ideal (e.g., ‘empirical accuracy,’ ‘saving the phenomena’), which has the detrimental consequence of bypassing (metaphysical) questions concerning the specific ways in which competing theories agree and disagree (i.e., as alternative descriptions of reality). For Feyerabend, the instrumentalist interpretation of theories is detrimental *for scientific practice* insofar as it discourages engagement with conflicting theories and the potential resolution (or synthesis) of conflicting theories. In this precise sense, Feyerabend argues that realism promotes scientific criticism and progress, whereas anti-realism (e.g., instrumentalism, positivism) stagnates scientific criticism and progress.

Pluralistic realism a *methodological prescription for scientists*: scientists should adopt a realistic interpretation of theories (and a realist interpretation of *conflicting* theories) because this *attitude* towards scientific theories promotes scientific criticism and growth. In terms of the scientific realism debates in philosophy of science,<sup>3</sup> pluralistic realism amounts to the methodological suggestion that the theoretical terms (or ‘unobservable entities’) in scientific

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<sup>2</sup> For convenience, I adopt Feyerabend’s terminology in this chapter to describe a distinctively realist (and metaphysical) aspect of Feyerabend’s arguments for pluralism in the 1960s and 1970s. The only other publication that Feyerabend adopts the terminology of ‘pluralistic realism’ is his review of Popper’s *Objective Knowledge* (Popper 1972), wherein Feyerabend (1974) presents Popper as defending a pluralistic account of realism or ‘ontological pluralism’ (p. 476).

<sup>3</sup> Feyerabend’s various discussions of realism (e.g., Feyerabend 1981a, 1981c, 1989), largely neglect and do not engage with the expansive philosophy of science literature on scientific realism that developed in the 1980s and 1990s (cf. Shaw and Bschor 2021, p. 5). For exceptions, Feyerabend (1989, 1993) cites Arthur Fine’s discussion of NOA (Fine 1986) and Ian Hacking’s discussion of experimental realism (Hacking 1983).

theories (e.g., ‘electrons,’ ‘genes,’ ‘force’) should be interpreted *as literal descriptions of the world*, rather than instruments for generating predictions or summarizing empirical data. This anti-positivistic position agrees with the first tenet of Richard Boyd’s definition of scientific realism “Theoretical terms’ in scientific theories (non-observational terms) should be thought of as putatively referring expressions; scientific theories should be interpreted realistically” (Boyd 1983, p. 45). Hasok Chang (2021) argues that Feyerabend’s methodological realism meets the realist standard prescribed by Bas van Fraassen’s definition of scientific realism (cf. Tsou 2003): “Science aims to give us, in its theories, a literally true story of what the world is like; and acceptance of a scientific theory involves the belief that it is true” (van Fraassen, 1980, p. 8). Feyerabend’s argument for a realistic interpretation of scientific theories provides a methodological justification (viz., a *realist attitude* towards theories promotes criticism and engagement with alternative theories) for preferring realism over instrumentalism.

Textual evidence that Feyerabend endorsed pluralistic realism in works as late as 1981 stems largely from the introduction that Feyerabend prepared as a general introduction for the first two volumes of his *Philosophical Papers* (Feyerabend 1981e, pp. ix-xiv, 1981d, pp. vii-xii), which summarizes the general themes and arguments that unify his earlier published works. The first volume of Feyerabend’s *Philosophical Papers* (Feyerabend 1981e), *Realism, Rationalism and Scientific Method*, features Feyerabend’s classic early papers arguing for a realistic interpretation of scientific theories (Feyerabend 1958, 1960, 1962, 1964, 1965a, 1965c). Significantly, in his introduction to volumes 1 and 2, Feyerabend (1981a) provides no indication that he no longer accepts his earlier arguments for realism over instrumentalism (this omission is significant given that Feyerabend often announced his changes of view). Therein, Feyerabend (1981b, p. ix) presents pluralistic realism (somewhat unhelpfully) with the argumentative schema:

criticism → proliferation → realism

Feyerabend (1981) emphasizes that arrows in this chain do not represent logical implications, but rather “starting with the left hand side and adding [a proliferation of alternative theories] . . . a dialectical debate will eventually arrive at the right hand side” (p. x). There are at least two ways to interpret this argumentative chain. First, it can be interpreted as an argument for the formulation of better theories of reality. If the aim of science is the realist goal of formulating true scientific theories, then one means to this goal is to criticize accepted scientific theories by testing them against a plurality of alternative theories. Put in terms of Feyerabend’s schema: *criticism* of accepted theories leads to a *proliferation* of alternative theories, which leads (through dialectical debate) to the formulation of better theories of *reality*. Second, Feyerabend’s argumentative chain can be interpreted in light of his argument for the realistic interpretation of scientific theories. On this reading, the argument starts with Feyerabend’s Popperian assumption that science is an essentially a critical enterprise. If you accept that criticism is the most important feature of science, then you should be a pluralist and support the proliferation of alternative theories that conflict with accepted scientific theories. Criticism and proliferation is facilitated by a realistic interpretation of scientific theories insofar as a realist attitude promotes genuine criticism of accepted theories and robust (metaphysical) engagement with alternative

theories. This second more qualified interpretation coincides better with the details of Feyerabend's arguments for realistic interpretation of scientific theories (see Feyerabend 1981b, p. ix); Brown and Kidd (2016, p. 3) and Chang (2021, p. 43) present Feyerabend's argument along these lines. While I assume that the second interpretation is a closer approximation to Feyerabend's intended meaning, I believe that Feyerabend could accept both interpretations presented above.

## 5. Pluralistic Realism in the 1970s

While Feyerabend's endorsement of pluralistic realism is evident in the 1960s, his position on realism in the 1970s is ambiguous at best. In 1970s publications, it is notable that Feyerabend only rarely discusses his 1960s arguments for realistic interpretation of scientific theories, and he no longer explicitly defends realism as a methodological principle that promotes critical science. More generally, Feyerabend's paradigmatic publications in the 1970s (Feyerabend 1970a, 1975a, 1978) differ in style (and content) from his publications in 1960s (Feyerabend 1962, 1963, 1965b). Whereas Feyerabend's writings in the 1960s are fairly narrow and technical papers arguing against logical empiricist views of science, his writings in the 1970s are more broadly-focused and polemical. If Preston is correct that there is a shift in Feyerabend's philosophical thinking *away from realism*, then there is prima facie textual evidence supporting the thesis that this shift appears in Feyerabend's published work starting sometime in the late 1960s (c. 1968-1970).

Whereas Feyerabend presents pluralistic realism as a methodological ideal that promotes scientific criticism and metaphysical engagement with alternative theories in the 1960s, he presents the realistic interpretation of theories as a necessary presupposition of incommensurability in the 1970s (Preston 1997a, ch. 6; Oberheim 2006, ch. 6; Oberheim and Hoyningen-Huene 2024, §4).<sup>4</sup> In the 1970s, this latter argument is presented in Feyerabend's "Against Method" book chapter (Feyerabend 1970a, pp. 86-88) and repeated in the first and second editions of *Against Method* (see Feyerabend 1975a, pp. 278-282; Feyerabend 1988, pp. 221-224).<sup>5</sup> In these works, Feyerabend emphasizes that *under their "customary" (i.e., realist) interpretation*, certain pairs of theories (e.g., classical mechanics and quantum mechanics, general relativity and classical mechanics) are incommensurable. Feyerabend (1975a) responds to the instrumentalist objection that incommensurability does not exist under an instrumentalist interpretation of theories:

Theories can be interpreted in different ways. They will be commensurable in some interpretations, incommensurable in others. *Instrumentalism*, for example, *makes commensurable all those theories which are related to the same observation language and are interpreted on its basis*. A realist, on the other hand, wants to give a unified

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<sup>4</sup> Feyerabend's argument that incommensurability requires a realist interpretation of theories was present in his earlier papers (e.g., see Feyerabend 1962, 1965a, 1965b, 1965c). In his reply to Peter Achinstein (1964), Feyerabend (1965a) explicitly states that his account of incommensurability presupposes an "epistemological realism" (p. 268), i.e., a realistic interpretation of theories.

<sup>5</sup> Feyerabend's argument that incommensurability requires a realistic interpretation of theories is removed in the third edition of *Against Method* (Feyerabend 1993, pp. 207-208).

account, both of observable and of unobservable matters, and he will use the most abstract terms . . . in order either to *give* meaning to observation sentences or else to *replace* their customary interpretation. . . . Against this, it is pointed out by almost all [logical] empiricists that theoretical terms receive their interpretation [and meaning] from being connected with a pre-existing observation language, or with another theory that has already been connected with such a language. (p. 279, emphasis added)

Feyerabend (1975a) presents the ‘guiding idea’ behind this instrumentalist objection to incommensurability as the prescription that “new and abstract languages cannot be introduced in a direct way, but must first be connected with an already existing, and presumably stable, observational idiom” (p. 280). Feyerabend (1975a, pp. 280-282) chastises and dismisses this logical empiricist prescription for its artificial and implausible picture of language acquisition. Curiously, Feyerabend does not raise his earlier objections to this Carnapian view on scientific theories. In his earlier papers, Feyerabend (1958, 1960, 1962) rejects Carnap’s strategy of identifying the *meaningfulness* of scientific theories with their observational content (Carnap 1956), which privileges the empirical part of scientific theories with respect to *meaning*. Feyerabend assumes a radical version of the theory-ladenness of observation thesis that inverts this logical empiricist picture of meaning. For Feyerabend, the meaning of scientific theories does not derive indirectly through their connections with observation sentences, but the meaning of observation sentences is “fully theoretical” in the sense of being determined by what a scientific theory says about the world (Feyerabend 1965a, 1965b, 1965c). Retrospectively, Feyerabend (1993) summarizes his early views on incommensurability as follows: “[T]he interpretation of an observation language is determined by the theories which we use to explain what we observe, and it changes as soon as these theories change . . . observation statements are not just theory-laden . . . but *fully theoretical*” (pp. 211-212, emphasis in original).

For the purposes of this chapter, it is significant that Feyerabend endorses pluralistic realism in the 1970s insofar as his account of incommensurability requires a realistic interpretation (see Preston 1997a, ch. 6; Oberheim and Hoyningen-Huene 2024; Oberheim 2006, ch. 6). This exegetical position is amenable to interpretations of *Against Method* as a realist work (e.g., Lloyd 1996, Preston 1997b, Tsou 2003). Eric Oberheim (2006) usefully connects Feyerabend’s view in the 1970s that incommensurability requires a realistic interpretation to Feyerabend’s earlier 1960s publications on realism:

Feyerabend's . . . point is simply that if one of two theories (or both) are interpreted instrumentally, i.e. merely as tools and not as attempted descriptions, then *they cannot conflict as attempts to describe nature*. The result is that there is no competition between them, and consequently no need to improve them or to find a better theory. Conceptually incompatible tools can be used for different purposes, and there is nothing stopping us from using such tools at different times. However, conceptually incompatible attempted descriptions can and do conflict. *On a realistic interpretation, theories expressed with incommensurable concepts are mutually exclusive*. This promotes competition; and consequently, progress. (p. 190, emphasis added)

Oberheim provides an astute reconstruction of how Feyerabend’s arguments for a realistic interpretation of theories forms the basis for Feyerabend’s arguments for incommensurability. Compared to instrumentalism, a realistic interpretation of theories encourages genuine metaphysical conflict and engagement with alternative theories of reality, whereas instrumentalism discourages it. This is due to the way that *conflicting theories* are regarded by realists and instrumentalists respectively. Whereas realists take conflicting theories as an impetus

to resolve this conflict, instrumentalists take conflicting theories to be an invitation to compare these theories in terms of predictive accuracy or some other empiricist standard. Like his earlier arguments for realism over instrumentalism, Feyerabend points to an epistemic benefit of a ('realist') *psychological attitude* towards scientific theories. While there is textual evidence that Feyerabend is a pluralistic realist as late as 1988, I limit my argument in this chapter to the claim that Feyerabend is a pluralistic realist as late as 1981.

## 6. Relativism and Feyerabend's Retreat from Empiricism

My argument that Feyerabend is a realist in published works as late as 1981 faces the exegetical objection that in *Science and a Free Society*, Feyerabend (1978) explicitly endorses 'relativism.' With respect to Feyerabend's defense of 'relativism' in the 1970s and 1980s (e.g., Feyerabend, 1978, 1987), I argue—as suggested by Brown and Kidd (2016)—that the relativistic tendencies in Feyerabend's work after the first edition of *Against Method* (Feyerabend, 1975) should be regarded as a *shift of emphasis and strategy*, rather than a major change in philosophical positions. On this understanding, Feyerabend's arguments for relativism represent different interests (rather than a major shift of philosophical position) that Feyerabend pursued in the late 1970s and 1980s. Feyerabend's interest in relativism stems from a more fundamental philosophical shift that Feyerabend made around the mid-1960s (Feyerabend's 'retreat from empiricism'), wherein Feyerabend gave up the view that science is superior to non-scientific ways of knowing because of its empirically testable methods.

It is worth mentioning that Feyerabend's interest in relativism (Feyerabend 1978, 1987) coincides with a 'dark period' (c. 1975-1980) in his personal life, when Feyerabend was dealing with physical and mental health issues.<sup>6</sup> During this period, Feyerabend was distressed by the largely negative reception of *Against Method* (Feyerabend 1975a). In his autobiography, he reports:

Somewhere in the middle of the commotion I grew rather depressed. The depression stayed with me for over a year. . . I had often warned my students not to identify with their work. . . I myself had followed this advice in the past, but now I was alone, sick with some unknown affliction; my private life was a mess, and I was without a defense. I often wished I had never written that fucking book. (Feyerabend, 1995, p. 147)

During his dark period, Feyerabend was uncivil and aggressive in some works, most notably in his acerbic responses to critics of *Against Method* in *Science in a Free Society* (Feyerabend, 1978, part 3). Feyerabend's widow, Grazia Borrini-Feyerabend, reports that in his later years, Feyerabend regarded *Science in a Free Society* as the work that he regretted the most (Preston 2020, §5.2). It is unclear how much explanatory work that Feyerabend's dark period can do in

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<sup>6</sup> I date the beginning of Feyerabend's dark period in 1975 since it occurs after the publication of *Against Method* (Feyerabend 1975). I date the end of Feyerabend's dark period in 1980 since Feyerabend (1995) describes the 1980s as "ten wonderful years" (p. 158), when he was able to split time between UC Berkeley and the Federal Institute of Technology at Zurich (Preston 2020, §5.3). As is well documented, Feyerabend was unhappy at UC Berkeley (e.g., see Feyerabend 1995, pp. 112-113). In the late 1960s and early 1970s, Feyerabend's colleagues in the philosophy department at Berkeley (viz., John Searle, Hans Sluga, Hubert Dreyfus) tried to get Feyerabend fired over his teaching practices (see Feyerabend 1995, p. 126; Lakatos and Feyerabend 1999, pp. 154, 177, 193, 311).

accounting for his endorsement of relativism, but it is a salient aspect of Feyerabend's personal life in the mid-to-late 1970s that undoubtedly played some role.<sup>7</sup>

During his dark period, Feyerabend's publications appear to shift towards more polemical and skeptical (i.e., 'anti-science') positions (Feyerabend 1975a, 1975b, 1977, 1978), including his infamous defense of relativism. Retrospectively, Feyerabend (1995) describes his views on relativism in his autobiography with typical self-deprecation:<sup>8</sup>

Other armchair views [of mine] did not fare so well. I am referring to my "relativism," to the idea that cultures are more or less *closed entities with their own criteria and procedures*, that they are intrinsically valuable and should not be interfered with. . . . But cultures interact, they change, they have resources that go beyond their stable and objective ingredients . . . Considering how much cultures have learned from each other . . . I have come to the conclusion that *every culture is potentially all cultures* and that special cultural features are changeable manifestations of *a single human nature* (pp. 151-152, emphasis added)

As alluded to in this passage, the relativism that Feyerabend defended in the 1970s and 1980s is closely related to his incommensurability thesis: particular cultures ('forms of thought, 'forms of life,' etc.) are "closed entities," which cannot meaningfully engage with other cultures. One thing to notice about Feyerabend's particular view of relativism is *that it is entirely consistent with his methodological ideal of pluralistic realism*. The idea that cultures are closed systems ('paradigms,' 'conceptual schemes,' 'linguistic frameworks,' 'forms of life') with their own internal criteria and knowledge-producing procedures is not inconsistent with Feyerabend's methodological recommendation for a realistic interpretation of theories. By the logic of his earlier arguments for pluralistic realism, a plurality of alternative forms of life ('interpreted realistically') will lead, through dialectical debate, to new and better forms of life. Hence, Feyerabend's arguments for pluralism in society are not only consistent with, but they may *require* pluralistic realism (i.e., a realistic interpretation of forms of life).

Feyerabend's path to relativism can be traced to a significant change in his philosophical thinking, around the mid-1960s, regarding the demarcation problem and the *meaningfulness* ('cognitive content') of alternative theories used to test and criticize accepted scientific theories. In publications prior to 1966, Feyerabend (1962, 1965b, 1965) assumed that alternative theories (e.g., myths, rejected worldviews, metaphysical speculations, religious cosmologies) are important resources for criticizing accepted theories, but alternative theories themselves did not possess cognitive (empirical) content. In a 1976 letter to the philosopher of science Zev Bechler, Feyerabend describes a change in his philosophical thinking (that occurred after the mid-1960s) regarding the *cognitive content* of alternative theories used to criticize science:

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<sup>7</sup> As a reckless speculation, Feyerabend's move towards relativism and more provocative ('post-modern') modes of expression in the 1970s (Preston 2000) may be explained, in part, by his aspirations to become a public intellectual. In his autobiography, Feyerabend discusses 'intellectuals' with bitterness:

Gradually I became acquainted with "intellectuals." They constitute a very special community. They write in a special way, have special sentiments, and seem to think of themselves as the only legitimate representatives of the human race, which in practice means other intellectuals. . . . Thomas Nagel is one, Rorty another; even Searle turns up here and there, though he lacks the smooth ways of the true intellectual. This community now started taking a slight interest in me: it lifted me up to its own eye-level, took a brief look at me, and dropped me again. After making me appear more important than I ever thought I was, it enumerated my shortcomings and put me back in my place. That really confused me. (pp. 146-147).

<sup>8</sup> For a more comprehensive discussion of Feyerabend's changing and somewhat unorthodox views on relativism, see Heller (2016), Kusch (2016), and Sankey (2020).

I had tried to show [see Feyerabend 1962, 1965b, 1965c] that a separation of the *content* of science and non science would be detrimental to the former. Metaphysical views, ancient myths, the cosmologies inherent in the various religions are not only valuable reservoirs of ideas, they are possible *test cases of the status quo* and must be preserved and developed in close connexion with science rather than abandoned. . . . All this means that the separation of science and non-science which plays such an important role in the development of modern thought must cease. However, I still assumed that non-scientific views are (A) not on par with science – they must be changed *until they become more definite and receive empirical content* . . . My studies of myth and of the theatre [see Feyerabend 1967a, 1967b, 1969c, 1975c], then made me very doubtful of assumption (A). We know now that the inventors of myth in astronomy, botany, zoology, biology, medicine, sociology, theology . . . *tested* this knowledge in laboratories and ‘observatories’ . . . In the course of my research I started suspecting that *myths have cognitive content as well*. Moreover . . . I suspected that there might be cases where science and myth are in conflict, but the myth is right, and science is not. *I suspected that myths are fully-fledged alternatives to science with a content and a method of presentation of their own*. (Feyerabend 1976, pp. 36-37, emphasis added)

When Feyerabend adopts the view that myths are ‘fully-fledged alternatives to science’ in the late-1960s, he has given up the view that *empiricism* is the best methodology for acquiring scientific knowledge and he rejects any empiricist demarcation criterion for science. Whereas Feyerabend’s criticisms of empiricism in the early 1960s (Feyerabend 1962, 1963, 1965b) were arguments for *non-dogmatic (i.e., pluralistic) forms of empiricism*, his publications after 1966 reject empiricism entirely (Preston 2020, §4.4). Feyerabend’s anti-empiricist stance is most explicitly announced in his 1969 paper, “Science without Experience,” wherein Feyerabend (1969c) rejects the idea that scientific facts are *necessarily empirical*. In post-1966 works, Feyerabend begins to regard myths and metaphysical views as “fully fledged alternatives to science with a form and content of their own . . . [that] provide knowledge not contained in, and perhaps even denied by science” (Feyerabend 1976, p. 38).<sup>9</sup> Feyerabend’s argument for the cognitive (or *epistemic*) content of alternative theories is crystalized in chapter 4 of *Against Method* (see Feyerabend 1976, p. 37), wherein Feyerabend (1975a) argues that “[t]here is no idea, however ancient and absurd, that is not capable of improving our knowledge” (p. 47, emphasis removed).

With respect to Feyerabend’s alleged shift from realism to relativism (Preston 1997b; Brown and Kidd 2016), I contend that realism/ relativism (or realism/ antirealism) is not a useful variable for classifying different phases of Feyerabend’s work. As indicated above, I believe that Feyerabend was a pluralistic realist in his publications in the 1970s and early 1980s (even as late as 1988), given that his account of incommensurability explicitly requires a realistic interpretation of theories (Feyerabend 1970a, pp. 86-88; Feyerabend 1975a, pp. 278-282; Feyerabend 1988, pp. 221-224). Moreover, there are not compelling reasons for regarding the ‘relativism’ that Feyerabend endorsed in the 1970s and 1980s (i.e., cultures are closed epistemic systems) as being *inconsistent* with pluralistic realism. Indeed, there are good reasons for thinking that Feyerabend’s arguments for pluralism in society *require* a realistic interpretation of theories/ forms of life (viz., a realistic interpretation encourages the proliferation of alternative theories and the genuine *testing* of theories against one another). For these reasons, I reject

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<sup>9</sup> For a fascinating analysis of Feyerabend’s later views on art and science, see Ambrosio (2021).

characterizations of Feyerabend's philosophical shift in the 1970s as a shift from scientific realism to relativism (Preston 1997a, 1997b; Brown and Kidd 2016).

Regarding Feyerabend's alleged 'retreat from realism' in the mid-1970s (Preston 1997b), it would be more accurate to say that Feyerabend made a 'retreat from empiricism' in the mid-1960s (cf. Preston 2020, §4.4), which paved the way for Feyerabend's more radical ('anti-science') arguments in the 1970s. In works prior to 1966, Feyerabend assumes that scientific knowledge is superior to other ways of knowing because of its *empirical testability*, and he argues that theoretical pluralism is a means to maximize the empirical content used as the basis for any testing situation. In works after 1966, Feyerabend assumes that non-scientific theories (e.g., myths, metaphysical speculations, religious beliefs) possess cognitive content and are *genuine epistemic alternatives to science*. This fundamental change in Feyerabend's thinking in the mid-1960s is more important for tracking changes in his overall views and more useful for classifying different phases of his work than any position that Feyerabend defended about realism. Feyerabend's retreat from empiricism and rejection of an empiricist demarcation criterion for science forms the basis for the key positions (e.g., the defense of society *from* science, relativism, the value of non-scientific ways of knowing) in his pluralism in society phase.<sup>10</sup>

Although I have argued that Feyerabend was a pluralistic realist in the 1970s and 1980s, it is important to acknowledge how unorthodox and narrowly focused his methodological ideal of realism is formulated, i.e., the recommendation to interpret theories realistically rather than instrumentally. Feyerabend's discussions of realism are always somewhat disengaged with the philosophy of science literature on scientific realism that emerged in the 1980s and 1990s, and his resulting realist positions were thin (and idiosyncratic) at best. I take this to be the reasonable core of Oberheim's (otherwise objectional) argument that Feyerabend was never a scientific realist (Oberheim 2006, ch. 6): it is difficult to locate Feyerabend's methodological and highly contextualized realist position (viz., realism is preferable to instrumentalism for promoting *critical scientific practices*) in the context of the philosophy of science literature on scientific realism. Moreover, it is significant that while Feyerabend explicitly defends realism (versus instrumentalism) in publications prior to 1970 (Feyerabend 1958, 1964), in post-1970s publications, he no longer presents explicit arguments for realism. In terms of *emphasis and strategy*, Feyerabend does not appear to be interested in presenting himself as a realist.<sup>11</sup> In the

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<sup>10</sup> In conversation, Oberheim has chided my presentation of Feyerabend's "retreat from empiricism" (c. 1967). Oberheim (2024) argues that the most important change that separates Feyerabend's early (c. 1962) from later (c. 1976) works is a "reversal" of Feyerabend's stance towards *scientism*. On Oberheim's picture (cf. Feyerabend 1981b, p. xiii-xiv; Oberheim 2006, pp. 268-269; Kidd 2021; Shaw 2021, pp. 125-131), Feyerabend's early works are characterized by an endorsement of scientism (i.e., science should be employed to correct common sense), whereas his later (post-1980s) works are characterized by a (Wittgensteinian) rejection of scientism (i.e., common sense should be employed to correct science). In response to Oberheim, I would argue that Feyerabend's retreat from empiricism (i.e., his rejection of the view that empirical science is the best source of knowledge) is closely related to his changed stance towards scientism (i.e., his rejection of the view that science should be used to correct common sense) insofar as the latter *presupposes* the former. Moreover, while Oberheim dates the beginning of Feyerabend's anti-scientism phase in his post-1976 works, in the work (Feyerabend 1981a) that Oberheim identifies as announcing this reversal (cf. Brown and Kidd 2016, p. 3), Feyerabend (1981b, p. xiii) dates the beginning of this reversal with works published in the 1960s (c. 1962-1969), more than a decade before Oberheim's dating.

<sup>11</sup> It is worth noting that in works published in the late 1960s and 1970s, Feyerabend appears to *generalize* his earlier arguments for a realist interpretation of theories to an argument for the "principle of tenacity," which suggests that scientists should remain committed to promising theories despite their difficulties (see Feyerabend 1969b, 1970b). Feyerabend (1970b) presents the principle of tenacity as fulfilling a similar scientific function as Kuhn's concept of

1970s and 1980s, Feyerabend's pluralistic realism is reduced to the extremely narrow argument that some theories (interpreted realistically) are incommensurable (cf. Feyerabend 1981b, 1981a, 1981c). Given the paucity of textual evidence supporting a substantial realist reading of Feyerabend in the 1970s, I contend that—as a potential variable for classifying different phases of Feyerabend's work—realism-relativism is a red-herring at best.<sup>12</sup>

### 7. Feyerabend's Expansion of Pluralism: Pluralism in Society (c. 1970-1989)

Although I reject realism-relativism as a useful variable for clarifying different phases of Feyerabend's work, Brown and Kidd's distinction between pluralism within science and pluralism in society is an excellent variable for distinguishing the early and middle phases of Feyerabend's published works. Feyerabend's retreat from empiricism (as discussed in section 6) in the mid-1960s provides the philosophical basis for Feyerabend's shift to arguments for pluralism in society. This shift can be understood as Feyerabend's expansion of pluralism: Feyerabend expands his earlier arguments for pluralism within science to apply more broadly to *knowledge produced in society*, wherein science is regarded as one ideology among many that can contribute to knowledge. Rather than seeing this shift as a movement from arguments *for science* to arguments *against science*, Feyerabend's shift should be understood as *broadening the scope of application* of his arguments for pluralism within science (wherein empirical science is assumed to be the best source of knowledge) to arguments for pluralism for knowledge considered more broadly (wherein empirical science is assumed to be one ideology among many). Feyerabend's arguments for pluralism in society are exemplified by his arguments for defending society from science, his rejection of empirical science as the best methodology for attaining knowledge, his endorsement of relativism, and his defense of non-scientific ways of knowing (e.g., witchcraft, art). I contend that a defensible beginning date for Feyerabend's pluralism in society phase is 1970.

Brown and Kidd (2016) date the beginning of Feyerabend's shift to pluralism in society in 1978 on the historical ground that, by the publication of *Science in a Free Society* (Feyerabend, 1978), Feyerabend has *definitively shifted away from arguments for pluralism within science to arguments for pluralism in society*. They write:

The shift is definitely complete by 1978, with the publication of *Science in a Free Society*, which is firmly situated in the themes of Feyerabend's middle work. We suggest that one can read the 1975 edition of *Against Method* as a transitional work, mainly

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normal science: it captures the *necessary dogmatism* required for the formulation and elaboration of scientific theories. In contrast to Kuhn's idea that a tradition of normal science should develop *until* a new paradigm emerges that can supplant it in terms of puzzle-solving power, Feyerabend (1970b) argues that scientific development should be characterized by the *constant interaction among tenaciously held scientific theories*:

[T]he interplay between tenacity and proliferation . . . is . . . an essential feature of the actual development of science. It seems that it is not the puzzle-solving activity that is responsible for the growth of our knowledge but the active interplay of various tenaciously held views. (p. 209)

Feyerabend's argument in the 1960s that a realistic interpretation of theories promotes proliferation and metaphysical engagement with alternative views appears to be generalized to the principle of tenacity in the 1970s. For a more comprehensive discussion of the principle of tenacity, see Preston (1997a, ch. 7), Oberheim (2006, ch. 7), Tambalo (2015), and Shaw (2017).

<sup>12</sup> While I am sympathetic to Chang's argument that Feyerabend was a realist throughout his career (Chang 2021), I cannot completely follow his argument that Feyerabend's pluralistic realism in the 1960s and 1970s is closely related to (or 'coheres with') Feyerabend's defense of 'abundance realism' (see Brown 2016) in the 1990s.

occupied with the concerns of the early work, but moving in the direction of the middle period (Brown and Kidd, 2016, p. 3)

The historical methodological reasons cited by Brown and Kidd for dating the start of Feyerabend's pluralism in society phase in 1978 are sensible. However, by their own standard, the beginning of Feyerabend's pluralism in society phase could be dated much earlier. I contend that a more appropriate starting date for Feyerabend's arguments for pluralism in society and expansion of pluralism is 1970, with the publication of the book chapter version of "Against Method" (Feyerabend 1970a).

Leaving the variable of realism-relativism to the side, when did Feyerabend's arguments for pluralism in society appear in his publications? Below is a list of important publications that firmly belong in the tradition of Feyerabend's arguments for pluralism in society:

- "On the Improvement of the Sciences and the Arts, and the Possible Identity of the Two" (book chapter in *Boston Studies*): Feyerabend (1967a) argues that science and art are similar insofar as they both assume a certain form (or 'style') that influences people's attitudes (e.g., critical or dogmatic) towards the knowledge presented (cf. Feyerabend 1976, pp. 37-38).
- "Science, Freedom, and the Good Life": Feyerabend (1968b) argues that pluralism is a remedy for conservatism in science and conservatism in society.
- "Against Method" (book chapter of *Minnesota Studies*): Feyerabend (1970a) cites John Stuart Mill's pluralism in *On Liberty* as a means to combat dogmatism in science, facilitate the psychological development of individuals in society, and improve civilization (pp. 27-30). Besides promoting progress in science, pluralism and proliferation are essential ingredients for a "humanitarian outlook" that seeks to improve society and culture (pp. 26-27).
- "Experts in a Free Society": Feyerabend (1970c) defends society from science by arguing against the legitimacy of scientific experts.
- *Against Method* (first edition of the book): Feyerabend (1975a) argues that non-scientific ideas are meaningful and can improve human knowledge (ch. 4) and that science and the state should be separated because of the authoritative status of science in society (ch. 18).
- "How to Defend Society from Science": Feyerabend (1975b) aims "to defend society and its inhabitants from all ideologies, science included" (p. 4).
- *Science in a Free Society*. Feyerabend (1978a, part 2) argues that modern science is not superior to non-scientific ways of knowing. Feyerabend defends relativism and argues that science is one ideology among many. Because of its authoritative status, science should be supervised by the public and democratic judgment should overrule expert opinions on science.
- "Democracy, Elitism, and Scientific Method": Feyerabend (1980) argues for a "democratic relativism" to counter "intellectual elitism" (e.g., the authority of science).
- *Farewell to Reason*: Feyerabend (1987) defends a specific form of cultural relativism ('practical relativism' or 'opportunism') against *rationalistic* forms of thought. Cultural diversity promotes human happiness and freedom, while cultural uniformity is detrimental for attaining these goods.

- *Against Method* (revised edition of the book): Feyerabend (1988) adds new chapters that incorporate materials from *Science in Free Society* (Feyerabend 1978).

Brown and Kidd date the beginning of Feyerabend's pluralism in society phase in 1978 because Feyerabend's examination of the political implications of *Against Method* (Feyerabend 1975a) in *Science in a Free Society* (Feyerabend 1978) marks a clear shift away from his arguments for pluralism in science. However, Brown and Kidd's proposed start date for Feyerabend's shift to arguments for pluralism in society (and hence his 'middle works') is misleading insofar as they date the *beginning* of Feyerabend's interest in pluralism in society *a full decade after* his first published works on defending society from science (Feyerabend 1967a, 1968b).

A defensible start date for Feyerabend's shift to arguments for pluralism in society and expansion of pluralism is 1970, which coincides with Feyerabend's publication of "Against Method" (Feyerabend 1970a) and "Experts in a Free Society" (Feyerabend 1970b). There are multiple historical and practical reasons for identifying this date as marking the beginning of Feyerabend's pluralism in society phase, and hence the start of his 'middle works.' First, this date accommodates significant changes in Feyerabend's philosophical thinking that started around the mid-1960s. In terms of his publications, the mid-to-late 1960s (c. 1966-1969) were a volatile time in Feyerabend's thought, when he changed his mind on various positions and his views evolved in multiple ways. This was a period when Feyerabend reassessed the significance of Bohr's 'instrumentalist' interpretation of quantum mechanics,<sup>13</sup> and he was increasingly distancing himself from Popper's school of philosophy of science (Farrell 2000, Tambalo 2015, Collodel 2016, Oberheim 2024). For the purposes of this chapter, two important changes that occurred around the mid-1960s are: (1) Feyerabend's retreat from empiricism, and (2) Feyerabend's incorporation of John Stuart Mill's arguments for pluralism into his own.

Feyerabend's retreat from empiricism, which appears in his post-1966 publications, marks a fundamental philosophical shift from a position wherein empirical science is viewed as the best source of knowledge to a position wherein science and non-science are placed on equal footing with respect to the legitimacy of their knowledge claims. From a historical perspective, Feyerabend's retreat from empiricism (and rejection of a demarcation criterion) provides the philosophical basis for his shift towards arguments for pluralism in society. It also provides the basis for Feyerabend's shift from arguments for pluralism within science in the 1960s to his

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<sup>13</sup> Feyerabend's reassessment of Bohr plays into his adoption of anarchism in 1970s. Early in his career, Feyerabend (1958) criticized the Copenhagen interpretation of quantum mechanics (on Popperian grounds) for its instrumentalist interpretation (Feyerabend 1958, 1963). In his papers in the late 1960s, Feyerabend (1968a, 1969a) defends Bohr's specific arguments for complementarity on *physical grounds* (Kuby 2021b). Feyerabend does not take this to imply a greater epistemological benefit of instrumentalism *versus* realism, but that Bohr's *physical arguments* for complementarity should not be regarded as an unsophisticated form of instrumentalism or positivism because it is driven by *scientific reasons* rather than *a priori* philosophical reasons. For a more comprehensive discussion of this shift, see Farrell (2001), Shaw (2020), van Strien (2020) and Kuby (2021b). Van Strien (2020) presents Feyerabend's reevaluation of Bohr as an important precursor to Feyerabend's anarchism (c. 1970-1993) insofar as it solidified Feyerabend's position that universal *philosophical standards* of scientific methodology (e.g., universal, rational principles) should not be imposed on science from outside sources (e.g., philosophy of science).

more radicalized arguments for pluralism during his ‘anarchism period’ starting in the 1970.<sup>14</sup> Whereas Feyerabend arguments for pluralism in the 1960s can be summarized as an argument that a plurality of scientific theories promotes progress within science, in his arguments for anarchism, Feyerabend (1970a, 1975a, 1988, 1993) generalizes his previous arguments for a plurality of scientific theories to scientific methodology itself (including scientific standards and rules of practice). These arguments (‘against method’) are formulated in support of the claim that—with respect to *knowledge* (including scientific knowledge)—“theoretical anarchism is *more humanitarian* and *more likely to encourage progress* than its law-and-order alternatives” (Feyerabend 1975a, p. 17, emphasis added). Feyerabend’s anarchistic dictum (Feyerabend 1970a, pp. 26-27; Feyerabend 1951a, p. 17) that pluralism encourages more ‘humanitarian knowledge’ (and more humanitarian scientific knowledge) marks a significant change from his 1960s pluralistic arguments for progress in science, in which progress is marked by scientific theories with ‘greater empirical content’ (or theories, when ‘interpreted realistically,’ produce ‘better descriptions of reality’).

Another significant historical reason for dating the start of Feyerabend’s expansion of pluralism in 1970 is that it coincides with the publication of the book chapter “Against Method,” which is the first work that Feyerabend (1970a) integrates Mill’s arguments for pluralism into his own. Based on various accounts, Feyerabend read *On Liberty* (Mill 1859/1977) sometime in the mid-to-late 1960s (c. 1968-1969) on the advice of the Popperian philosopher of science John Watkins (see Watkins 2000; Collodel 2016, pp. 51-52). In a book review of *Beyond the Edge of Certainty*, which included Feyerabend’s “Problems of Empiricism” (Feyerabend 1965b), Watkins (1966) remarks that “a reference to J. S. Mill would have been in place . . . where [Feyerabend] calls for an extension of his epistemological pluralism to extra-scientific walks of life” (p. 361). Based on various accounts, Feyerabend read *On Liberty* sometime around 1968 or early 1969, when he made it required reading for one of his courses at UC Berkeley (Watkins 2000, pp. 49-50). In a letter from Feyerabend to Watkins (dated January 17, 1969), Feyerabend states that he is more enthusiastic about Mill’s *On Liberty* he has been about anything for a long time (quoted in Collodel 2016, 51). In a letter from Feyerabend with Lakatos (dated April 25, 1969), Feyerabend proclaims that *On Liberty* is his “new bible” (quoted in Collodel 2016, pp. 51-52), and Feyerabend discusses Mill’s pluralism effusively in multiple letters to Lakatos in the late 1960s and early 1970s (Lakatos and Feyerabend 1999, pp. 169, 216, 238-242). In his publication of the book chapter of “Against Method,” Feyerabend (1970a) presents Mill (and Hegel) as providing the philosophical arguments for anarchism. In publications after 1970, Mill is consistently presented by Feyerabend as the most important influence on his pluralism and anarchism. In 1981, Feyerabend presents Mill as the most important historical proponent of pluralistic realism (Feyerabend 1981b, 1981c).

Feyerabend’s incorporation of Mill in publications starting in 1970 marks a change from his previous arguments for pluralism insofar as Mill provides the philosophical basis for applying pluralism to non-scientific forms of life (e.g., society, culture, civilization) and for Feyerabend’s somewhat cryptic claim in *Against Method* that “theoretical anarchism is *more*

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<sup>14</sup> Feyerabend’s anarchist slogan (“anything goes”) first appears in his book chapters “Against Method” (Feyerabend 1970a, p. 26) and “Problems of Empiricism, Part II” (Feyerabend 1970d, p. 278). For discussion of Feyerabend’s anarchism, see Lloyd (1996), Preston (1997a, ch. 9), Tsou (2003), Oberheim (2006), and Shaw (2017).

*humanitarian* and more likely to encourage progress than its law-and-order alternatives” (Feyerabend 1975a, p. 17, emphasis added). In “Against Method,” Feyerabend (1970a) presents Mill’s methodological pluralism as a means for advancing knowledge, facilitating the free development of individuals, and improving civilization (p. 27). Feyerabend (1970a) is particularly impressed that Mill’s pluralism is not applied narrowly to questions about knowledge and truth (e.g., how to improve scientific methods), but it is applied broadly to problems of life, wherein ideals of ‘scientific method’ are closely related to humanitarian ideals (i.e., ethical ideals regarding how to live the good life, promote individuality, or improve society):

Proliferation is introduced [by Mill] as *the solution to a problem of life*: how can we achieve full consciousness; how can we learn what we are capable of doing; how can we increase our freedom so that we are able to decide . . . the manner in which we want to use our talents? . . . Today, the only question is how science can improve its own resources, no matter what the human effect of its methods and of its results. For Mill the connection still exists. *Scientific method is part of a general theory of man*. It receives its rules from this theory and is *built up in accordance with our ideas of a worthwhile human existence*. . . . Thus methodological and humanitarian arguments are intermixed in every part of Mill's essay, and it is on *both* grounds that a pluralistic epistemology is defended. (p. 29)

Feyerabend appreciates the broad vision of Mill’s pluralism that understands specific human ideas (e.g., ‘scientific method’) as connected to broader (and unstable) humanitarian or ethical ideals (e.g., ideals regarding how to live a valuable human life). Whereas Feyerabend’s arguments in his 1960s papers are confined to the claim that pluralism will promote scientific progress and better empirical scientific theories, in publications starting in 1970, Feyerabend expands his arguments for pluralism (or ‘anarchism’) to apply to broader (ethical and humanitarian) ideals of knowledge (cf. Lloyd 1997; Shaw 2017).<sup>15</sup> Matteo Collodel (2016) reconstructs Feyerabend’s shift in thinking in the late 1960s as follows: “On the basis of its ethical underpinning, then, pluralism was not to be recommended only within the limited precincts of scientific methodology, but had to be extended across the board to every aspect of human life” (p. 51). In appreciating the full philosophical power and extensive scope of Mill’s arguments for pluralism, Feyerabend expanded (or broadened) the scope of his own arguments for pluralism in science to arguments for pluralism in society. Feyerabend’s incorporation of Millian arguments for pluralism (Feyerabend 1970a) is the most compelling historical reason for dating the start of his pluralism in society phase in 1970.

The argument articulated in this chapter suggests revising Brown and Kidd’s specific periodization of Feyerabend’s early and middle works. I suggest the following the alternative manner of distinguishing Feyerabend’s early works and middle works:

- *Early Work* (c.1951—1969): Feyerabend argues for pluralism within science, and his main goal is to defend science against philosophies of science that would damage it. Exemplary works of this period include Feyerabend (1958, 1962, 1963, 1965b)
- *Middle Work* (c.1970—1987): Feyerabend argues for pluralism in society, with science understood as one social tradition amongst others, and his main goal is to

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<sup>15</sup> My generalization is a simplification insofar as Feyerabend provides quasi-ethical and humanitarian arguments for pluralism in the early 1960s (see Feyerabend 1961, 1963; for discussion, see Shaw 2017, p. 15).

defend society from the undue authority of science. Exemplary works of this period include Feyerabend (1970a, 1975a, 1975c, 1978, 1987)

As argued above, this periodization is advantageous for distinguishing various important differences in Feyerabend's ('mature') middle works and his earlier works. First, this periodization captures the qualitative differences in the style and content of Feyerabend's (narrowly focused and technical) works in the 1960s compared to his (broader and more polemical) works in 1970s. On this view, Feyerabend's early works can be informally understood as his arguments *for science*, while his middle works can be seen as Feyerabend's arguments *against science* (and the source of the accusation that Feyerabend was the 'worst enemy of science'). Second, this periodization is usefully tracks Feyerabend's 'retreat from empiricism' and other significant changes in his philosophical views (e.g., his reevaluation of Bohr, his break from Popper's philosophy) that culminated in the mid-to-late 1960s. Third, dating the beginning of Feyerabend's 'middle works' with the publication of "Against Method" (Feyerabend 1970a) coincides with Feyerabend's 'anarchism period' (c. 1970-1993) when he expanded and broadened the scope of his earlier arguments for a plurality of scientific theories to apply to scientific methodology itself. This anarchistic stance is related to Feyerabend's retreat from empiricism and rejection of attempts to demarcate science from non-science (c. 1966-1969). This periodization identifies the beginning of Feyerabend's middle works with his first citation and discussion of Mill's *On Liberty* (Feyerabend 1970a). My suggested revision can accommodate Brown and Kidd's argument that *Against Method* (Feyerabend 1975a) is a "transitional work." As Feyerabend often said, *Against Method* is a "collage": it is largely constructed by patching together arguments from works that Feyerabend published in 1960s and early 1970s (Feyerabend, 1963, 1965b, 1967, 1970a, 1970d). According to the analysis of this chapter, the parts of *Against Method* (Feyerabend 1975a) that summarize his arguments for pluralism within science from the 1960s render it an early work; the parts that argue that pluralism is a means for achieving more humanitarian knowledge, that non-scientific ways of knowing are valuable (ch. 4), and that society needs to be defended from science (chs. 17, 18) render it a middle work.

## 8. Conclusion

In this chapter, I articulated two fairly narrow arguments against Brown and Kidd's framework for classifying Feyerabend's publications: (1) realism-relativism is not a useful variable for classifying different phases of Feyerabend's published work, and (2) Feyerabend's middle-works, distinguished by Feyerabend's interest in arguments for pluralism in society, should be dated earlier than they suggest (viz., 1970 rather than 1978). My analysis was motivated to clarify the nature of a philosophical shift in Feyerabend's thinking that occurred in the 1970s. I presented Feyerabend's shift—from arguments for pluralism within science to arguments for pluralism in society—as Feyerabend's *expansion of pluralism*. In publications starting in 1970, Feyerabend expands the scope of arguments for pluralism to apply to scientific methods, ethical and humanitarian ideals of knowledge, and society more generally.

While I argued that the variable of realism-relativism is a red-herring for distinguishing different phases of his published work, my analysis of Feyerabend's pluralistic realism is not merely of historical interest.<sup>16</sup> Like many contemporary philosophers of science, I endorse both

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<sup>16</sup> In this regard, I confess that I share Preston's sympathies towards Feyerabend's early philosophical work in the 1960s, which provided careful and ingenious philosophical arguments that were articulated through a close engagement with the history of science. I am less sympathetic towards Feyerabend's more a priori (armchair) analyses in the mid-to-late 1970s, which deployed fairly trite observations to argue for views such as relativism.

realism and pluralism as fruitful regulative ideals. In the 1960s and 1970s, Feyerabend articulated a novel and a promising way to combine pluralism and realism, although it must be said that he never explicated a comprehensive nor detailed account.<sup>17</sup> The desideratum to combine pluralism with realism is a general topic that has only received limited attention among historians and philosophers of science (see Ludwig and Ruphy 2021, §4). This problem was addressed in the pluralist and deflationary accounts of realism articulated by members of the Stanford School of pluralism (e.g., Dupré 1981, 1993; Cartwright 1983; Hacking 1983).<sup>18</sup> While pluralism and realism are now platitudes in contemporary history and philosophy of science, it is surprising how little work has been explicitly devoted to clarifying their relationship (cf. Chang 2018). Feyerabend’s pluralistic position on the methodological benefit of realism for scientific practice (‘pluralistic realism’) provides a fruitful basis for the defense and elaboration of pluralistic accounts of realism.

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<sup>17</sup> Matthew Brown (2009) suggests a promising line of exegesis when he notes similarities between Feyerabend’s pluralism and Ronald Giere’s perspectivalism (Giere 2006). Giere (2016) agrees that Feyerabend’s views on science can be characterized as perspectivalist, but he expresses disappointment that Feyerabend’s later perspectivalism lacked the critical (Popperian) character of Feyerabend’s earlier views.

<sup>18</sup> Elsewhere, I suggest that the methodological assumptions (i.e., pluralism, disunity of science, anti-reductionism) of the HPS community in the 1980s and 1990s (associated with the Stanford and Minnesota schools of pluralism) render post-Kuhnian normative philosophy of science more Feyerabendian in character than Kuhnian (Tsou 2024). For a more comprehensive discussion of the Stanford and Minnesota schools of pluralism, see Kellert, Longino, and Waters (2006), Solomon and Richardson (2005), Richardson (2006), Ludwig and Ruphy (2021), and Cat (2024).

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