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Arguing Against Argumentation in Science: Paul Feyerabend's Polemical Scholarship in "Against Method" and its Lasting Queer Effects

Frederik Appel Olsen

Kock, Christian, and Lantz, Marcus, eds. 2023. Rhetorical Argumentation: The Copenhagen School. Windsor Studies in Argumentation 13. Windsor, Ontario: Windsor Studies in Argumentation. https://uwindsor.ca/wsia.

Introduction

In the preface to the fourth edition of Austrian philosopher of science Paul Feyerabend's classical work *Against Method: Outline of an Anarchistic Theory of Knowledge*, first published in 1975, Feyerabend's fellow philosopher of science and friend Ian Hacking (2010) describes the work as "more than a book: it is an event", as well as "the Woodstock of philosophy" (p. vii). According to Hacking, the book was such a powerful and historically important piece of philosophy that it makes little sense to consider it as merely a collection of pages with words on them. Feyerabend himself, in his 1995 autobiography, described *Against Method* as "not a book", but "a collage" (139). *Against Method* was initially intended as a correspondence book with another colleague and friend, Imre Lakatos, who passed away unexpectedly in 1974 and to whom the book is dedicated. The book is thus a summing up and stitching together of Feyerabend's general critique of rationalist philosophy of science, many of its passages are versions of earlier articles and essays. Feyerabend (1970) also famously, when contemplating writing his ideas in book form or as a letter to Lakatos, referred to it as "the stinkbomb" (211). In the book itself, Feyerabend (1975) testifies that he enjoys "leading people by the

nose in a rational way" (32), and in the autobiography he confesses that he "loved to shock people" (Feyerabend 1995, 142). Feyerabend seemed determined to wreak havoc within philosophy of science with *Against Method*.

An event, a festival, a collage, and a stinkbomb; *Against Method* seems to have had impact not only as a philosophy book but as something else. Why is this so? If *Against Method* was initially received with so much dismissiveness, repulsion, and ridicule as many Feyerabend scholars – and, indeed, Feyerabend himself – have suggested, why has it endured as an important work within the philosophy of science? If next to no philosophers agreed with Feyerabend's radical philosophy of science when it came out, to what does it owe its place in the canon of philosophy books in this field?

In this essay, I turn primarily to the first chapter of *Against Method*, where Feyerabend not only introduces his main reasons for an anarchist theory of scientific progress but also comments specifically on the role of argumentation to the growth and development of science, basing a textual-intertextual close reading on these pages. First, I present how Feyerabend rejects the role of argumentation in science altogether. In doing this, he employs a rhetorical strategy that I characterize as polemical in the sense that it constructs an enemy audience, consisting of rationalist philosophers of science. Second, I look to reviews of *Against Method* from the years following its first edition to see how the audience of philosophers of science actually reacted to the book. I find that the reviews, while often hostile, also in some cases recognize that the book's provocation might be fruitful to the philosophy of science field. Taking my que from Erin Rand's (2008) work on polemics, I argue that this is evidence of how the queer effects of polemics can unfold within scholarship. Finally, I argue that dynamic theories of rhetorical argumentation can better account for the workings of these effects than a static sense of argument as it might often be found within the analytical philosophy community that Feyerabend himself was addressing and stirring up with *Against Method*. While the book does not necessarily provide a compelling argument according to traditional

criteria of formal logic and other classic schools of argumentation studies, it can be considered a forceful, and even valuable, *rhetorical* artefact that works its lasting influence exactly as something else than a classic argument. I argue that this shows that polemics might be valuable, and even desirable, not only to political debate in the public sphere but also within more specialized communities in the technical sphere, and that polemical performances might be exactly what accounts for the lasting effects of some scholarship. I speculate that within these spheres, something like Robert Ivie's (2002) rhetorical "tricksters" can perform a vital role to scholarly, not just public, conversations and debates. We can view Paul Feyerabend in this light: a trouble-maker with a productive function within his field.

The 'Copenhagen School' of rhetorical argumentation studies—the loosely structured network of scholarship within which this essay situates itself—offers a productive theoretical and normative framework for thinking through the role of polemics in technical spheres as this school tends to recognize that dissensus plays an important role in public debates; arguably more so than reaching consensus, which is the ex- or implicit goal of many other theories or schools of argumentation. With this essay, I aim to broaden the perspective on this line of thought to investigate and critique arguments in technical spheres.

The Relevance and Effects of Polemics in Public and Scholarly Debates

Deriving from the Greek *polemos*, 'war', polemics is a form of discourse closely associated with eristics: the endeavor to thwart one's interlocutor—in this case, one's opponent or even enemy-using any verbal means necessary. Thus, the general meaning and usage of this word tends to be negatively loaded. However, in a recent publication, Ruth Amossy (2021) defends the role of polemics in democratic discourse. Polemics, she argues, are "an *argumentative modality* among others" (45, emphasis in original), which often has the function of aiding, not obstructing, "the

construction of a public sphere and of democratic deliberation" (145). Like Amossy, this essay disagrees with the standard view that polemics is solely a problematic form of rhetoric. This is not to say that polemical rhetoric is only and always *good*—far from it. However, we should hesitate to write it off as unproductive at all times merely because its production might not work in accordance with consensus-oriented theories of argumentation. Where this essay goes a different direction than Amossy is in the sense that she examines cases from disputes in wider public spheres "and not from scientific or philosophical controversies which obey other rules" (25). In treating the philosophical controversy of *Against Method* as a case of potentially productive polemical rhetoric, I challenge this view and seek an even wider perspective on the nature of polemics.

In order to gain a theoretical framework for understanding the rhetoric of a text such as *Against Method* as more than a problem for consensus-reaching, Erin J. Rand's 2008 article "An Inflammatory Fag and a Queer Form: Larry Kramer, Polemics, and Rhetorical Agency" is highly illuminating. According to Rand, "polemics are apt to be put to unexpected uses and to have unpredictable effects. Instead of viewing the unpredictability of the polemical form as a limitation to its usefulness, I understand it as the source of the polemic's productive possibilities to create change" (298). Thus, the polemical form is "productively excessive and provocatively queer" (ibid.). Here, "queer" does not refer to sexual or gender identity narrowly but to a much broader category of social life. Queerness, in this case, is the fundamental unpredictability of the effects of discursive practices such as polemics. Thus, Rand argues that in the case of the rhetoric of AIDS activist Larry Kramer, his polemical style of speech found an unexpected uptake in academic circles that Kramer neither seemed to intend nor could have predicted. What was *productively* queer about this surprising effect of Kramer's rhetoric was that scholars in the field of queer theory were able to utilize it as material for analysis; they were able to form their research field's academic identity through intellectual criticism of Kramer's polemics (311).

I find Rand's insights into the queer effects of polemical rhetoric in a scholarly context pertinent in the case of Feyerabend's *Against Method*. By almost any account of the polemical form or style, there is no doubt that Feyerabend can be deemed a polemicist – and he was often labeled exactly so. As I will show, Feyerabend is not only against method in *Against Method* but constructs an enemy audience of fellow philosophers of science within his text. According to Rand, "polemics always function in opposition to another persona, point of view, or ideology, the construction of the audience takes place in conjunction with the construction of an *enemy* (after all, it is difficult to imagine a polemic that does not rail 'against' someone or something)" (306, emphasis in original). She elaborates: "What is fascinating about polemics, then, is that the enemy and the audience are not only related, but closely aligned, if not barely distinguishable factions of the same groups" (307). This sets the audience of the polemical text, in Rand's sense, apart from Edwin Black's (1970) influential concept of the second persona. In the second persona, we look for features of the text that are "enticements not simply to believe something, but to *be* something" (119, emphasis in original). To be sure, the polemical text can, like any other rhetorical artefact, be examined and critiqued in a second persona perspective. However, polemical rhetoric, as I read and employ Rand's concept, seeks first and foremost to specifically construct the audience as enemy to the text's own point of view, and not, as such, to attain this audience's identification and adherence.[1]

1. This does not mean, of course, that there might not be other audience constructions, second personae, in a polemical text that are not the enemy but are supposed to align with the views put forward. This aspect of polemical rhetoric brings to mind J. C. Meyer's (2000) treatment of humor and satire as a double-edged sword, or even Michael Billig's *Laughter and ridicule* (2005), where the rhetor makes one group the bud of the joke while inviting another to share this view. However, polemics cannot be juxtaposed completely with such accounts of humor and satire (although humor and satire often appear in polemical texts, *Against Method* included). We can, at least theoretically, imagine a polemical text addressed solely to the enemy audience, with no joke for a third party to recognize and react to.

Other rhetoricians similarly deal with concepts closely related to polemics. In her essay on "provocative style", Marie Lund Klujeff (2012) contends that "provocative style, mordant irony, and caustic sarcasm are not simply violations of deliberative ideals but vital elements of debate, helping to shape *presence*, structure argument, form opinion, and constitute an engaged and reflective audience" (101, emphasis in original). As Klujeff shows with her example of the controversy around Jostein Garder's condemnation of Israeli aggression in Lebanon in 2006, debate carried out in provocative style might not meet the usual criteria of "good" public debate but can still bring salience to certain politically relevant topics. Here, Klujeff, like Amossy, is talking about deliberative ideals of public debate as it appears among contestants in the wider societal debate, among politically engaged citizens in the public sphere. Similarly, Rand suggests that "polemics produce the public space that enables democratic struggles and political disputes" (308). However, I would argue that provocative style and polemics have an even wider application, being able to shape presence, structure argument, form opinion, and constitute an engaged and reflective audience – and, using Rand's terms, constituting enemies, audiences and publics – in, and around, *technical* spheres as well: that is, in arenas of argumentation "where more limited rules of evidence, presentation, and judgment are stipulated in order to identify arguers of the field and facilitate the pursuit of their interests" (Goodnight 2012, 202).

Some paths into this have already been shown within the rhetoric of science field. The most direct example might be John Angus Campbell's 1975 article, in which he argues that Charles Darwin was "a polemicist of the first order" (376), who navigated successfully in the larger debate on evolution by employing "conventional language, the conventional religious categories of popular thought and his own credibility to explain and lend credibility to his ideas" (377). Campbell's conception of what a polemicist does in order to gain that label, however, I find wanting. Speaking in a common language, appealing to popular values of one's time, and using one's own credibility seems to me like more general rhetorical strategies, and are often things we ask of a

"proper" rhetorical practice that seeks to produce common ground with its audience in order to persuade, even within technical fields. A more compelling account of polemics within scientific controversies is offered by Helen Constantinides (2001). Although ethos, not polemics, is the central concept driving her analysis of a specific controversy over the adaptationist programme in evolutionary biology, Constantinides does offer an explanation of how rhetorical moves inconsistent with traditional norms of scientific discourse within a technical sphere can play a productive role. In much the same way that I aim to show that *Against Method* did not turn out to be a success on the narrow criteria that his fellow philosophers accepted his arguments as valid but still ended up playing an important part to the field because of its polemical nature, Constantinides argues that "Gould and Lewontin's article [against adaptationism] was not successful in convincing readers of the narrow-minded dogmatism of adaptationists", but their "rhetorical stance was successful" (68) nonetheless. Constantinides attributes said success to biologists Richard Lewontin and Stephen Jay Gould's ability to balance their dual scientific ethos by arguing for the scientific contestability of adaptationism on a "deep structure" level, while employing an "ethos more consistent with humanism" on a "surface structure" (69) level, i.e., in their stylistic choices in the text. What unites my textual-intertextual reading of *Against Method* with Constantinides' reception-based reading of Lewontin and Gould is that the latter not only diverge in surface and deep structures of scientific ethos but employ strategies similar to Feyerabend's: "They flout the stereotypical neutral and objective language of the scientist using wit and sarcasm" (p. 66), Constantinides writes, referencing Gay Gragson and Jack Selzer's critique of the text.[2] Thus, not only does Constantinides show that a 'non-scientific' rhetoric is used at the surface level of scientific ethos, but also that Gould and Lewontins's sarcastic and witty – although, perhaps, not exactly polemical – prose had something to do with their successful rhetorical stance.

2. See also Gragson and Selzer 1993.

However, my sense of polemics is, on the one hand, and following Rand, somewhat stronger than Campbell's and, on the other, takes a different approach than Constantinides. What I am getting at is not the question of different dimensions of scientific ethos, nor of whether a rhetoric diverging from more traditional norms of scientific discourse can play a productive role in science or other scholarly environments. As I will develop in a bit more detail, I take this to be a fundamental assumption of the Rhetoric of Science field already. I am specifically applying Rand's idea of the queer effects of polemics to the field of scholarly work. On my account, the polemical scholar is polemical not because they employ rhetorical strategies challenging classical norms of scientific discourse as such within a technical sphere of argument but because they *construct an enemy audience in their text that can be assumed to fall in line with a large part of the text's actual audience of academic peers*. To construct an enemy audience is different from using wit and sarcasm in a scientific debate; the polemical rhetor emphatically—in direct and indirect ways—rejects the position and even the identity of their audience. In the case of *Against Method*, it is the intellectual positions and scholarly identity of Feyerabend's peers who become targets, not only of criticism but of ridicule and even malice. The *enemy* aspect of polemics stems largely from this source: Not only is the polemical text very much against something; it is *violently* against it in the sense that ridicule, malice, or, in perhaps a more contemporary language, *burns*, *roasts*, and *take-downs* are the discursive tools used to argue a given case. When we talk about argumentation, we often employ military of more general fighting metaphors: We "shoot down'" arguments, we "defeat" our opponent, etc. The polemical rhetor takes these metaphors not literally, but to heart. This rhetorical warfare and weaponry, I claim, can, surprisingly (and certainly not in all cases), be a way of advancing knowledge in a specialized field and is not necessarily a hindrance to the progress of knowledge. As my textual-intertextual reading shows, Feyerabend's "intellectual warfare" can indeed be seen as productively queer: In the ruins of the battle, a space is created for further discussions and developments within the

philosophy of science which might not have happened had Feyerabend not shaken the territory. I will attempt to clarify how he did so in the following.

'Anything goes': Against Method's Arguments against Argumentation in Science

Paul Feyerabend (1924-1994) was a unique and odd character within 20th century philosophy. Austrian-born, he participated in World War II as a lieutenant in Hitler's armed forces. On the Russian front, he was shot in the face, hand and spine during battle, leading to life-long disability (Motterlini 1999, 406). After the war, he drifted left politically – indeed, he would often "dismiss the war as something of an interruption of his previous life", in which he was mostly interested in physics, astronomy and mathematics as well as opera and theater – swinging back and forth between liberalism, Marxism, anarchism, and other systems of thought, never quite settling with any of them due to an intense aversion to dogmatism (ibid.). Having flirted with the idea of a career in acting, he subsequently pursued one in philosophy instead, getting his PhD in 1951 under the supervision of rationalist philosopher Viktor Kraft, former member of the Vienna Circle. His early philosophy was therefore heavily influenced by the Logical Positivism of this community of thinkers, but also of one of its opponents, Karl Popper, whom Feyerabend initially admired (Feyerabend 1978, 115). Later, however, Feyerabend would break decisively with Popper as well as with the heritage of the logical positivists. Working as a professor at the University of California, Berkeley, he became an infamous dissident within the philosophy of science, known primarily for his "anarchist epistemology" – which he also referred to as "Dadaist" epistemology. He developed this philosophical framework through the '60s and '70s, often in heated discussion with friend and philosopher colleague Imre Lakatos, and possibly influenced by the student revolts at Berkeley in the 60s (Martin 2019). *Against Method* was Feyerabend's first full-length book publication and was initially intended to include

a second part where Lakatos replied to Feyerabend's arguments, with the title *For and Against Method*.[3] However, Lakatos' untimely death in February 1974 obstructed this project, resulting in Feyerabend publishing his part alone at New Left Books the following year, teasingly dedicated to Imre Lakatos, "*Friend, and fellow-anarchist*"—the latter label being one that the rather conservative Lakatos would surely have rejected. Despite the friendship between the two (which, on the surface, would seem to contradict my claim that Feyerabend constructs an audience of enemies), Feyerabend does not go soft on his late friend and colleague in the pages of *Against Method*. Lakatos' response lacking, other philosophers of science had to engage in the rejoindering work instead.

As we shall see, the initial reception of *Against Method* was as stormy and many-sided as the life of its author. However, the legacy of the book lives on and *Against Method* has a close-to-canonical status within philosophy of science today. The *Stanford Encyclopedia of Philosophy* regards Feyerabend as "one of the twentieth century's most famous philosophers of science" (Preston 2020), and Ian James Kidd, in a positive review of the fourth edition in 2015—the publication of which is in itself a testimony to its endurance—contends that the book "was very much ahead of its time, sketching an account of the nature of science, and of its contested authority, that is very much in line with contemporary developments in the philosophy of science" (344). But this positive view of the philosopher Feyerabend and his *magnum opus* has not been shared by all in the more than four decades since its publication. Apart from many negative reviews and responses within the more specialized philosophy of science community, which I shall attend to later, Feyerabend also gained a reputation in broader technical and public spheres. In *Nature*, he was described as the "Salvador Dali of academic philosophy" (Theocharis and Psimopoulos 1987, 596), and *Scientific American* even did a

3. A work of this name was subsequently published, after Feyerabend's death, containing lectures and writings by Feyerabend and Lakatos, including the written correspondence between the two from the years 1968-1974. See Lakatos, Feyerabend and Motterlini, *For and Against Method*, 1999.

profile on Feyerabend, crowning him "The Worst Enemy of Science" (Hogan 1993).

When reading *Against Method*, it is not difficult to see why Feyerabend acquired the image of a philosophical dissident. The book's title is to be taken literally: Feyerabend completely denies that subscribing to any one method, or even a small set of methods, is fruitful to the development of science or human knowledge in general. In fact, he argues that scientific progress is more likely to come about when methodological prescriptions are *violated*, whether intentionally or by accident. Not only is Feyerabend highly skeptical as to whether a universally true method for science would ever come about; he also uses a large part of the book's pages to show how the history of science proves that a lack of method is productive. Many of these pages are preoccupied with the example of Galileo's arguments (or lack thereof) in favor of a heliocentric astronomy. According to Feyerabend (1975), "the Copernican view at the time of Galileo was inconsistent with facts" (55) and even "philosophically absurd" (64)—even though this view would later come to be understood as true compared to geocentrism. Galileo had to introduce an entirely new observation language to make credible the idea, preposterous at the time, that the earth was moving. In order to do so, he, according to Feyerabend, resorted to "*propaganda*" and "*psychological tricks* in addition to whatever intellectual reasons he [had] to offer" (81, emphasis in original). Thus, scientific knowledge progresses in large part *counterinductively*: by the willingness to introduce hypotheses inconsistent with known fact and theories, often by help of what Feyerabend regards as non-argumentative strategies such as propaganda. The political consequences of this view are briefly touched upon towards the end of the book. According to Feyerabend, there is nothing inherently special about science, and it should be regarded as an ideological framework among others. Thus, science and the state should be separated in the same way that religion and state are separate (in a US context): "While the parents of a six-year-old child can decide to have him instructed in the rudiments of the Jewish faith, or to omit religious instruction altogether, they do not have the similar freedom in the case of the

sciences. Physics, astronomy, history *must* be learned. They cannot be replaced by magic, astrology, or by a study of legends" (301, emphasis in original). From such comparisons it should be clear why this book had such a potential for causing grievances–at least if one holds science to be paramount to knowledge production and of unique cultural value.

So much for a general outline of *Against Method*. In what follows, I will focus its first chapter. Here, Feyerabend tells us why he thinks argumentation as such is counterproductive to science. Not only do I find this chapter fitting for a volume about rhetorical theories of argumentation—also, this is an opportune part of the book to close-read as a "microscopic study of [a] particular work" (Ceccarelli 2001b, 6) because *Against Method*'s central themes are laid out here and because this part of the book quite clearly shows how Feyerabend polemically provokes his audience of rationalist philosophers of science. Furthermore, a focused reading is better suited to the length available in this essay.

In this chapter, we become acquainted with one of Feyerabend's philosophical slogans, indeed his most famous one: *anything goes*. According to Feyerabend (1975), this is the only principle that can be sustained in science over time that will not at any point hinder the progress of scientific knowledge. The primary philosophical idea targeted by Feyerabend is "[t]he idea of a method that contains firm, unchanging, and absolutely binding principles for conducting the business of science" (23). He sets up two main arguments against this idea. The first is that the history of science shows us that all such rules and methods will be violated at some point or another (indeed, this is often exactly how progress is made) (ibid.). The second argument denies that in principle such firm, unchanging, and absolutely binding principles could even exist. In making both of these points, Feyerabend suggests that argument itself is often a hindrance to science, not a productive and necessary component, as is often assumed. Feyerabend is frequently lumped together with another, arguably more widely known philosopher of science, Thomas Kuhn, who famously viewed the growth of scientific knowledge not as a product of logic but of "argument and counterargument" and "persuasion

rather than proof" (Kuhn 1962, 152). However, Feyerabend seems to go a step further in dismissing arguments' productive role as such.[4]

As in any instance of human learning and thinking, science progresses, according to Feyerabend, not by careful and intentional reasoning by which an idea is deduced and *then* introduced to external reality, but by a process of *growth*. This growth has very little to do with arguments, and "where arguments do seem to have an effect, this is more often due to their *physical repetition* than to their *semantic* content" (Feyerabend 1975, 24, emphasis in original). What follows from this is that in order to apply rationalist thinking to science, this very idea of how to think must have come about by non-rational means in the first place, since rationalist philosophers have the relation between idea and action backwards (25). All kinds of external events precede and constitute one's faculty for thinking, forming ideas through a process of growth, not deliberate arguing and rational thinking. Thus, "[e]ven the most puritanical rationalist will then be forced to stop reasoning and to use *propaganda* and *coercion*, not because some of his *reasons* have ceased to be valid, but because the *psychological conditions* which make them effective, and capable of influencing others, have disappeared" (ibid., emphasis in original). Feyerabend then goes on to ask rhetorically (in more than one sense): "And what good is the use of an argument that leaves people unmoved?" (ibid.). Here we see that the "puritanical rationalist" is framed as the figure most opposed to Feyerabend's idea of natural scientific progress. We also meet more specific characters such as Karl Popper, and Lakatos' concept of research programmes is implicitly identified as an adversary position as well (26). However, it is a more general persona in, and audience to, the text that interests me here. After all, *Against Method*

4. The philosophy of science of Kuhn and Feyerabend, both working at Berkeley in the early 1960s, had many differences bot also important overlaps and similarities. According to Paul Hoyningen-Huene (2005), both can be seen as the first authors to take the concept of incommensurability (the treatment of which is outside of the scope of this essay) from the domain of mathematics and apply it to the philosophical study of scientific development.

addresses an academic community as a whole and was, as we will see, picked up by a number of philosophers strongly objecting to Feyerabend's anti-rationalism. I trace in this chapter, and throughout the book as a whole, a polemical strategy designed to invite Feyerabend's peers to identify with the text's rationalist philosopher persona, which he at the same time ridicules: implying that the rationalist is developmentally beneath a child (at least when it comes to the understanding of science and thinking). I call this strategy *hyper-infantilizing the rationalist*.

Hyper-infantilizing the Rationalist

In arguing against argumentation in science, and method more broadly, Feyerabend accompamnies his theme of growth-based scientific progress—as opposed to the idea of a 'rational' development—with several comparisons where the rationalist is deemed less than immature. The first I quote at length:

> Nobody would claim that the teaching of *small children* is exclusively a matter of argument (though argument may enter into it, and should enter into it to a larger extent than is customary), and almost everyone now agrees that what looks like a result of reason – the mastery of a language, the existence of a richly articulated perceptual world, logical ability – is due partly to indoctrination and partly to a process of *growth* that proceeds with the force of natural law (24, emphasis in original).

According to Feyerabend, it follows that this must also be true for adults and larger societal structures and institutions, including science: "We certainly cannot take it for granted that what is possible for a small child (…) is beyond the reach of his elders" (ibid.). It may seem at first that this is merely an opportune analogy or a way of describing, not rationalist philosophers, but merely their wrongheaded ideas about scientific development and progress. However, something more is at stake. Reading further, we learn that the rationalist himself (and it is a him, both throughout Feyerabend's text and in the academic environment of

the time) is unable to intellectually grow in a healthy way and only responds to indoctrination, much like pets[5]:

> Just as a well-trained pet will obey his master no matter how great the confusion in which he finds himself, and no matter how urgent the need to adopt new patterns of behavior, so in the very same way a well-trained rationalist will obey the mental image of *his* master, he will conform to the standards of argumentation he has learned, he will adhere to these standards no matter how great the confusion in which he finds himself, and he will be quite incapable of realizing that what he regards as the 'voice of reason' is but a *causal after-effect* of the training he has received. He will be quite unable to discover that the appeal to reason to which he succumbs so readily is nothing but a *political manoeuvre* (25, emphasis in original).

The rationalist is, in this humiliating analogy, unable to recognize the fundamental immaturity of his position. He is unable to develop naturally in his interactions with the world and can only repeat what his masters have told him, completely prey to "political manoeuvres". Again, with reference to the Popperian idea of starting any investigation with a defined problem, which you then attempt to solve or act upon in some way:

> Yet this is certainly not the way in which small children develop. They use words, they combine them, they play with them, until they grasp a meaning that has so far been beyond their reach. And the initial playful activity is an essential prerequisite of the final act of understanding. There is no reason why this mechanism should cease to function in the adult (26, emphasis in original).

Here, the theme of playing is introduced, the implication being that the rationalist 'pet' is simply too tamed by the 'voice of reason' to have the fun required to actually fulfil the "act of understanding". Feyerabend thus concludes the chapter, contrasting the attitude of

5. Recall again here Feyerabend's remark about his enjoyment of leading people "by the nose". This metaphor brings to mind cattle being dragged by a nose ring. A pretty upsetting remark, comparing his readers to dumb animals. (I express here my gratitude to Leah Ceccarelli for bringing this interpretation to my attention.)

his philosophical colleagues and adversaries sharply with his own famous slogan:

> It is clear, then, that the idea of a fixed method, or of a fixed theory of rationality, rests on too naive a view of man and his social surroundings. To those who look at the rich material provided by history, and who are not intent on impoverishing it in order to please their lower instincts, their craving for intellectual security in the form of clarity, precision, 'objectivity', 'truth', it will become clear that there is only *one* principle that can be defended under *all* circumstances and in *all* stages of human development. It is the principle: *anything goes*. (27-28).

The rationalists, then, are 'naïve', but not in a productive and playful sense. They seek 'intellectual security', instead of playing around, in order to "please their lower instincts". Truly, these thinkers are not even half as smart as children because they refuse to free themselves from the constraints of reason.

This rhetorical strategy of hyper-infantilizing the rationalist, then, contains a lot of the polemical potential of *Against Method*. This strategy, on my reading, serves to constitute an enemy audience for *Against Method*, and ridicule it in the same movement. Being no better than the superstitious dogmatists that their 'reason' and 'rationality' is supposed to set them apart from, Feyerabend's fellow philosophers of science are intellectually beneath young children in their clinging to principles of reason and logic. Whereas children usually know how to live and grow, and how to get acquainted with the world in an unafraid manner, the puritanical rationalist is not so brave, nor so experienced. This is the reason that I use the prefix *hyper*: For rationalist philosophers to become more authentically infantile, more akin to children, would, to Feyerabend, be an *improvement* in their thinking. In this way, *Against Method* casts its audience as even less mature than children. It would be good if rationalists, and many scientists as well, would learn how to play. But even this they cannot do.

The strategy of placing the rationalist mind developmentally beneath a child's, or similar to a pet's, is evident in *Against Method*'s first chapter and is a recurring theme throughout the

book. For instance, the critique of the critical rationalism associated with Popper is reiterated later on when Feyerabend states that science "often *does not start from a problem* but rather from some irrelevant activity, such as playing (…)" (175-176, emphasis in original). In some passages, this comparison between rationalists and children become less stable. In the book's last pages, for instance, Feyerabend laments the dogmatic rationalism of contemporary science education, saying that the "mature citizen is not a man who has been *instructed* in a special ideology, such as Puritanism, or critical rationalism" (308, emphasis in original). Here, Feyerabend seems to be privileging *maturity*, not the playful qualities of the child. It seems here that the mature citizen is more like a child, which must then, considering the hyper-infantilizing in chapter one, somehow be mature in the sense that it knows how to play around and create knowledge naturally. The analogies become somewhat muddled, but no less polemical at that.

Thus, the provocations inherent in *Against Method*'s arguments against argumentation in science runs throughout the work, even when Feyerabend is not directly concerned with argumentation. (This is one of the reasons that I have chosen the book's first chapter as the textual 'microcosm' for my close reading—this pervasive strategy is set out most strongly and directly here.) This is of course not the only rhetorical strategy employed in *Against Method*. It is a rhetorically rich text, using arguments from example, graphical illustrations, the common logos appeal of the prose of analytic philosophy, etc. Nevertheless, I regard the strategy of hyper-infantilizing the rationalist as central in the polemical construction of an enemy audience in *Against Method*. It is a pervasive and recurring strategy designed to demean the epistemic authority of the main portion of Feyerabend's peers.[6] As my reading has shown, it differs from the many other criticisms of specific rationalists throughout the book in that it lies at the heart

6. Feyerabend does target specific philosophers also in *Against Method*, of whom his former mentor Karl Popper is repeatedly ridiculed, but this hardly makes for the construction of an enemy *audience*; at least not as comprehensive an audience as to gain notoriety in the field and to trigger as vehement a push-back as *Against Method* turned out to do.

of Feyerabend's general argument in favor of the 'anything goes' attitude, in itself provocative.

So far, I have shown the polemical *potential* of *Against Method*—how an enemy audience of Feyerabend's peers is constructed at the heart of the text's central argument. In the following section, I look into this audience's reception of *Against Method* in order to qualify whether and how these peers were, in fact, provoked by Feyerabend's polemics.

A Clowning Conman or a Master of Profitable Confusion? Reviewers' Receptions of Against Method

If we are to consider *Against Method* "the Woodstock of philosophy", as proposed by Hacking, it was not one in tune with the 'peace, love and harmony' ideals of the hippie movement that one might associate with this event, at least if we are to understand most commentators of the work. As John Preston (1997) puts it, "the reviews went way beyond what normally counts as bad press in academic circles" (170). Feyerabend's ideas were already hotly contested, and his first full-length book publication only seemed to bring more wood, if not petroleum, to the bonfire of criticism. Although Feyerabend himself seemed to have anticipated this outcome, he was nevertheless hit hard by the negative response and, in turn, responded with even more wickedness (a term he himself used about his writings on several occasions[7]), including a third and final part of his 1978 follow-up *Science in a Free Society*, titled "Conversations with Illiterates" (123-217). It is curious that Feyerabend seemed to have wanted to provoke rationalist philosophers of science but then reacted so poorly to the push-back this provocation set off. Feyerabend (1995) himself indicated that he was deeply troubled by the negative reception of his "stinkbomb", often even wishing that he "had never written that fucking book" (147).

7. The Subject Index of the book event containing a directory for where to find "wicked remarks", of which 22 such instances are listed (Feyerabend 1975, 339).

What did all this bad blood in philosophy of science circles look like? And was it really *that* bad? The overwhelmingly negative reception of Feyerabend's work is often referenced, but rarely, to my knowledge, analyzed more systematically. In the following, I will supplement my own reading of Feyerabend's polemics with an intertextual reading of a number of academic reviews of *Against Method* following its first publication. Here I draw on Leah Ceccarelli's textual-intertextual close reading approach as laid out and applied in her *Shaping Science with Rhetoric* (2001b). Ceccarelli, too, is interested in the impact of scholarly works and uses reception texts to qualify her reading of works by Theodosius Dobzhansky, Erwin Schrödinger, and Edward O. Wilson, suggesting that Dobzhansky and Schrödinger were able to inspire new interdisciplinary alliances within scientific communities, while Wilson was less successful at this. A major innovation of this book is Ceccarelli's methodological approach of expanding the close reading praxis to reception texts. Thus, she urges the rhetorical critic to "conduct a close textual analysis not only of the primary text, but also of the intertextual material produced by audience members who were responding to it", which can provide "a more reliable connection between internal form and external function" (8) of a rhetorical artifact. I find that this approach is not only instructive in determining the effects on audiences that the close reader of the primary text can only hint at; it is also useful for determining whether conventional understandings of the reception of a text hold up to scrutiny. In the following, I aim to do both of these things. While a textual-intertextual reading is no universal key to understanding 'what the audience thought' of a text, it does provide qualification on the text's reception, especially with audiences like academics, who are a highly 'textual' community, often discussing issues in their fields in publicly available writing. In reading the reviews of *Against Method*, then, we can qualify how Feyerabend's polemics were actually picked up by other philosophers of science. We can then better determine how these philosopher colleagues reacted to the polemical nature of *Against Method* specifically—regardless of whether they ended up subscribing to Feyerabend's epistemological anarchism or not.

This, I claim, tells us something essential about the effects of Feyerabend's polemical scholarship; we gain insight into whether the audience was completely pushed away or if something more productive happened too.

As a fundamentally intertextual genre, the academic journal review article seeks to discuss and evaluate the validity and durability of claims put forward in what will usually be a recent work by (an)other scholar(s) within a disciplinary community. As such, the journal review inserts itself in a vast and open-ended web of texts in the specific area under consideration. As Charles Bazerman (1993) puts it, scientific and scholarly "[r]epresentation of intertext" is "a strategic site of contention, for it is the site at which communal memory is sorted out and reproduced, at which current issues and communities are framed, and dynamics established, pushing the research front towards one future or another" (20).[8] This makes the journal article especially relevant to the study of the reception of the ideas put forth in *Against Method* (adding to the fact that Ceccarelli's approach lends itself well to a community expressing itself in written form, as well as the more practical reason that journal reviews are relatively easy to find and access).

I restricted my material to English language reviews in academic journals between 1975 (when the first edition of *Against Method* was published) and 1978 (when Feyerabend responded to his critics in *Science in a Free Society*).[9] I surveyed Google Scholar, Proquest, Ebsco, Jstor, and WoS and was able to access and read a total of 18 such reviews. I regard this to be a sufficient number to gain an understanding of how other scholars and philosophers of science reacted to *Against Method*, even as I recognize that there might be more reviews I was not able to find. The reviews I did find were not selected on any other terms than that they reviewed this specific book.

8. See also Bazerman 1988.

9. A more lengthy investigation of the "polemical case of Paul Feyerabend" could include his responses to his critics published in this work; and *then* look at the reviews of *this* book, and so forth. This is work for another time.

My first discovery was that the common impression that the contemporary reception of *Against Method* was less than favorable is not unfounded. This is not surprising in light of my reading of how Feyerabend constructs an enemy audience by hyper-infantilizing the rationalist philosopher of science. It is hard to see how any philosopher who even remotely identifies with the rationalist position would take up the philosophical position in *Against Method* when this very position is ridiculed not only in wicked remarks in the footnotes but at the heart of the philosophical argument. Thus, many reviewers evaluate Feyerbend's dismissal of scientific method and rationality negatively and find his defense of epistemological anarchism/ Dadaism unconvincing, if not downright appalling. Feyerabend is accused of arguing against a straw man position (Cantor 1976; Nagel 1977), of "posturings and misplaced trendiness" (Harré 1977, 295) and of "spouting *enfant terrible*-ish pseudo-radical rhetoric" (Curthoys and Suchting 1977, 338). His arguments are deemed "entirely bogus" (Worrall 1978, 281), "a tremendous blunder" (Lieberson 1977, 490) and Feyerabend's "cognitive claims" are judged "nonsensical", but also "incompatible with just about every action in which we must engage to survive"(Nagel 1977, 1134). Some reviewers take issue with Feyerabend's extravagant and provocative style. Thus, John Watkins (1978) states: "Feyerabend often complains that he is not read properly. I say that he often writes so that he cannot be read properly" (339). Likewise, John Worrall (1978) charges that even when Feyerabend does make good points, they are "obscured by the engaging rhetoric which accompanies them" (286). The generally polemical nature of the book is also commented on in most reviews. *Against Method* is described as "provocative" (McGill 1976, 126; Agassi 1976, 173), and "written in the form of a saucy challenge to the friends of Reason, a style the reader is certain to find captivating or pretentious according to his tastes" (Wilson 1978, 108). Some reviews are so strongly dismissive that I suspect that some of the scolding passages in them are responsible for the impression that the reception of *Against Method* was bad *overall*. But as I will

show, not even these reviews were without praise. First, however, the scolding:

Joseph Agassi's 1976 review ranks in the very top of "bad press" reviews of *Against Method*, starting out by simply asking: "How do you read a book which extols lies? Do you at least admire its author for his excessive honesty and take literally what he says? Or do you consider him a mere con-man?" (165). Agassi seems thoroughly displeased with Feyerabend's insistence on a playful Dadaist attitude to science, which he finds so ambiguous and shallow that it hardly makes any sense: "Feyerabend only plays the clown; he is not the clown; what he really is I cannot say; he may just happen to be a defender of the Established Order" (166). The review is sarcastic and mocking in what seems like an attempt to mirror Feyerabend's own polemics. Agassi refers to Feyerabend's alleged division of "Bad Guys" and "Good Guys" within philosophy and even degenerates into deliberate childish language and exclamations: "But why this pooh-pooh?" (170), "Tut tut" (171), and in a questionable passage mocking Feyerabend's engagement with Asian practices of science and politics: "Ban-zai!" (ibid.) and "Let a thousand flowers bloom!" (172), Agassi clearly takes issue with Feyerabend's attack on his audience of fellow philosophers who are deemed dogmatists: "Even some of Feyerabend's best friends are bloody dogmatists: This volume is dedicated to, and was planned to be written in collaboration with, Imre Lakatos who was, alas! a mafioso (210) and a sheer terrorist (181, 200)". (Ibid.) He goes on to consider whether *Against Method* "should be dismissed as a bad joke" (173). Just about as dismissive as Agassi, Ernest Gellner (1975) considers *Against Method* to be "a rather idiosyncratic book" (331) in which "Feyerabend has invented a game at which he cannot lose" (337). Consistently referring to Feyerabend's philosophical endeavors as "clowning", Gellner mockingly mimics the author: "I, Paul Feyerabend, am fooling and clowning for all I'm worth, at this very moment, and all the time" (333). These gestures suggest a push-back to Feyerabend's hyper-infantilizing of the rationalist position where the accusation is turned around on Feyerabend. To Gellner, Feyerabend is guilty of "Dadaist trumpet-blowing" (340)

in which "a melange of truisms and extravagances (hedged by self-characterisation as deliberate provocation) is presented as a recipe for our liberation" (341). *Against Method* is labeled a "hysteria of protest", and Gellner confesses that he is "just embarrassed at seeing someone make such an exhibition of himself" (ibid.). Once again, he levels the accusation of infantilism back at Feyerabend: "This motive seems to drive the author to any position of supposed maximum outrage, in accordance with the well-known internal mechanics of tantrums, when the child looks round for the most potent verbal missile that may be to hand" (342). It all ends up being simply too much for Gellner, whose conclusion to the review is worth quoting at length:

> The trouble is that clowning only has charm if it is good-natured and has an element of humanity and humility. This clowning is persistently rasping, boastful, derisive and arrogant; its attitude to what is rejected is aggressive and holier-than-thou, and opponents are not allowed to benefit from the all-permissive anarchism; the frivolity contains a markedly sadistic streak, visible in the evident pleasure taken in trying (without success) to confuse and browbeat the 'rationalists', i.e. people who ask questions about knowledge in good faith. This is why what might otherwise seem a harmless piece of Californian-Viennese *Schmalz* leaves such a disagreeable taste in the mouth (ibid.).

Similarly, in a stormy accusatory passage, Rom Harré (1977) takes issue with what he reads as the political implications of Feyerabend's philosophy of science:

> Indeed, though the rhetoric is radical most readers of a radical persuasion will not find the underlying exploitative ideology far to seek. […] Indeed, Professor Feyerabend seems to insist on the idea that success or power must go to those who have the least respect for consistency and truth in the pursuit of some kind of exploitative paradise of pleasure (295).

Reading these reviews—their take-downs so severe that they seem like character assassinations—it is tempting to conclude that *Against Method* was simply a philosophical failure. But however

harsh these reviewers are, they are not entirely dismissive (except, perhaps, for Gellner). Harré (1977), so appalled by Feyerabend's pursuit of an exploitative paradise of pleasure, nevertheless recognizes that the examination of the case of Galileo "lifts [Feyerabend's] book into a major contribution to the philosophy of science" (295-296). Agassi (1976) surprisingly ends his review on a positive note: "[*Against Method*] is annoying but full of delights too. It looks as if the author tries to be impish and get away with anything. I confess my sympathy is with the author, and this review is simply an expression of regret over the loss of an ally to the forces of irresponsibility and irrationalism" (173). Agassi even ends up, after all his sarcasm and ridicule, conceding that the 'crime' of *Against Method* succeeds: "What is my verdict? In my opinion for what it is worth**,** does Feyerabend get away with murder? I think, yes." (p. 177) In a similar vein, John Worrall (1978), although declaring that method will survive Feyerabend's attack, recognizes the effect of the attack nonetheless: "But so far as its central negative arguments are concerned, it does seem to me that although 'rationalist methodology' does not escape from Feyerabend's attack entirely unscathed, it receives no mortal wounds. 'Method' lives!" (295). The theme of attack and survival of the rationalist position is recurring in these reviews, sometimes with gothic overtones: "But [Feyerabend] does drive yet another stake and this time a formidable one, through the heart of the vampire of logicism" (Harré 1977, 298). Worrall even asserts that *Against Method* "is *essential reading* for all those interested in the problem of status of scientific knowledge. It will (I trust) win few serious converts, but non-anarchists will benefit from reading it because they will find in it much to challenge their own ideas" (294, emphasis added).

Some reviewers, again contrary to the 'bad press' conception, actually give entirely positive reviews. One reviewer, Andrew Lugg (1977), makes the curious move of ascribing to Feyerabend an approval of rationality in science after all—just not a *special* rationality preserved for science only. According to Lugg, "[t]his enables us to see his writings as something other than a slew of aphorisms, jokes, and *bons mots*, interspersed with acute (or not

so acute) historical sketches" (774, emphasis in original). Another claims that Feyerabend on certain points "turns out to be right in spite of himself" (Finnochiaro 1978, 239, underlining in original). Still others have no need for this kind of charitable reconstruction. Husain Sarkar (1978), playing along, says that he "profoundly agree[s]" with much of what *Against Method* says and that he has a "deep appreciation" of the book, but that the review will be written in a "negative tone"—from the point of a rationalist who is faced with the challenge of defending methodology in science (35). David R. Topper (1975) thinks that *Against Method* is a "brilliant and exciting book" (394) with which he mostly agrees except for the concluding pages about epistemological anarchism's political implications. Ian Mitroff (1976) is thoroughly delighted with *Against Method* and shows no desire to "look beyond" Feyerabend's polemical rhetoric:

> Paul Feyerabend is not the kind of man who inspires one to remain passive. He does not merely "write a book" in the conventional sense but he literally assaults his readers in his attempt to reach them and to engage them. As a result, he inspires passion. You either passionately like him (and not just his book), or, you detest him. Let me therefore start with a confession. I am a passionate enthusiast of Feyerabend. I not only like the content of what he says but the honest and emotional way in which he says it (346).

The polemical expression of *Against Method* is thus applauded by several reviewers. It is deemed a "highly entertaining book" (Cantor 1976, 272), "a lively and spirited discussion" (G.B.O. 1976, 127) and an "exciting work" (Sarkar 1978, 35). Jonathan Lieberson (1977) acknowledges that Feyerabend "writes very well" (483), and V.J. McGill (1976) appreciates the "good humor which prevail [sic]" (130). More importantly, however, some of the more negative reviewers still see the value in *Against Method*'s attacks on reason as more than entertainment, which we saw in Agassi's, Harré's and Worrel's acknowledgements above. Thus, Tomas Kulka (1977):

> Leaving aside the fact that there are many interesting ideas and some nicely wicked attacks on contemporary scientism, the chief value of the book lies, in my opinion, in its unmitigated radicalism. (…) Feyerabend seems to be the first to take his relativism seriously and to follow it out all the way (286).

This aspect is key to understanding the potential of polemical scholarship as manifest in the case of *Against Method*: Many reviewers indeed recognize that this provocative book, while not philosophically 'correct', is useful to the field. M.J. Scott-Taggert (1976) describes the book as "noisy, polemical, and designed to irritate" and at the same time "a powerful challenge to those philosophers of science who, perhaps taking refuge in the alleged denial that we can argue from facts to values, say how the scientist ought to proceed while ignoring the ways in which he does proceed, and proceed successfully" (294). Lieberson (1977), who is very much against *Against Method*, concludes that:

> "even if (…) an initiation into 'Epistemological Anarchism' affords, like skepticism, but a transitory dislocation and reprieve from the confrontation of pre-existing problems of knowledge, Feyerabend's striking defense of it seems to me to fulfill the task set to all good philosophy of crystallizing complacently held opinions into an absorbing and profitable confusion" (491-492).

The same recognition is evident in the positive reviews. Thus Mitroff (1976):

> *Against Method* is a good book, possibly a great one. It is full of contradictions, over and understatements, and enough ad hominem statements to give even the most liberal student of rhetoric apoplexy. This is not to condemn Feyerabend. Indeed, I applaud him all the more for breaking through the hypocrisy, dullness, and triviality of so much of contemporary academic philosophy (347).

So is it true that *Against Method*—"the most radical theory of scientific methodology yet proposed" (Topper 1975, 394)—was unilaterally rejected and/or misunderstood? I think this widely accepted conclusion is simplified and misleading. While few of

Feyerabend's peers ended up accepting his arguments against argumentation in science and his motto of 'anything goes', it is obvious to me that *Against Method* still had a lot to contribute in the ongoing discussions within philosophy of science, with its noisy, polemical, irritating intervention in the field. Reviewers recognize Feyerabend's ability to entertain and cause profitable confusion, even driving stakes through logician vampires' hearts and getting away with murder. Gellner (1975), perhaps the reviewer least impressed by *Against Method*, even at one point recognizes it "as a phenomenon rather than a serious position" (334), opening the door for it to be useful in some sense. It seems that here we find the book's event-like quality, as put forth by Hacking: Through its polemical form it was able to seriously challenge prevailing ideas and dogmas of its time, opening up a space for heated defenses and discussion for decades to come.

Rhetoric as Obstacle to or Driving Force of Against Method?

I have argued above that Feyerabend's polemical scholarship, while receiving violent push-backs, was able to open up a space for productive debate within philosophy of science. However, there seems to be a widespread assumption that the content of *Against Method* should be scrutinized only regarding the 'clarity' of the text, or lack thereof. In this rather traditional view in analytic philosophy, Feyerabend's text can only be more or less clear, either read correctly—as intended by the author, that is—or *mis*read. This becomes evident when consulting the few major works on Feyerabend's philosophy. Here, Feyerabend's contrarian philosophical voice is often regarded as nothing more than a regrettable source of confusion. Eric Oberheim, who in his 2006 *Feyerabend's Philosophy* makes an admirable attempt to rescue Feyerabend from the label of being simply anti-philosophical, and hence not worth taking seriously, sees the rhetorical side of Feyerabend as a hindrance to understanding the greatness of his thinking. As he puts it, "Feyerabend often complained bitterly

about being misread, but it was at least partly his own fault. His texts are filled with rhetoric, polemic and intentional provocations" (2). He goes on to say that Feyerabend's rhetoric *should* be appreciated but what he seems to mean by this is that it should be detected in order to be overcome: "A little more attention to detail and a better appreciation of Feyerabend's rhetoric's [sic] could have prevented at least three decades of a perpetuating misunderstanding" (p. 34). Another full-length work on Feyerabend's philosophy of science, Robert P. Farrell's *Feyerabend and Scientific Values* (2003), similarly suggests that the "popular conception of Feyerabend's later philosophy [including *Against Method*] is a completely misleading one" (1). However, Farrell does not touch upon Feyerabend's own rhetoric but focuses his book's section "Feyerabend's Rhetoric: Propaganda, Irrationality and Subjective Wishes" (39-43) on Feyerabend's idea that Galileo used propaganda to hammer home his Copernicanism in astronomy. Thus, Feyerabend being a rhetorician *himself* is often either seen as a regrettable aspect of his academic career, or bypassed altogether. Viewed differently, however, one might say that these 'perpetual misunderstandings' are exactly *what is rhetorically engaging about Feyerabend's thinking in the first place*. That is, the agency of *Against Method*—understood as its potential to effect changes in the community of philosophy of science and beyond—may reside in its polemics. *Against Method* might be valuable to philosophy of science not necessarily because it can be *deciphered* once and for all, its true arguments *revealed* and then critiqued on objective terms (an idea that much of Feyerabend's thinking strongly objects to), but because it *resists* such deciphering and revelation and instead sets the field alight. That the lasting effect of *Against Method* is, at least in part, caused by its polemics is supported by its reviews. As I hope to have shown, reviewers rarely agreed with Feyerabend's epistemological anarchism and were often hostile to his arguments. But this is not the end of the story. Many reviewers were delighted with and/or intrigued by Feyerabend's contrariness and provocations. Indeed, some of them viewed this as a valuable aspect of the work itself. So, *Against Method* was received with

not only repulsion but also philosophical curiosity.[10] I suggest that it is in this tension between rejection and interest, made possible by Feyerabend's polemics and provocations, that the queer effects of *Against Method* reside.

I do not claim that this settles the matter of *Against Method*'s sustained relevance to and canonical status in the philosophy of science field. The discussions of this particular work, and of Feyerabend's philosophy in general, have of course been continued on multiple fronts in the four decades following the work's first publication and the immediate reactions of its reviewers—a discussion that has outlived Feyerabend himself. Even its first publication's contemporary effects cannot be reduced to the reviewers' reactions; the work itself and its influence is bound to be far more complex. Still, I think that the immediate reactions inevitably provide a hint of the potential for endurance that inhabits this particular book. If all aspects of *Against Method* were so universally rejected at its publication as is sometimes claimed, it is hard to see how it was able to survive and thrive to become a classic.

I also do not claim that philosophers are so myopically obsessed with abstract argument structures and that they never consider wider contexts and philosophical ideas. Indeed, context is a considerable part of the work within the history of philosophy. For instance, in his brilliant 2019 article "'The Battle is on': Lakatos, Feyerabend, and the Student Protests", Eric C. Martin points to the fact that "Feyerabend composed [*Against Method*] in the heart of America's student protests" (21) at the University of Berkeley and suggests that this might have had important implications for his thinking. Martin also, like other commentators on Feyerabend, brings attention to his "philosophical voice", which he characterizes as "ultra-contrarian" (18), and he points to the pleasure such contrariness gave him. According to Martin, then,

10. Here I should add that even repulsion can end up being valuable in the larger picture. The bromide 'any press is good press' holds in a lot of instances, and it is hard to deny that the 'bad press' for *Against Method* was 'good' in a publicity perspective in the sense that Feyerabend got the attention he did partly because of the provocative style in which he wrote.

we cannot fully understand *Against Method* without considering the social and political context that Feyerabend found himself in when he was assembling his stink bomb: "It is an understatement to say the book resonated with a counter-culture that was critical of established authority" (31). However, it seems to me that the philosophical community, historians or otherwise, has had a tendency to miss the value of *Against Method*, simply because it was not a success according to narrow criteria of philosophical argumentation but instead worked its effects queerly through polemics.

Polemics and Rhetorical Argumentation in Technical Spheres

In courses on rhetorical argumentation at the University of Copenhagen, students will likely become familiar with Charlotte Jørgensen and Merete Onsberg's (2008, 101-115) four criteria for evaluating arguments in public debate: Is the argument correct, effective, fair[11] and interesting? These criteria, the authors claim, are different from criteria of formal argumentation. Formal arguments need not be effective nor interesting; their paramount criterion for success is *soundness*. The logician, when assessing real life arguments, will first and foremost ask: Is it possible that the argument's premises are true but the conclusion false? If not, the arguer should be more or less home safe as far as the logician is concerned. Other schools of argumentation theory are more pragmatic and base their theory on an ideal of dialogue. The Pragma-Dialectic school famously considers the general function of argumentation as a discursive endeavor to resolve differences of opinion (van Eemeren and Grootendorst 1984; 2004). Rhetorical conceptions of practical argumentation, however, ask for something more, and sometimes for something else entirely. Jørgensen and Onsberg's (2007) criterion of *interesting* seems to set itself apart the most. An interesting argument is an argument in

11. For a specification on what fairness is to denote in this context, see Jørgensen 2007, p. 170.

which "the speaker presents the audience with something *new* or *controversial*" (107, my translation). An audience has no need for self-evident statements, platitudes, and clichés, however soundly crafted they may be. Furthermore, a bored or indifferent audience cannot be persuaded, in either a narrow or broad sense of this term. We may here reiterate Feyerabend's rhetorical question: What good is an argument that leaves people unmoved? That is, this essay's reading of *Against Method* is informed by what I take to be central tenets of the Copenhagen School, which takes it in a direction that many, if not most, other schools of argumentation studies could not. In looking mainly for 'correct' inferences and not effective arguments, philosophical conceptions of argumentation overlook the extent to which whether something is true or false is not the issue—or, at least, not the whole story (Kock 2009a).

Furthermore, I take the idea that dissensus is not necessarily something to be avoided or overcome but is integral to democratic deliberation as another central tenet of the Copenhagen School. With Christian Kock (2009b), the rhetorical argumentation scholar can acknowledge that "dissensus may persist indefinitely because values differ, and this is legitimate" (106). Granted, Kock is here (like Jørgensen and Onsberg above) talking about practical argumentation, which rhetoricians often contrast not only with informal logic, pragma-dialectics, Habermasian public sphere theories of rational deliberation, etc., but also with *scientific* argumentation. I will argue, however, that Copenhagen School ideas have a lot to contribute to the study of argumentation in scientific/technical spheres.

The ideas that arguments should be interesting and that dissensus can be legitimate, even necessary, in argumentation broadly considered open the door to polemics in ways that other theories of argumentation do not. When considering the value of polemics and provocative arguments in the case of *Against Method*, Christopher Tindale's (2017) distinction between static and dynamic senses of argument is useful. Following Tindale, we may refer to theories of argumentation that are merely concerned with formally correct/incorrect arguments as the *static sense of*

argument. This sense of argument has a *dynamic* counterpart more suitable to rhetorical situations of real life arguing. I quote Tindale at length:

> The static sense of argument sees arguments as products with no essential connection to the argumentative situation from which they arose. They are inert pieces of discourse, connected statements that can be judged "good" or "bad" merely in terms of their structures. (This is clearly the case with the traditional model and still the case generally with informal logic models). By contrast, a dynamic sense of argument sees arguments as social events, personalized by those engaged in them. They are alive with meaning and movement, and should only be judged "good" or "bad" in light of consideration of the entire argumentative situation (including the participants) (25).

I think that such a dynamic, rhetorical sense of argumentation, where we do not only seek out *sound* arguments but also *interesting* ones, accounts much better for the canonical status of *Against Method* than does its static counterpart. Indeed, as made evident by the reception from the reviewers, the fact that Feyerabend's arguments against argumentation in science were *interesting* might be what made them *effective*. The dynamic sense of argument explains the value of *Against Method* in ways that a static sense never could: We can view the book as a 'social event'. *Against Method* became an event to participate in, whether by arguing vigorously against it or by enthusiastically appreciating its challenge to the philosophy of science. This, I claim, accounts for the lasting influence of the book, its event-like quality; its 'Woodstocky' hype and importance to the field. This, I would argue, is interesting in and of itself and a welcome nuancing of ideas about Feyerabend's philosophical influence. But more importantly, it also tells us something about the role and function of polemics within more specialized areas of debate. I think that *Against Method* and its immediate reception shows us that a dynamic sense of argument, where arguments should also be interesting and where polemics can play a legitimate role in advancing debates, showing itself to be productively queer, also

plays a part in constructing "a social space" (Amossy 2021, p. 159) in technical spheres of argument, like it can in public spheres.

Further, it seems to me that the static sense of argumentation described by Tindale is more or less what Feyerabend is arguing against in his rejection of argumentation in science. For Feyerabend (1975), the dynamic sense is less problematic to science as he is using the word 'argumentation' to mean formal and informal (static) senses of argument, and "interests, forces, propaganda and brainwashing techniques" (p. 25) to mean rhetorical (dynamic) senses of argument. (Although 'rhetoric' is edited away in subsequent editions of *Against Method*, the first edition's Subject Index does include "rhetoric" at pages "1-309" [p. 337].)[12] This is not to say that rhetoric is reducible to the dirtiest tricks in the communication toolbox, although these, too, are of course highly rhetorical. I merely suggest that a dynamic view of argumentation both accounts best for the quality and effectiveness of *Against Method*, and, interestingly, falls somewhat in line with much of what Feyerabend had to say about the progress and development of scientific ideas.

Of course, I am making no novel claim in stating that actors in technical fields like science and the academic world employ rhetorical strategies broadly among each other; this is a basic assumption of the Rhetoric of Science field as a whole (See Wander 1976; Ceccarelli 2001a; Miller and Ceccarelli in press). It is a common understanding in Rhetoric of Science that scientists *do* argue rhetorically, even among peers (Overington 1977), and that they *should* make a greater effort to construct arguments in accordance with rhetorical criteria when communicating to the wider public (Fahnestock 2020; Pietrucci and Ceccarelli 2019). However, texts in this field have tended to focus on how the rhetoric of scientists and scholars generates its credibility and rhetorical effectiveness first and foremost in its appeal to

12. Indeed, there may be a connection, so far underexplored, between Feyerabend's ideas about 'rhetoricity' in his own work, its bearing on scientific progress, and movements in rhetorical argumentation studies around the same period. Famously stating that "rhetoric is epistemic" in 1967, Robert L. Scott asserted that rhetoric, not formal modes of argumentation, is the driving force of knowledge.

logos—what Joseph Gusfield (1976) has called a "windowpane" theory of scientific language (16) and Alan P. Gross (1990) has called science's "useful illusion: for scientists, the results of science depend not on argument but on nature herself" (32). Moreover, audience studies of scientific discourse have tended to highlight accommodation to the target audience's beliefs and values as a basis for positive evaluation of a given text's argumentation and effects. Indeed, Ceccarelli's 2001 book, from which this essay draws much inspiration, ends up negatively evaluating Edward O. Wilson's attempt to inspire interdisciplinarity because he failed to "demonstrate an appreciation for the intellectual work" of humanities and social science scholars and instead provoked them by casting them as "ignorant, misguided, lazy, or primitive" (151). While this may claim be true in the case of Wilson, my study of *Against Method* suggests that there may be times when scholarship, aimed, harshly and directly, at an audience of peers, can be productively queer when employing polemical rhetorical strategies of argumentation. In other words, polemical scholarship like Feyerabend's, to work its effects, need not be broadly accepted by its intended audience in accordance with the intention of its author; it may produce them in roundabout ways by pushing its audience *away*. Instead of becoming an accepted and recommended philosophy, Feyerabend's epistemological anarchism became an event in the philosophy of science, a space wherein and against which other philosophers could and did develop their arguments and identities. Though I am not 'against method' in Feyerabend's radical sense, I agree with him that a little chaos can be profitably confusing in some cases—*Against Method* itself being an example.

Tricksters in the Technical Sphere

Kenneth Burke (1973) used the metaphor of a parlor conversation to describe the ongoing rhetorical development of intellectual life and ideas (110-111). The Burkean parlor is a familiar picture within rhetorical and composition studies: Ideas about the world

are not created 'from scratch' by the individual thinker but are developed within a heated discussion that preceded the individual and will go on after the individual has left the parlor. It is the steady stream and substitution of interested and engaged interlocutors over time that moves thinking forward within a field. One might also imagine, however, that the interlocutors in a parlor would suddenly—by coincidence or design—constitute a combination of people who mostly agree on the subjects under consideration, or at least do not disagree enough to summon any resistance to a point put forward. Differing views would be politely recognized and attention would turn to something else: the match on TV or the exchange of harmless small talk. Might the entering of a rather rowdy guest, slamming the parlor doors wide open upon entry, be what was needed to get the talk going again?

In line with my reimagining of Burke's parlor metaphor above, I will draw a final parallel to a rhetorical concept relating to criticism of debates in the public sphere that might prove useful in technical spheres as well: Robert Ivie's (2002) concept of the rhetorical trickster.[13] In the aftermath of the September 11 terrorist attacks in New York City, Ivie cautions against ideals of democratic deliberation that seek to exclude the 'rowdy' rhetoric of actually existing political debate. "[A] strictly rational model of deliberation," Ivie contends, "masks elite privilege and power" (284), as was seen in the years following the 9/11 attacks where dissent to the subsequent war efforts was largely silenced. Ivie introduces the concept of the rhetorical trickster, inspired by the myth of Old Man Coyote, whose role it is to make space for dissent, performing "a needed service by engaging in 'dirt work' that muddies clear waters and confounds reified conceptions by crossing established boundaries, stealing symbols back and forth, embodying ambiguities, and ambivalence, speaking freely and tactlessly, and so on" (280). The existence of such a water-muddying character enables a pluralistic democracy, in the here and now, allowing protesting voices to inform the debate in a positive way. Indeed, the crossing of boundaries and the inherent

13. See also Ivie 2005.

ambivalence of the trickster bears resemblance to Rand's notion of the queer effects of polemics, which, I have argued, are at play in the case of *Against Method*. Thus, I want to suggest that the trickster can be valuable not only to public deliberation on policy questions but also in scholarly discussions in technical spheres. What was Feyerabend if not a rhetorical trickster, doing philosophical 'dirt work' by speaking freely and tactlessly?

The event of *Against Method* seems to me to be a form of polemical trickster—an event in and around which philosophical discussions of science could, and did, take place for decades. I believe that studies in rhetorical argumentation could benefit tremendously by investigating polemics, and other 'rowdy' strategies and expressions, within technical spheres in the future, not least because there is no guarantee that tricksters in the technical sphere will be an unequivocally good thing for the 'democratic' development of a given disciplinary field. The right trickster at the right time in one corner of the technical sphere may be productively queer, in the sense that I argued that Feyerabend was (or in some other, unpredictable way). The *wrong* trickster at the *wrong* time in another corner, however, might produce more troubling effects. This is important to keep in mind as the epistemic authority of science is increasingly diminished or set aside in areas that are vital to society—to the thriving of human civilization, even. Here, it might be wise to revisit Feyerabend's (1975) final words in the introduction to *Against Method*: "There may, of course, come a time when it will be necessary to give reason a temporary advantage and when it will be wise to defend its rules to the exclusion of everything else. I do not believe that we are living in such a time today" (22). One cannot help but wonder what Feyerabend would have made of our present day where "the ramblings of mad men" (68), viewed favorably by the anarchist Feyerabend five decades ago, seem to have taken roots so comfortably in our uncertain times.

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