

Paul Feyerabend, *Conquest of Abundance: A Tale of Abstraction Versus the Richness of Being*. Ed. Bert Terpstra. Chicago: University of Chicago Press, 1999.

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“Xenophanes ... was one of the first Western intellectuals Although dealing with topics that soon became the exclusive property of a new profession, philosophy, he often behaved in a thoroughly unprofessional way. He used epigrams, one-liners, he imitated, mocked, or repeated popular profundities to reveal their shallowness. Serious thinkers were not amused Occasionally they did not even get his jokes.”

When Paul Feyerabend, this most consciously and clearly self-reflective writer, wrote those words (41) it is hard to imagine that he did not mean us to see a resemblance between author and subject. Serious thinkers will not be amused, sensing the implied critique and resenting the wit. Perhaps Feyerabend was one of the last Western intellectuals, in a world whose conquest he portrays and laments. *Conquest of Abundance*, as he tells us in the Preface, was meant to be the book he promised his wife, Grazia. He did not live to complete it. The manuscript was ably edited by Bert Terpstra, who supplemented it with a selection of Feyerabend’s publications of the last decade. There is a touching, insightful short preface by Grazia Borrini-Feyerabend. The book is itself a work of such abundance that a review is likely to remain idiosyncratically selective -- pathetically illustrating Feyerabend’s theme, the impoverishing consequences of academic attention.

The book’s announced aim was to show “how specialists and common people reduce the abundance that surrounds and confuses them”. This project continues explicitly that of *Against Method*, “to free people from the tyranny of philosophical obfuscators and abstract concepts ... which narrow people’s vision and ways of being in the world” (viii). But the book is not solely or single-mindedly addressed to its aim. Although certainly every part can be read as contributing it, if sometimes obliquely, the chapters can practically be read as independent essays. These essays display Feyerabend’s lifelong fascination with transformations in our ways of seeing: how we see the gods, the world,

ourselves, and everything else there is. The conquest of abundance is a recurring characteristic of those transformations, but is balanced by startling new insights, revolutions that bring new light as well as new blindness. Despite his dismay about how academic philosophy seems intent mainly to cut things and to dry them, despite himself perhaps, Feyerabend's writing is essentially optimistic and hopeful. He is more intent on bringing us back to the reality than on lamenting the abstractions.

Feyerabend is generally credited (if that is the word) with introducing the notion of incommensurability. This generated the puzzle of how scientists immersed in incommensurable paradigms can even communicate, let alone pass from one paradigm to another. In his own view, that puzzle is itself a central example of how academics, caught up in their own abstractions, become enmeshed in self-generated problems. The culprit in this case is their woefully inadequate, oversimplified, 'idealized', distorting model of language. Here is the verdict in his own words:

I agree that if discourse is defined as a sequence of clear and distinct propositions (actions, plans, etc.) which are constructed according to precise and merciless rules, then discourse has a very short breath indeed. Such a discourse would be often interrupted by "irrational" events and soon be replaced by a new discourse for which its predecessor is nonsense pure and simple. If the history of thought depended on a discourse of this kind, then it would consist of an ocean of irrationality interrupted, briefly, by mutually incommensurable islands of sense. (32-33)

What he disowns here is of course precisely what some have read as Feyerabend's position. So what is it about real discourse that makes it so different from the artificial languages that logicians and philosophers have allowed to guide their thought? Feyerabend is as intent as ever on highlighting the vast gaps that separate pre- and post-revolutionary transformations of our view. So what allows for these transformations, what makes it possible for the past view to be understood in the new?

When Feyerabend writes about language he is much closer to literary theory than to analytic philosophy of language. The latter tends in any case to ignore the problems of language that preoccupy philosophers of science, such as the "theory-ladenness" of terms, "incommensurability" of theories stated in different vocabularies, the impossibility

of understanding discourse independently of some of the theories it has been fashioned to express. There may be good reason for this: philosophers of science who introduced these issues, Feyerabend included, showed little inclination to work out a separate theory of meaning in any detail. However that may be, in his response to the tangled “incommensurability” cluster of problems, Feyerabend focuses on the irremediable ambiguity of real discourse. Chapter One, “Achilles’ Passionate Conjecture” presents the initial case study to present his diagnosis and solution: a passage in the *Illiad* and its study in academic philology. Achilles feels offended and withdraws from the battle against Troy. To compensate for the offence Agamemnon offers rich gifts and his daughter’s hand in marriage. Achilles refuses, and in a passionate speech says things about honor which stun the messengers; those same words stun the Greeks when Odysseus reports them. Scholars have seen here a rupture in the meaning or concept of honor. We distinguish between someone being genuinely honorable in character and actions and someone honored in society for his character and actions. The claim is that there had been no such separation in the Homeric world. When Achilles exclaims that now “equal honor goes to the virtuous and the worthless”, the messengers hear something that makes literally no sense to them at all.

This moment in the *Iliad* is a moment of conceptual change, precipitated by Achilles’ emotional response to his treatment by Agamemnon. But however precipitated, the change in conception happens; it is intelligible to the later readers of the epic. How is such a transition possible, when from the prior point of view the words make literally no sense? Feyerabend answers, in effect, that from the posterior vantage point we can see the ambiguities and connotations that were already there (in some way, hidden) in the prior discourse, and became disentangled through that emotional crisis. For in the prior conception there were already, for example, links between honor and how the gods see the actions, which may be distinct from how the surrounding humans see them. In addition Achilles sees other examples where *in his own view* actions should have been honored and were not, as well as worthless actions that received honors. These anomalies can then serve to break apart what was conceived as indissolubly linked in meaning. This way of reconstructing the pre-revolutionary conception afterward gives us a ready temptation to anachronism, if we become insensible to the magnitude of its shock

to the prior way of thinking. Not just cocktail hour conversation, after all, but the discourse that guides action and limns the value of a man's life in the Homeric world, is affected. The extreme puzzlement and even hostility sometimes occasioned by the ideas of incommensurability and of conceptual change may derive precisely from the failure to distinguish between *ex ante* and *ex post* intelligibility.

Feyerabend's diagnosis focusing on ambiguity may not work well if received within a view of language not his own. On ambiguity he is closer to literary critics than to analytic philosophy. The New Criticism is not well regarded these days and certainly out of fashion, although its focus on vagueness, ambiguity, and unresolvable tensions presaged the more deconstructively critical approaches to come. Empson's *Seven Types of Ambiguity* is still a pleasure to read and, I would suggest, this pleasure is more likely to be instructive when it comes to Feyerabend's intentions than a reading of Quine or Davidson. At the end of the last chapter Feyerabend suggests a striking analogy with quantum mechanics: we should try to see the old (now diagnosed as ambiguous) term as a superposition rather than mixture of its disambiguations. We have no theory of language available that could make something of this suggestion, nor has Feyerabend provided one. Perhaps our problem is just that the history and philosophy of science gets us interested in the idea of languages that are imperfect or defective but of real use in practice, while in philosophy of language it is just the other way around.

The more familiar example from science concerns mass before and after Einstein. Imagine Newtonian scientists to whom it is suddenly suggested that perhaps mass varies with velocity. That is absurd in their terms. In their models, mass varies only when material is added or lost. Moreover, while velocity varies from one frame of reference to another, mass does not. All of this is so basic to their way of thinking that they are just completely puzzled by the suggestion. It makes no sense. So far this story seems to bear out our impression of incommensurability. There is nowhere to go, at this point, if we think of the Newtonian's language on the model of some logician's ideal.

But while the Newtonians do not realize it yet, there are such ambiguities in this speaking and thinking that any three different logicians would likely construe it (extrapolate it to an less ambiguous formalism) in three different ways. For in the Newtonian tradition, mass can be equally well characterized in three different ways. For

our anachronistic convenience, we give them different names. The proper mass (“quantity of matter,” a certain constant value assigned to e.g. each [classical] atom), the inertial mass (a measure of its resistance to motion), and the gravitational mass (evident in the mutually induced acceleration of bodies at a given distance from each other). Logically speaking it is quite remarkable that these three values would coincide. So a logician would construe the word “mass” as standing for only one of them, but say that the physicist’s talk was ambiguous between the three.

In Einstein’s Special Theory of Relativity light has a constant velocity, the same in every inertial frame of reference. The velocity of a body in constant motion is different from frame to frame (zero in its own rest frame) but cannot exceed that of light, as measured in any frame. Is that idea consistent? Not in Newtonian terms. Suppose the same force is applied repeatedly to a body so as to increase its velocity. This process must have diminishing returns, as seen in any inertial frame, if the body is not to ever go faster than light. Thus it appears that the resistance to motion is increasing as the velocity increases. Although I am simplifying, we get an inkling here of how the first and second senses are separated, so to speak. The proper mass (mass in the first sense, “rest mass”) does not vary, and this common concept of mass we are therefore able to discern in both theories.

Feyerabend predicts in effect that the later scientists will be hard put to understand how the prior point of view could have experienced true epistemic trauma. Today the disentanglement seems so natural! This prediction is easily verified in our own minds (don’t we all see our way as natural and the past view as almost willfully defective, almost culpably ambiguous?) as well as in scientists’ writings. Here is Steven Weinberg’s review article on Kuhn, “The Revolution That Didn’t Happen” (*The New York Review of Books* XLV, 15; Oct. 8, 1998, 48-52): “It is true that there was a good deal of uncertainty about the concept of mass *during* the Einsteinian revolution But this has all been resolved ... and in fact the term “mass” today is most frequently understood as “rest mass”, an intrinsic property of a body that is not changed by motion, which is much the way that mass was understood before Einstein. Meanings can change, but generally do so in the direction of an increased richness and precision of definition, so that we do not lose the ability to understand the theories of past periods of normal

science.” (49) This is exactly right as an expression of the posterior view. It bears out Feyerabend’s own conclusion, “We are a long way from the disaster announced by [the philologist A.] Parry and systematized by the champions of incommensurability.”(37) But it seems also to display the puzzlement, in oblivion of the prior discourse structure (physicists now having a definite take on Newtonian mechanics and its rightful place in science), about how we could possibly see our present view as a *revolutionary* change.

Feyerabend’s main writings about art and its relation to science appeared in German, so I am especially glad that the book contains the chapter “Brunelleschi and the Invention of Perspective”. This is also a case study of a revolutionary change, conceived as akin to revolutionary change in science, with careful attention not only to that kinship but to the parallels between philosophical thinking on both. The critics’ and museums’ views of medieval art as defective in comparison to that of the Renaissance – initially exemplified by Vasari, but persisting for centuries – also illustrates the posterior sense of progress as well as oblivion to the past ‘as it was’. The subject also provides Feyerabend with the stage for an analysis of representation (art as representation, science as representation) in relation to imitation, resemblance, distortion, and appearance-creation versus copying. Central to the chapter is his exposition of Brunelleschi’s famous demonstration with his painting of the Baptistery, first as following precisely the format of a scientific experiment and then as a theatrical stage setting and performance. We have to wonder whether the diagram can be completed and the scientific experiment viewed as dramatic production, or a theatrical event as itself an experimental demonstration.

In such reflection on representation we have a necessary but too much ignored background for the discussion of realism and anti-realism; and this is how Feyerabend goes on to draw on it. The various “realist” and “relativist” positions share certain assumptions, even certain uncritical views of what it is to represent (artistically, scientifically) and the debates have been hamstrung by oblivion to the long history of reflection on that very question. Even as supplemented by some of the published essays, this theme is not sufficiently developed, at this point, to convince. This chapter, the last of the book manuscript itself, returns then to the examples of Galileo on motion from *Against Method* and of Achilles’ passionate conjecture to underline Feyerabend’s undermining of the realism debates. I realize that it is very unsatisfactory for me leave

this solely to the reader, or to more thorough studies of Feyerabend's work as a whole, to evaluate. But even if Feyerabend's conclusions here are contested -- both by scientific realists and by post-modern relativists -- this chapter is exciting as a study in art from an original and unusual point of view.

What public does this author constitute for himself, as intended target? An educated audience, clearly, as interested in the sciences and the arts as in religion, mythology, literature, history. An audience with reading knowledge of the several main Western European languages, and a passing acquaintance with Latin and Greek. Feyerabend does not condescend to his readers. But what if the actual reader senses painfully how s/he lacks this abundance glimpsed in the author? Feyerabend wears his learning lightly, but what of the impoverishing victory of academic abstraction that he describes? The fact is that lamentation is not at all the tone of the book. That conquest of abundance Feyerabend describes he does not hold up as a lamentable 'sign of the times'. On the contrary, he shows it at work at the very beginning of Western civilization, in the time of Xenophanes, as well as in the seventeenth century, in just the same way that it operates now. So, we should conclude, this process has never yet succeeded in replacing our real world by its pale abstractions. The conquest is in the end a sham conquest, an illusory victory for the forces of abstracting intellect. Xenophanes, Feyerabend, ... these are the saints of our culture, difficult, obstructive, provocative. They bring not peace but the sword; they have charm, charisma, appeal; they are altogether too bloody-minded for comfort. We can't ignore them as mavericks, for their brilliance just won't let us pass by. But quite apart from that, they themselves are the proof that the conquest of abundance, the replacement of reality by abstract simulacra, bloodless ballets of categories (or, for that matter, of gene frequencies) fails in the end.