

Comment

On Rereading a Classic

Jeroen Bouterse

How to talk about a classic? How to peel through all the layers of reviews, references in books and articles, and conversations *about* a book? I remember when I read *Leviathan and the Air-Pump*. This was about a year after I had heard the names of Steven Shapin and Simon Schaffer mentioned in a class—along with those of Bruno Latour and someone called “SSK.” Through no fault of my teachers, I quickly understood all these names to stand for the same thing: the thesis that science was not [the things I knew it was] but [something else]—a thesis that had to be resisted. After all, how could Western civilization survive if the bizarre notion that science was [not the things I knew it was] took root? Surely you can understand my worries; they were based on the intuition that the problem of knowledge and the problem of order are connected.

The last stand was the question of whether science was “social” (it *had* to be *more*), and this was what I wanted to test Shapin and Schaffer’s views on. Not that I couldn’t discern that *Leviathan and the Air-Pump* was about much more than this question. I found myself charmed at every step: by the “playing the stranger” motif in the introductory chapter; by the discussion of material, literary, and social technologies; by the idea of the air-pump as “seventeenth-century ‘Big Science’”; by the problems with replication—when did an air-pump count as working, if you could only calibrate it to phenomena the very existence of which was in question?¹ Most of all, I was impressed and convinced by the balanced, “symmetrical” treatment of Boyle and Hobbes—evidently, the contrast between them was not one between reason and unreason.

The concluding chapter, on how Hobbes’s and Boyle’s proposed practices in natural philosophy were connected to the political context of Restoration society—matters of fact and the experimental form of life for Boyle and the assault on independent authority for Hobbes—blew me away in its elegance. When I am reminded by Azadeh Achbari’s survey of the reviews of the book that according to Richard Westfall this is a historically indefensible inflation of the dispute between Boyle and Hobbes, I nonetheless feel a strong impulse to preserve the abstract beauty of the thesis; displacing something Hobbes said, “it would be impossible to render the causes of wonderful effects without wonderful hypotheses” (quoted on p. 362). What Shapin and Schaffer offer us is a proposal about historical explanation as much as it is a contribution to our knowledge about natural philosophy in the late 1600s. And perhaps such an intervention

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¹ For the quotation see Steven Shapin and Simon Schaffer, *Leviathan and the Air-Pump: Hobbes, Boyle, and the Experimental Life* (Princeton, N.J.: Princeton Univ. Press, 1985), p. 38 (hereafter references to this work will be given in the text in parentheses).

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in our beliefs about history and philosophy of science cannot be satisfactorily resisted by simply stating “matters of fact.” Perhaps you shouldn’t need a direct quotation to support the claim that “for Hobbes, the rejection of vacuum was the elimination of a space within which dissension could take place” (p. 109).

Engaged as my reading was, it was “an interested and an historically informed reading” (p. 81), conditioned by rather crude resources and analyses. I kept looking out for sentences that proved that Shapin and Schaffer had transgressed some orthodoxy, and I found them: at points that were surely crucial (and mainly in the first and last chapters), they would agree with Hobbes that “knowledge, as much as the state, is the product of human actions” (p. 344) or that “he who has the most, and the most powerful allies, wins” (p. 342). Or that “truth” and “objectivity” could be seen as historical products or as actors’ judgments (p. 14). Aha! Between all the careful historical and textual analyses and the eye-opening and horizon-expanding interpretations, these two gentlemen were still openly getting on with “the job of doing the thing” (p. 15)—the thing meaning the enterprise of claiming that science was not [those things I knew it was]. In their symmetrical treatment of Boyle and Hobbes, they forgot that the bare facts of what happened in the air-pump—that nature itself—could sometimes break the symmetry.

Actually, I have to admit, this conclusion stayed with me, and I mostly forgot about the whole motif of the identity of the problems of knowledge and social order until, working on my Ph.D. thesis on the philosophy of historiography of science, I saw Bruno Latour enlist Shapin and Schaffer as powerful allies.² And with Latour, the social had explicitly been given a different meaning—as had “symmetry.” If the air-pump itself counted as Boyle’s ally, then how could I maintain that Shapin and Schaffer’s balanced treatment of Boyle and Hobbes led them to neglect the decisive role of physical phenomena in science? Come to think of it, how could I ever have drawn that conclusion, given that I seemed to recall a long chapter on leaking pumps (p. 233), on copper or wooden valves (p. 237)—on all kinds of “resistance of the world”?

I did not reread the book, and my memories of it came to be replaced or selectively enforced by the countless references to it in other books and articles. What Frank Ankersmit said about the impact of the overwhelming number of commentaries on Hobbes’s *Leviathan* on our reading of the text itself has become applicable to *Leviathan and the Air-Pump* as well: “owing to all the interpretations, the text itself became vague, a watercolor in which the lines flow into one another.”³ How to talk about such a classic? Does it even matter if I read the book, if I can’t disentangle my own reading of it from all other encounters?

For an answer to this question we may turn to the great twentieth-century theoretician of interpretation. According to Hans-Georg Gadamer, the humanities are distinct from the natural sciences precisely because of the historical character of understanding. In his dismissal (for a dismissal it was) of the natural sciences as being without a real history, he is undoubtedly mistaken. Shapin and Schaffer help us see that scientific reason and method do not transcend historical contingency: “there was nothing self-evident or inevitable about the series of historical judgments . . . which yielded a natural philosophical consensus in favour of the experimental programme” (p. 13).

But within if not outside of the humanities, Gadamer helps us to reflect fruitfully on what it means to say that a work is a classic: a classic is the ideal case of the general historical mediation between past and present, where all understanding means inserting yourself in a tradition of re-

² Bruno Latour, *We Have Never Been Modern* (Cambridge, Mass.: Harvard Univ. Press, 1993); and Latour, “Postmodern? No, Simply Amodern! Steps Towards an Anthropology of Science,” *Studies in History and Philosophy of Science*, 1990, 21:145–171.

³ Frank Ankersmit, “Historiography and Postmodernism,” *History and Theory*, 1989, 28(2):137–153, on p. 137.

ception. If a work is a classic, this does not mean that we need to dig through layers of history in order to retrieve it; it means that history—in this case, the development of our discipline—has gone in such a way that the work can still speak directly to us. Understanding is historical, for Gadamer, precisely because it moves between historically informed expectations and experience—that is, the confirmation or defeat of those expectations. This, Gadamer says, is precisely the procedure modern science began to formalize in the seventeenth century.⁴

It is not the vacuum, but experiment itself, that is the space in which the whole of our prejudices can be tested, in which dissension can take place. This, it turns out when I finally reread the book—after Latour and with hermeneuticist prejudgments—is the theme of *Leviathan and the Air-Pump*. “Our subject is experiment” (p. 3). The theme is the question of how to harmonize novelty with existing order. For Boyle, this is by allowing novel experiences in only consciously, carefully, publicly, and with due deference to the restrictions of their explanatory reach.

Nature does not break the symmetry simply by being the other to the social world; but for Boyle it can bring relevant news, wherefore we may ask “what new experiment or matter of fact Mr. Hobbes has . . . added to enrich the history of nature” (p. 174). For Hobbes, on the other hand, there is no actual space in the plenum—there are no empty receivers (pp. 149, 374). A proper philosophical system is already whole and full, and external news is unlikely: “not every one that brings from beyond seas a new gin, or other jaunty device, is therefore a philosopher” (p. 128). It is no use building fancy instruments just to “get as far as Hobbes had already progressed” (p. 142).

Shapin and Schaffer may have concluded that Hobbes was right about the social nature of knowledge, but they are proper Boyleans in this sense at least: they believe that new things may be learned about a system from sources that seem to be external to it. For as easy as it is now to believe that experiments can teach us something about space, it is still hard to believe, with Kuhn, that history can teach us about science;⁵ that Shapin and Schaffer’s historical case study, with its “prolix” and technical sociological jargon, is capable of telling us something novel about “the nature and status of experimental practices and their intellectual products” (p. 3). Or that (re)reading a classic that you have read about so often is going to be worth the time.

⁴Hans-Georg Gadamer, *Wahrheit und Methode* (1960; Tübingen: Mohr Siebeck, 2010), pp. 295, 352–356.

⁵Thomas S. Kuhn, *The Structure of Scientific Revolutions* (Chicago: Univ. Chicago Press, 1962), p. 2. It is tempting to enlist Hobbes as an ally here by abusing another statement of his (deriving from Aristotle) and to say that “to be ignorant of motion is to be ignorant of nature” (*Leviathan and the Air-Pump*, quoted on p. 379).