

Comment

The Epistemology of Civility and the Civility of Epistemology

Alex Wellerstein

Leviathan and the Air-Pump has been regarded as a classic since before I knew how to read. Even when I was in graduate school, it was one of those works that you were assumed to have read at least once before deciding to become a historian of science. There were precious few of those: Thomas Kuhn's *Structures of Scientific Revolutions*, of course, but not too many others were considered so obvious that they didn't need to be assigned, because they were perpetually part of course discussions.

Such must be both a blessing and a burden to the book's authors. "Classic" can mean "uncontroversial," and it can even mean "unessential"—since the ideas may have been so thoroughly absorbed into the mainstream of the discipline that they are either uninteresting to state explicitly or fun only when one decides to be a contrarian about them, using a critique of them as a springboard for one's own approach.

Reading *Leviathan* today, I am struck by the patience of the authors in their thick description of Boyle's experiments and their close—almost too close—reading of Hobbes's objections. Such thick, close readings have become almost a cliché in our discipline at this point. These are the parts of the book that I feel, as someone who is used to this sort of move, could be tightened up in retrospect. Do we really need to have the tacit knowledge aspects of Boyle's air-pump labored over in such depth? But, of course, I never read the Harvard case study or knew any Boyle—or any air-pump—other than Shapin and Schaffer's. For me, it was more surprising to learn that people had studied these things prior to Shapin and Schaffer's book, so dramatically has their work altered the landscape.

There are other aspects that, reading the book over again, appear in a kind of odd or antiquated dress, terms of art having changed in thirty years. Should we call all evidentiary and literary practices "technologies," particularly given ongoing historiographic anxieties over whatever "technological" might be taken to enlighten in a given context? I believe I understand the intent of such a label: it appears to elevate what might be denigrated as mere rhetoric to an importance at least as lofty and crucial as that of the data-producing machines that typically get the lion's share of credit in science, in the craft of making knowledge. Today, it seems entirely straightforward to scholars that practices of publication, of complex description, and of presentation and interpretation of evidence are all just as vital to the persuasive dissemination

Alex Wellerstein is Assistant Professor of Science and Technology Studies at the Stevens Institute of Technology. His research focuses primarily on the history of nuclear weapons and institutions of secrecy. He is also a computer programmer and web developer. He is the author of "Restricted Data: The Nuclear Secrecy Blog" and is a frequent contributor to the *New Yorker's* "Elements" blog. His NUKEMAP, an online nuclear weapons effects simulator, has been used by millions of people globally. College of Arts and Letters, Stevens Institute of Technology, Hoboken, New Jersey 07030, USA; awellers@stevens.edu.

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of Boyle's work as the air-pump itself was—arguably even more so, given the tetchiness of the machine. Again, this “obviousness” is itself in no insignificant way a product of the success of *Leviathan*. What was once potentially objectionable has been rendered run-of-the-mill.

What felt most “fresh” to me about *Leviathan* on a recent reading was its arguments about the interrelatedness of epistemology and civility. For both Boyle and Hobbes, the question of how good knowledge is made is deeply linked not just with social conditions (now a common-enough idea in our field) but in the intricacies of how “proper” people agree that claims and evidence are meant to be evaluated. Which is to say, the goal is to avoid people simply shouting each other down or taking to more violent measures such as those that were associated with both political and religious disagreements in both Hobbes's and Boyle's living memory. What *Leviathan* does extremely well is to point out the deep connections between these epistemological and social systems: the conditions required for scientific persuasion are, to some degree, the conditions necessary for peaceful political resolutions as well.

That Hobbes and Boyle disagreed over exactly what this civility ought to look like (Hobbes notably accusing Boyle of being clubby and dishonest about the alleged transparency of his approach) does not detract from the fact that both saw knowledge and social interaction as being crucial. This feels much more subtle than the typical overtures about science and its relationship to society or politics, not only getting around the often clumsy externalism/internalism debates but proposing a much more fine-grained interaction between people, communication, and instrumentation.

And this is also a place where *Leviathan and the Air-Pump* feels relevant so many years later. The Internet seems to have brought with it a radical destruction of the traditional social structures of civility with regard to knowledge, leading to an anarchic mix of truth claims, aspersions against character, explicit politicization of claims to natural knowledge, and a goodly number of routine threats of violence. “Hobbes was right,” indeed—perhaps never more so than about the early twenty-first-century World Wide Web, where disputes over knowledge claims can be, and have been, implicated in real-world instabilities.

The authors, I am aware, would probably downplay the importance of their singular volume, and as historians of knowledge we are all well aware of the tendency to elevate individual works to the category of “seminal” when they were actually expressing what was more widely “in the air.” Still, it is hard not to see *Leviathan* as a “killer app,” as we might say today, for many of the analytical methods advocated by the Sociology of Scientific Knowledge and the Strong Programme. It provides a canonical template for how to investigate competing claims, with the insight that claims to knowledge are often not *merely* claims about knowledge but also claims about how knowledge is to be created, critiqued, and policed.

Similarly, it is hard to read the book without having in mind some of the clever critiques. Bruno Latour's argument that the work lacks a “fully” symmetrical approach is somewhat compelling. There is a sense (though perhaps not as dramatic as Latour makes it appear) that politics is taken for granted as a resource for both Boyle and Hobbes, to dip into as they see fit, as opposed to an entity that is being co-produced (as some might put it today) alongside the claims about the natural world. Still, I can see why Shapin and Schaffer, in their new introduction to the 2011 edition, would wince a bit at the half-compliment of this approach: they *almost* got it right. The original book stands up well even without this “fully symmetrical” reinterpretation, and the reinterpretation itself brings its own complications and criticisms.¹

¹ Bruno Latour, *We Have Never Been Modern* (Cambridge, Mass.: Harvard Univ. Press, 1993), pp. 24–27 and throughout; and Steven Shapin and Simon Schaffer, “Up for Air: *Leviathan and the Air-Pump* a Generation On,” introduction to *Leviathan*

In reading Azadeh Achbari's summary of contemporary reviews of *Leviathan*, I was struck by how many seemed to regard it as a classic from the beginning, putting it on a par with *Structure*. Rose-Mary Sargent's criticism that the book switches the question it asks—from being about “experiment” to being about “polity”—had occurred to me as well when reading it. A generous interpretation would be to say that the book starts out being about situating experiment but that situating experiment correctly means, in the end, reducing its apparent importance from *the* driver of change to one of many resources invoked or attacked by those on the various sides. But whereas Sargent found that this move had made *Leviathan* irrelevant for philosophy, I would consider the argument actually quite crucial: if conditions to develop knowledge depend on social organization, then what does that say about what the object for philosophy of science ought to be?

The criticism that Shapin and Schaffer might have overstated their case about the stakes of Hobbes and Boyle's debate is, of course, to be expected—this is still the boldest part of the argument, still radical and dangerous feeling after all these years. I am not a historian of the seventeenth century, so I cannot chime in on that aspect with any certainty, but I will note again that, in the present historical moment, arguing that questions of how knowledge claims are created, vetted, and mobilized are somehow deeply linked with questions of polity seems far less radical. The early twenty-first century appears, at first glance, to be a riot of epistemological incivility. Expertise is diminished and doubted, alternative epistemological movements have risen, with strong political attachments, and basic questions of methodology appear to be entirely up for renegotiation both inside and outside of the scientific enterprise. Anyone who has ever attempted to edit entries on controversial topics on Wikipedia in a sustained way knows that a majority of content-based arguments eventually devolve into arguments about the proper modes of behavior and speech—trick your opponent into violating an unseen rule of civility and you've soon got one less opponent.²

The emerging Internet model of expertise (and anti-expertise) does, distinctly, have the feel of a new form of “social life”—for both better and worse. If one takes Hobbes to be saying that the Boylean model was not going to result in perfect resolution of deep questions of knowledge because it was dishonest about its own social dimensions, then one might see the current epistemological mash, where truth and falsity are routinely treated as dependent on political preconditions, as his ultimate, if depressing, vindication.

and the Air-Pump: Hobbes, Boyle, and the Experimental Life, 2nd ed. (Princeton, N.J.: Princeton Univ. Press, 2011), pp. xi–l, esp. pp. xxxii–xxxiii.

² Non-Wikipedians curious about the role of civility in Wikipedia's epistemological construct should read the contents of “Wikipedia:Civility,” one of the “five pillars” of Wikipedia, which defines quite narrowly the allowed-upon modes of discourse. Failure to comply can lead to “banning” from the site. Wikipedia authors, “Wikipedia:Civility,” <https://en.wikipedia.org/wiki/Wikipedia:Civility>.