

Steven Shapin, *A Social History of Truth* reviewed in *TECHNOLOGY & CULTURE* 38 (1997): 238-40.

Most historians treat the notion of “truth” rather loosely; some philosophers treat “truth” very seriously. It is Steve Shapin’s signal achievement to engage historians, philosophers, and sociologists with his account of the collective nature of truth-telling and knowledge-making. Shapin’s aim is not conventionally “interdisciplinary,” but rather to engage a set of philosophical and sociological problems through detailed historical analysis. The case at hand is the gentlemanly origins of English experimental philosophy in the 17th century. The characters in the Royal Society’s circle range in social standing from Robert Boyle, a younger son of the vastly wealthy first earl of Cork, through Robert Hooke, the celebrated microscopist who began as a paid laboratory assistant, and down to the anonymous technicians responsible for building and operating the new experimental machines, including Boyle’s famous air pump. Shapin’s sharply etched and richly drawn collective portrait of a scientific community wrestling with how accurate knowledge about nature can be known is a rewarding read. But not a light one.

The argument of this ambitious book can be stated concisely. Constituting a body of reliable knowledge requires identifying trustworthy agents. Working solutions to problems of credibility and trust were found in the practices of “gentlemanly culture.” These practices were the foundation of the new empirical science of seventeenth-century England. Gentlemen, unlike courtiers or merchants or yeomen, were deemed to be truthful owing to their material independence and moral integrity. By possessing freedom of action, thanks to annual income of £280 or more, gentlemen literally had the freedom to tell the truth. (By contrast, persons in dependent states, including women and servants, were deemed unreliable due to their dependent status.)

Yet, as Shakespeare’s Hamlet put it, “to be honest, as this world goes, is to be one man picked out of ten thousand” (p. 101). Some gentlemen lied; truthfulness was an ideal. Indeed, gentlemanly culture possessed a rich vocabulary for speaking out about truthfulness and lying. Gentlemen recognized not only the material and structural reasons why tradesmen or statesmen might be forced to lie, but also the several degrees of gentlemanly untruthfulness. In the extreme, an accusation of mendacity led to the duel. The elaborate and subtle means available to gentlemen for expressing skepticism, modification, and even negation, short of “giving the lie” that provoked a duel, was one cultural resource imported into experimental natural philosophy. Continuing the scientific conversation, for Robert Boyle and the Royal Society, took precedence over insisting on the truth. This character distinguished English experimental philosophy from the rigorous deductive logic of Cartesian science on the Continent. Revealing the workings of the gentlemanly culture of truth-telling -- in the career of Robert Boyle, the evaluation of testimony from diverse sources, and the conduct of observational and experimental science -- is the achievement of the book’s central chapters. (Readers will wish to supplement Shapin’s conclusion, relating early-modern truth-telling to present-day scientific practice, with Theodore Porter’s *Trust in Numbers* [Princeton, 1995].)

Historians of technology indifferent to practical epistemology will nonetheless wish to examine chapter 8, “Invisible Technicians.” Here Shapin depicts skilled technicians designing, building, maintaining, and operating experimental apparatus. Occasionally, they did even more. Consider Denis Papin, probably best known to this journal’s readership as the inventor of a steam engine. Coming from Christiaan Huygens’s laboratory in Paris, Papin worked for Robert Boyle from 1675 to 1679, then assisted Robert Hooke, the Royal Society’s curator of experiments. Shapin makes the provocative claim that it was Papin and not Boyle who designed, conducted, and interpreted a certain set of air-pump experiments published under Boyle’s name in 1680; “Boyle’s law” was the outcome. Shapin even uncovers the activities (and names) of the “operators” of experimental apparatus. Indeed, the ample presence in London of skilled operators, lens grinders, metal borers, glass blowers, and instrument makers made possible the practice of experimental science. Even Oxford lacked the “dextrous artificers” needed for air-pump experiments (p. 380).

Finally, in dealing with the ideals and practices of gentlemanly culture, Shapin displays a sophisticated conception of culture that should be studied by anyone concerned with the relation of technology and culture. Whereas Shapin’s earlier co-authored book, *Leviathan and the Air-Pump* (Princeton, 1985) was a self-conscious exercise in the sociology of knowledge, *A Social History of Truth* displays an historical anthropology of knowledge. Culture, in this view, is neither a passive template nor a set of fixed rules. Culture is a set of resources and practices that actors, individually and collectively, may deploy. Attention to this view could invigorate debate on the perennial question of technological determinism. Besides, this book offers supreme scholarly value. Where else can you get 1,306 footnotes and a 1,000-item bibliography at this price?

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