



An 18th-century chemistry laboratory. "This plate reproduces one of three engravings which traditionally are considered to represent the interior of the *Golden Phoenix*, the laboratory established in . . . London by Ambrose Godfrey Hanckwitz in 1707. [This] illustration of what was probably the best equipped laboratory of its kind at the beginning of the eighteenth century reveals the prominence of equipment devoted to operations by fire, concerning which Hankwitz says, 'for the space of about forty years I have most frequently busied myself in Operations

and Essays relating to Productions and Actions of Fire, and of Heat and Cold in their several Degrees, having made repeated Tryals of the different Actions of both dry and liquid Bodies upon each other, from the slightest intestine Motion, or *Effervescence*, to the most vehement Ebullitions, so as not only to occasion Light and Petillation, but to break out into sudden and violent flames; all which Observations have greatly contributed towards my better perfecting that wonderful Preparation, the *Phosphorus Glacialis*.'" [From *The Life of the Honourable Robert Boyle*]

Facts about Boyle

The Life of the Honourable Robert Boyle, F.R.S. R. E. W. MADDISON. Taylor and Francis, London, 1969. xxii + 332 pp. + plates. £9.10.0.

Like every intellectual discipline, the history of science pursues a middle course between contrary extremes. On one side lies the Scylla of abstract conceptualization, a maelstrom which swallows the details of individual endeavor as it displays the rational structure of scientific thought. Maddison's *Life of the Honourable Robert Boyle, F.R.S.*, gives Scylla a wide berth, and in so doing runs headlong against the opposing rock of Charybdis, filial devotion to biographical details of every sort without regard to the light they may cast on Boyle's scientific achievement. Maddison is wholly explicit about his purpose. In the preface, he renounces any attempt to analyze the content of Boyle's work or to discuss his significance in the history of science. He is concerned rather to describe the events of Boyle's life and to provide a guide "through the manifold aspects of his life and works."

I was, I confess, unprepared for the

full extent of the author's self-denial. Taking as his model the biography that Thomas Birch composed in the 18th century as a preface to the collected edition of Boyle's *Works*, he intends not to supplant Birch, but merely to supplement him. I have been laboring under the delusion that the history of science has made some progress of late in understanding the 17th century and that one might reasonably aspire to surpass the achievement of the 18th century in that respect. To say as much, however, is implicitly to introduce the considerations that Maddison has explicitly excluded.

It is legitimate to exclude them? I am prepared to argue that it is not. Despite Maddison's phrase about the "manifold aspects" of Boyle's life, I cannot immediately recall a life more uneventful if his role in the history of science is excluded. No romantic interest spiced Boyle's existence. He played almost no role in the public events of his day. Although he lived through the civil war, the interregnum, the restoration, and the revolution, and belonged to a family inevitably thrust forward by its wealth and power, he studiously avoided prominence and even commitment

in these events and devoted his life, chemistry aside, to nursing his hypochondria and avoiding strong oaths. Son of the Earl of Cork he may have been; we should have forgotten him long ago had he not also been the father of chemistry. If now and then one senses a somewhat leaden quality in Maddison's biography, it may derive from the fact that he has deliberately chosen to ignore the one element of excitement in Boyle's life.

Perhaps it is unfair to cavil with an author over his own definition of the problem he sets himself. Let me give Maddison his due. With some diligence he has compiled a considerable body of information about Boyle, and there is every indication that his scholarship is reliable. Future investigations of Boyle are bound to find his work a valuable reference tool, a guide to Boyle's life and work as Maddison suggests. It is not likely to be mistaken for the definitive biography, but Maddison has eschewed such ambitions.

RICHARD S. WESTFALL

*Department of the History and
Philosophy of Science,
Indiana University,
Bloomington*