

Boyle Studies: Aspects of the Life and Thought of Robert Boyle (1627–91).

Michael Hunter.

Farnham: Ashgate, 2015. xiv + 244 pp. \$124.95.

For almost three decades, Michael Hunter's work has been a necessary starting point for students and scholars of Robert Boyle and other founding fellows of the Royal Society of London. His many publications, and his editions (with collaborators) of Boyle's printed works and correspondence, have provided an intellectual framework and an invaluable set of resources. *Boyle Studies* brings together material published since 2004, plus two new chapters and another that first appeared in French. The nine chapters form a coherent set, in part because Hunter has inserted signposts and cross-references, linking discussions across the volume. In the introduction, he reflects on his own understanding of Boyle in relation to past and current scholarship, continuing to see Boyle as "a convoluted figure" (5) and preferring this to "the lifeless lay saint depicted in the traditional historiography" (131), also found in Thomas Birch's mid-eighteenth-century account (3–4). While acknowledging the insights of Steven Shapin and Simon Schaffer, Hunter eschews the image of Boyle as the self-assured aristocratic gentleman.

A key moment in Boyle's intellectual development was the shift in his interests from ethical writing and meditation to experimental science. Hunter's deep knowledge of Boyle's papers allows him to pinpoint this moment to March 1649, as evidenced by the sudden change in the content of Boyle's "workdiaries," the paperbooks in which he made notes from books, observations, and experiments, usually dictating these to amanuenses (34). At this time the topics shift "from moral aphorisms and literary extracts to recipes and observations concerning chemical processes" (36). Although Hunter refers to this moment as a "Great Divide" (51), he does not postulate a radical alteration of Boyle's personality; indeed, some of his spiritual preoccupations continued. Chapter 5 explores Boyle's recourse, under the guidance of Thomas Barlow, to the discipline of casuistry as a way of managing religious doubts and debilitating scruples. Hunter suggests that Boyle's inability to make definite decisions on moral issues transfers into his publicly

voiced diffidence about general theories in science. This resonates with the striking observation of Bishop Gilbert Burnet who, recalling conversations with Boyle, remarked that “He made Conscience of great exactnes in Experiments” (123).

Chapters 3, 6, 7, and 9 show Boyle as a figure engaged with what Robert K. Merton, in his writings from the 1940s, defined as the scientific ethos — a notion that included protocols of communication and shared standards of inquiry. Boyle was one of the first to use a form of questionnaire (called “queries” or “inquiries”) to elicit new information. His “General Heads for a Natural History of a Country” of 1666 became influential as a template for data collection in Baconian natural and experimental histories. Although he recognized the risk that some responses to these inquiries could be unreliable, he had confidence in the direction and structure offered by this method. Like Francis Bacon, he listed desiderata for future research. Equally significant, but less well known, are the interviews Boyle conducted with various travelers able to inform him about exotic places around the world. In the final chapter, Hunter offers the first full account of these interviews, based on workdiaries 21 (from the late 1660s) and 36 (from 1685 onward). These various initiatives look forward to the norms of the modern scientific community; however, Hunter reveals a tension between Bacon’s call for open communication and Boyle’s reservations concerning full disclosure of data and, one might add, his elaborate justifications of this stance. At the request of the London intelligencer Samuel Hartlib (with whom he began to correspond in early 1647), Boyle wrote an essay titled “An Invitation to free and generous Communication of Secrets and Receits in Physick,” published in 1655. Yet in his diary for 1658, Hartlib recorded that although Boyle had heard of a way of growing very large apples, it could not be circulated because “Mr Boyle is bound to secrecy and binds others to it” (133).

Hunter displays a mastery of archival material, a nuanced account of Boyle’s intellectual preoccupations, and attentiveness to the conceptual problems confronted by any historian trying to understand a complex early modern person — in this case, one of the leading natural philosophers of the late seventeenth century.

Richard Yeo, *Griffith University*