

Mark A. Waddell, *Magic, Science and Religion in Early Modern Europe*

Cambridge: Cambridge University Press, 2021. Pp. 220. ISBN 978-1-1083-4823-2. £69.99/£19.99 (hardback/paperback).

Neil Tarrant

University of York

Mark A. Waddell's *Magic, Science and Religion in Early Modern Europe*, published in Cambridge's New Approaches to the History of Science and Medicine book series, offers a survey of the relations between magic, science and religion. It takes an unashamedly – and highly welcome – history-of-ideas approach to its subject matter, tracing the multiple interconnections between these three areas of human activity in the early modern period. Waddell also offers an account of the manner in which, and the reasons why, they diverged in the eighteenth century. During the course of his discussion, Waddell provides succinct and lucid accounts of key early modern ideas and the work of such important historians as Keith Thomas, Steven Shapin and Simon Schaffer. It therefore offers an accessible, contextualized introduction to the thought of such individuals as René Descartes, Pierre Gassendi and Theophrastus von Hohenheim (Paracelsus); the importance of their work; and insights into how these issues have been interpreted by scholars.

The first chapter opens with the story of Marsilio Ficino being distracted from translating the works of Plato by the seemingly more pressing task of rendering the work of Hermes Trismegistus into Latin. This nod to Frances Yates's classic *Giordano Bruno and the Hermetic Tradition* (1964) sets the tone for much of the book that follows. Although it discusses important themes, the choice of subject matter is often unsurprising and the approaches used to study them are well established. Subsequent chapters consider witchcraft and demonology; the relations between medicine, and magic featuring studies of Andreas Vesalius and Paracelsus; a survey of cosmology from Copernicus to Newton; an account of the mechanical philosophy that presents the ideas of Descartes and Gassendi; and a discussion of experimental culture of the seventeenth century. The final chapter, dealing with the Enlightenment, draws together many of the threads of the earlier chapters. For example, drawing on John Henry's account of the fragmentation of Renaissance magic (which was influenced by William Newman and Lawrence Principe's discussion of the 'decline' of alchemy), Waddell suggests that the practitioners of the new sciences of the seventeenth and eighteenth centuries appropriated many magical practices whilst disparaging others. In this manner, older maps of knowledge were redrawn, and once respectable ideas and practices were placed outside the acceptable canons of elite intellectual culture.

Although Waddell's work offers a clear introduction to important themes and enduring historiographical debates, it is difficult to determine its intended audience. A researcher looking for an overview of new approaches or a novel synthesis is likely to be disappointed. The chapter on hermeticism and Kabbalah, which owes much to Yates, is clear and useful, but as the work of such scholars as Nicholas Weill-Parot, Jean-Patrice Boudet, Frank Klaassen, Claire Fanger and Sophie Page has shown, they were far from the only important traditions of learned magic during the medieval and early modern periods. The chapter on experiment is again clear, but it is deeply indebted to Shapin and Schaffer's pioneering work from the 1980s and Peter Dear's from the 1990s. The

bibliographical essays, meanwhile, direct readers to classic works by Thomas Kuhn, Arthur Koestler, Walter Pagel and Pierre Duhem, but feature relatively few works from the last ten years. Since it offers a clear introduction to both early modern ideas and the arguments of influential historians, this book would no doubt be of use for students approaching these materials for the first time, but it also occludes some important historiographical debates. Throughout the text, Waddell uses terms such as the ‘Scientific Revolution’ and ‘witchcraft’, employing them unproblematically to define and analyse events in history, despite the fact that many historians have challenged their suitability. These debates are neither new nor obscure, and Waddell’s decision not to acknowledge them is surprising and may limit his book’s value in the classroom as an introduction to modern approaches to the study of science, magic and religion.

doi:10.1017/S0007087422000085

Elena Aronova, *Scientific History: Experiments in History and Politics from the Bolshevik Revolution to the End of the Cold War*

Chicago: The University of Chicago Press, 2021. Pp. 256. ISBN 978-0-2267-6138-1. \$45.00 (hardback).

Alex Langstaff

New York University

The deep past is everywhere today. Just as new discoveries purporting to reveal hidden truths of our biological and psychological existence fill bestseller lists, historians continue to fret over how to constructively engage with this phenomenon. Elena Aronova argues that ‘the history of the history of science *itself* is instructive for today’s repositioning of history vis-à-vis the sciences’, revealing interdisciplinary contexts, techniques and political programmes of prior interactions (p. 6, original emphasis). *Scientific History* searches for these encounters in the Soviet socialist project. Ranging from 1880s Paris to mid-1960s Moscow, the book is bursting with different connections, but its locus is the Second International Congress of the History of Science, organized in London in 1931. Aronova follows historians, geneticists and librarians radiating towards and away from this conference in six discrete chapters. Ultimately, the book hinges upon the different political functions that they saw their histories of science serving.

Chapter 1 traces the influence of Auguste Comte’s vision of progress-as-synthesis behind *fin de siècle* attempts to unify science through the history of science. It focuses on Henri Berr, who laid the groundwork for the *Annales* school and founded the International Center of Synthesis in 1925. Aronova argues Berr and George Sarton were motivated by the internationalist and pacifist possibilities of the history of science. Chapter 2 covers the Russian valence of this synthesizing impulse. Here, Nikolai Bukharin operates as the Marxist counterpart to Berr. Bukharin oversaw the Soviet Commission on the History of Knowledge after his demotion by Stalin in 1930, and was a star participant at the 1931 London congress. Aronova persuasively argues throughout