

670 Book Reviews: Modern (Nineteenth Century to 1950)

Seymour Mauskopf is Professor Emeritus of History at Duke University, where he taught history of science for almost half a century. His main area of research is the history of chemistry. His most recent publication is "William Barlow and the Determination of Atomic Arrangement in Crystals" (Annals of Science, 2015).

William R. Woodward. *Hermann Lotze: An Intellectual Biography.* (Cambridge Studies in the History of Psychology.) xxii + 496 pp., figs., app., index. Cambridge: Cambridge University Press, 2015. \$120 (cloth).

William Woodward's biography of the philosopher, physician, natural scientist, and psychologist Hermann Lotze (1817–1881) is the first complete intellectual biography of Lotze. It includes an overview of his theories, as well as of his life path. As the title suggests, this biography is oriented toward classical intellectual history and the history of ideas, rather than toward the new(er) cultural history and discourse analysis. The book is based on primary sources and archival material, listed at the end of the book (although a comprehensive bibliography including secondary literature is missing). Moreover, it includes a chronology of Lotze's life and an index, which make it perfect for a quick consultation (although summaries at the end of each chapter would have been even more advantageous for the reader).

In the introduction, in addition to explaining the aim of his book, Woodward tells the reader about his methods. In particular, he pays attention to categories from gender studies (e.g., regarding the construction of masculinity) and compares some aspects of Lotze's thought with feminist philosophy (in Ch. 11, where the author recognizes some feminist insights in Lotze's thought).

This biography, like Lotze's work, touches on disparate issues: from idealist philosophy to cosmopolitan ethics, from pathology and physiology to mathematical analysis, from the conception of time and space to political ideas, from geometry to the humanities and the relation between nature and culture, from metaphysics to aesthetics, from logic to theology. Woodward demonstrates skill in dealing with all these fields in a consistently deep manner. He devotes special attention to the reception of Lotze's work both in Germany and in the Anglo-Saxon intellectual landscape, considering philosophers such as William James, continental philosophers such as Wilhelm Dilthey, Wilhelm Windelband, and Carl Stumpf, and analytical philosophers such as Bertrand Russell and Charles Peirce, and showing how their thinking is related to or indebted to Lotze's ideas.

Woodward presents Lotze's intellectual biography as being situated between German idealism and the positivist worldview of the natural sciences, but he also contextualizes it in the framework of the professionalization of philosophy and the emergence of psychophysics. The book is divided into three main parts. The first part, composed of six chapters and covering the years from 1817 to 1843, focuses on the intellectual influences during the time of Lotze's studies and considers the role of both medical practice and philosophical thought in his intellectual formation. The second part, composed of five chapters, deals with Lotze's thought in the years between 1843 and 1864. It suggests an interpretation of Lotze's position in philosophical anthropology as a disguised proposal for political reform, and of his secular theology as displaying similarities to the position of contemporary feminist philosophy. Moreover, it presents Lotze's critique of Fechner's and Weber's measurement paradigm (pp. 206–210) and his alternative to psychophysics, namely, the "physical-mental mechanism." The third part (1864–1881) includes four chapters that deal with Lotze's theories of aesthetic, ethics, logic, and metaphysics, as well as with the reception of his thought at length. In particular, Woodward lets the cosmopolitan features of Lotze's ethics emerge. He highlights Lotze's conception of aesthetics as precursor of Dilthey's theories, who became his successor in Berlin. In fact, Lotze arrived in Göttingen in 1844 as successor to Friedrich Herbart and then became a critic of Herbart, trying "to make aesthetics a science, while preserving the world view of idealism" (p. 341). The book is rich in comparisons, one of which is the comparison between Lotze's and John Dewey's theory of inquiry, including references to Dewey's critique of Lotze's logic (p. 365). The three parts are named according to the sociopolitical constellation prevailing in the respective period, namely,

“Youth in Biedermeier,” “Emerging Bourgeois Liberalism,” and “The System in the Bismarck Period.” However, what is doubtlessly at the center of each part is Lotze’s thought, rather than its political and social context.

Instead of ending with a conclusion, the book ends with a “postscript,” in which the author remarks that it took one and a half centuries to uncover the feminist and postcolonial ideas *avant la lettre* in Lotze’s philosophy. However, the numerous references to twentieth-century philosophers such as Habermas (pp. 292 ff.), Heidegger (pp. 298–299, 360), and feminist philosophers appear quite questionable from a historical point of view: one wonders whether it is useful and relevant to understand Lotze by comparing his thought to the feminist critique of Habermas (pp. 297 f.), or to say that “it foreshadowed Heidegger’s ‘originative thought’” (p. 298). Nevertheless, this monograph, the fruit of a lifelong fascination with Lotze, is a valuable work and will be helpful to students, scholars, and anyone interested not only in the history of psychology but also in the history of philosophy and of the sciences.

Laura Meneghello

Laura Meneghello teaches in the History Department of Justus-Liebig-Universität Gießen, where she held a Graduate Centre for the Study of Culture scholarship. She has submitted her Ph.D. thesis, titled “Jacob Moleschott: Science, Politics, and Popularization in Nineteenth-Century Europe.” After studying in Venice, Paris, and Utrecht, she published articles on the history of science in English and German.

Finn Aaserud; Helge Kragh (Editors). *One Hundred Years of the Bohr Atom: Proceedings from a Conference*. (Scientia Danica: Series M: Mathematica et Physica, 1.) 560 pp., illus., figs., index. Copenhagen: Royal Danish Academy of Sciences and Letters, 2015. \$60 (paper).

The authors of the essays featured in this outstanding collection are leading international experts on the history and philosophy of quantum theory who took part in a conference held in June 2013 at the Royal Academy of Sciences and Letters in Copenhagen to celebrate the centennial of “Bohr’s atom.” In three seminal papers published in 1913, the Danish physicist Niels Bohr expounded the principles of the first quantum theory of atomic structure, providing key physical, mathematical, and philosophical insights that were taken up by theorists in many other countries, eventually leading to the emergence of quantum mechanics. Bohr substantially contributed to each step of the further development of his initial ideas and is today remembered both for his ability in constructing physical-mathematical models of phenomena and for his acumen in exploring and reflecting upon the philosophical premises and consequences of theoretical research. In line with Bohr’s multifaceted talent, both the conference and the volume have been conceived with the aim not of celebrating, but rather of critically discussing the historical context, reception, and scientific and philosophical significance of Bohr’s work, including, but not limited to, the specific themes of his 1913 papers.

The authors featured in the volume have many years of experience in investigating the topics they deal with in their contributions, which therefore offer an ideal opportunity for engaging with in-depth, up-to-date discussions of historical, philosophical, and scientific issues related to Bohr’s work. The book is thematically structured in four parts, which address, respectively, the “The Quantum Atom: Origins and Popularization,” “Early Atomic Theory: Principles and Techniques,” “Philosophical and Contemporary Aspects” of Bohr’s work on quantum theory, and “National and Institutional Aspects” of the development and reception of Bohr’s atom. These four sections provide a useful framework for readers, but many themes are also featured across their boundaries, thus conferring further unity to the volume as a whole. Some contributions focus more closely on the figure of Niels Bohr, discussing the importance of his relationship with his wife Margrethe for both his personal and his scientific life (Heilbron, Aaserud), the way in which he interacted with other scientists or built upon their results (Pérez and Pié Valls, Na-