MIT Open Access Articles

Georgina M. Montgomery and Mark A. Largent, A Companion to the History of American Science. Chichester: Wiley Blackwell, 2016. Pp. xvii + 692. ISBN 978-1-4051-5625-7. £120.00 (hardback).

The MIT Faculty has made this article openly available. **Please share** how this access benefits you. Your story matters.

Citation: Scheffler, Robin Wolfe. "Georgina M. Montgomery and Mark A. Largent, A Companion to the History of American Science. Chichester: Wiley Blackwell, 2016. Pp. Xvii + 692. ISBN 978-1-4051-5625-7. £120.00 (hardback)." *The British Journal for the History of Science* 50, 2 (June 2017): 342–343 © 2017 British Society for the History of Science

As Published: <https://doi.org/10.1017/S0007087417000358>

Publisher: Cambridge University Press

Persistent URL: <http://hdl.handle.net/1721.1/116366>

Version: Author's final manuscript: final author's manuscript post peer review, without publisher's formatting or copy editing

Terms of use: Creative Commons Attribution-Noncommercial-Share Alike

Montgomery, Georgina M., and Largent, Mark A., *A Companion to the History of American Science*. Chichester: Wiley Blackwell, 2016. Pp. xvii + 692. ISBN 978-1-4051-5625-7. £120.00 (hardback).

From the perspective of historian of science in the 1970s, the history of science in the United States might well have constituted a minor thread in their reading. The field's focus on events before the 19th century and on the development of sciences in the United Kingdom and Europe easily diverted focus from the United States (as well as many other parts of the world). However, in more recent scholarship on the history of science, the United States is a major presence—a product both of a growing community of professional historians of science in the United States and of a broader shift within the field towards events in the twentieth century. As the history of American science has gained stature within the history of science, so too has it attempted to gain a place within American history writ large. Reflecting this ambition, Wiley Blackwell has commissioned *A Companion to the History of American Science* as part of a series of 'Companions to American History.' It is intended as a point of entry for those unfamiliar with the field as well as a reference for historians of science.

The collection consists of two types of essays: an alphabetically-arranged series of essays on different scientific disciplines and a series of essays, with no apparent thematic order, on different "topics" that emphasize the relationship of different sciences to American society. "Genetics," "Medical Genetics," and "Molecular and Cellular Biology" are disciplines, for example, while "Eugenics," or "Biotechnology" are topics. The essays reach back to the eighteenth century in some instances, but the focus of the collection is on the nineteenth and twentieth centuries. Both the disciplinary and topical essays within this reviewer's areas of competence did well in providing cues to important milestones and in illuminating historiographic questions. The bibliographic essays included with the overviews are also a very useful research tool.

Beyond these practical functions the *Companion* provides an opportunity to reflect on the rapid growth of the history of American science as a subfield within the history of science. The editors of this volume place their efforts in the third ‘wave’ of collections seeking to capture the unique character of the history of science in America. Prior iterations have included *The Sciences in American Context* (Smithsonian, 1979), *Historical Writing on American Science* (Johns Hopkins University Press, 1985), and *The American Development of Biology* (Rutgers University Press, 1991). After a point, single volumes could not contain the volume of scholarship produced on the history of science in the United States—a function of the vast expansion of science after the Second World War and the growing attention paid by historians of science to events in the late twentieth century, as highlighted, for example, by *Science in the American Century* (University of Chicago Press, 2013).

The emphasis on American science is more than the recognition of an active sub-field. The editors of the *Companion* foreground a cultural approach to the history of science, and the organization of their volume reflects their conviction that a distinct cultural ‘style’ marks the history of science in the United States. The entries are powerfully shaped by a commitment to the idea that the cultural dimension of science matters deeply to its practice and development—hence the importance of nationality as a descriptor rather than a mere locator. (p. 3) Following this emphasis, the volume contains frequent references to processes such as as professionalization, application, militarization, commercialization, or popularization. However, although it is certainly fair to argue that each of these processes follows particular national contexts, it is not especially clear how or why a particular process would be different in the case of American science than in the history of British, German, or Russian science. The occasional cross-national comparison may help highlight the contingency of processes that seem unremarkable, or inevitable, in a given national frame.

Placing the practice of science within its particular local contexts represents a major accomplishment for the history of science thus far. However, recent discussions of how to write the history of science field have reminded us of the importance of remaining aware of the need to seek out narrative strategies that avoid taking the frame of the nation-state for granted. This is certainly true of American science, which at first took root in the context of an expanding continental empire and later expanded in the context of series of global military conflicts—both hot and cold. A national frame might cause one to underestimate the transnational movements of scientific ideas and scientists that shaped American science, especially in the twentieth century. The development of physics and molecular biology, for example, cannot be understood absent an understanding of the flows of scientists dislocated by the prelude and aftermath of the Second World War (which, in fairness, the authors of these two entries on this topic in the *Companion* do mention).

A volume on the history of American science also raises the question of the disciplinary orientations of those who study science in the United States. As several contributors to the *Companion* note, historians do not hold a monopoly on the study of science in America, especially as the scope of historians expands to events in the later twentieth century. To what degree might the study of American science be informed by developments in the philosophy of science, science and technology studies, or historiographic innovations in American history (such as the study of capitalism or transnationalism) more generally? That one is left with these questions from paging through the *Companion*, however, is a sign of the service it does in capturing the extraordinary ferment in the history of American science and its importance not only to the history of science, but to the history of the United States as a whole. In addition to acting as a gateway into the history of science for American historians, the *Companion* will surely reward consultation by experts the history of science.

Robin Wolfe Scheffler

Program in Science, Technology, and Society

Massachusetts Institute of Technology