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GOWAN DAWSON, BERNARD LIGHTMAN, SALLY SHUTTLEWORTH, and JONATHAN R. TOPHAM, eds. *Science Periodicals in Nineteenth-Century Britain: Constructing Scientific Communities*. Chicago: University of Chicago Press, 2020. Pp. 424. \$55.00 (cloth). doi: 10.1017/jbr.2022.209

Science Periodicals in Nineteenth-Century Britain: Constructing Scientific Communities, edited by Gowan Dawson, Bernard Lightman, Sally Shuttleworth, and Jonathan R. Topham, is a magnificent volume that examines the relationship between nineteenth-century science periodicals and the readerships with which they engaged. Its premise is that there was (and is) nothing fixed about the genre of the scientific journal. While some nineteenth-century periodicals have survived into the present (*Nature*, most famously) it is a mistake to see the periodicals of the period groping toward the form in which science is published today. Rather than accept the nineteenth-century periodical as the precursor to the contemporary scientific journal, the authors of the contributions try to understand what the many forms scientific periodicals took in the period tell us about the readers they attempted to reach.

The richness of the nineteenth-century press presents opportunities and challenges for scholars of the period. The expansion of the press—prompted by improvements in writing, imaging, and printing technologies; changes to legislative frameworks, and improved literacy (in the broadest sense)—resulted in a highly competitive market. The resulting archive, fragmented as it is, affords a chance to study how communities were addressed in the period and how they addressed themselves. And because periodicals are serial publications, it also affords a chance to see how communities did this over time. As the Victorians themselves well realized, however, the problem comes with navigating such a large and uncompromising mass of material.

In their introduction to the book, Dawson and Topham recognize both opportunities and challenges. While scholars readily accept the notion that one function of scientific periodicals from the period was to authorize scientific knowledge, they argue that the important role they played "in the development and functioning of more or less coherent collectives within the sciences" (4) has been neglected. To remedy this, the volume offers first a section on how new formats altered the way periodicals conceived of their readerships, then two final sections that contain "samplings and soundings" (5) from different sciences. The use of the phrase "samplings and soundings" is a nod to one of the landmark collections in periodical studies, Joanne Shattock and Michael Wolff"s *The Victorian Periodical Press: Samplings and Soundings* (1982), and an acknowledgment of the problems of scale. Dawson and Topham estimate more than a thousand scientific periodicals were published in the period, with many appearing regularly throughout. Faced with such abundance, they concede that the focus on Britain is (partly) pragmatic and that there are gaps in their coverage (they note that chemistry lacks a chapter).

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The book is no mere miscellaneous collection of case studies, however. The introduction offers a wonderful analysis of the relationship between science and serial publication and the chapters in the opening section provide a structuring framework for the sections that follow. The first of these chapters, also by Dawson and Topham, surveys attempts to exert bibliographic control over the archive, both in the nineteenth century and more recently, then offers its own detailed survey of the main changes in scientific publishing over the period. The second, by Topham, is a rigorous account of how new imaging and printing technologies transformed the availability of printed images in the press in the early nineteenth century. The third, by Alex Csiszar, focuses on the genre of the proceedings, showing how it emerged both as a distinct publication circulated among members of a society and as copy supplied to the new commercial science periodicals. The remaining two sections provide rich studies of periodical publications focused on particular sciences. The first contains chapters on geology, natural history, entomology, physics, and astronomy; the second focuses on medicine: Sally Frampton discusses the opposition of the medical establishment to public-facing journals such as Hospital and Baby, and Shuttleworth describes the dynamic cluster of publications that emerged around the new field of public health.

The opening chapters provide an excellent introduction to the methodological complexities of this material and the individual case studies are required reading for anybody working on these scientific fields. The surveys by Dawson and Topham are particularly valuable, and Csiszar, taking genre as the focus, offers an alternative way of reading across the volume. Indeed, one of the strengths of the book is that it prompts the readers to make their own connections between chapters. I found myself asking how one monthly resembled another, for instance, or comparing prices, circulations, and formats. Reading across the chapters, one issue that comes up repeatedly is that of failure. As Geoffrey Belknapp notes in his chapter on natural history, "failures and mergers were the norm in the periodical marketplace" (182). Given this, I wondered how the contributors understood failure and what meanings it had for those in the period. William Sturgeon's Annals of Electricity is cited twice as failing but lasted seven years. Similarly, Lightman, in his fine chapter on astronomical publications, notes that only two of the nine journals discussed lasted into the second half of the twentieth century and only three still appear today. While this might well show dwindling support over time, it still means over half of these periodicals lasted seventy years or more.

This book is a valuable contribution to the growing literature on periodicals and science in the nineteenth century. It is also a timely reminder of the historical contingency of scholarly publishing, providing much-needed historical context for ongoing debates about the function of publication, peer review, and what constitutes a journal. The book derives from the recent Constructing Scientific Communities project (2014–2019), funded by the Arts and Humanities Research Council, and builds on earlier work done by the Science in the Nineteenth-Century Periodical project (1999–2004). The earlier project detailed scientific contributions in general periodicals; the later one considered the breadth and diversity of scientific communities themselves. *Science Periodicals in Nineteenth-Century Britain*, which brings together many of the finest scholars in the field, does full justice to the richness of nineteenth-century scientific periodicals and makes a persuasive case for what they reveal about the communities that bought, read, and contributed to them.

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