

**Claire G. Jones, Alison E. Martin and Alexis Wolf (eds),  
*The Palgrave Handbook of Women and Science since 1660***

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The historical literature around women in science has grown steadily since the 1970s, with biographies, articles and books exploring various aspects of women's participation in the sciences. Yet, to date, no projects have come close to matching the scope or scale of the *Palgrave Handbook of Women and Science since 1660*. Its twenty-eight essays feature scholars from a variety of fields, with an introduction by the editors that incisively deconstructs the historiographical invisibility of women in the sciences. The volume's chapters are arranged around five key themes: strategies and networks; the role of archives and institutions in making women visible; cultures of science; science communication; and access, diversity and practice. The *Handbook* offers an excellent overview of the issues surrounding women in the history of science, drawing together a wide range of perspectives and topics in a significant addition to the literature.

The *Handbook* is impressive both in the range of topics it covers and in the number of perspectives it brings together. As it spans the period from 1660 to the present day, its chapters cover topics from Margaret Cavendish's (1623–73) seventeenth-century scientific publications to the complex role of Japanese universities in supporting women's scientific careers up to the early 2000s. The contributors also hail from a variety of backgrounds: among them are scholars, archivists, journalists and even a descendent of one of the volume's case studies, instrument-maker Janet Taylor. The chapters are well balanced between the scientific disciplines, though a marginally higher proportion of chapters discuss the physical sciences and mathematics than the biological sciences. Notably, the *Handbook* maintains an eye on the present throughout, questioning the gender gap in the sciences and the clustering of women in certain disciplines, with chapters such as Carol C. Mukhopadhyay's analysis of the causal factors behind the gender gap in India delving deeper into these phenomena. Although only two of the volume's chapters focus on non-Western locations, these do important work towards beginning to understand women's experiences in different cultural contexts. The *Handbook* therefore successfully draws together a variety of voices and topics, offering a broader scope than any other text to date.

The volume skilfully blends traditional strategies for researching women in science with novel approaches. Some sections trace key themes introduced by earlier works, teasing out issues such as the role of women's connections and networks, the importance of the domestic setting and how scientific interests interacted with contemporary ideals of femininity. These themes echo scholarship such as Pnina Abir-Am and Dorinda Outram's *Uneasy Careers and Intimate Lives* (1987) and Helena Pycior *et al.*'s *Creative Couples in the Sciences* (1996), which emphasized women's domestic lives and personal relationships – especially with men. Similarly, the *Handbook* pulls at domestic threads, such as in Gabriella Bernardi's chapter on domestic astronomy, and dedicates a section to exploring how women strategically constructed their own scientific and social networks. The *Handbook* builds on these anthologies by placing these networks in the broader

context of women's lives and thereby not allowing connections to men of science to define their careers. For instance, Alexis Wolf's chapter on medical author Margaret Mason, Lady Mount Cashell (1772–1835), explores Mason's connection to a male mentor, but this is far from her main focus. Instead, the piece explores Mason's uses for the medical knowledge she gained through her mentoring relationship. The volume thus echoes themes that remain significant in the literature, whilst successfully retaining women's agency.

Furthermore, the *Handbook* offers innovative frameworks and vocabularies for scholarly work on women in science. Jordynn Jack's contribution on 'The cycle of credit and phatic communication in science' dissects the rhetoric of women working as laboratory assistants – positions women often occupied, but which received little credit. By considering women's engagement in 'phatic communication', the practice of garnering and maintaining goodwill in professional relationships, Jack offers a convincing framework, drawing on theory from the study of English, for understanding how women strategically employed communication to secure credit for work. Jack's piece is an example of the value the volume derives from its interdisciplinarity, though it is not unique in offering a novel framework. Other contributors break new ground by critically analysing existing approaches: Mary Orr calls for a rethinking of theories of women in science, deconstructing and questioning the idea of the 'leaky pipeline', and Nina Baker critiques the modes of studying women in engineering in her chapter 'More Than Pioneers'. Critical analysis and innovation are invaluable to scholars working in the field; novel ways of rethinking women's place in the sciences – and, indeed, which activities mattered to scientific endeavours – represent an important resource for drawing women's work into the mainstream of history of science.

Lastly, this volume's practical nature is an asset; the chapters on the theme 'Making women visible' are especially rich in this regard. In particular, Anne Barrett, archivist at Imperial College London, offers a practical guide to finding women in archives. This chapter equips the reader with a variety of places to search, complete with a checklist, taking Imperial's own archives as a central case study. From archival records of women attending lectures, figures such as Elizabeth Garrett Anderson, the first woman to qualify as a physician in Britain, emerge from obscurity. It is worth noting that all the chapters, with their comprehensive data tables and bibliographies, function both as masterclasses in recovering women's oft-overlooked participation in the sciences and as directories of resources. The volume is therefore well placed to facilitate new research in the field.

Much remains to be written about the long history of women in science, but this *Handbook* is a crucial step forward in revealing women's overlooked stories, drawing attention to current issues, and fostering further research. Its readable chapters cover diverse topics, making it an ideal candidate for inclusion on course reading lists. It is also a useful text for researchers, as its innovative approaches to topics will be valuable resources for the study of women in science. The *Handbook* is an important work, which, along with publications like Hannah Wills *et al.*'s *Women in the History of Science: A Sourcebook* (2023), forms part of the rich and ever-expanding literature around women in the history of science. The volume is an accessible, well-researched and necessary addition to the literature, and a firm foundation on which further scholarship should build.

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