LENA WÅNGGREN, *GENDER, TECHNOLOGY AND THE NEW WOMAN* (EDINBURGH: EDINBURGH UNIVERSITY PRESS, 2017) ISBN 978-1-47441-626-9 (HB) £75.00, 978-1-47444-130-8 (PB) £19.99, 978-1-47441-628-3 (EPUB) £19.99 [UNA BROGAN]

In this recent publication, Lena Wånggren takes as her object the question of the New Woman's interaction with the technologies of modernity in late nineteenth-century Britain. It is published as part of the series 'Edinburgh Critical Studies in Victorian Culture', which seeks to provide fresh perspectives on nineteenth-century literature and culture. The text is accompanied by fifteen reproductions of illustrations from contemporary newspapers and works of fiction, and includes a bibliography and index.

This is the first monograph published by Lena Wånggren, a research fellow in the English literature faculty at the University of Edinburgh. Wånggren has previously edited collaborative works and published a variety of articles and chapters in fields such as education, gender, and feminism. This volume includes new material, as well as revised forms of articles or chapters that appeared in previous publications. Chapter 3 is a revised and enlarged version of Wånggren's chapter 'The New Woman and the Bicycle', included in the 2015 edited collection *Transport in British Fiction: Technologies of Movement, 1840-1940* (edited by Adrienne Gavin and Andrew Humphries), while part of Chapter 5 previously appeared in an OScholars special issue on Arthur Conan Doyle (2015).

The monograph is organised into six chapters, the first of which introduces and engages with the question of the New Woman's interaction with technological modernity. The five subsequent chapters examine a different technology or profession in turn, specifically seeking to uncover their relationship to the cultural and literary figure of the New Woman. The technologies considered are the typewriter and the bicycle, followed by the professions of the nurse, doctor, and detective. In each chapter, the author gives a cultural and historical introduction to the area under study, before offering a reading and analysis of a number of literary works. This approach generates some compelling insights, but there is at times a tendency to lose track of a unifying argument and get bogged down in the details of the plot.

This opening chapter contains a welcome problematisation of the term 'New Woman', engaging with both nineteenth-century sources (including a genealogy of early uses of the term) and current criticism. The reader comes away from this well-documented chapter with a clear sense of the New Woman figure, 'both a literary trope and a set of social practices' (21). Wånggren provides an overview of the flourishing current criticism on this complex figure. Indeed, several studies have already engaged with the New Woman and her connections to nineteenth-century technologies, such as the bicycle and the typewriter (see, for instance, the collection by Angelique Richardson et al.). As such, Wånggren is contributing to a growing field of study.

Wånggren's methodology is rooted in a cultural studies perspective; she engages with literature as one of a variety of factors that both reflect and generate change in society. She is a keen disciple of Foucault and applies his thinking on technology, modernity, and medicine to her argument and analysis. Notably, she mobilises Foucault to situate 'technology as part of power relations, as both disciplining the body and articulating the body as agent' (41). She is wary of technological determinism, which she defines as 'the idea that any specific technology bears inherent values or outcomes' (29). She detects such determinism in some contemporary criticism and is keen to avoid this tendency by considering the bidirectional influences that technology and subjects may have upon each other. Wånggren is unafraid to question reputed scholars, such as Friedrich Kittler, whose two monographs on technological modernity published in the mid-1980s have held sway in this field of study for decades. Wånggren considers that Kittler falls prey to technological determinism by situating agency solely in technologies and thus seeing technologies as 'inscribing passive subjects' (42). Such a dose of iconoclasm is healthy in a field which, while recent, has acquired some largely unquestioned figureheads.

The corpus included for study is vast and varied; many little-known authors, such as Mary E. Kennard and Mathias McDonnell Bodkin, are examined, alongside those who gained greater prominence, such as H. G. Wells, Arthur Conan Doyle, and Grant Allen. Wånggren justifies the omission of women more readily considered New Woman authors, such as Sarah Grand, George Egerton, and Olive Schreiner, by noting that these writers did not tend to use material technologies to signal the modern character of their heroines, focusing rather on new means of expressing female subjectivity (5). Alongside these literary sources, there is ample consideration of historical documents, including articles from newspapers and periodicals. This wide net provides a rich overview of a variety

of texts published in this period, yet at times it necessarily implies rather superficial engagement with texts. It is appreciable that the author provides contemporary reactions to the works of literature she analyses, seeking out book reviews in order to gauge public reaction and the impact of the work at the time.

Wånggren provides a reading of Wells's 1898 novel The Wheels of Chance as part of her consideration of the bicycle's role in New Woman literature in Chapter 3. Much of this material was previously included in an article in the Transport in British Fiction edited collection. Refraining from either considering Wells's feminist credentials or dismissing him as a sexist, Wånggren is interested in 'examining [his] literary works to find protofeminist and feminist concerns' (79). She seeks to engage with the novel's portrayal of questions of both class and gender, and her examination of the novel compellingly argues that technologies are not inherently progressive, 'their emancipatory potential depend[ing] upon how they are configured both in literary and other contexts' (89). This novel and, specifically, its treatment of the bicycle have previously been examined by a number of critics (see, for instance, articles by Simon J. James, Yoonjong Choi, and Hiroshi So), and it is to be regretted that Wånggren omits engagement with these earlier critical studies. Nonetheless, her reading of Wells's cycling novel provides some interesting insights and contributes to the growing body of criticism on the novel. A few passing references are made to other works by Wells: the New Woman novel Ann Veronica is cited in relation to the protagonist's reflections on the question of cycling and dress (80), while footnotes mention bicycles in The War of the Worlds and A Modern Utopia (100). In the final chapter on detective fiction, there is also a short discussion of an interesting and lesser-studied 1893 article by Wells, 'The Advent of the Flying Man' (190).

This work will be of interest to those researching the fields of New Woman literature and technological modernity. Wånggren engages with much current research on these topics and brings to light a number of overlooked texts, providing fresh insight and analysis. For scholars of Wells, there is little new material, but the monograph does provide a useful overview of a growing field of study on the relations between literature, early feminism, and technologies of modernity.