The Gender of Things: How Epistemic and Technological Objects Become Gendered

by Maria Rentetzi (ed.) (2024) Abingdon and New York, Routledge, 234 pp.

Fotarisman Zaluchu
Universitas Sumatera Utara

Salman Al Farici
Universitas Sumatera Utara

Nurman Achmad
Universitas Sumatera Utara

In a world increasingly driven by technology, the nuanced aspects behind it are often overlooked. Technology is commonly perceived as neutral, independent from its creators. Hence, we tend to forget that technology itself is imbued with gender inequalities. Maria Rentetzi, the editor of the book *The Gender Of Things: How Epistemic And Technological Objects Become Gendered*, reminds us of the necessity to examine both past and present technologies, which – through practices of creation, production, and improvement – contribute to gender injustice between men and women. For those of us engaging with Science and Technology Studies (STS), this book offers fresh illustrations of how gender disparities persistently infiltrate human life. Even in the modern era, technologies remain heavily biased.

The main purpose of this book is, at the very least, to unravel the existence of gender disparities behind "things" in science, technology, and medicine. Certainly, there is already a plethora of STS literature addressing this issue. However, Maria Rentetzi and the contributing authors of this volume endeavor to offer a distinct perspective. Rather than compiling a collection merely presenting several examples of injustices in various aspects, Maria Rentetzi and the scholars who joined her in this endeavor, provide a narrative that progressively reaches its crescendo, uncovering crucial points of the theme. This is what distinguishes this book from other feminist studies on technological products. Maria Rentetzi – editor and author of *The Gender Of Things* – adeptly organizes each piece of writing and, through them, provides answers to questions concerning some of the gender injustices that have long been hidden within three domains: "things in/as laboratories", "things as artifacts" and "things as sites of power".

To delve into the nuances behind these "things", Maria Rentetzi relies on two crucial premises. First, technology is not gender-neutral. Rather, technology is a product, resulting from the circumstances that dictate what gender roles deemed appropriate in social, cultural, economic, and technological products. Maria Rentetzi's overall argument aligns with the efforts of intellectuals, activist groups, and feminist collectives who have persistently highlighted the obscured injustices inherent in technology (Hicks 2017). Through the excellent composition of this book, Maria Rentetzi further elucidates these concerns. In other words, a critical perspective must be continually voiced to tackle gender injustices that otherwise go unnoticed and are perpetuated socially.

TECNOSCIENZA. Italian Journal of Science & Technology Studies
15(1) pp. 171-173 ISSN 2038-3460
DOI: 10.6092/issn.2038-3460/19901

Second, Maria encourages the readers of her book to persistently reconstruct and critically examine our understanding of an object. In this aspect lies much of the merit of her book, as it expands our horizons on how gender injustice infiltrates all facets of society while simultaneously illustrating the substantial challenges involved in achieving justice. Deconstructing and scrutinizing technology is a scholarly task, and in our view, it must continuously be integrated into literature in gender and technology studies.

As mentioned, Maria Rentetzi divides her book into three major sections. In the initial part, the book is dedicated to how laboratory products contribute to gender inequalities. Starting with contributions that reflect on the condition of women through the historical journey of sealing wax and string, to the art of sculpture making, the book revisits "the space of the laboratory to closely examine things that have been routinely used as epistemic tools, to such an extent that they become overly familiar and thus invisible in the process of producing knowledge" (p. 9). The masculine culture of laboratories is discussed by Maria Rentetzi in Chapter 4, where she explores the creation of Françoise, a phantom of a female torso. This laboratory product, modelled after a female form, was used to conduct medical tests involving a radioiodine isotope during the early Cold War. Françoise's journey around the world facilitated calibration and standardization, even in countries outside the US. Despite the fact that radiation primarily affects the thyroid gland, Françoise's form is designed with female characteristics, including perky breasts. This aspect is quite astonishing and reflects the masculine engineering culture prevalent in this "laboratory thing". This example prompts us to reflect on the relationship between bodies and standardization, particularly when standards are shaped by a dominant male imaginary that may influence us without our awareness.

This first section of the book delves into what has long been the focus of feminist scholars: examining the relationship between humans and technology. Through a feminist perspective, biases inherent in technological processes and concerning sex, gender, and even social status can be examined. Feminist STS literature abounds in this regard. However, in Maria Rentetzi's book points out something significant: gender biases manifest through the silencing of women. This is exemplified by Denise Darvall (Chapter 5), the first heart donor, whose story highlights the underrepresentation of women in fields – such as the medical field – where the female body is medicalized, while the professional male role (i.e., the doctor) is elevated. Thus, to prevent the silencing of specific narratives, Maria Rentetzi and the other authors of this book echo a feminist viewpoint on technology and seem to ask us: should we celebrate the transplantation process (or any laboratory thing) as a technological achievement at the risk of disregarding the social processes affecting, in this case, the donor, their family, and acquaintances? This is an enduring question posed by critical feminist voices in STS and is present in this book to ensure the history behind any "things" in a laboratory setting is not overlooked.

The analysis of gender disparities in technology continues in the second section of the book. This section presents objects from museum collections and various artifacts of contemporary society. For instance, in Chapter 10, the authors recount the story of Sophia, a humanoid robot designed by a Japanese company in 2016. The chapter describes Sophia's public debut, as an advanced technology, where her (its) behaviors, both mimicry and voice, were technically controlled to adherence to an assigned female gender. This part of the book effectively illustrates how both women and men often do not act spontaneously but are in-

fluenced by the same "gender regime" embodied and performed by a robot in this case. In this context, we can refer to Judith Butler (2004; 2010), who has articulated the concept of "performativity" to describe how men and women typically conform to gender norms within a broader gender system of expectations. In other words, gender behaviors are not merely individual choices but can be significantly influenced by the societal framework. Reading this section of the book has deepened our understanding of how gender roles are intricately embedded within technological artifacts, even when this influence is not explicit. Designers and developers of technologies, whether consciously or not, can contribute to perpetuating gender inequalities through their innovations by reproducing gender regime.

In the third section, the book focuses on "things as a site of power". For instance, the author of Chapter 12 reviews the Trump administration's policy of erecting a 2,000-mile-long wall at the southern border of the United States (US) with Mexico and analyzes this infrastructure as both literally and figuratively a site of power. Since the inception of the project, the wall has been portrayed as a means of excluding immigrants perceived as disruptors of American society. There was such apprehension concern about illegal immigrants that the strength of the wall was even simulated to assess its effectiveness in thwarting breach attempts. The wall was meticulously designed as a measure to prevent those deemed as disruptors from entering the US. Despite facing opposition, even from some within the US, the construction of the wall reflects a racist and gendered imagination about Latino men crossing or living beyond the national boundaries. Hence, this wall can be viewed as a manifesto of cultural arrogance that glorifies male hegemony (Wieringa et al. 2015). All chapters in this section confirm that it is not an easy task to counteract gender-based injustice. Individuals in positions of power often organize themselves, their groups, and their environments to preserve their privileges through biases and discrimination (Bourdieu 2001).

To conclude, this book offers new perspectives for reflexively examining "things". The authors invite us to scrutinize the creation and inherent power of things and artifacts. Behind the facade of certain objects, there may lie serious issues, such as invisible gender injustices, which are often masked and concealed. This book excellently unveils these issues from an STS perspective and provides a thorough exploration of many such injustices embedded in the objects that populate science, technology, and medicine.

References

Bourdieu, Pierre (2001) *Masculine Domination*, Cambridge (UK), Polity Press.

Butler, Judith (2004) *Undoing Gender*, New York, Routledge.

Butler, Judith (2010) *Gender Trouble*, New York, Routledge.

Hicks, Marie (2017) *Programmed Inequality: How Britain Discarded Women Technologists and Lost Its Edge in Computing*, Cambridge (MA), MIT Press.

Wieringa, Saskia E., Bhaiya, Abha and Katjasungkana, Nursyahbani (2015) *Heteronormativity, Passionate Aesthetics, and Symbolic Subversion in Asia*, Liverpool (UK), Liverpool University Press.