

**Ask Kristine and Søråa Roger A. (2024) *Digitalization and Social Change: A Guide in Critical Thinking*. London, New York: Routledge. 304 pages. ISBN: 9781003289555**

Sophia Leipert

leipert@em.uni-frankfurt.de

Kristine Ask and Roger A. Søråa's *Digitalization and Social Change: A Guide to Critical Thinking* offers a comprehensive exploration of the complex interactions between digital technologies and social change from a critical perspective. The authors provide a framework for understanding how digitalization is (re)shaping various aspects of daily life. They aim to not merely present "quick facts" about digitalization, but rather to develop the "necessary cognitive tools" to evaluate the digital technologies woven into the social fabric (p. 5). By doing so, the book intends to empower readers to reflect on the consequences of digitalization, critically analyze its foundational premises, and question the notion of its inevitable effects. In this, it is aimed primarily at students via providing theoretical and methodological tools for understanding and analyzing these sociotechnical interplays. For years, the authors observed, their students requested such a book that would offer a comprehensive guide to digitalization and social change (p. xi).

The book is structured into four parts. The first part introduces a critical perspective on digitalization, which is conceptualized as a sociotechnical process that encompasses social and technological transformations associated with the development, implementation, and/or utilization of digital technology. The second part delineates theoretical frameworks that aid in identifying, comprehending, and analyzing the interactions between technology and social change. The third

part presents empirical case studies that demonstrate the ramifications of digitalization across five domains – health, work, control, culture, and identity – highlighting its multifaceted nature and the complex consequences it engenders. The final part then synthesizes the book's content, underscoring the insights gained from empirical analyses of digitalization processes in relation to the primary themes of social change, user perspectives, and critical thinking. In addition, the final part offers guidance for future applications and provides analytical and methodological resources.

Overall, the authors advocate for a sociotechnical perspective to digitalization, emphasizing the importance of nuanced views regarding the potential and limitations of technology – both positive *and* negative (p. 17). This perspective is introduced in the book through stylized key STS theories such as Interpretative Flexibility (p. 46f), which posits that technology can be interpreted in various ways and has differing consequences depending on the context, and Delegation (p. 47), which involves analyzing the interactions between humans and technologies as an exchange of responsibilities and tasks. Additionally, Actor-Network Theory (ANT) (p. 48) conceptualizes technologies as components of networks that include both human and non-human actors, and Domestication Theory elucidates how technologies undergo a 'taming process' to become usable, necessitating interpretation and nego-



tiation between technology and the user (p. 67). Finally, Script Theory examines how values are materialized and conveyed through design, seeking to understand how technologies communicate preferences and worldviews through their functionality and aesthetics (p. 84).

In addition to examining digitalization, the book critically analyzes and operationalizes the concept of social change. The authors use the somewhat ambiguous term to describe and justify the book's focus (p. 272), referring to global 'rapid change' more comprehensively co-produced by digitalization. As part of this, they advocate for examining the diverse and unequal experiences and consequences associated with the change (p. 271). This is pertinent: technologies build upon one another, and while social change is fundamental, it is also incremental. With the concept of social change being as broad as digitalization, the authors primarily aim to empathize with the relationships between these concepts, processes, and ongoing transformations. The book's critical aim should thus not be interpreted as a guide to achieving a normative vision of an alternative, specific future. Instead, criticality is engaged through how and why-questions, and with the concept of 'it could be otherwise,' following Latour and Woolgar (1979) and Star (1988). This positioning reminds us to contextualize the deployment of technologies: how they are formed as objects of thought and action, as well as designed in practices that entail also politics. The imagination of how technology could be otherwise especially enables us to question normality in its procedurality and constructed character, rather than accepting it as granted (pp. 98–110). While not a novel idea to experienced STS scholars, this provides a valuable framework for future scholars, which indeed makes sense in the context that the book's primary target audience is students.

The authors' roles as Associate Professors of STS at the Department of Interdisciplinary Studies of Culture, Norwegian University of Science and Technology (NTNU) in Trondheim, may have influenced the book's emphasis on Norwegian case studies. This emphasis emerged from translating the original Norwegian-language edition, seeking to address their primary audience of students while providing an overview of STS research in Northern Europe over the past decade. While

these cases offer valuable insights into digitalization within the (Northern) European context, they may not resonate as strongly with readers seeking for more globally diverse perspectives. Given the book's aim to provide a broad introduction to digitalization and social change, a greater inclusion of case studies from different cultural and political contexts would have strengthened its applicability.

The book nevertheless serves as a valuable resource for educational purposes, offering guidance on the development and enhancement of critical thinking skills. The perpetuation of STS traditions aids in understanding knowledge processes and technology as co-produced by cultural and social phenomena, making them more accessible for critical analysis. The inclusion of examples from popular culture and science fiction elucidates these entanglements in the book, while the empirical cases underscore the practical study of digitalization. The authors furthermore appear to adopt a didactic approach through the inclusion of 'activity boxes,' which prompt interaction and critical engagement with the discussed issues, potentially rendering information more tangible, memorable, and accessible. As demonstrated by Deslauriers et al. (2019), such (inter)active teaching methodologies enhance learning outcomes, deep engagement, and critical thinking more effectively than students' preferred but less effective linear teaching methods.

Drawing from personal teaching experience, the book is recommendable not only for STS students, but any students enrolled in non-STS programs that explore digitalization. Its interdisciplinary approach makes it particularly useful for students and scholars in cultural sciences, urban studies, human geography, and related fields. The book may also be of significant value in disciplines that traditionally place less emphasis on qualitative methods or on courses outside the social sciences. Although the book may appear somewhat repetitive to advanced researchers, it functions effectively as a comprehensive refresher on established concepts within STS too. The book's clear and consistent structure supports this, offering introductions and summaries for each chapter, along with two concise 'cheat sheets.' The analytical cheat sheet encapsulates the five principal theoretical concepts of the book

and relates them to analytical practice. The methodological cheat sheet offers guidance on data collection, specifically designed to aid students in writing about digitalization, and here integrating established research methods such as interviews, observations, and document analysis.

In summary, *Digitalization and Social Change: A Guide in Critical Thinking* is a well-structured introduction to the study of digitalization and its societal dynamics. While its focus on Norwegian case studies and some of its repetitiveness may limit its applicability, the book provides a strong theoretical foundation and encourages critical and practical engagement with digitalization processes. The sociotechnical approach highlights the mutual shaping of technology and society, highlighting the reciprocal relationship between users and digitalization. By focusing on this

co-production, the book situates these processes in the interplay between social and technical elements, making it relevant for those responsible for, affected by, and capable of effecting changes. The key conclusion of the book, and perhaps that of critical research addressing technology in general, is to advocate for broad political discussions of social problems and their complex dynamics, rather than relying on simplistic (technological) solutions as something through which they might be fixed. The book's strengths lie in this commitment to critical inquiry. It achieves this by encouraging a meticulous and critical examination of the implementation, design, and usage of technologies, cognizant of the inseparable nature of social and technical factors in shaping digitalization processes.

## References

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