

Minna Ruckenstein, **The Feel of Algorithms**, Oakland: University of California Press, 2023, 240 pp., \$29.95 (paperback), \$95.00 (hardcover).

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Minna Ruckenstein's *The Feel of Algorithms* presents a decade's worth of investigation into the pervasive influence of algorithmic culture driven by the widespread use of sensor technologies and data-driven services. The book examines how these technologies shape our daily activities and social interactions, steering us toward a predefined future. The vibrant allure suggested by the book's title is matched by the author's interest in interview-based, personal insights, conveying that everybody has a—positive, neutral, negative—story to tell about algorithms. Thus, in crafting this work, exploring the emotions intertwined with algorithmic culture presented both an opportunity and a challenge.



Minna Ruckenstein, a professor at the University of Helsinki specializing in the societal impacts of emerging technologies, argues with intensity for the need to acknowledge that people react emotionally to algorithms they do not understand. Accordingly, she considers emotional reactions to be culturally patterned vistas and structures for feelings—even if feelings might sound incompatible with structures at first. Borrowing the idea of analyzing feeling structures from film culture, she primarily focuses on the tensions in feelings. This approach results in a literary concept: Algorithms are incredibly flexible cultural projects—agents, resources, buddies, hindrances, and symbols of unwanted and colonizing forces.

The interpretative chapters of the book delve deeper into the “structures of feeling” within the realm of algorithmic culture, highlighting the impacts of sociotechnical systems through the prism of personal stories and expressed feelings. This interpretation framework is intended to discern a wide range of emotional responses, from neutral and fluid experiences to positive and pleasurable sensations while contrasting these with negative emotions like fear, irritation, frustration, resignation, and fatigue. The interpretative approach aims to uncover the diverse emotional landscapes fostered by algorithms, shedding light on the emergence of new or familiar emotional constructs resulting from algorithmic engagements. In line with this, the imperative for modifying the ethical and responsible use of algorithms is emphasized, particularly when dealing with uncertainties or insecurities.

¹ Funding: The Janos Bolyai Research Scholarship of the Hungarian Academy of Sciences supported the paper, Grant No. BO/00045/19/9. European Union's Horizon Europe Research and Innovation Programme-NGI Enrichers, Next Generation Internet Transatlantic Fellowship Programme is also a fund of the research and publication (Grant No. 101070125).

This distinctive perspective emphasizes digital technology's experiential, affective, and lived aspects, particularly focusing on how data-intensive advancements shape human experiences. It underlines the critical role of understanding individual practices, tactics, and the sense of control people maintain amid broad social changes. Notably, it considers emotions like irritation as reactions to digital systems and as catalysts for user agency, inspiring strategies to counteract frustrating technologies. By paying closer attention to the role of emotions in creating algorithmic environments and the specific feelings elicited by algorithms, this view reveals how algorithms act as an "infrastructure of intimacy" (p. 45). This concept suggests that algorithms deeply influence and manipulate our innermost desires, preferences, choices, and actions, making this approach unique in its focus on the intimate interplay between technology and human emotion.

Accordingly, the book advocates for a shift in perspective. Instead of viewing algorithms through the lens of culture, Ruckenstein seeks to understand culture through the lens of algorithms. Accordingly, the narrative is particularly notable for its emphasis on human experiences, visions, and related emotions, offering a specific perspective on the impact algorithms have. As a framework, the author suggests exploring frictions in algorithmic relations and examining how users engage with algorithmic systems in a variety of settings and diverse contexts. Additionally, she suggests that we consider the approach that "algorithms are human too, referring to the human-machine connections that algorithmic systems generate" (p. 3).

Due to its multidisciplinary approach, this work explores the intersection of algorithms, culture, and emotions in rich and diverse ways. Even if the interpreted interviews guide the core narrative, the book also profoundly analyzes several aspects of broad topics from political economy to sociology. The author explores the interconnections between technological trends and broader societal dimensions, including ethical and ecological considerations. Criticism of increasing inequalities, reinforced racism, data feminism, biased systems, and black box society are discussed intensely in the chapters, as they are also currently trending in the related academic and public discourse. However, Ruckenstein's unique contribution lies in her focus on the "feel" of algorithms and the reciprocal relationship between culture and technology, offering a fresh perspective on academic discourses on algorithmic culture.

The tension between individual agency and technological determinism is acknowledged in the book as an inevitable but manageable process. While the text underscores the importance of personal agency, it also cautions against overlooking the broader systemic forces at play, questioning the real impact of individual resistance against the backdrop of dominant tech corporations. Moreover, it warns against a deterministic view of technology as the sole driver of social change and advocates for a more balanced perspective that also considers the role of existing social and political-economic structures. This approach suggests a moderate stance that can retain its value for a longer time.

Algorithmic culture is summarized, focusing on the interplay between frictions and emotions within surveillance and data colonialism. The quest for an ideal integration of humans and machines and how global dynamics influence local realities is explored, and vice versa. Friction emerges as a critical concept, tuned to social contexts and robust enough to facilitate significant connections that ensure the smooth functioning of global power mechanisms. Datafication is presented not merely as a technological process but as an invitation to individuals and societies to engage with global trends. The book critically examines the roles of search engines, academic databases, and wearable technologies with voice assistants, highlighting how they intersect

with culturally specific emotions. It sheds light on the resulting inequalities and the exclusion of those who remain disconnected from the envisioned digital future, offering a nuanced critique of these developments.

Only three critical comments need to be made in the book, but they are essential. First, the author mentions several times the significant role that U.S.-based technology firms play in molding our digital sphere, striving to decipher the repercussions of their choices on the sociotechnical fabric. While the analysis touches on instances of data colonialism and AI's (Artificial Intelligence) implications for various nations, the emphasis is predominantly on a dystopian future shaped by algorithmic systems. It would also be helpful to incorporate an optimistic perspective, providing a more balanced view. Second, Facebook's dominance in the book is only partly justified, even if further significant platform impact is also mentioned. This may be because the intensity of use for some platforms may have varied over the decade that the field was explored. For some stories, it would be especially worthwhile to collect less dominant platform experiences separately for more diverse results. Third, the critique highlights that the research predominantly reflects perspectives from a professional elite and more experienced users under technological pressure. Thus, the proposed concept of "an algorithmic milieu" (p. 178) also underscores a predominantly elite perspective, often overlooking the diverse inputs from users who span various cultures, age groups, and geographic or socioeconomic backgrounds. Such an approach can inadvertently underestimate the role of diverse implications of further user habits. Accordingly, the book primarily mirrors the concepts of the elite.

These criticisms aside, the book offers a unique approach in several respects. The most remarkable parts are when the author emphasizes the fundamental role of choice and care: why choosing between emotions for the users is relevant and why algorithmic care is a crucial principle in planning any technology. With this twin view, namely pairing personal and technological responsibility, the author contributes significantly to algorithmic society and cultural discourse. The author presents a toolbox drawn from all disciplines of cultural science, and algorithm-related emotions, to build a future that is not only business driven but also values and morality driven, where every interview and structurable emotion supports human centrality.

The book's style uniquely blends readable academic writing with lyrical evocations and creatively spans various disciplines, for instance, anthropology and biopolitical marketing. The author also uses academic and nonacademic references to richly illustrate the subject and outlooks. Moreover, she also showcases sensitivity to linguistic expressions and meanings for further illustrations. The narrative weaves together discovery experiences and precise summaries of complex issues and unveils new insights. While personal stories from research participants occasionally extend the discussion, they do enhance its engaging readability.

Thanks to its focus, the book addresses a wide readership within and outside of science, as emotions provide a universal language for understanding complex topics. The work is recommended for academics and students with interdisciplinary backgrounds to receive technological insight with broad human and social perspectives. The book is also highly recommended for professionals and policymakers in the tech industry, as it offers critical insight into the structure of human feelings and emotions driven by algorithms, facilitating the development of human-centered practices. Ethicists, philosophers, activists, and tech advocates will find this book invaluable to understanding individual agency with ethical and societal dilemmas. Lastly, tech-curious readers will have an accessible look into the impact of algorithms on society and how their personal experience can be interpreted in this era of algorithms.