
Reviewed by Jason Ludwig (Cornell University)

Published on H-Sci-Med-Tech (February, 2024)

Commissioned by Penelope K. Hardy (University of Wisconsin-La Crosse)

Mikael Hård's Microhistories of Technologies: Making the World is an ambitious effort to present a novel approach to researching and writing the global history of technology. At its core, the book argues against the notion that new technologies spread across the globe in a uniform manner; instead they are subject to hybridization and even resistance as they come into contact with varying local cultures. Based on a five-year grant funded by the European Research Council and drawing inspiration from Carlo Ginzburg's microstoria and Hans Medick's Alltagsgeschichte (approaches commonly grouped together in English-language scholarship under the term “microhistory”), Hård uses nine case studies, organized into three parts, from around the world to reconceptualize the categories “global” and “technology.”[1] In doing so, he thoughtfully makes theoretical contributions to the history of technology and advances several useful concepts for future scholarship.

Section 1 looks at three cases from the nineteenth century. The first (chapter 2) examines the network of missionary stations built across the Dutch East Indies (today's Indonesia), which Hård argues were hybrid constructions blending European sensibilities with Asian technical expertise. While missionaries often served as site managers overseeing the construction of the stations, they were dependent on the skills of local Batak craftspeople and their knowledge of local materials.

The next two chapters pay close attention to material cultures in Africa and Asia to challenge received ideas about technology and global systems like imperialism, colonialism, and capitalism. Chapter 3 examines the “technological landscape” that existed across West Africa prior to European colonization, through which indigenous Africans extracted material, manufactured goods, and communicated across long distances well before French colonialism.[2] Chapter 4 turns to sugar cultivation in India to show how nationalist political movements kept sugar production small-scale and geared toward domestic consumption—as op-
posed to producing cash crops for the global market, as goes the narrative in many prominent global histories of sugar. By advancing a more inclusive conceptualization of technology and paying attention to precolonial material culture in these chapters, Hård counters the “tools-of-empire” narrative popularized by historians like Daniel Headrick, which casts technology as mere material extensions of global power relations (*The Tools of Empire: Technology and European Imperialism in the Nineteenth Century* [1981]).

The second section of the book turns to the twentieth century, looking first at the electrification of Dar Es Salaam. Hård convincingly uses this case to complicate Thomas P. Hughes’s famous theorization of the evolution of large technical systems (*Networks of Power: Electrification of Western Society, 1880-1930* [1983]). Unlike in Hughes’s model, where large-scale technologies develop momentum that allows them to grow and expand exponentially, Hård shows how controversies over privatization and the racial politics of colonial Dar Es Salaam—which denied most African residents of Dar Es Salaam access to electricity—constrained the growth of the city’s electric grid. In the following chapter, he argues that authors of Argentine cookbooks mobilized culinary technologies like the outdoor grill and electric kitchen to invent criolla (or creole) culinary traditions that associated Argentine national identity with gaucho culture.

Section 3 concludes the book with case studies drawn from the postwar period. Chapter 7 proposes the term “flexible settlement,” as opposed to “slum,” to describe the creativity found among residents of low-income urban communities in Kenya (p. 165). Highlighting their use of diverse materials to build homes, and the innovative economies of illicit-beer brewing, Hård emphasizes the adaptability of these “self-help cities” in the face of harsh economic conditions and unfair treatment at the hands of political authorities.[3] He then turns to South Korea, to argue that Korean women remained indifferent to mass-produced menstrual pads and tampons, typically marketed by American companies, due to the widespread availability of traditional homemade products, such as reusable woven cotton and recycled pieces of cloth, which better aligned with their local lifestyles. Chapter 9 takes readers to Central Asia, where Hård argues that Uzbek communities developed “do-it-ourselves” practices to repair and maintain their homes to make up for the failures of the Soviet state to provide acceptable living conditions (p. 241).

Hård concludes by reiterating his argument from the introduction that scholars must pay attention to local material cultures in global histories of technology, especially in order to challenge the notion that technological developments spread smoothly and easily across the world. The thematic and geographical scope of the cases he uses to build this argument is impressive, and it is easy to imagine integrating individual chapters from the book into undergraduate syllabi on topics as diverse as gender and sexuality in East Asia or colonialism and resistance in Africa. The book’s efforts to engage with major ideas in the history of technology, particularly its critique of Hughes’s evolutionary model of large technical systems, are thought provoking. Nonetheless, even as it demonstrates many of the benefits of applying the methods of microhistory to the history technology, the book does little to respond to the critiques of this approach, which have been well rehearsed within the discipline of history writ large. For example, even if we accept the reasonable assertion that a precolonial technological landscape existed in West Africa, does this necessarily refute the notion that other technologies served as tools of imperial dominance? By placing our emphasis on the resilience and technological agency of subjugated peoples, do we risk losing sight of the large-scale forces—like global capitalism and colonialism—that restrain them? In other words, what falls out of the frame if we as historians zoom too closely in on the actors we study? It seems to me, at least, that the key is knowing which scale of analysis is
most appropriate in a particular instance and how to combine different scales in ways that closely attend to both micro and macro forces. For even bringing such questions to the table for historians of technology, Hård’s interesting book is praiseworthy and deserves a readership that is similarly open to questioning the foundations of the global history of technology.

Notes


If there is additional discussion of this review, you may access it through the network, at https://networks.h-net.org/h-sci-med-tech


URL: https://www.h-net.org/reviews/showrev.php?id=59738

This work is licensed under a Creative Commons Attribution-Noncommercial-No Derivative Works 3.0 United States License.