

BOOK REVIEW

Guillaume Carnino, Liliane Hilaire-Perez and Jérôme Lamy (eds.), *Global History of Techniques: 19th–21st Centuries*

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Why a *global* history of technology? For some, such an enterprise can unsettle conventional accounts of the material world in our histories, and therefore those histories, paving the way for new descriptions and interpretations of the modern world. Such a task, as Svante Lindqvist and David Edgerton, among others, have argued, must necessarily be inclusive: incorporating old as well as novel but overlooked things and activities, the poor world as much as the rich, and technology in use rather than its conflation with innovation. This inclusive global picture of the material presents a powerful challenge to nationalist and globalist formulations of 'technology' and history.

For the editors of this substantial volume (forty-four chapters running through 781 pages), the upshot of a global history of techniques in the nineteenth and twentieth centuries is rather different. It seeks to 'restore the complexity of regional historiographies and of the meanings given to technical activities in society' (p. 11). This is a corrective, it is argued, to the 'return of grand narratives which, in the name of global history, fall back on mostly Eurocentric metanarratives that long dominated this field of research' (pp. 11, 31). One such narrative, according to the editors, is the study of technology as applied science or 'techno-scientific hybrids' aiding economic growth, more engineering than material culture (p. 11). Another is a consensus of 'diffusionist narratives' or 'diffusionism' (pp. 15–16). This recurring phrase is not defined in this voluminous text, while the body of work thus termed remains vague (economic historians and anthropologists being explicitly named). The editors imply that such works attribute innovation in techniques and production solely to European agents and assume their seamless diffusion around the world (pp. 19, 125). There is some truth to this charge, but this critique fails to recognize both the dissensions in a literature as broad as that on the diffusion of techniques, and the crucial fact that many of the alleged 'diffusionist' texts are not about technology at all. However, there is a stronger suggestion that a global history that overlooks local innovations and focuses on the circulation and use of European technologies engages in the 'naturalization of diffusion' (p. 16). It is worth recalling, however, that Edgerton's *Shock of the Old* (2006), an early global history, in fact referred to 'technologies of poverty' peculiar to, and circulating within, the poor world in the twentieth century. Here, then, is an example of historians tilting at windmills to make a case, and not a very original one.

Instead, the editors suggest that a new global history should trace *techniques*, a more capacious term than *technology*, encompassing both know-how and material culture (p. 13). It should be micro-historical and regional rather than aim for an 'illusory global overarching template' (p. 17). And finally, it should stress the complexity of the circulation and appropriation of techniques by local agents over the 'diffusionist' consensus or fragmentary narratives (pp. 18–19).

These tendencies are evident in the first of three parts of the book, which present a 'world tour of techniques' through case studies of regional and national contexts ostensibly overlooked in narratives of technological innovation (p. 19). Thus the chapter on Oceania narrates a rich story of the region's adoption of new technologies of transport, communication, mining and processing, to show that 'technical innovation is important to the Oceanian peoples' lives' (p. 58). Similarly, the chapter on East Asia highlights the use of modified raw materials, indigenous construction of roads, 'anti-technocratic' agricultural improvement, and humanoid robots to illustrate the region's capacity for innovation, one where 'local circulations' and actors were indispensable (pp. 100, 107). The chapter on Africa similarly stresses 'African tools, knowledge, cultures of production and maintenance and philosophies' as 'already products of innovation and exchange' within and beyond Africa (p. 136). The chapters on the West mirror this framing, with innovation treated as ideology. One chapter reinforces the centrality of technological innovation to US national identity; another on Europe traces the changing discourse of 'universalistic "Western" technology' there which was nonetheless challenged by contemporaries (p. 192).

The problem with this new global history, however, is that it is not new, but follows the conventional historiography of technology in the colonial world of the past two decades and an even older contextualist approach. Although 'circulation' and 'appropriation', terms borrowed from the history of science and consumption respectively, might seem to overcome the standard characterization of the innovative West and passive Rest, it does not in any way negate it, but in fact relies on this old and tested dichotomy to make its case. The Rest, it would seem, is *a lot like the West* when it comes to innovation (whereas, in fact, it is imitation and use that are universal). Such methodological moves reproduce the innovation-centrism of an older contextual history of technology and its tendency to echo the consensus of its chosen (regional or national) historiography, rehashing or inverting old stories with new techniques. Meanwhile, the focus on regional or micro-historical contexts without a global comparative dimension or an account of power – economic or otherwise – fails to contend with the uneven global and regional diffusion and use of things, and, indeed, techniques.

Part Two of the book follows sectors 'critical to the constitution of the modern world' (p. 20): heavy industries, mining, aeronautics, agriculture, telecommunications and so on, and Part Three deals with interconnections of technique with the 'social fabric' (p. 497), addressing Taylorism, big science, laboratory techniques, law, warfare, gender, and so on. These two sections provide useful discussions of the literature on these themes but do not engage with the central interventions of the introduction, notably the emphasis on techniques over technology, and overlooked regional contexts. In fact, these chapters are dominated by conventional surveys of standard innovations in largely American and European settings. An excellent chapter on everyday household technologies makes an important case for the centrality of these overlooked technologies for modern history (pp. 705–28), but this is the exception in a volume that makes familiar promises more than it delivers on them.