

Book review of:

Global Scientific Practice in an Age of Revolutions, 1750–1850. Edited by *Patrick Manning* and *Daniel Rood*. Pittsburgh: University of Pittsburgh Press, 2016.

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This is an author approved version.

Over the last two decades, world and global histories of science and knowledge production have developed into one of the most vibrant fields of historical scholarship. The volume reviewed here is thus no exception to this general trend. The editors, Patrick Manning and Daniel Rood, have managed to bring together a series of thirteen well-crafted case studies that anatomize local and global practices of scientific knowledge production and exchange in the decades around 1800. Earlier versions of the essays have been presented at an international conference held at the University of Pittsburgh in 2012. The volume's contributors are junior and senior scholars based at universities and research institutes in the United States, South America, and Europe. The volume is well organized, and individual essays are carefully edited. Each of the chapters discusses an important aspect of how science was practiced in the worlds of the late eighteenth and early nineteenth centuries. Surprisingly, the volume is only sparsely illustrated with black-and-white illustrations and contains no maps. Adding maps would have helped readers to develop a better visual understanding of the volume's truly global geography.

The volume's first section focusses on historical episodes of knowledge making in the Caribbean. The section entails essays from Matthew James Crawford on the history of cinchona, a medicinal tree bark, in the late eighteenth-century Spanish Atlantic world and from Eleonora Rohland on the history of hurricanes and environmental knowledge in Louisiana, the Caribbean, and the United States. Kay Etheridge's essay examines the importance of images in the work of Maria Sibylla Merian (1647–1717) and other naturalists. The volume's second section situates Carolus Linnaeus's work and ideas in a wider historical context. In his empirically rich essay Kenneth Neyborg, for instance, problematizes the role of Linnaeus as the center of an organized global network of collectors. Instead of reading Linnaeus's followers as a homogeneous group of "apostles" steered from the European center, Neyborg demonstrates that a contextualization of individual careers has the potential to spatially nuance histories of natural history and colonialism.

The volume's third section zooms in on debates of description and taxonomy. Instead of discussing different classification systems on an abstract level, Marcelo Fabián Figueroa offers a fascinating view on the daily practices of a bird collector in Paraguay in the late eighteenth century. Describing birds was, as Figueroa shows, never a straightforward endeavor, but formed an integral part of a broader struggle between Portugal and Spain to demarcate their borders in South America. Seen from this perspective, territorial inspection and natural historical description appear as closely intertwined endeavors. In her essay on *Chlamyphorus truncatus*, also called "blind" armadillo, which was first described as a species by the American naturalist Richard Harlan in New York in 1825, Irina Podgorny argues in a similar vein. Instead of situating her narrative in New York, she shows that Harlan's act of describing the armadillo formed the final step of a much longer historical trajectory of trade, learned and diplomatic exchange. Her in-depth analysis and contextualization of blind armadillo specimens available in European and North American collections allow her to uncover a stunning number of local and long-distance networks involved in collecting, describing, and trading the animal.

The volume's fourth section shifts the focus eventually to issues of logistics, management, and planning. In a series of three case studies, readers learn about the historical roots of tropical sugar agriculture, the material logistics of plant transfer, and postal standardization in India in the nineteenth century. In particular, the essay on material aspects of the long-distance transport of living plants written by Stuart McCook is fascinating. By zooming in on the history of the so-called Wardian cases and its users, McCook offers a narrative that decenters the exclusive role of the Royal Botanic Gardens in Kew as center of global plant exchange and horticulture. Instead of providing an institutional history of Kew Gardens and its affiliated botanists, McCook manages to reconstruct a cosmopolitan network of commercial nurseries such as the Hackney Botanic Nursery Garden in London, which formed the backbone and motor of global plant transfers in the late eighteenth- and early nineteenth-centuries' world.

The volume closes with essays by Jessica Ratcliff and Daniel Rood. Their essays have a double function: on one hand, they summarize points that have been made in previous chapters. On the other hand, they aim to bring the history of scientific practice in dialogue with global histories of economics. Ratcliff's contribution, for instance, examines why the great divergence debate has never fully been taken up by historians of science interested in the same period. Daniel Rood continues by reflecting on how the global history of labor might profit from a closer dialogue with historians of science. Rood discusses a number of crucial dynamics of global science making in the late eighteenth and early nineteenth centuries: the active othering of local helpers and expertise, the importance of (knowledge) management and accumulation¹, and the problem of heavy Eurocentrism in traditional economic history (Jacobs, Mokyr). Taken together one can only congratulate both editors for producing a highly inspiring volume that should be of interest not only to global historians of science.

¹ This point has also been highlighted and extensively discussed by a special issue titled "Management and Accumulation in Global Historical Perspective" in *History of Science*, vol. 52 (2014), edited by Lissa Roberts.