

## Focus on Indigenous and Colonial medicine in the Americas

**Mathew James Crawford, *The Andean Wonder Drug. Cinchona Bark and Imperial Science in the Spanish Atlantic, 1630–1800*, Pittsburgh: The University of Pittsburgh Press. 2016. Pp. 296. \$45. ISBN 978 0 8229 4452 2.**

Drawing extensively on unique primary Spanish archival sources, Mathew James Crawford provides an exciting and illuminating window on the genesis of green imperialism in the Spanish Atlantic. *The Andean Wonder Drug* uses the story of cinchona bark and its use as a febrifuge to demonstrate how the early-modern merging of the worlds of science, commerce and imperial governance laid the foundation for European global hegemony. Crawford convincingly shows how scientific reasoning and assessment were intimately connected with Spanish imperial politics. More importantly, however, he provides an intriguing account of a forgotten chapter in early modern colonial and science history. Crawford skilfully deconstructs and then connects the processes of local and global knowledge production by following a wide variety of agents involved in the transatlantic circulation of knowledge. It is a pity that the author exaggerates in his efforts to symmetrically address the knowledge and expertise of the *cascarilleros* (bark collectors) and *curanderos* (healers) in the Andes and of the pharmacists, botanists and physicians in Europe. The different actors on both sides of the Atlantic did not necessarily agree on what was the best way to harvest, identify, evaluate and use the cinchona bark. But these disagreements, as the author is the first to pinpoint, were instrumental in the co-production of knowledge regarding the questions of classifying and qualifying cinchona bark on both sides of the Spanish Atlantic. Unnecessarily, he positions himself as the ultimate arbiter of quite a number of knowledge disputes.

The historical trajectory of cinchona bark as a natural resource, commodity and medication is exemplary for the search for 'green gold' and the challenges involved in, first, the circulation of bark and knowledge of it, and secondly in connecting different and distant sites of production, exchange and consumption. Mastering and controlling the natural world in the Andean forests of Spanish America was not without its pitfalls. Ironically, the healers in the Andes were the first to find a natural remedy against the old world disease malaria that was brought by European and African colonists as part of the early modern European imperial expansion. The fast growing global demand for cinchona bark in the early 1700s turned it into a high value commodity that served the Spanish imperial interests. The eponym 'green gold' reflects the analogy popular within circles of the Spanish Crown and imperial merchants between mining precious metals and extracting bark. Both activities would naturally lead to exhaustion and within this paradigm there was ample room for discussion about increasing the supply of bark through the large scale cultivation of cinchona trees. To safeguard the exclusive exploitation of the bark and other natural resources in Spanish America, the Crown ordered in 1751 the establishment of a huge royal forest reserve in Peru. The Crown defined cinchona bark as a most important imperial natural resource that was worthy of scientific interest and attention.

Systematic study of the raw materials was to take place in Spain under the guidance of the Royal Pharmacy as an institution of imperial science. The Spanish Crown, however,

did change its view on the bark as a finite resource in the second half of the eighteenth century with the help of the botanists, who did manage to position themselves as imperial experts on plant commodities amenable to cultivation. The botanists started efforts to set up cinchona plantations in Peru. These efforts, as Crawford describes, did not materialize, because of the significant local obstacles that the imperial botanists encountered in the colonial Andean world. The local merchants and landowners appeared not interested in cooperating due to a different view on the scarcity of the cinchona tree. In their view the forests still produced abundant quantities of high quality cinchona bark. History has proven them right in their assessment, if we go by the bark exports from South America up to the 1860s. The European claims about the impending disappearance of the cinchona tree were indeed, as Crawford argues, hyperbole and served the imperial interests of the English and the Dutch in search of new profitable plantation commodities.

However acute and smart Crawford's conclusion on the entanglement of science, commerce and empire is in the search for the best bark, his analysis of imperial epistemologies, epistemic cultures and the politics of knowledge are less convincing. Despite this shortcoming and a relatively high frequency of typos the book succeeds remarkably in describing and clarifying the myriad ways of knowing nature and producing knowledge about a specific plant medicine within the context of the early modern Spanish Atlantic World.

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**Martha Few, *For All of Humanity: Mesoamerican and Colonial Medicine in Enlightenment Guatemala*, Tucson, AZ: University of Arizona Press, 2015. Pp. 320. \$34.95. ISBN: 978 0 8165 3187 5.**

*For All of Humanity* addresses responses to epidemic disease in colonial Central America. Focusing on the typhus and smallpox epidemics that ravaged the administrative region known as the Kingdom of Guatemala in the 1790s and 1810s, Martha Few shows how an urban elite who saw themselves as propagators of enlightened humanitarianism orchestrated anti-epidemic measures, and places these specific responses within a broader story of the way the state inserted itself into the health and reproductive lives of its colonial subjects. In addition to measures including quarantines and inoculation programmes introduced by governments, Few places the varied responses to disease in their social context. The author explains Mesoamerican medical worlds at the village and parish level, and includes fascinating perspectives on rural communities and women. The chapters occasionally meander from the guiding thread of epidemic disease, but the relatively wide scope of the book does allow Few to present a great variety of intriguing case studies. This is a monograph that is both highly informative and eminently readable.

A crucial aspect of Few's argument hinges on separating the colonial government's actions at the level of the Spanish empire from the local level of administrators based in Guatemala City and smaller communities. Few's careful breakdown of the concept of 'state power' to different local levels allows her to trace medical responses at different scales. Given the important role of the Catholic Church and religious orders in the governance of colonial society and especially rural communities, the role of priests and friars in implementing colonial medical campaigns is analysed in detail. Few describes a state–