

## Book Reviews

**Matthew J. Crawford** and **Joseph M. Gabriel** (eds), *Drugs on the Page. Pharmacopoeias and Healing Knowledge in the Early Modern Atlantic World* (Pittsburgh: University of Pittsburgh Press, 2019), pp. x + 374, \$50, hardback, ISBN: 9780822945628.

As the editors state, the main aim of this volume is to integrate the pharmacopoeias ‘into the broader intellectual culture of their time’ (p. 3). For Crawford and Gabriel, the essays in the volume test three important theses regarding this genre of medical literature, which has received scant attention from historians despite its success in its day. First, diverse factors contributed to that long-term success, from the desire to control the trade in healing substances and to codify knowledge of *materia medica*, understood as ‘medicinal substances used to prepare medicaments’ (p. 4), to the promotion of national or imperial interests. Second, the essays ‘show that the impulse to produce knowledge about healing goods involved a diverse cast of characters and took a variety of textual forms’ (p. 8). Third, these essays show the importance of the pharmacopoeias as sources enabling new perspectives on the historical implications of the cultural encounters between Europeans, Africans and indigenous Americans in the ‘Early Modern Atlantic World’ (p. 10).

However, the volume fails to elucidate two important problems: scale and sources. Their resolution would have helped to achieve the aim of the volume more convincingly. The scale of the ‘Atlantic World’ that sets the geographical parameters of the essays is not the most adequate one to tackle the complex implications of the encounters between non-European cultures and the expansionist European colonial powers. A global scale would have been far more useful than a regional one. That limitation of the first globalisation is anachronistic, probably due to current academic labels. In this case it unnecessarily restricts the range of an excellent book, as clearly emerges from Walker’s chapter, in which he breaks the artificial framework of the ‘Atlantic World’ by discussing the Portuguese empire. As for sources, the problem lies in the idiosyncrasy of the pharmacopoeias, obviously a limited genre on the part of both their producers and their consumers. They offer a partial, biased view of the main object of analysis of the volume. As a result, most of the chapters are forced to go ‘beyond the pharmacopoeias’ (Rivest’s chapter) and to bring in other related texts, such as the ‘social pharmacopoeias’ discussed by Gómez in his Afterword, which help to throw light on the circulation networks of healing goods originating in non-European contexts that the book sets out to demonstrate.

Nevertheless, the virtues of the volume outweigh its shortcomings. Regarding the Atlantic scale, unlike other similar volumes that take the ‘Atlantic World’ as a study region, this one is convincing because it accords equal importance to both shores of the ocean: five chapters focus on European territories, one on Africa and six on the Americas, including Spanish, Portuguese, French and British America. Regarding the sources, the contributors turn their critical gaze to relevant works that have received little attention, showing that there is much more to discover in the pharmacopoeias than has been explored so far by historians of medicine and pharmacy.

Part One focuses on the construction of the pharmacopoeias and their function in relation to other genres of medical literature. Paula de Vos provides a survey of the tradition of Galenic pharmacy from antiquity to the Renaissance, drawing on examples from *materia medica* and the Islamic and Christian worlds over ten centuries. Emily Beck adopts the

narrower focus of fifteenth-century Tuscany to place the *Ricettario Fiorentino* (1499) in the context of the circulation of manuscript prescriptions and the activities of institutions, physicians, barber-surgeons and apothecaries. Crawford analyses the *Pharmacopoeia Matritensis* (1739) as one more instrument to serve the reforms of the colonial empire of the Bourbon dynasty in Spain.

Part Two tackles attempts to systematise and codify knowledge of *materia medica* by placing the pharmacopeias in a broader context. Among the various challenges were conflicts over the market of ‘secret’ remedies or those from other medical cultures. Justin Rivest focuses on the conflict of interests between French apothecaries and physicians over the *Pharmacopée royale* and their attempts to secure a royal privilege to monopolise trade in the antidote Orviétan. Tim Walker deals with the Portuguese attempts to codify and keep secret the knowledge of medicinal remedies they had acquired from contact with indigenous medical healing in India and Brazil. William Ryan addresses the tension between secrecy and publication in Hans Sloane’s practices as editor of the *Philosophical Transactions* vis-à-vis British colonial and his own interests.

Part Three provides examples of the role played by pharmacopeias in constructing New Worlds. Benjamin Breen analyses an excellent example of how much knowledge of the Portuguese sources enriches the historiography of the contacts between both shores of the Atlantic, throwing light on the forced transfer of Africans to the mines and plantations run by Europeans in America. The next chapter moves to the territories of *Nouvelle France* from which the *Capillaire du Canada* came. This fern was used domestically in the colony, but its economic value rose considerably in the Atlantic trade as a commodity, partly due to its inclusion in the French pharmacopeias. Kelly Wisecup analyses the list of medical herbs used by the Mohican healer Samson Occom and stresses the need to ‘rethink the forms’ (p. 195) which the counterparts of drugs on the page can assume in other medical cultures.

Part Four deals with the uses of pharmacopeias in relation to various projects of national construction. Stuart Anderson deals with the contexts of their production in England (London, 1618), Scotland (Edinburgh, 1699) and Ireland (Dublin, 1807) as models of national construction differing both chronologically and in their ultimate success. Antoine Lentacker analyses the case of the *Codex Medicamentarius* (1818), the first French national pharmacopeia, to show what the nomenclature reveals of technologies of control implemented by the nation state with remarkable success, at least in France. Joseph Gabriel demonstrates the varied range of pharmacopeias in the USA deployed to control the complex herbal remedies market, including the cures of the indigenous peoples.

Regrettably, the attractive and coherent structure of the book is marred by the strong bias of the bibliography toward English-language publications.

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**Pierre-Yves Donzé**, *Making Medicine a Business. X-ray Technology, Global Competition, and the Transformation of the Japanese Medical System, 1895–1945* (London: Palgrave Macmillan, 2018), pp. 199 + xiv, £99.99, paperback, ISBN: 9789811340819.

Pierre-Yves Donzé’s excellent book examines the transformation of medicine into a business from the example of Japan during the first half of the twentieth century. Donzé