

SIEGFRIED HUIGEN, *Knowledge and Colonialism: Eighteenth-Century Travellers in South Africa*. Leiden: Brill, 2009. Pp. xii + 273. ISBN 978-90-04-17743-7. €99.00 (hardback). doi:10.1017/S000708741000110X

Whereas the history of South African science in the nineteenth and twentieth centuries has attracted considerable attention in recent years, the eighteenth century has lagged behind. The journals and reports of individual travellers and explorers are widely available and the most notable scientists have had monographs written about them. Yet, thus far, there has been no comprehensive statement of the state of scientific knowledge at this time. In part, this may reflect the absence of established scientific institutions during the era of Dutch colonialism, which came to an end in 1806. A lack of immersion in comparative European literature on the part of anglophone scholars may be another and it is here that Huigen, associate professor of Dutch literature and cultural history at the University of Stellenbosch, has a distinct advantage.

In developing his valuable overview of eighteenth-century scientific knowledge at the Cape, the author is highly critical of Mary Louise Pratt, who essayed a postcolonial critique in her widely noticed book *Imperial Eyes: Travel Writing and Transculturation* (London, 1992). Huigen takes strong issue with Pratt's assumptions, building on the critiques of others, notably William Beinart and Nigel Penn. He provides a compelling body of evidence to show that scientific writings about the eighteenth century did not efface the presence of indigenous figures, and that the relationship between scientific discovery and colonial conquest was by no means crudely instrumental.

The principal cast in this book includes Peter Kolb, Robert Gordon, François Le Vaillant, John Barrow and Lodewyk Alberti, with Lichtenstein, Augusta De Mist, Sparrman and Thunberg featuring in supportive roles. Their diverse backgrounds – German, Dutch, French Surinamese, English and Swedish – reflect the fact that the ruling Dutch East India Company had little interest in curiosity-driven knowledge or in building scientific institutions at the Cape; the narrow mercantilist orientation of the VOC meant that its scientific expeditions were restricted to answering questions of demonstrable utilitarian value. By contrast, the cosmopolitan group with whom Huigen is concerned were for the most part independent gentlemen of science (with the notable exception of Barrow and De Mist, who were tied to the British and Batavian administrations respectively). Their intellectual mentors in Europe were equally diverse, including metropolitan gatekeepers like Buffon, Allamand and Linnaeus. One should not infer from this that the scientists under consideration were mere subordinate fieldworkers: on the contrary, Huigen offers tantalizing evidence that research conducted on the Cape periphery had a shaping influence on metropolitan scientists and philosophers. New understandings of the Hottentots, for example, provided by the likes of Kolb, were readily absorbed into the thinking of writers like Rousseau, Voltaire and Diderot, as well as Kant and Herder.

Eighteenth-century scientific travellers worked independently yet they were fully aware of the work of their predecessors and maintained a rich intellectual conversation amongst themselves. Most of the subjects of this study – with the interesting exception of Le Vaillant, who pioneered a more personal style of narration inflected by Romantic philo-primitivism – were dedicated to an evidence-driven but expansive view of knowledge with no artificial boundaries erected between ethnography and the natural or physical sciences. They shared a determination to experience nature and record facts 'with their own eyes' in a manner that seems to anticipate Humboldtian epistemology. Working in an era before racial attributes were codified and subjected to stern, if spurious, comparison, several of the subjects of this study are shown to have evinced open-minded sympathy towards South Africa's indigenous inhabitants. Above all, Kolb stands out as Huigen's hero: the author sees Kolb's *Current State of the Cape of Good Hope* (1719) as a remarkable humanist statement which challenged established stereotypes of the Khoikhoi (Hottentots), as well as introducing the Cape to a wide scientific audience for the first time. Huigen is irked that Kolb's work was neither fully appreciated by contemporaries, who mounted

whispering campaigns against him, nor understood by scholars of our own time, who continue to misread Kolb by failing to read him in the original German.

Robert Gordon is much praised by Huigen for his rigorous empirical methods and his considered view that differences within humanity are superficial rather than fundamental. No scientific traveller was more genuinely tolerant towards difference than Gordon. In the case of the more inconsistent Le Vaillant, who privileged experience over objectivity, Huigen detects the influence of Rousseau, not only in the traveller's powerful expression of sympathy towards indigenes (which extends to an account of his romantic attachment to a – probably fictitious – young Khoikhoi beauty, Narina) but also in his hostility to Cape colonial society. Even more stridently critical of Cape colonists was the Englishman Barrow, though in this case antipathies to the slothful and repugnant Dutch Boers were linked to Barrow's championship of English administration and progress in the second volume of his *Travels* (1804). Huigen is especially critical of Pratt's interpretation of Barrow, maintaining that his view of the Khoikhoi and Xhosa was more nuanced and less prejudiced than Pratt's selective quoting allows.

Alberti, who produced the first ethnographic monograph of the isi-Xhosa (1810), is shown to be a successful exponent of the pioneering French anthropologist Joseph Marie Degérando, whose conception of man, combining moral and physical attributes, supported an egalitarian view of human abilities. Alberti's study was in part the manifesto of an aspirant colonial governor. As such, Alberti sought to use his ethnographic knowledge to influence the exercise of colonial power in an enlightened manner – and he managed to achieve this briefly in his capacity as a *landdrost* during Batavian rule. The case of Alberti endorses Huigen's wider point that, whilst scientists were inextricably involved in and dependent on the networks of colonial power, their influence on governance was not necessarily negative. On balance, Huigen concludes, the symbiotic relationship between scientists and colonialism tended to favour the interests of the former over the latter – rather as historians of colonial anthropology in the twentieth century now tend to argue.

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GALINA KICHIGINA, **The Imperial Laboratory: Experimental Physiology and Clinical Medicine in Post-Crimean Russia**. Amsterdam and New York: Rodopi. Pp. ii + 374. ISBN 978-90-420-2658-2. £72.20 (hardback).

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With the notable exception of Ivan Pavlov, Russian physiology of the late nineteenth century is little-known to non-Russian speakers. This book presents Russian experimental physiologists and their research, situating them both within the historical and political context of post-Crimean Russia and within developments in European physiology. Kichigina concentrates on the decades from 1860 to the mid-1880s, a period of reform and liberalization in Russia, and on educational institutions, primarily the St Petersburg Medico-Surgical Academy, which trained physicians for the military. The volume is divided into three sections: one on the situation of physiological research in Russia and Europe, one on the rise of the Medico-Surgical Academy to become a leading site for experimental research in physiology, and one on the career of Ivan Sechenov after his resignation from the Academy.

The first section provides an intellectual and scientific background to the development of Russian experimental physiology. In the 1860s, Russia found itself in a brief phase of liberalization, with a strong interest in modernization. Recognizing that it lagged well behind Central and Western Europe in science, technology and medicine and that adequate facilities for acquiring scientific skills were lacking in the country, the Russian government encouraged scholars to study