

Book Review

Jim Endersby, *Imperial Nature: Joseph Hooker and the Practices of Victorian Science* (Chicago: University of Chicago Press, 2008), xii + 429 pp., illus., \$35.00

In reading Jim Endersby's original and provocative book *Imperial Nature: Joseph Hooker and Practices of Victorian Science* it is helpful to begin by reading the introduction and then go directly to the conclusion. In the introduction Endersby outlined his approach:

Despite the fact that natural history was arguably the most important nineteenth-century science (certainly the most widely practiced), whose implications ranged from the economic to the theological, the daily activities of its practitioners have yet to be studied closely. Instead, historians have tended to concentrate on a handful of publications that deal with theoretical issues, ignoring the vast bulk of Victorian naturalists' libraries – notably the endless books on collecting, preserving, storing, and classifying specimens. As a result we have a rich history of scientific ideas but almost nothing on the scientific practices that made those ideas possible. By building my study around a detailed examination of what might initially seem the most mundane of practices – botanical collecting and classification – I hope to show how these activities shaped even the most sophisticated theoretical speculations (p. 6).

Then, in the conclusion Endersby brings the subject of his book around to the relationship of Joseph Hooker to his older contemporary Charles Darwin:

Friendships were crucial to Hooker's career, and none more so than that with Darwin; they wrote to each other regularly for over forty years, until Darwin's death, and their surviving letters – over 1,300 of them – record one of the most important scientific friendships of the nineteenth century. However, I have deliberately chosen to keep Darwin in the background throughout this book, partly because his story is so well known and has been so well told but also because his enormous historical significance has tended to overshadow the lives of his contemporaries (p. 316).

Between these two poles – emphasizing scientific practices and keeping Charles Darwin in the background – Endersby has written his book.

Endersby's Hooker was busy and on the move. The 10 chapters of the book are entitled to describe his activities: Traveling, Collecting, Corresponding, Seeing, Classifying, Settling, Publishing, Charting, Associating, and Governing. The first chapter is straightforward. Hooker's first great role was as assistant surgeon aboard HMS *Erebus*. In this capacity he spent 4 years (1839–1843) exploring southern oceans. As the son of William Hooker, the botanist, Hooker early exposure to the subject determined his preference. Eventually over the course of many years (1844–1860) he would publish his *Botany of the Antarctic Voyage* in six large volumes. As Endersby shows in beautiful detail in his next two chapters, Hooker's enormous success in writing his flora of the southern oceans was due to his expertise in collecting (such equipment as the vasculum and the plant press are duly illustrated and explained), and to his success in enlisting the aid of men of British descent such as William Colenso, an expert on the plants of New Zealand, and Ronald Campbell Gunn, a specialist on Tasmania. The nexus of the relationship between Hooker and his imperial correspondents was by gift exchanges and friendship: "Friendship begat botanists, and botany begat friendships...it is important not to lose sight of this crucial affective dimension" (p. 85). In the next chapter "Seeing" Endersby discusses botanical illustration. The following two chapters are central to Endersby's concerns. Both concern classifying. Here Hooker's work as a "philosophical" botanist operating in the metropolis was critical to the field. Linnean naming practices still had a hold in Britain, even after the work of Robert Brown in introducing the "natural" system begun by Bernard de Jussieu and his nephew Antoine-Laurent de Jussieu. As Endersby shows, Hooker promoted the "natural" system, even while keeping track of the wide variety of competing systems. Because of his association with Kew Gardens, where he became director upon his father's death in 1865, Joseph Hooker's views carried weight. For example, "Hooker's *Handbook of the New Zealand Flora* (1864–1867) one of the 'colonial floras' that Kew produced in the 1860s, was a particularly useful vehicle for exporting his metropolitan classification back to the colonies" (p. 163). There was also the fraught question of deciding what defined a good species. Here, Hooker was a "lumper" rather than a "splitter": as a philosophical naturalist he favored economy in naming. Endersby pointed out that there were practical reasons as well as philosophical ones for his preference: a variety did not require its own separate herbarium sheet, catalog number, or published

description. Endersby argues that expediency shaped the situation: “colonial botanists were more likely to be splitters, whereas metropolitan naturalists were usually lumpers” (p. 157).

In Endersby’s next chapter “Publishing” he acknowledges the theoretically-oriented essays that accompanied Hooker’s major publications, noting that because of the range of botanical publications available at the time Hooker and his peers “had to put considerable effort into distinguishing the work they produced from the other kinds of botanical publishing” (p. 208). Chapter 8, “Charting,” is devoted to the subject of geographical distribution, one of Hooker’s well known interests and, given his geological knowledge, one which led him to be open to speculations concerning the former distribution of land masses on the earth’s crust. Chapter 9 “Associating” is about behavior, in particular what constituted gentlemanly behavior among botanists. This chapter touches on a theme that runs through most of Endersby’s chapters: how could philosophically-minded botanists advance their science and themselves? As numerous examples make clear, Hooker’s ideal was that of gentle folk who did not get into “broils” and who worked for the love of the science. He desired the status of gentility, while at the same time needing to provide for himself a position that supported not only himself but would support a family. Hooker fully resolved this problem for himself when he assumed his father’s position at Kew. This victory, however, as Endersby shows in his final chapter, was not sustainable in the long run, for, as a public servant Hooker was accountable to Parliament and, ultimately, to the taxpayer. Somewhat amusingly, the question of accountability played out partly over the mundane question of what were to be the opening hours at the Gardens. Hooker wanted the Gardens closed to the public as much as possible in order to further scientific research. The public wanted the gardens open as a place of recreation.

In his conclusion Endersby brings Darwin back into the story. He argues that “for men from Hooker’s community, those who practiced classification for a living, the species question was not primarily about the transmutation of species but about their definition of it” (p. 323). As Endersby put his point in a recent article, Darwin’s work “made no difference to everyday scientific work” (*Science* 326:1499). While I do not agree with this point (in my view the Darwinian revolution was a rolling one that began with the radical notion that some species had become extinct), Endersby is fresh and engaging in making his case.

Endersby’s book deserves close reading. It brings one into the world of Victorian botanists just before the field became professionalized with

salaried career trajectories and degree certifications. Is there any material I would have gladly seen more of? Some treatment of Darwin and Hooker's intellectual relationship during the 1840s would have been helpful to understanding the development of both of their ideas on species. I also would like to have seen more on Hooker's emotional nature. With all of his energy and mastery of collections, Hooker could be enormously condescending. Endersby refers at one point to Hooker's "imperious nature," but the subject could use further elaboration (p. 312). These points aside, it is clear that Joseph Hooker was an influential man of science, and that, in a fascinating and subtle study, Jim Endersby has brought us deeper into his world.

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