RW Home, AM Lucas, Sara Maroske, DM Sinkora and JH Voigt (eds),

Regardfully yours: selected correspondence of Ferdinand von Mueller. Volume I: 1840–1859, Life and Letters of Ferdinand von Mueller, Bern, Peter Lang, 1998, pp. 842, illus., £36.00 (3-906757-06-4).

Few people outside the botanical world have probably heard of Ferdinand von Mueller, and it may therefore come as a surprise that he is rated important enough for a multi-volume "life and letters". For Australian historians of science, however, he is that country's outstanding nineteenthcentury figure, who successfully overcame the handicaps of its geographical isolation to achieve a renown that was emphatically international. What is more, like so many of his contemporary counterparts in Europe and America, he conducted a correspondence of heroic dimensions, much of which is invaluable for the picture it provides of the day-to-day concerns and constraints of a leading scientist-cumadministrator in a colonial outpost at that period, otherwise concealed behind the bare façade of his published work.

Born plain Müller at Rostock in Mecklenburg in 1825, one of the nine children of a customs officer, von Mueller owed his introduction to botany, like so many in that era, to an apprenticeship in pharmacy. Developing a passion for collecting, he was soon yearning to follow the example of Alexander von Humboldt in investigating the flora of little-known areas in distant corners of the globe. In 1847, armed with a doctorate from the University of Kiel, and on the then-familiar pretext of requiring a warm climate to avert suspected tuberculosis (but perhaps also on account of the tricky political situation in Schleswig-Holstein, to which the family had moved on his mother's widowhood), he emigrated to Australia with two of his sisters. Once there, he promptly Anglicized his name and, though forever undisguisedly German both in writing and in speech, had the luck to

land the post of Government Botanist in the newly-independent colony of Victoria. Over the next forty-three years he energetically fostered the further exploration of Australia and New Guinea, building the Phytologic Museum in Melbourne into a world-class herbarium in the process, partly by extensive exchanges with botanists in other countries. For some of those years he also occupied the decidedly hot seat of Director of Melbourne's Botanic Gardens. A pivotal figure in the country's intellectual life more generally, he had a major hand in the founding of several of its key scientific institutions. Among the many honours bestowed on him before his death in 1896 were several European knighthoods, a Württemberg barony and the coveted Royal Medal of the Royal Society in London.

Mueller was one of the most prodigious correspondents of all time. An international team working for ten years has succeeded in locating some 12,000 items, but even that, they calculate, is less than 5 per cent of the total. The three volumes projected will contain chiefly those letters adjudged most important from a scientific or biographical standpoint or which illustrate the wide reach of his activities and interests; the entire collection is to be made available on CD-ROM. Particularly welcome is an appendix listing all those featured in the correspondence whom it has proved possible to identify, with brief biographical details added. Many of these were medical men or had medical connections. After that come lists of Mueller's publications and of the many new taxa he described, then finally a general bibliography and two indexes, the second one to the scientific names of plants mentioned in the letters. There are even five portraits: four of Mueller and members of his family, and one of Joseph Dalton Hooker, of all his correspondents probably the most important scientifically (as well as one of the most prolific). All in all, this volume is a model of what an enterprise of this kind

ought to produce. Scholars in numerous fields will have much reason to be grateful.

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Mary J Dobson, Contours of death and disease in early modern England, Cambridge Studies in Population, Economy and Society in Past Time, 29, Cambridge University Press, 1997, pp. xix, 647, illus., £65.00, \$95.00 (0-521-40464-9).

Some observers in the seventeenth and eighteenth centuries were well aware of the significance of local "airs" and "waters" and the extent to which there was an apparent link between health and topography. Mary Dobson has pursued this theme for some time, following her doctoral dissertation of 1982, with the intention of providing a more rigorous explanation for the existence of significant spatial gradients of health. The present study is designed to recreate the epidemiological landscapes of the past, and to provide a clearer understanding of the spatial patterning of diseases in preindustrial England. It focuses on south-east England, specifically the counties of Essex, Kent and Sussex, and by utilizing data from over 600 parishes Dobson is able to reveal the existence of significant, deep-seated regional differences in mortality which persisted into the nineteenth century. In particular, the high crude death rates in marshland communities, associated with an instability in the burial curve, reflected the presence of "black spots" on the mortality map of south-east England. Topographical features, specifically local geology, natural drainage and soil quality, continued to affect the disease panorama. The high mortality of marshland communities, specifically areas with slightly stagnant saline waters, on the basis of this analysis,

was essentially a result of the presence of the malaria mosquito vector, Anopheles atroparvus. In contrast to Mckeown's view, malaria was a significant cause of high mortality in marshland parishes and its gradual disappearance was, in turn, primarily a result of environmental improvements, including drainage and new farming techniques.

The great merit of Dobson's study is that it focuses attention on a number of factors that influenced mortality levels, such as topography and land-use characteristics, that are frequently neglected by historical demographers. The analysis is based on a very extensive range of parish registers, relevant archival material and contemporary topographical evidence. The emphasis on the key role of malaria in the saline marsh communities is well-sustained, despite the fact that the parish registers contain little concrete information on cause of death, a problem compounded by the symptombased nosologies of the period in question. Mortality black-spots are defined, in the first instance, by the burial-baptism ratio, despite Dobson's awareness of the varying extent of under-registration (particularly of infant deaths) and the absence of reliable information on age-specific migration. Geographical clustering may well negate "random deficiencies of parochial registration", as Dobson suggests, but any meaningful discussion of spatial differences in life expectancy is undermined by the absence of information on the age structure of individual parishes. An undoubted strength of the study lies in its careful attention to the mortality of individual localities, but this is seldom supported by micro-level information on the nature of environmental change, medical provision, living standards, food supply and net nutritional status. Dobson implicitly accepts the fact that the secular pattern of mortality change in south-east England can be understood only on the basis of a disaggregated analysis of specific types of localities, by age, sex and social