

Book Reviews

The major question, however, is why did the shifts occur when they did? Midelfort does not leave us guessing here. One cannot, he insists, argue that madness was becoming medicalized, or that “physicians were more knowledgeable or humane in 1600 than a century earlier”. Other, more political considerations drove the transition from confinement to care. In an age of nascent bureaucratization, as princes and their governments increasingly relied on academic learning as “a guarantor of proper procedures and of legitimacy”, physicians acquired new status (p. 150). Physicians, like jurists, were experts, and when confronted with the madness of princes, councillors turned to authorities like themselves for assistance. More provocative is Midelfort’s contention that mad princes came to be handled with more circumspection because “an increasing reverence for the state led to an increased awe for the prince’s person” (p. 151). It was the body of the prince that legitimized the states of the late sixteenth and seventeenth century, and indeed “the prince in his physical body had become essential to the structure of authority” (p. 17). Therefore, he or she could no longer be forcibly replaced or silently hidden away. This interpretation is very credible, although Midelfort might well have spent more time discussing the rise of these new “body politics”.

Midelfort’s learning, good historical sense, and theoretical restraint shape the book. Justifiably wary of sweeping generalizations, he shrewdly picks and chooses among the explanatory schemes advanced by Michel Foucault and Norbert Elias, accepting parts while remaining sceptical of their overall validity. He avoids impetuously concluding that the sixteenth century was a “world gone mad”, and equally eschews the “seductions of genealogy” by pointing out that it would be rash to infer that the house of Braunschweig, for example, was “unusually subject to madness *because of the lines of inheritance*” (p. 159). Twenty cases cannot tell us much about how the populace perceived insanity, or how it was treated, or whether princes were madder than paupers. Midelfort’s scholarly reserve, his refusal to leap wildly beyond the sources, and his smooth yet vigorous prose, have

produced a lovely little book that sweetly combines the virtues of historical imagination and solid research.

Mary Lindemann, Carnegie Mellon University

Troels Kardel (ed.), *Steno on muscles*, Transactions of the American Philosophical Society, vol. 84, pt 1, Philadelphia, American Philosophical Society, 1994, pp. xii, 252, illus., \$25.00 (0-87169-841-2).

This volume contains facsimile reprints and the first English translations of Niels Stensen’s *Nova musculorum & cordis fabrica* (1663) and *Elementorum myologiae specimen* (1667). The first text, framed as a letter to Thomas Bartholin, includes a brief report of Stensen’s early observations on muscle structure. The second text, Stensen’s major work on skeletal muscle, details his geometrical theory of muscle structure and function in forty-four definitions, five suppositions, six lemmas and a main theorem. In essence, if muscle comprises one or more parallelepipeds of fleshy fibres, obliquely angled between their tendinous extensions, then the swelling apparent on contraction can be accounted for by the parallelepiped increasing in one dimension only, namely that which corresponds to the thickness of the muscle. There is no change in volume, and Stensen declines to offer any opinion as to how the fleshy fibres shorten.

In a comprehensive and well-organized introduction, Troels Kardel explains Stensen’s new muscle structure, details the reception, rejection and subsequent neglect of his theory and argues for its vindication in the light of post-1980 studies including computer modelling of muscle activity. Much of this introductory material can be found in one of Kardel’s earlier papers, ‘Niel’s Stensen’s geometrical theory of muscle contraction (1667): a reappraisal’ (*J. Biomechanics*, 1990, 23: 953–65), but he has taken the opportunity to add appropriate detail and to expand on Stensen’s predecessors and contemporaries.

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Well-chosen illustrations and excerpts from sources including Richard Lower, Thomas Willis, John Mayow, Giovanni Alfonso Borelli, Johannes Bernoulli, Hermann Boerhaave and Albrecht von Haller, aptly evidence the immediate impact of Stensen's theory and the variety of misinterpretations which beset it over the ensuing years. Kardel does not consider the possibility that Stensen may have contributed to these misconceptions by his use of plane rather than solid geometry, and by his failure to realize the difficulties inherent in linking his geometrical abstractions with specific muscles, *in vivo*, where the form and location of the muscle determined whether the swelling could be readily palpated.

Whilst the careful juxtaposition of Latin text and English translation facilitates textual comparisons, readers dependent on the translation will encounter some passages where complex sentence constructions and an inappropriate choice of words detract from the meaning. The reader would also have been better served by combining the endnotes to the English translation and the notes to the Latin text as page footnotes, or at least indicating the existence of a note in the Latin text where the lines are unnumbered. It is disappointing to find most of the Latin text notes untranslated, and few with any indication as to their possible significance.

The impetus for this publication came from the realization that certain elements of Stensen's muscle structure and function are pertinent to present day studies. Readers can now judge for themselves the extent to which Kardel's thought-provoking reappraisal can be justified in terms of Stensen's stated concepts, theory and vision.

Margaret Nayler, La Trobe University

Helen Jones, *Health and society in twentieth-century Britain*, Themes in British Social History series, Harlow, Longman Higher Education, 1994, pp. x, 204, £9.99 (paperback 0-582-00459-4).

For some time now there has been a generally recognized need for a short,

relatively cheap, well-written book setting out the major issues pertaining to health in Britain in the twentieth century. Helen Jones is to be thanked for having produced such a volume. Teachers and students alike will find this a most useful work. Quite properly this book is about the wider determinants of health and disease and anyone looking for a detailed history of medicine will not find it here. In that respect, however, the second half of the work perhaps devotes more attention to the National Health Service than is merited. By contrast, the first half of the work has very little to say about clinical medicine. Jones's work is constructed chronologically. She recognizes in her introduction that health can be addressed as a culturally constructed set of meanings as well as something that can be described in terms of the material conditions of life. She is much better at dealing with these material conditions than meaning and thankfully most of the book is devoted to material things. Poverty, diet, housing and labour are the substance of the work. Class inequalities in health, as measured by mortality and morbidity, are the dominant theme. There are significant modulations within this theme, notably the great attention given to the subtlety of the factors determining the health of women. This attention, although quite proper and corrective, seems to be at the expense of equal attention to the determinants of male health. The book, after all, seems to be intended as a general survey and not an argument about a particular group in the population. Thus it is surprising to find in a work on the health of the British people in the twentieth century no mention of, say, coalminers. Immigration, ethnic minorities and their special problems also receive detailed treatment. Certainly more than they would have done even ten years ago. Odd in this connection is the absence of any reference to the Irish.

Jones is extremely good at fair-minded historiographical presentation. Historical arguments are summarized, compared and contrasted. She is excellent in maintaining the balance between continuity and change (the health of women works well in this context).