

improvements, and a change in the character of specific diseases put forward to account for the fall in mortality during the course of the nineteenth century or even to assess the relative contribution of each to the mortality level of a particular city.

On the latter issue, Robert Woods' own study of the sanitary condition of Birmingham marks a significant advance in that he is able to provide a fine area breakdown of the distribution of wells and water-closets to compare with the spatial incidence of disease. Even Woods, however, is not able to exclude the possibility that it was not the locality of residence but the standard of living of individuals that critically shortened or lengthened their expectation of life. Other contributors fare less well. Barbara Thompson, for instance, discusses the factors behind the high level of infant mortality in Bradford, but her analysis is disappointingly inconclusive. The turn-of-the-century survey of infant welfare by the Westminster Children's Health Society, recently summarized by F. B. Smith in *The people's health 1830–1910*, (Croom Helm, 1979, pp. 125–126) established that whether and for how long the infant was breast-fed was a much more potent influence on its chances of survival than either the quality or type of housing or whether the mother was employed outside the home. If this was the situation of the inhabitants of a poor quarter of the metropolis, why should it be different for the infants of Bradford? This, at least, is the proposition that ought to have been confronted in any further account of the high rate of nineteenth-century infant mortality, particularly if the historian feels, like Barbara Thompson, that the blame lay with environmental hazards and poverty rather than elsewhere.

A more general weakness with the collection of essays is the absence of any detailed treatment of mortality in rural areas. This may seem a somewhat churlish criticism to level at a book specifically devoted to the study of urban disease and mortality, but it is difficult to deal adequately with the various hypotheses competing to account for the general decline in mortality unless it can be explained why life expectancy at birth in rural areas could exceed fifty years while in a number of the larger towns it failed to reach thirty-five. At one point (p. 24), Woods and Woodward allege that the early-nineteenth century witnessed a substantial advance in life expectancy in rural areas, but they offer no direct evidence. Otherwise, there is only Gillian Cronjé, who shows that one of the major killers, tuberculosis, although more prevalent in urban than in rural areas, was as early as the 1850s already in a more marked decline in the former. Nevertheless, it must be a tribute to the success of Woods, Woodward, and their colleagues that one wishes for a companion volume on what the industrial and urban revolutions had left of rural England.

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J. R. SMITH, *The speckled monster. Smallpox in England, 1670–1970, with special reference to Essex*, Chelmsford, Essex Record Office, 1987, 8vo, pp. 217, illus., £14.95.

The history of smallpox, and its conquest by inoculation, vaccination, and the strong arm of public medicine, must form one of the crucial test cases in any interpretation of the relationships between disease, medicine, and society in modern Britain. It could lend powerful support to the historical case for the efficacy of scientific medicine. Alternatively, the continuation of serious epidemics long after inoculation and vaccination became available might suggest that the social and institutional factors surrounding sickness and its treatment need to be confronted. Above all, the furores created by the host of anti-vaccination movements throughout the post-Jenner period seem ripe cases for the subtle examination of medical politics. It is quite peculiar, then, that relatively little recent scholarship has appeared examining the wider trajectory of smallpox and its treatment in England.

We possess, of course, much valuable specialized research: Miller's admirable though ageing account of the reception of inoculation, Razzell's querying of the Jenner myth, Baxby's careful investigation of Jenner's techniques, and, for the nineteenth century, MacLeod's pioneering article on anti-compulsory vaccination movements and Fraser's analysis of the Leicester experience. But we do not, as yet, have for England what Pierre Darmon's *La longue traque de la variole* (1986) attempted (not totally successfully) to achieve for France: an integrated overview of the interaction of disease, medicine, and society over the course of several centuries.

J. R. Smith's monograph does not completely fill this gap; but in its modest and carefully researched way it presents us with the best account yet — albeit one essentially geographically circumscribed to the Eastern Counties — of the social response to surely the most serious and feared epidemic disease from Stuart to Edwardian times. Smith's local researches in Essex confirm that smallpox mortality was often extremely high. Plenty of Georgian reports speak of villages being deprived of a tenth, or even a sixth of their inhabitants. But the costs were much wider, for the closing of markets and the curbing of economic activity which outbreaks required often brought misery and poverty to communities (and as a result, heightened susceptibility to other diseases). Smith shows that magistrates under the Old Poor Law were often generous and active in coping with outbreaks, and numerous pesthouses were brought into operation.

But the real breakthrough came with the activities of the Sutton family, and other local general practitioners, in pioneering cheap, fast, efficient, and largely *safe* inoculation from mid-century. Here Smith confirms Zwanenberg's earlier account of the positive success of Suttonian inoculation. He also underlines how astute were the Suttons as businessmen (they even hired a clergymen to sing the praises of inoculation from the pulpit), and how speedily their services were adopted by magistrates and corporations.

One wishes Smith's analysis were equally full on the Victorian period, for scholars have yet to explain in detail why the advent of vaccination made relatively slow inroads into these lethal epidemics, and also why religious and libertarian opposition to vaccination steadily grew to a peak around the 1890s. Organized anti-vaccination opinion was never very powerful in Essex, unlike in some counties, though a group of religious fundamentalists around Southend, the Peculiar People, successfully defied the law in the 1890s. Smith hints that the shift from essentially "private enterprise" inoculation to vaccination within the legal framework of Victorian public health may have triggered resistance; but further research is required before we shall know for certain whether the anti-vaccination leagues were true barometers of public opinion or little more than noisy but narrow cliques.

Dr Smith combines local and national concerns with skill, and makes particularly effective use of newspaper sources. His book is strongly to be recommended to all interested in the fine texture of medical and social responses to epidemic diseases.

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NEGLEY HARTE, *The University of London 1836–1986. An illustrated history*, London, Athlone Press, 1986, 4to, pp. 303, illus., £11.95 (£4.95 paperback).

Negley Harte made his debut as a historian of higher education as a co-author of *The world of University College London, 1828–1978* (1978). Given the undoubted importance for medicine of the Godless institution in Gower Street, it is curious that this book was not reviewed in this journal. Recently, Harte has turned his attention to the challenge occasioned by a second and related sesquicentenary, that of the University of London, established in 1836 as a mere examining board. As HRH the Princess Anne, the Chancellor, remarks in a pithy foreword, her University is unique among British universities in its scale, its federal structure, and its connexion with the Commonwealth. Its size is now daunting: it consists of thirty-seven different institutions, one of which itself consists of twelve institutes.

To cover fully the historical development of such a large and sprawling university would require several tomes analogous to the eight volumes of *The history of the University of Oxford*, of which three volumes have been published to date. Harte has wisely avoided such a mammoth task. Instead, he gives a penetrating overview of the University's history, recording its controversies and compromises as well as its triumphs. In addition, he offers no fewer than 366 very well-chosen illustrations. With its telling and sometimes comical epigraphs, Harte's book is an admirable model of popular but not patronising writing: every sentence is informed by easily-carried scholarship, including knowledge of pertinent archives. For readers of this journal, Harte gives a useful synoptic picture of how the University came to achieve primacy in