

Book Reviews

Michael Worboys, *Spreading germs: disease theories and medical practice in Britain, 1865–1900*, Cambridge History of Medicine series, Cambridge University Press, 2000, pp. xvi, 327, illus., £37.50, US\$59.95 (hardback 0-521-77302-4).

Many historians of medicine will react to the publication of Michael Worboys' book with a gratified and perhaps exasperated exclamation: "At last!" When they sit down to read it, they will not be disappointed. Indeed, such a detailed and nuanced examination of British medical theory and practice during the early years of what we have all learned to call the Bacteriological Revolution is long overdue, and similarly sophisticated analyses in other national contexts are devoutly to be wished.

Steven Shapin's *bon mot* "There was no such thing as the Scientific Revolution, and this is a book about it" applies nearly as well to Worboys' treatment of germ theories, medicine, and public health in late-nineteenth-century Britain (Steven Shapin, *The scientific revolution*, University of Chicago Press, 1996, p. 1). There was no Bacteriological Revolution, he seems to be telling us, and this fact deserves a book! Something important, even fundamental, changed in medicine during the last third of the nineteenth century, in Worboys' view, but the nature and mechanisms of the change were far more subtle, uneven, and gradual than we have been led to believe.

Worboys' approach represents a salutary departure from historiographical routine in several respects. Prior accounts of the rise of "germ theory" or "the germ theory of disease"—whether in monographs, articles, or chapters within more sweeping narratives—have concentrated on developments in French and German laboratories between 1880 and 1900 (and to a somewhat lesser degree on legislation and local government policies in the United

States after 1900). Worboys shifts the geographical spotlight to Britain, a country on the periphery of early bacteriology; surgery, veterinary medicine, and "sanitary science" or "preventive medicine" reclaim in this book a central position among medical specialties; and the critical decade of the 1880s finds itself displaced as the crucial time of transition in favour of a judgement that, first, no single moment of decisive change can be identified and, second, the most significant historical transitions can be seen gathering momentum in the late 1860s and 1870s.

In place of bird's-eye views in which giants such as Robert Koch and Louis Pasteur (and occasionally Joseph Lister) bestride a medical landscape left unrecognizable in their wake, Worboys depicts a densely tangled topography seen from ground level, in which a profusion of ever-shifting theories (here he joins with other historians who have recently insisted upon the *multiplicity* of germ theories of disease in the nineteenth century) and practices developed in confusing, inconsistent, and sometimes contradictory directions over a period of thirty-five years. Moreover, the momentum that ultimately led to the hegemony of germ-oriented programmes of disease control originated not in a culture plate under a microscope, but rather in the barnyard (as in responses to the cattle plague of 1865) and in the operating room (as in the slow and uneven elaboration of antiseptic and aseptic techniques), where theories ceded primacy to practical considerations.

Worboys begins by reconstituting the fluid and ostensibly turbid state of affairs in etiology at mid-century. Here he is at his best, carefully reviewing the methods and evidence of the principal medical and sanitary authorities, reminding the reader that the absence of a single dominant theory or even a battle between two clearly

opposed theories does not signify a lack of scientific rigour. On the contrary, both anti-contagionism and miasmatic (related but far from synonymous medical doctrines) receive at Worboys' hands a long-overdue rehabilitation; "miasmatic explanations of disease", he concludes, "were historically quite precise and amongst the most well-grounded ideas of the Victorian period" (p. 38). Contagionists and anti-contagionists, he reminds us, differed less over the nature and etiology of disease itself than over the feasibility and desirability of specific preventive policies. With this groundwork laid, the easy and simplistic contrast of a pre-1880 muddle of ignorance and prejudice with a modern era of scientific discovery becomes untenable; the subsequent chapters on developments in veterinary, surgical, clinical, and preventive medicine then become case studies in the piecemeal negotiation of new methods and their limits rather than a series of battles between right and wrong.

This is not to say that there were not aggressive statements proclaiming the absolute truth or falsehood of various germ theories. The abrasive John Tyndall plays a recurring cameo role here as a clumsy polemicist in the service of Pasteur's doctrine, who by his own extremism ends up serving the cause of his opponents. Worboys quotes a wonderfully vivid outburst from John Simon in a report on the 1865 cholera epidemic, ridiculing the notion that the microscopic study of cholera victims' excretions might yield up the terrible disease's etiological (and perhaps even therapeutic or prophylactic) secrets; Simon could only react to such nonsense by sputtering indignantly, "It is excrement, indiscriminately, which must be kept from fouling us with its decay" (p. 116). Although he does not fully exploit the emotional charge and cultural resonance of such vehement proclamations, Worboys does correctly interpret them as examples of a pragmatic insistence on specific and immediate measures to protect the public

health rather than as irrevocable and principled opposition to microbial etiologies *per se*.

Eventually, of course, germ theories of many important diseases did win the day, although even here, Worboys warns us against reading too much into exactly what winning the day meant in the short run. A few particularly striking anecdotes speak volumes, however, and threaten to undermine such caution. After a court condemned Birmingham City Council to pay damages to the family of a boy who died of scarlet fever contracted when his brother was prematurely released from a city hospital, local Medical Officers of Health went to extraordinary lengths to prevent such accidents from ever recurring. In Birmingham, children convalescing from scarlet fever were henceforth subjected to a draconian disinfection ritual prior to discharge, which included a head-to-toe assault with as many as four different chemical solutions before a final medical examination. Some readers will long for more of this kind of local detail in this book, where medical literature and government reports leave little room for the personal and social experience of disease and medical care; here too, after all, crucial if not revolutionary transformations were taking place in these years.

Meticulous in his research and cautious in his argumentation, Worboys seems determined not to overstate his case. He has already gained the reader's confidence a third of the way through the book when he characterizes the "spread of germ ideas and practices" as "additive and adaptive" rather than revolutionary (p. 109). One is even more inclined to believe him by the time one reaches the conclusion, in which he claims that the most important change in late-nineteenth-century British medicine was not the advent of a new etiological model, but rather the very idea that the "mechanisms of disease ought to be knowable and demonstrable". For the most part, Worboys locates this change in

orientation in the late 1860s and 1870s, prior to the ascendancy of bacteriology; this helps account for the fact that four of his seven chapters focus on these early years, which other scholars have found less dramatic than the golden etiological age of the eighties and nineties. If the quest for knowability and demonstrability was crucial to the new understanding of disease, however (and it was), then surely nothing changed the meaning of demonstrability as thoroughly as did the successive iterations of Koch's postulates for etiological proof. Misleadingly attributed to Koch alone, and never fully articulated by him in a single paper or speech, these criteria in their mature form nevertheless emerged from bacteriological laboratories in the 1880s and 1890s and forever changed the nature of medical knowledge. To downplay this part of the story obscures the extent to which, epistemologically, this change was in fact revolutionary and transcended the discovery of any single bacterium, even if its impact on disease treatment and prevention was initially underwhelming.

Koch and his fellow bacteriologists, however, have claimed more than their fair share of the historical spotlight, and it is high time we listened to some other voices. It is Michael Worboys' signal achievement to have in a single concise, straightforward, and readable volume recaptured the fundamental indeterminacy of nineteenth-century etiology, refocused our attention on hitherto neglected areas of medical practice, and substituted a subtle and complex narrative of ambivalence for a stale, two-dimensional tale of marble statues triumphing over ignorance.

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Stanley W Jackson, *Care of the psyche: a history of psychological healing*, New Haven and London, Yale University Press, 1999, pp. xiii, 504, £30.00 (hardback 0-300-07671-1).

How should one write a history of psychotherapy? At the outset, several choices present themselves. One could attempt a chronological study, commencing, say, with the definition of a new science of "psycho-therapeutics", the term proposed in 1872 by Hack Tuke, and then proceeding through its main propagator and popularizer, Hyppolite Bernheim, tracing the fates of hypnosis, suggestion and psychogenic disorders through *fin-de-siècle* Europe and America. Or, one might note that Tuke's definition is retrospectively proposed in relation to the debates concerning animal magnetism, and consequently follow the line of works of the "Mesmer to Freud" ilk (and Mary Baker Eddy, in Stefan Zweig's version), tracing teleologies, unknowing precursors and unwitting heirs. Alternatively, one might adopt the perspective that something like psychotherapy, broadly considered, has always featured in the Western medico-therapeutic traditions, and perhaps non-Western traditions as well, depending upon the scale of one's aspirations to universality. The manner in which one proceeds has critical consequences not only for the historiography of psychotherapy, but for the definition of what constitutes psychotherapy and its ongoing identity. For one significant trait of the institutions of psychotherapy is the utilization of some version of history to form, authorize and legitimate its identity, be it through stressing supposed novelty or supposed continuity. Thus a critical task for the history of psychotherapy is that of disentangling its subject from such histories.

In this work, the late Stanley Jackson adopted the long-term approach. Given the recent vintage of the term "psychotherapy", the question of using a more general term arises, to avoid overt anachronism. Thus Jackson proposed that the subject of his history would be "psychological healing", which he used to refer to "the variety of efforts taken to minister to a person's ailments by psychological means or psychological interventions—whether or not