

Book Reviews

Spreading Germs: Disease Theories and Medical Practice in Britain, 1865–1900. By Michael Worboys (Cambridge University Press, Cambridge, 2000), xvi + 327 pp.

ONE OF THE MAJOR LANDMARKS IN THE HISTORY OF MODERN MEDICINE is the elaboration of ‘germ theory’ in the late nineteenth century, and yet for all its eminence it largely remains undeciphered. For the fifty or so years after C. E. A. Winslow wrote *The Conquest of Epidemic Disease* (1943)—and longer since W. Bulloch wrote *The History of Bacteriology* (1938)—historians have tended to skirt around germ theories and their impact. An outline or a gesture has usually sufficed, before moving to another topic. At the end of the last century this began to change. Bruno Latour, for example, gave us a narrowly focused, though intellectually stimulating, sociological study of what he called the *Pasteurization of France* (1988), somewhat fancifully projecting Louis Pasteur’s laboratory onto the Hexagon and beyond. A few years ago, Nancy Tomes and John Harley Warner edited a special issue of the *Journal of the History of Medicine and Allied Sciences* (vol. 52, 1997) showing us that ‘germ theory’ should more realistically be plural. Evidently the meaning of germs and the practice of bacteriology varied with discipline and setting: veterinarians, surgeons, tropical specialists, general practitioners, and patients all had different ideas about the seeds of disease. But we still awaited a detailed ‘local’ or national study. Now, finally, Michael Worboys has given us a theoretically nuanced and thoroughly documented account of the development and uptake of germ theories in late nineteenth-century Britain. And now, at last, I can put Winslow’s book back on the shelf.

Spreading Germs is an extensive history of the various manifestations of germ theories and practices in veterinary medicine, surgery, public health and the clinic. In describing the gradual ‘germification’ of consumption, typhoid, diphtheria and other diseases, Worboys sensitively attends to the social, institutional and generational causes of resistance or indifference to the new ideas, as much as to their accep-

tance. His account of the gradual, stuttering transformation of ‘consumption’ into ‘tuberculosis’ is especially valuable. In general, so Worboys argues, the novel microbial pathogens eventually fitted well enough into pre-existing cognitive frameworks and patterns of practice. They rarely overturned settled assumptions, although they might on occasions have given added impetus to emerging trends. Thus, theories of social pathology and contagion were not new, but germs gave these notions a plausible, materialist mechanism—a compelling explanation. Disease specificity too was an old idea, but germs at last provided the specific lesion with a specific cause, making etiology as ontologically distinct as pathology. Surgery was already becoming cleaner, but Listerian antisepsis suggested definite targets and simple techniques that would aid the achievement of this goal. Germ theories, then, were more than a gloss on old practices, but they did not constitute a revolution.

Even as explanations of the cause and spread of disease began to take on different expressions, some older medical assumptions proved surprisingly resilient, especially in the clinic. Worboys demonstrates the lasting appeal of notions of predisposition and diathesis; that is, the continuing attraction of the parable of St Matthew, which urges us to consider the soil as well as the seed. In clinical encounters, new etiological theories initially merely supplemented an older constitutional medicine, a practice predicated on the building up of the ‘resistance’ of the soil to the agents of disease, whatever form they might take. As usual, promised therapeutic breakthroughs were in the future. Germ theories became more important in surgery and sanitary science than in clinical medicine, though nowhere were they immediately triumphant or utterly transformative. *Spreading Germs* thus confirms, yet again, the deep-seated conservatism of medical practice, its reassuring and generally wise incrementalism.

Worboys, the new director of the Wellcome Centre for History of Medicine at Manchester University, asserts early on that he is ‘interested in the “construction” and “use” of germ theories and practices by local medical cultures’. While his analytic drive is never as feeble as the internal quotation marks suggest, his attention to distinct medical cultures within Britain proves disappointing. There is a sense that Britain, at least England, produced a homogeneous medical culture; perhaps it did. But Australian medical historians, aware of the crucial differences in medical cultures between the colonies, will be sceptical. I was hoping for more detailed accounts of the local cultures of bacteriological practice in London, Manchester, Liverpool and elsewhere—for ‘multi-sited’ and comparative histories of medical practice in late nineteenth-century Britain—but Worboys rarely situates bacteriological knowledge so definitely.

In the conclusion, Worboys—who otherwise is so apt and sure in judgment—makes the jarring claim that the understanding of the ‘soil’, of susceptibility to disease, was relatively undifferentiated. He discerns a decline in the influence of epidemiology, which ‘signaled declining interest in social factors, as disease was constituted in relations between bacteria and individual bodies’ (p. 285). Accordingly, there was ‘surprisingly little consideration of the action of germs on the soils of different social classes, races, or sexes’ (p. 285). What an odd statement, and how peculiar that a historian of tropical medicine should utter it. Whether or not there was a decline in epidemiology, a dubious proposition in itself, germ theories did not suddenly wipe out the discriminations of class, race and gender that had been so thoroughly incorporated into medical practice and public health activities for generations. How strange that Worboys would assume that germ theories, which otherwise merely supplemented or slightly modified older cognitive frameworks, would in this one aspect of their application completely transform medical convention. At the end of the book, Worboys makes a plea for more study of the relations between disease germs and ‘germ plasm’; if only he had awaited the results of such research before asserting that individualised notions of predisposition had nudged aside the framework of collective heredity, organised by race, class and gender.

Finally, I should point out the similarity in character and timing of British and Australian debates about germ theories. We even find a Dr William Thomson, the medical officer of health for Peterborough, conducting a survey in 1879 of medical explanations of the spread of typhoid, and writing an article for the *British Medical Journal* entitled: ‘Typhoid fever: contagious, infectious and communicable’ (p. 145). Surely not...

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The Eighteenth-Century Origins of Angina Pectoris: Predisposing Causes, Recognition and Aftermath. By Leon Michaels (Medical History, Supplement No. 21, The Wellcome Trust, 2001).

THE CENTRAL PREMISE OF LEON MICHAELS’ BOOK IS THAT ANGINA PECTORIS was unrecognised prior to William Heberden’s description of the condition in 1768, and this was because before then it did not exist, or was exceedingly rare. After reviewing a number of isolated earlier