

Book Reviews

The support of doctors and public authorities was not just a necessity for public acceptance and popularity; it was a prerequisite for the development of hydrological science. Several contributors make the point that much writing on waters was a form of publicity for a specific water and the relative lack of hydrological research in Britain until late in the nineteenth century is quite striking. There was nothing like the Parisian Academy of Medicine which imposed some outside guidelines on research and which, while committed to the system as a whole, had no particular stake in any specific spa.

Nevertheless, several contributors make the point that hydrological research cannot be simply dismissed as propaganda. In describing the development of chemical analysis from the eighteenth century, Noel Coley emphasizes its importance in legitimating spa therapy and also makes clear how real the achievements were, particularly in the nineteenth century. Christopher Hamlin tries to distance himself from an exclusively internalist approach to chemical analysis and stresses its legitimating function. But he does suggest that chemists eventually brought "much more of the ethos of pure scientific research into mineral water analysis . . ." (p. 80).

Clinical medicine also had its forms of research. Audrey Heywood analyses the patient records of the Bath General Hospital which opened in 1741 with specific reference to the treatment of lead poisoning. Her essay is eye-opening on at least two counts. It makes clear that research whose explicit purpose was to demonstrate the efficacy of the local product could still be of reasonably high quality. If Bath doctors actually followed the stated protocols in determining the effects of therapy, their data is uniquely rigorous for hydrological research of the period. Secondly, she makes a good case that treatment was in fact effective for lead poisoning and uses recent research (in which she herself participated) to explain this effectiveness which applies to only one of many conditions treated with waters. Her explanation centres on the physiological effects of submergence in water rather than on specific chemical properties or other treatment modalities, so it is hardly a rehabilitation of the principles of traditional water therapy. Nevertheless, it does suggest that if we want to understand the popularity of the waters over the centuries, we need to take seriously their clinical effects.

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M. WEATHERALL, *In search of a cure: a history of pharmaceutical discovery*, Oxford University Press, 1990, 8vo, pp. xvi, 298, illus., £19.50.

In the final chapter of his book, M. Weatherall reminds us that pharmaceutical discovery "cannot be reduced to a simple formula or a standard intellectual process, nor is the logical route likely to be straight" (p. 271). Indeed, *In search of a cure* mounts case study upon case study in the history of pharmacy to demonstrate that there can be no such thing as a primer on how to discover drugs; scientific, medical, and technical understanding of a therapeutic problem must mesh under the right circumstances to achieve success, and the occasional serendipitous observation can play a role as well. This is one of the strengths of Weatherall's book, which I recommend over the other comprehensive drug histories that have appeared in the past decade.

The opening chapters are arranged chronologically, but thereafter Weatherall follows a topical scheme with a focus on the nineteenth and twentieth centuries; here he devotes chapters to replacement therapy, deficiency diseases, antibiotics, cancer, drugs and the mind, and so on. His emphasis on Western therapeutics, and British contributions in particular (for example, the National Institute for Medical Research seems to receive much more attention than the National Institutes of Health), does not diminish the value of his study. The illustrations are fine but unfortunately they are collected in the middle of the book. The writing is not too technical, but the prose nevertheless can be a bit slow at times and the paragraphs sometimes too packed with information. Thus, distribution of the pictures throughout the book would have helped. Weatherall's documentation is ample with respect to both primary and secondary literature, and the index is adequate.

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Among the things that make *In search of a cure* stand out from similar histories is the author's steady attention to background research that supported discovery of pharmaceuticals, sometimes in distant fields. His chapters on the physiological basis of medicine and cancer bear this out well. Another noteworthy character of this book is Weatherall's refusal to rest on the introduction of a pharmaceutical and its assimilation into the therapeutic armamentarium. He often reminds the reader of the problems with a particular drug, and why the search for a better pharmaceutical continued.

In a work of this breadth one would expect to find more errors of fact or omissions than I was able to detect; none seriously detract from the book. For example, he does not list Philip Hench among the winners of the Nobel Prize for Physiology or Medicine in 1950 (even though he cites Hench's Nobel lecture in the endnotes, p. 95). The chapter on deficiency diseases gives short shrift to the contributions to vitamin work by researchers at the University of Wisconsin in the early twentieth century (chapter 7). John Sheehan is not given the credit he deserves for the semisynthetic penicillins (p. 177). And Weatherall's lamentation about industry's low priority for the development of drugs for rare diseases (p. 278) does not mention the 1983 Orphan Drug Act in the U.S. The author implies that a drug history written by a person with scientific training should be preferred over one by a person without such training (p. 168). One could easily substitute "historical" for "scientific" and make as plausible a claim.

In search of a cure should stand out for some time to come as one of the better single-volume histories of drugs. It is reliable (the above points notwithstanding), well-documented, thoughtfully argued, and organized in a reasonable way. Historians should make it their book of choice for the subject.

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ANGUS McLAREN, *Our own master race: eugenics in Canada, 1885–1945*, Canadian Social History Series, Toronto, McClelland & Stewart, 1990, pp. 228, (paperback, 0-7710-5544-7).

In a review in this journal Roy Porter suggested that the history of eugenics had in recent years been comprehensively surveyed and to prevent "overpopulation" recommended that responsible scholars exercise voluntary restraint. While he was specifically referring to Great Britain he might well have had in mind also the numerous studies of the subject in the United States, France, Germany, and the Soviet Union. Angus McLaren's modest introduction to the eugenics movement in Canada indicates that Porter's admonition has not halted the proliferation of books any more than eugenic warnings curtailed the propagation of the so-called "unfit" earlier in the century.

In McLaren's case the result is a readable, interesting survey that complements rather than revises or reinterprets existing histories of eugenics in other countries. Many of the same fears and concerns that motivated eugenicists elsewhere, particularly in the United States and Britain, were central to the Canadian movement—immigration, the proliferation of the feeble-minded, differential fertility, and racial "inefficiency", all fuelled by an exaggerated belief in the predominance of deterministic hereditary factors.

Similarly, as in other countries, Canadian eugenics drew much of its support from the professional middle classes, particularly doctors, psychiatrists, psychologists and social workers, many of them in university posts. According to McLaren, who is especially contemptuous of doctors and other so-called experts in the rising healing professions, their loss of faith in nineteenth-century liberal individualism coupled to their selfish preoccupation with professional enhancement and power, combined in an advocacy of state intervention, guided by their expertise, to prevent further racial decay and to assure the revitalization of the fitter stocks in the country. As in the United States, where Canadian eugenicists tended to find their models, this was translated primarily into immigration restrictions and marginally successful efforts to pass sterilization legislation.

Although the number of avowed eugenicists was impossible to determine and the Eugenics Society of Canada, not even established until 1930, attracted no more than a hundred members, McLaren is certainly correct in his claim that eugenic beliefs were far more pervasive