

Book Reviews

Likewise, one would have expected more prominent discussion of contemporary debates about the shifting public health of London (the old but still useful analyses by M. C. Buer and Dorothy George could have been drawn upon: they do not figure in the notes or bibliography). Similarly, in discussing the relations between medical prevention and population shift, Riley's account suffers from not taking into consideration any of the work of Wrigley and Schofield published since their mammoth 1982 book. And the whole "medical police" movement also receives surprisingly little attention. This monograph is selective in its coverage, and the grounds for selectivity are not always clear.

In general, Riley's analyses of environmentalism are cogent and illuminating. Occasionally, perhaps suffering from the benefit of hindsight, and in particular an awareness of later bacteriology, he cannot resist accusing its proponents of unscientific trains of thought. He talks of their "curious . . . failure to become sceptical about the validity" of the theory of environmental influences (p. 87), as if, by proper scientific criteria, it might have been self-evident that the theory should have been falsified; somehow they were slovenly in their methodology ("they observed both too many things and too few things": p. 73). This hint of anachronism is perhaps also present in Riley's use of the modern generic term "epidemiologists", and his talk of eighteenth-century "reasoning about pathogens"; probably both notions, useful though they be as shorthand terms, beg too many questions.

Overall, however, it would be silly to end on a negative note. Professor Riley has produced a stimulating essay which does well to focus our attention once more on the Enlightenment roots of public health. Given that most histories of public health are now superannuated, it is hoped that his work will provoke new interest in the subject.

Roy Porter
Wellcome Institute

WALTER B. CANNON, *The mechanical factors of digestion*, reprint of 1911 ed., with introduction by Horace W. Davenport, Canton, Mass., Science History Publications, 1986, 8vo, pp. xxiii, 195, illus., \$20.00.

W. B. Cannon's 1911 classic *The mechanical factors of digestion* is probably already familiar to most physiologists, if only by reputation. Whether this reprint will extend its audience is debatable as, in the laudable interests of economy, several not-so-laudable sins of commission have been made: it is indifferently printed on poor quality paper, the photographs and radiographs are so badly reproduced that they serve merely as irritative stimuli, and even the line drawings are often badly set within the text. Combined with these is a major sin of omission—the absence of any editorial commentary that would place this book in context and highlight its importance. An attempt to do so, bravely made by H. W. Davenport in his short introduction, is a step in the right direction. However Professor Davenport has written elsewhere, and more extensively, on Cannon's contributions to integrative physiology, and reference to these papers and a bibliography of Cannon's later works would have been a valuable and not too costly addition to compensate for the lack of annotation.

This book is undoubtedly a classic that does deserve reprinting. Cannon was a pioneer in the use of X-rays and radio-opaque media to study the movements of food along the gut, previous access to the region having necessitated surgical interference. And the results of this early experimental work are still in everyday use, much modified of course, as part of routine radiographic diagnostic procedures. His work was at a time when the hazards of X-rays were unknown and there are chilling reminders of the consequences in the introduction: Cannon was "one of the few early Roentgenologists to live to old age", becoming "an old man suffering from at least three kinds of cancer as a sequel to his early x-ray studies". Cannon's approach, which characterized much of his later writings, addressed broader issues than those that were of immediate experimental interest. This allowed him to see gut function as a continuous process and to consider questions such as the influence of food composition on gastric emptying and the

Book Reviews

role of emotions on gut function (thus heralding his next series of researches that were summarized in *Bodily changes in pain, hunger, fear and rage*, 1915, second edition republished 1963 by Harper Torchbooks, New York). The new technique permitted him to describe specific mechanical activities of different regions of the gut and helped him to differentiate gut sounds using air-filled preparations such as soufflés, light omelettes and a paste of flour, milk and whipped egg-white that was "eaten with a little cream and sugar", although the experimental animals had to forego the cream and sugar. And he tackled the debate about pyloric function: was it purely gravity, as much popular and professional opinion held, that pushed food from the antrum into the duodenum? Cannon's simple experiments provided the first hard evidence to support a posture-independent control mechanism, and his famous "J" pictures of gastric emptying still grace many a textbook.

This is an important book, it was influential at its time of publication and it could be valuable again, when gut motility is attracting much more research attention than it has done for several years. Modern pharmaceutical interests range from anti-emetics to laxatives; whilst military programmes, space travel, and the side-effects of radiation therapy have all brought awareness to motility disorders and the related problem of vomiting. This edition is far from perfect, but it might encourage readers to seek out the original, as well as Cannon's later books, and to learn, in a paraphrase of Davenport, that some of what happened the day before yesterday is of importance today.

E. M. Tansey
Wellcome Institute

SANDER L. GILMAN, *Difference and pathology: stereotypes of sexuality, race, and madness*, Ithaca and London, Cornell University Press, 1985, 8vo, pp. 292, illus., \$38.45 (\$14.25 paperback).

Sander Gilman's new book consists of a series of essays on stereotypes of race, sexuality, and madness in Western Europe and the United States. While there is some passing attention to the use of stereotypes from the Middle Ages to the present, for the most part his focus is upon the late-nineteenth and early-twentieth centuries. Gilman is fascinated by what he sees as our universal need to create stereotypes, a necessity rooted in the requirement that we all cope "with anxieties engendered by our inability to control the world" (p. 12). More specifically, he believes that the acquisition of stereotypical thinking is an essential concomitant of early childhood socialization, a product of the need to create "the illusion of an absolute difference between self and Other . . ." (p. 18), and of our Manichean perception of the world as composed of "good" and "bad". Stereotypes are, in his view, neither random nor archetypical, shifting and changing through time, and forming part of the cultural tradition of a given social order. And "texts", in a broad meaning of that term (encompassing everything from "advertising copy to medical illustration, from popular novels to classical drama, from the academic portrait to graffiti scratched on the walls of prisons") form an ideal source for studying "the fluidity of stereotypical concepts" (p. 26).

Ten essays on a variety of topics follow this general theoretical introduction: the madness of Jews, blacks, and artists; Freud and Jewish jokes; male stereotypes of female sexuality in *fin de siècle* Vienna; nineteenth-century images of Hottentots and prostitutes; and the portrait of Nietzsche as pathogen, producer of dangerous thoughts and acts, even extending to murder. Five of these pieces have previously appeared in journals and anthologies, the remainder being published here for the first time. Taken together, they do serve to document Gilman's claims about the permeation of science and medicine, literature and the fine arts (to say nothing of popular culture) by stereotypical thinking. However, the collection is at best superficially integrated by its concentration on a set of related themes, and whether or not the reader will find the arguments illuminating will depend heavily, in my judgement, upon one's prior position on