

Book Reviews

agriculture" (pp. 193-267), "Medicine". including pharmacology (pp. 269-357), and "Sociology" (pp. 359-365). This volume is printed on good-quality paper, and is beautifully bound in glossy paper covers. One could easily appreciate the amount of work that was put into the preparation of the manuscripts of this volume, and in seeing them through the press. This review only covers the section that deals with medicine and pharmacology. Some papers are well documented with adequate references to sources; others – apart from the translated summaries of Arabic papers appearing in Volume I – are without any scholarly apparatus. Unfortunately, a paper on 'The title of a work of Rāzī with reference to "al-ṭīn al-Nīshābūrī"', printed earlier (in F.N.L. Poynter, *Proceedings of the XXIII International Congress of the History of Medicine, London 2-9 September 1972*, London, Wellcome Institute of the History of Medicine, 1974, 2 vols., vol. 2, pp. 1073-1076), appears again in the present volume (pp. 338-340), but without any scholarly apparatus or even a warning that it was printed elsewhere. Such costly and unwarranted duplication should have been avoided by the editors of this volume. Interestingly enough, an earlier case of unwarranted reprinting of material also concerned one of Rhazes' books: 'Bur³ al-sā^c a li-Muḥammad Ibn Zakariyyā al-Rāzī', first printed in *al-Machriq* (1903). Printing errors, arising from inaccuracy and inconsistency of transliteration occur in some papers on medicine and pharmacology. The only way to minimize such errors (which are bound to occur, no matter how careful editors may be) is to supply each author with a set of galley-proofs, to be followed by the final page-proofs that should be also carefully revised by the editors.

We offer our heartfelt congratulations to the editors of this volume on their achievements, and wish them every success in forthcoming publications.

A. J. YOUNGSON, *The scientific revolution in Victorian medicine*, London, Croom Helm, 1979, 8vo, pp. 327, £9.95.

M. JEANNE PETERSON, *The medical profession in mid-Victorian London*, Berkeley, Los Angeles, and London, University of California Press, 1978, 8vo, pp. x, 406, £12.25.

Reviewed by Christopher Lawrence, M. B., Ch. B., M. Sc., Medical Historian to the Wellcome Museum at the Science Museum, London SW7 2DD.

To judge by titles alone it might be thought that these two books would cover a great deal of common material. This however is far from the case, not least because A. J. Youngson's title *The scientific revolution in Victorian medicine* is frankly misleading. I approached the book expecting a study of microscopy, embryology, cellular pathology, instrumental diagnosis, experimental physiology, bacteriology, and so forth, and an account of how these disciplines entered the Victorian medical curriculum. No such comprehensive study exists. For the early century, and the case of chemistry, Morris Berman's *Social change and scientific organisation* begins to fill this gap. For the later period Gerald Geison's *Michael Foster and the Cambridge school of physiology* does much the same. Youngson however does not tackle this question at all, rather he recounts in traditional fashion the introduction of anaesthesia and antiseptics into surgery and midwifery. The great men, Lister, Syme, Simpson, are his focus and his account adds nothing to the older sources, whereas a detailed empirical study of the

conflict over these techniques in a particular hospital or region, and a teasing out of the issues involved and the possible interests behind them would have been of great value.

The author *can* use the title he does since his model for understanding Victorian medical knowledge is that doctors were utterly ignorant of twentieth-century medicine. “Medical science was in a rudimentary state”, and the pathology and physiology the doctors did actually “half” learn “was not much use anyhow” (p. 16). It was, he tells us, “a frightful state of affairs”. In a nutshell “the truth was, that the doctors simply did not know enough about medicine” (p. 19). Over this twilight world anaesthesia and antisepsis dawned. “That day marked a great step forward in the reduction of human suffering” (p. 42). A judgement with which it would be hard not to concur. Since this, however, is so apparently obvious, Youngson is left with the problem of why this new knowledge did not rush into the scientific vacuum which was sustained only by the ignorance of the Victorian medical practitioner. Some might say to set the problem up in these terms might be to write history after voluntarily tying one hand behind one’s back.

Only by the most devious of definitions can the use of anaesthesia be called the introduction of science into medical life. It entered medicine almost entirely on humanitarian grounds, not because there was a considerable body of theory which suggested it was a more scientific way of performing operations. Perversely, it might be said, there were good scientific reasons why it might be kept out. The experience of pain, it was suggested, was an important physiological regulator; hardly a frivolous contention. Indeed Youngson himself shows that when the defenders of anaesthesia engaged in debate over the virtues of the “Yankee dodge” their scientific arguments were almost entirely negative, attempting to demonstrate that when these noxious gases were inhaled they were not likely to kill the patient.

With antisepsis the case was rather different, for here the method was identified, in Lister’s mind at least, with the germ theory. The acceptance of the technique was eventually assured by the acceptance of that theory. However, as Youngson once again demonstrates, much of the debate over the introduction of antiseptic surgery was a debate over the most successful method of promoting wound healing regardless of the theory behind it. It was only a battle about science in retrospect.

The history of the introduction of anaesthesia into childbirth remains one of the most intriguing phenomena of nineteenth-century medicine. Occurring as it did at mid-century it should provide a perfect window into the religious temper of Victorian England. To attribute resistance to a “dubious morality” (p. 113) rather than seeking to display the hinterland of biblical theology, providentialism, the status of women, and professional uncertainties in the years before scientific naturalism won the field is to leave Victorian studies no better off.

Youngson’s assertions of the reasons for the resistance to anaesthesia and antisepsis remain just that, assertions. He adds no substantial flesh to more recent studies, and at times falls far short of them. This is the only book I have ever read that incorrectly identifies the century of origin of the stethoscope. The author relies for his primary sources almost entirely on the *Lancet*, a major, but hardly representative journal. On the basis of this is built a fabric of unverified statements about Victorian medical life. It is simply not sufficient to assert that antisepsis was resisted in London because of its

Scottish origins (p.190). Before any such comprehensive explanation is made we need details of the nationalities of the staffs of the London hospitals, documentation of their surgical practices, and accounts of their arguments against Lister (who was an Englishman). Further there has to be an analysis of the relations of Scots and English graduates in the Royal Colleges, the hospital, and private practice, and an assessment of the importance of ethnic background in the power struggles in these institutions. And, even in the unlikely presence of overt racist remarks, it is improbable that such a programme will give us the psychological explanation Youngson wants, that the English could not “tolerate” any more Scottish inventions. It might however tell us what specific ideological role antisepsis played in a conflict of interests.

The author offers a similar undocumented psychological explanation for the fact that Semmelweis spawned no great band of disciples. Physicians “must have felt let down” by his simple explanation of puerperal sepsis. He then goes on to assert the fact that Semmelweis “had shown republican sympathies in 1848, the ‘year of revolutions’ did not prejudice his superiors in his favour” (p. 134). A proposition supported by the scorn of the great Virchow. Virchow had, of course, manned the barricades for democracy in 1846.

Though a history of great men, the book is curiously dismissive of the achievements of others. “Sharpey” he states “along with some others, has been called ‘the father of modern physiology’ apparently for no better reason than that he was the first to give a special course of lectures on this subject” (p. 138). Now although disputed paternity suits are a source of embarrassment to serious historians there *are* much better reasons why Sharpey might have attracted this attribution of fatherhood. Sharpey was the man who introduced experimental physiology of the continental style into the university curriculum of Great Britain, and in doing so educated the first generation of physiological teachers including John Burdon-Sanderson and Michael Foster. Sharpey, in other words, was one of the major instigators of the scientific revolution in Victorian medicine. As such he probably should have been one of the principal figures in this book.

The reader might also note p. 64, 1927 should read 1827; p. 65, chloroform should read ether; p. 75, 1940s should read 1840s; p. 147, atiseptic is antiseptic; p. 150, the chloroform mentioned must be carbolic; p. 221 has a line missing; and p. 222 sanctified for sanctified.

To his discussion of the Victorian medical profession Youngson adds disapprovingly, “And to make matters worse favouritism and nepotism were rife” (p. 15). This statement might be nearer the truth if the word “worse” were excluded or at least according to M. Jeanne Peterson. For *The medical profession in mid-Victorian London* is a splendid study of the seats of patronage and channels of power that constituted the nascent profession. Medical success in the mid-nineteenth century she has shown depended on social style and origins. To do this Dr. Peterson followed the emerging middle class through all their manifold incarnations, in the Royal Colleges where the prima donnas entered by the front door and the members by the back, in the hospitals where lay control ensured that those born to rule, did rule, and in general practice, where in poor areas physicians were dominated by sick clubs, and in the affluent ones where they aped their potential patients on the bowling green. Dr.

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Peterson delineates a patronage pyramid worthy of the *ancien régime* with the poorest practitioners scraping a living at the base and the Oxbridge consultants creaming off the glittering prizes at the apex. She pursues her subject with enviable thoroughness, through diaries, novels, minutes, pamphlets, and books, supporting her contentions with unobtrusive statistics and illustrating them by illuminating anecdote. She keeps a tight rein on her judgements, not letting slip glib pronouncements she cannot substantiate or allowing guesses to masquerade as facts.

Yet there are, I think, problems. Not the least of these is that Dr. Peterson does not seriously tackle what she calls "the subject of this book" (p. 4). This she says is the escape of physicians from lay patronage to independence and autonomy consequent on a changing social evaluation of their work because of "increasing secularization, including a greater concern with physical health, human life, and productivity" (p. 4). Now this change in social evaluation is presumed, and not proven, to have occurred in the late nineteenth century. Dr. Peterson proves conclusively the *lack* of autonomy physicians had in mid-century, but does not really chart in the same depth a change in this pattern, nor does she show it depended on a changing social evaluation of the physician's work and still less that this depended on the other more general factors she posits. What is needed is a companion study of the medical profession in late Victorian and Edwardian London. I hope it is M. Jeanne Peterson who undertakes it.

JONATHAN MILLER, *The body in question*, 1978, London, Jonathan Cape, 8vo, pp. 352, illus., £7.95.

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If the reader of Dr. Miller's new book has any acquaintance with the flavour of the early enlightenment in Britain he may find his enjoyment coupled with an uneasy sense of *déjà vu*. For he brings to our age, when science is the centre of so much unfriendly analysis, the same enthusiasm that surrounded the Prometheus in the optimistic years after the Newtonian revolution. The same themes reappear with strange familiarity: the triumphs of science, English science, and its power to resolve the architecture of nature; progress following the rise of technology; the experimental method as the key to all mysteries; the hauteur of the ancients and the rationalism of the French.

"Scientific medicine" begins Miller, "recognises nature for what she is, and reconstitutes her grand designs" (p. 10). The basis of this achievement he asserts must be sought in the growth of technology and the realization of its value as an epistemology notably by that great English spokesman of science, Francis Bacon. Bacon "was one of the first to insist that the snobbish disregard for manual labour and technical skill had paralysed the pursuit of useful knowledge." (p. 149). The result of such disregard had been that the ancients; "seriously disabled their imaginations." (p. 148). Not only the ancients; "Unlike his Puritan colleagues on the opposite side of the Channel, Descartes shunned experiment with Jesuitical disdain." (p. 295). The true heroes of science for Miller are all English: Harvey, Lower, Newton, Sherrington, and Head.

Miller's achievement in this book is to show, with singular lucidity, the importance of metaphor as a device for understanding nature, and that the metaphor derived from