

Book Reviews

Jacalyn Duffin, *To see with a better eye: a life of R T H Laennec*, Princeton University Press, 1998, pp. xvii, 453, illus., £35.00, \$49.50 (0-691-03708-6).

The debunking tendencies of modern historiography notwithstanding, historians of medicine still find it difficult to resist depicting the invention of the stethoscope as a defining moment. Laennec's cylinder stands for the apotheosis of the clinico-anatomical programme of the Paris School, for the "disappearance of the sick man", and as the starting point of the long and triumphant march of medical technology. That the idea of mediate auscultation first suggested itself within a consultative encounter, that it sprang from the problematics of male professional proximity to the female body, renders the story of the invention interesting to "behaviourists" (in Erwin Ackerknecht's sense), to historians of the body, and to those who do "medical history from below", as we all have to nowadays. The life, work and legacy of René Théophile Hyacinthe Laennec, Catholic, Royalist and Breton, a legend in his own lecture-notes (and in thousands of subsequent ones), has something for everyone indeed.

It is remarkable, therefore, that Laennec has not had a full biographical treatment for forty years. Whatever the reason, it cannot have been lack of resources. Much manuscript material survives and, in Brittany, the collection of Laennec memorabilia seems to have the status of a cottage industry. Professor Duffin has laboured long in the various archives to provide us with what is a very full and scholarly biographical study.

Duffin's account of stethoscopy is not overall, a radically revisionist one. She is content to endorse the pivotal importance of her subject's innovation. "Doctors' stories", as she puts it, "were forever changed by Laennec's invention". The stethoscope allowed pathological anatomy to function as a conceptual model in the clinical sphere;

auscultation revolutionized how disease processes were constructed, and how doctors and patients related to each other during the diagnostic encounter. These may be broadly familiar arguments but much of the historical detail that Duffin presents in their articulation is both new and very pertinent.

Much of the strength of *To see with a better eye* derives from the author's painstaking exploration of less familiar aspects of Laennec's work and writings. An outstanding example is her detailed account of the lectures Laennec gave as a professor of the Collège de France, following his return to Paris in 1821. The text of only one of these has been published but manuscript versions of a further 162 survive. Duffin skilfully exploits this wealth of material to provide a rounded picture of the mature Laennec, presenting his developed views as a clinician and as a theorist, and responding to contemporary criticism of his work, notably of course that of F J V Broussais.

As well as being very enlightening with respect to Laennec, this discussion might be regarded as another step in the historiographic rehabilitation of Broussais. Duffin authoritatively delineates the role Broussais's critical polemic played in shaping the second edition of *L'Auscultation médiate*. She also intriguingly notes that Broussais, his sustained attacks upon Laennec notwithstanding, acknowledged that, in certain respects, he shared a common perspective with the inventor of the stethoscope. Perhaps the most noteworthy aspect of this communality was that both men, unlike the vast majority of their Parisian peers, had reservations as to the extent to which pathological anatomy could provide a proper foundation for clinical medicine.

Laennec's attitude to pathological anatomy is perhaps the point at which Duffin most bracingly challenges received historiographical assumptions. Certainly the stethoscope made a conceptual link between the morgue and the ward. Lesions which previously had been seen

only after death could now be discerned in the living patient. But Duffin maintains that the detection of such solidistic footprints of disease was not, in fact, Laennec's principal concern. He was always still more interested in how the stethoscope enabled the detection and elucidation of diseases which involved no organic lesion. The phenomenon of puerile respiration provided a key exemplification here, being, in Laennec's view, a symptom not of a disorder of the solid tissue, nor indeed of the body fluids, but of an alteration of function. Duffin assembles a convincing case that Laennec's clinical perspective was more physiological than anatomical—a stance which harmonized with the importance he accorded, in sickness and in health, to the "vital force". Indeed, Duffin eloquently argues, even when the "stethoscope told him nothing about the body of his . . . patient", Laennec "listened still". The sick man, evidently, had not yet wholly disappeared from Parisian medicine.

Duffin effectively delineates the relatively marginal position occupied by Laennec throughout most of his career in Paris. She explores the contrasting views of Laennec which developed among Anglophone observers and writes tellingly about the creation of the dual historical images of Laennec as the heroic exponent of the clinico-anatomical method and as the saintly Catholic physician. Her account of Laennec's hitherto neglected therapeutics is most interesting. *To see with a better eye* is a personal as well as a scientific biography—Duffin's detailed description of Laennec's Breton family and cultural background adds to our understanding of his life and career. The net result is a much fuller, more complex and more finely nuanced portrait of Laennec than was previously available.

Oddly enough one of the points on which the book is least clear is the precise nature and extent of Laennec's innovation. Modern commentators on the history of diagnosis, Kenneth Keele for example, have suggested that Gaspard-Laurent Bayle experimented with auscultation before Laennec. He listened to the sounds which could be heard within the chest by applying his ear directly to the patient's

body—a technique subsequently to be termed "immediate auscultation". Laennec's originality lay, it is thus customarily argued, in the invention of an instrument to serve the same purpose and in the sustained clinical application of that instrument. He was the pioneer of what he called "mediate auscultation". Duffin neither definitely endorses that account nor does she explicitly contradict it. Unfortunately she often uses the term "auscultation" without distinguishing whether it is to the immediate or mediate method that she is referring. On the other hand, her accounts of Laennec's subsequent clinical use of the stethoscope are admirably clear. She also provides a very careful analysis of Laennec's clinical epistemology, although why his views are compared with those of Karl Popper will puzzle some readers.

More problematic is Duffin's use (or rather lack of it) of the sociology of scientific knowledge. If it is odd to encounter Popper's normative precepts in a historical context, it is quite startling to see Robert Merton's antique name stalking the footnotes. Duffin describes her third chapter as "a case study of a discovery", yet no use is made of the now very extensive sociological literature on scientific discovery. She accepts Jacques Léonard's argument that Laennec's appointment to the Necker Hospital in 1816 was part of a Royalist attempt to "combat materialism" and to resist "the expansion of ideas and social forces", yet denies that Laennec's vitalism (for want of a better term—see the concluding passage of the book) and his royalism can be associated at the level of social interests. Perhaps not definitively—but other historians of medicine, notably John Pickstone, Stephen Jacyna and Gerald Geison, have provided very intriguing explorations of nineteenth-century French medical thought from that heuristically useful perspective. Her attitude to Michel Foucault's work is ambivalent: the opportunity to engage with *The birth of the clinic* is acknowledged and then spurned. It is strange, moreover, that Duffin's text is distinguished both by a fine sensitivity to the need for epistemological relativism and by occasional minor lapses from

such sensitivity. Popper has already been mentioned. See also the definition of clinical physiology on page 173.

This is not a book that will satisfy all of the many constituencies with an interest in Laennec. But *To see with a better eye* will be required reading for the serious scholar of nineteenth-century French medicine and of the history of clinical diagnosis for the foreseeable future.

Malcolm Nicolson,

Wellcome Unit for the History of Medicine,
Glasgow

Nancy Tomes, *The gospel of germs: men, women, and the microbe in American life*, Cambridge, Mass., and London, Harvard University Press, 1998, pp. xv, 351, illus., £19.95 (0-674-35707-8).

As I read Nancy Tomes's sparkling account of popular assimilation of the germ theory, I could not help thinking of Howard Hughes. So afraid of contamination with unseen germs that he locked himself away for years and only handled objects wrapped in Kleenex, Hughes is an extreme example of the "antisepticonscious America" that Tomes so engagingly analyses. Though few Americans were as obsessed as Hughes, Tomes shows that belief in the existence of disease-causing germs was instrumental in the transformation of an "extraordinary range" of products and practices. Extra-long hotel sheets, prohibitions on spitting, public fountains, porcelain toilets and a mind-boggling array of other developments date from this period. In thus shifting historical attention away from municipal engineering and towards the "reformation of individual and household hygiene", Tomes delivers an impressive study of public health and its relation to the public's daily life.

Tomes begins by demonstrating that, regardless of physicians' ambivalence towards germs as causes of disease, lay commentators rapidly assimilated germ theory largely

because its early versions harmonized so well with the prescriptions of contemporary domestic sanitary science. The heart of the book, covering the period from 1890–1930, is an analysis of the transformation of germ theory into a code applicable to domains of existence far removed from sewers and water supplies. Tomes illustrates the transformation with extended discussions of the anti-TB crusade and the domestic science movement. These movements are fine examples of Tomes's contention that scientific findings have to be exported outside the lab by interested parties. She nicely outlines the historical context that structured the form that these particular extensions of the theory assumed. The primitive development of state and local public health bureaucracies ensured, for example, that the anti-TB campaign was largely voluntary in orientation. Likewise, the domestic science movement was founded and led by the expanding network of college-educated women who were otherwise excluded from full participation in public life.

A second theme highlighted by these episodes is the central role played by advertising and commercial calculation in the triumph of the gospel. Tomes describes the significance of modern methods of mass persuasion in the TB campaign, but this campaign scarcely represents the full extent of their importance. From the earliest appearance of the germ theory, manufacturers of various sanitary products shrewdly manipulated scientific findings and public opinion in an attempt to peddle their wares. Indeed, Tomes argues that consumer preferences, increasingly formed by advertising, were a more powerful force for sanitary reform than appeals for action by government, and it was the failure of the market mechanisms to provide sanitary deliverance to the poor that necessitated government regulation in the interest of public health.

As she charts the forced migration of germs from the lab into ever-increasing areas of life, Tomes displays the limitations of the narrowing thesis, the notion that a concern with germs deflected attention away from the