

industrial interest and the pacemaker industry was born. Jeffrey's study illustrates very well the process by which scientific, clinical, and technical discussion regarding the relative merits of one or other design is gradually transformed into competition between commercial products vying for shares of the world market. When the Medicare programme came into operation, in 1966, the overall size of the pacemaker market grew rapidly, for most of it was in the USA. Manufacturers prospered. Further innovation, including the search for new applications of the device, was then shaped by the exigencies of the market. A reputation for technological sophistication was one competitive strategy, preferred by some commercial competitors. Others placed more weight on a reputation for reliability and the customer-support they provided. These are the central elements in the history of almost any modern medical technology. A strength of Jeffrey's book lies in its comparison of the pacemaker with the implantable defibrillator that came later. There were some similarities: the initial response of the clinical community was once more one of scepticism. What this second story illustrates is the effect of the new regulatory climate, and the concern with cost containment, that emerged in the 1970s, with "technology" identified as a major culprit. By 1980, demonstrating clinical safety and efficacy was no longer enough. Economists had arrived on the scene.

*Machines in our hearts* is more a study in the history of technology than in the history of medicine. It would be a pity if medical historians, or health policy analysts, were put off by the technicalities. It is precisely the book's attention to the motive forces of reputation-making and (still more) commercial competition in shaping these technologies, their uses and their growth, that helps us understand something of the fundamental quality of late-twentieth-century American medicine. The last chapter, 'The 1990s and beyond', looks to the future. Jeffrey anticipates the emergence of a cardiac implant to treat congestive heart failure (CHF): "the single most frequent cause of hospitalization in patients over age 65". If and when it comes, this will be

"an important source of future revenue growth for the manufacturers": probably not a matter of major interest for historians of medicine. But what of the demarcation of the role of the cardiologist, for this too may change? Getting to grips with where innovative health care technologies come from, how they are affected by (and affect) our expectations of medicine, and its organization, surely obliges us to look across the boundaries of our own scholarly disciplines too.

Stuart Blume,  
University of Amsterdam

Barbara Clow, *Negotiating disease: power and cancer care, 1900–1950*, Studies in the History of Medicine, Health and Society Series, Montreal and London, McGill-Queen's University Press, 2001, pp. xviii, 237, £18.95 (paperback 0-7735-2211-5).

Medical pluralism is a term that social historians of medicine have long associated with the eighteenth century, but only very rarely with the early twentieth. The dominating theme here has not been continuing pluralism but rather the rise of medical science and the tendency of modern states and their medical professions to establish medical monopolies. Barbara Clow uses the example of cancer care to analyse the construction of medical authority in Canada, and she suggests that medical culture in early-twentieth-century North America was far more pluralistic than often assumed.

The book centres around the careers of three popular providers of more or less heterodox cancer cures in the Canadian province of Ontario, whose influence extended far beyond the provincial borders. Hendry Connell was a physician who developed an enzyme extract that, he believed, dissolved cancer cells by proteolysis. John Hett, also a doctor, experimented with a combination of sera that he assumed would restore the endocrine balance of patients and trigger an immune response to the rogue cells. Finally, Rene Caisse, a trained nurse,

## Book Reviews

treated cancer sufferers with herbal infusions, derived, according to her own account, from a native American recipe.

Clow dedicates the second half of her book to explaining why, “while Connell was described as an experimenter and Hett was depicted as a maverick, Caisse was considered a quack” (p. 85). But before she turns to her three protagonists, she sets the stage with chapters on the experiences of cancer sufferers in the early twentieth century and on mainstream medical practices and concepts dealing with the dread disease. She presents us with some interesting illness narratives that show how patients moved quite freely from orthodox to heterodox practitioners and sometimes the other way—Clow describes this as a “continuum of care” (p. 116). Orthodox treatments, mostly surgical, were drastic and not necessarily more efficient than what fringe practitioners had to offer. Furthermore, the immunological, biochemical and endocrinological models employed by Connell and Hett seemed well in line with contemporary medical thought, and all three set up laboratories where they tested their formulas on animals.

In the 1930s, the negotiations over what was to count as legitimate medicine between cancer sufferers and their relatives, the medical profession and the state, intensified. Connell, Hett and Caisse expected the state to embrace their inventions and were supported in this by patients and their relatives. The government appointed a commission to evaluate non-conventional cancer therapies and at first seemed to follow the demands of the organized medical profession but made considerable concessions when faced with public protests. In the 1930s, more than 55,000 people signed petitions on behalf of Caisse. Connell had long collaborated with other doctors, and he received government help for his research. Hett alienated both the profession and the government by refusing to reveal the secret of his recipe and had his medical licence withdrawn. Caisse also kept her formula secret. As a nurse, she was never taken seriously by the medical profession but had the largest number of followers, and her anti-cancer tea enjoyed a comeback in the 1970s.

Barbara Clow’s interesting and well-structured book is a valuable contribution to the growing number of studies in recent years that suggest that early-twentieth-century medicine was far less monolithic than often assumed, and that the confidence in medical science and mainstream medicine that came to dominate medical culture in the 1950s and 1960s may have been an exception rather than the rule. The book also contributes some important insights on the framing of cancer in the twentieth century. The history of the disease has too often been written about as if it were synonymous with the history of cancer research.

**Carsten Timmermann,**  
University of Manchester

**Jock McCulloch, *Asbestos blues: labour, capital, physicians and the state in South Africa*, African Issues series, Oxford, James Currey, and Bloomington, Indiana University Press, 2002, pp. xxvii, 223, illus., £40.00 (hardback 0-85255-863-5), £12.95 (paperback 0-85255-862-7).**

Most studies of the history of asbestos, health and disease have focused either on Britain or the USA. Examination of these themes in the South African context is therefore welcome, not least because of the key role played by South African researchers in the discovery of the asbestos-related disease, mesothelioma. Since miners and others alleging ill health as a result of exposure to dust in the asbestos fields of southern Africa are currently bringing legal actions in the British and American courts, it is also topical.

Although a good deal of *Asbestos blues* deals with living conditions and mining techniques, medical history is at the heart of the book. McCulloch vilifies industry, scientists (even such “heroes” as J C Wagner), state authorities and defence lawyers for furthering their own interests while playing fast and loose with the lives of countless South Africans. Above all, the apartheid system stands accused of generating large profits for the few while bequeathing a legacy of environmental degradation, misery