uncertain, and the state lacked the resources for major infrastructural reform. "Medical policing", one of the Enlightenment slogans of the day, thus remained more ideal than reality.

In her final Chapter, Lindemann looks at the choices people took when they were confronted with the problem of illness. Fatalism and resignation were relatively uncommon. Most people preferred being well to being ill, and did not need the authorities to persuade them of the virtues of health. They usually tried a variety of treatments and went to a variety of sources for them; in this process, they neither scorned the university-trained physician nor relied on folk remedies and magical cures, which were far less widespread than many historians have assumed.

What Lindemann's absorbing and very readable book achieves, therefore, is to use detailed archival study of the grass-roots of medical practice to undermine widespread notions in German historiography of the eighteenth century as an age of nascent professionalization and sharp divergence between popular and elite attitudes to medicine and health. Medical practitioners of all kinds, including university-trained physicians, employed a variety of techniques in which the popular and the academic were often intermingled. As exemplified by a small town or rural district Physicus, "Enlightenment" could often degenerate into crankiness which local people were well advised to regard with suspicion. The idea of an "Enlightened" state trying to impose proper standards of health and hygiene on an indifferent rural society is revealed as myth. Lindemann backs up these persuasive arguments with a mass of fascinating detail. Her splendid book is not only a triumphant vindication of a broad-based, theoretically and historiographically informed approach to the social history of medicine, but also shows how much can be achieved when historians marry theory and historiography to detailed empirical research by rolling up their sleeves and getting to work on dusty and unread files in obscure provincial archives.

Richard J Evans,Birkbeck College, University of London

Thomas Neville Bonner, Becoming a physician: medical education in Britain, France, Germany, and the United States, 1750–1945, Oxford University Press, 1995, pp. xii, 412, £30.00 (0-19-506298-1).

This ambitious survey fills a real need. Not only do we lack a historical overview of medical education informed by the findings of recent scholarship; apart from the American case, even individual national experiences have suffered from relative neglect. Bonner's study, based on original research in the U.S., Britain, France, and Germany, as well as a thorough acquaintance with the secondary literature, allows readers to trace the key developments in four of the countries that most profoundly influenced the training of physicians in the modern West. Nor is this a narrow institutional history, though the transformation of institutions lies at its core. Bonner has much to say about student life and about the larger cultural, social, and political factors that impinged on the education of medical practitioners; he gives a very useful summary, for example, of the struggle by women for access to medical training, a subject that he has treated authoritatively in a separate monograph.

The book's most original feature is its attempt to produce a genuinely comparative account by interweaving the discussions of national cases into chapters arranged by topic and time period, rather than placing them in separate sections. To be sure, the demands of the narrative made it difficult to carry out the sort of detailed synchronic comparisons that might have helped explain the differing patterns observed in his four principal cases; although the chapters are not divided along national lines, the sub-chapters typically are. But the approach is particularly effective at highlighting both the major similarities, such as the widespread acceptance of the need for practical clinical training by the beginning of the nineteenth century, and the distinctive features of each national experience, such as the long dominant position of the university as the centre for medical education in Germany.

The emphasis is on the disparities, which Bonner attributes to the distinctive historical experiences of each national community. The inherently variable nature of these influences, he suggests, means that medical education has been and will remain fundamentally contingent. Implicitly at work here is a nonteleological model of evolution, which depends on the unplanned interaction of internal and environmental factors, rather than on a single progressive dynamic within medical education itself. The most striking examples involve what might be called paradoxes of disadvantage. In Germany in the 1850s and 1860s, "many of the same factors that had hindered medical pedagogy . . . earlier in the century—the struggle to maintain a foothold for professional study in the university, the tension between classroom and clinic, the small size of the numerous and widely distributed medical schools, the strict and varying regulations of individual states, and a reputation for theoretical speculation over purely practical study— . . . now seemed to give an important advantage to German medical teaching" (p. 235). Similarly, in the U.S. in the 1870s, the modernization of the curriculum actually benefited from the "chaotic conditions" that had hitherto characterized medical education (p. 265).

At the same time, however, a powerful subtext tells another story, based on a rather different conception of evolution—the story of the origins of modern medical education, though Bonner carefully avoids giving this title to his narrative. Central to this account are the Enlightenment as a fundamental turning point in the history of Western culture and then "the changes in scientific knowledge and medical effectiveness" (p. 10) that appeared in the nineteenth century. The new scientifically based and more effective medicine, once systematically incorporated into the training of physicians, greatly enhanced their authority in the larger society and culture and contributed to the decline of alternative healers (p. 347). While stopping short of the triumphalism of a more traditional historiography, this is none the less the story of a triumph.

The focus of that story, as the book's title indicates, is on the increasingly standardized training of medical professionals. Bonner gives almost no attention to recent alternative medicine, which stubbornly refuses to lie down and die, and has developed its own training institutes in the U.S., Germany and elsewhere, to the paramedical professions, or to lay learning and popular instruction in health and hygiene. He devotes relatively little space to unorthodox learned medicine (homeopathy rates a few mentions) or to the role of patients either as teaching material in the clinical setting or as the consumers of medical services. These are at most peripheral concerns. Indeed, Bonner's book can be read as an account of professionalization, albeit one that recognizes—as it must—the ways in which particular social and political contexts shape professional institutions and practices. The latter are surely contingent, as he argues, but it is difficult to imagine, on the basis of his account, how-short of the collapse of industrial society-the basic structure of medical education as he has described it might be transformed.

Such an approach may well seem unfashionable, but it is the source of what may be one of the book's most important contributions. For all the wealth of insights and information that less profession-centric studies have contributed to our understanding of the social history of health and health care, they do not diminish but in a sense throw into relief the central place of modern biomedicine and the organized medical profession and the extraordinary resources devoted to them in every industrialized society. Bonner's study reminds us of the crucial social functions of medical education, as part of the unwritten contract on which professional authority is based, but also as the formative experience that helps forge a shared professional identity among medical practitioners.

> Matthew Ramsey, Vanderbilt University