How dissimilar? If events in French or US psychiatry unfolded somewhat differently—as appears to have been the case—might such a contrast have made German psychiatry yet another example of the *sonderweg* thesis so popular among certain historians? The answers to these questions need not have occupied a prominent place in Engstrom's narrative, but they would have added analytical depth to an already fine book.

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Sanjoy Bhattacharya, Expunging variola: the control and eradication of smallpox in India, 1947–1977, New Perspectives in South Asian History, New Delhi, Orient Longman, 2006, pp. xv, 326, Rs 750.00 (hardback 81-250-3018-2).

On 23 April 1977 an international commission certified that India was finally free of smallpox. Sanjoy Bhattacharya's compelling and refreshing account of how this was achieved follows on from his previous volume, Fractured states: smallpox, public health and vaccination in India 1800-1947. co-authored with Mark Harrison and Michael Worboys. The two volumes together chart almost 150 years of smallpox control in India, from colony through to nation; and many of the analytical themes in the first volume are further explored here. In the period under discussion in this book national and international efforts went beyond the mere control of smallpox to its ultimate global eradication. India as the "hyper-endemic" state was the obvious primary target. This was attempted against a national and international context which presented new challenges both for India and the international health agencies. The new nation was intent on shaking off its colonial past; reversing the underdevelopment that was perceived to be its colonial legacy; and establishing itself as a regional player, at the very least, on the geo-political stage. Moreover, both the Indian government and

the WHO were aware that the Cold War context in itself provided a new dynamic for the conduct of relations between the industrialized nations and the ex-colonies of South Asia. The Indian government was not a passive recipient of aid from the richer nations but had the capacity to exploit the situation to pursue national self-interest. The novelty of this account stems from its exploration of the multi-faceted nature of this humanitarian achievement.

As Bhattacharya cogently argues, neither the Indian government nor the WHO were monolithic structures capable of imposing their will on the processes of decision making or of policy implementation. In India a myriad of actors at all levels was involved so that, in assessing the shaping of public health policies, indigenous resistance from within as well as from without the state apparatus is explored. At national level there was the Prime Minister's Office, the Health and Finance Ministries, the Directorate of Medical and Health Services. These were replicated at the state level with ministerial offices, state health departments. and district and sub-divisional health workers. The various agencies were protective of their responsibilities, their departmental identities and their professional interests. Furthermore, the WHO headquarters at Geneva had its own objectives, but these were not always accepted by the South-East Asia Regional Office (SEARO), its branch organization in India. The timing, nature and scope of the smallpox campaigns were continually under discussion and dispute, and hence, despite the WHO's call for eradication in 1958, they proceeded in the subcontinent at an uneven, disjointed and hesitant pace. Both the major campaignsthe National Smallpox Eradication Programme (NSEP), inaugurated in 1961 and the Intensified National Smallpox Eradication Programme (INSEP) launched in 1973—were beset by funding problems, and constantly compelled to adapt to the social, geographic and climatic variations of the country and the competing agendas of the various participants. There was civilian opposition too, sometimes met with force but more often countered through

negotiation with community leaders. The evidence presented in this volume effectively demonstrates the agency of participants at all levels and exposes the narrowness of those accounts which focus on the directives and activities of the few at the top.

Expunging variola is also notable for the attention it gives to another hitherto neglected aspect of smallpox studies—what Bhattacharya describes in chapter 5 as the "integral component" of the smallpox eradication programmes—"vaccine development and deployment". The technological aspects of vaccination had a significant impact on the organization of the programmes and, here again, Indian agency is highlighted. For example, despite the WHO's objections to the use of wet vaccine (with its attendant problems of storage and transportation), its substitution by freeze dried vaccines was resisted in order to protect Indian technological autonomy.

The efficacy of vaccines and the nature of the operation itself had an obvious impact on the take-up of vaccination. As Bhattacharya points out, civilian resistance to the vaccination procedure stemmed as much from these factors as it did from cultural opposition. Vaccination was intrusive and painful, and moreover carried a risk of infection. The rotary lancet, in common use, was described as a "mediaeval vaccination torture device" by one WHO official. However, attempts to standardize techniques and impose uniformity came up against existing wide-ranging variations in administrative attitudes and field practice.

Based on previously unused archival and private papers, this book eschews simplistic accounts of the WHO eradication campaigns and exposes the full complexity of the processes of decision-making and policy implementation. Its emphasis on the significance of vaccination technology is long overdue. In its unravelling of the complexities of the eradication programmes, it serves as a model for historical analysis. It could also be read with profit by those now actively engaged in such ventures. It illustrates perfectly the futility of trying to impose overarching

structures on human agency, whether attempted by historians or by those they write about.

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Margaret Pelling and Scott Mandelbrote (eds), The practice of reform in health, medicine, and science, 1500–2000: essays for Charles Webster, Aldershot, Ashgate, 2005, pp. xv, 376 (hardback 0-7546-3933-9).

Published thirty years after The great instauration, Charles Webster's groundbreaking study of the seventeenth-century political and scientific revolution, The practice of reform is a tribute to Webster from his colleagues, former students and professional historians whom he has influenced and guided. Drawing their inspiration from the questions Webster's body of work has raised, the eighteen authors examine the effects that demands for social, political and religious reform had on medical and scientific theory and practice, and on the structure of healthcare. Following the main thrust of Webster's research, the volume spans the Renaissance to the present, although it is the early modern period and the twentieth century that dominate. Margaret Pelling's detailed essay on medical practitioners and office holding is the only chapter that straddles both periods in its examination of how medical practitioners were marginalized from the normal structures of male authority at a local, regional and national level. Other essays equally point to the importance of national, regional and local contexts or, as in the case of Linda Bryder in her comparative assessment of infant welfare services in New Zealand and England, Stefano Villani in his essay on the battle between innovators and conservatives in seventeenth-century Italy, and Anne Marie Rafferty in her essay on the Colonial Nursing Association (CNA), to international contexts and the exchange of knowledge.