Book Reviews

Sanjoy Bhattacharya, Mark Harrison, and **Michael Worboys**, *Fractured states: smallpox, public health and vaccination policy in British India, 1800–1947*, New Perspectives in South Asian History, Hyderabad, Orient Longman, 2005, pp. x, 264, £24.95, $35.00, Rs 630.00 (hardback 81-250-2866-8).

Fractured states: smallpox, public health and vaccination in British India is the first book-length treatment that details the development and implementation of public health policies to control smallpox in British India between 1800 and 1947. The book takes an interdisciplinary approach shaped by the collaboration of its three co-authors whose expertise in South Asian studies and history of medicine is legion. It is a significant contribution to the history of smallpox, and public health. Using vaccination as a case study, it also offers a fresh perspective in the political history of British India by delving into the complex machinery of the colonial government. It is, appropriately, a volume of Orient Longman's New Perspectives in South Asian History in which it is followed by the smallpox story from India's independence to its eradication on the Indian subcontinent: Sanjoy Bhattacharya's *Expunging variola: the control and eradication of smallpox in India 1947–1977* (2006).

This work employs two principal analytic approaches that roughly divide the book into two halves. The first half is a detailed structural analysis of the development of smallpox controls and public health policies that "between 1890 and 1940 mirrored the fractured nature of the colonial Indian administrative structures"(p. 9). By focusing on the inter- and intra-governmental economic and political relationships that shaped smallpox control strategies (vaccination, isolation, and infectious disease notification), the authors depart from the standard historiography that tends to blame the relatively slow uptake of vaccination in India on indigenous resistance, or British imperialism. The authors point out that historians constructing narratives around the colonizers and the colonized tend to focus on the concerns of the senior bureaucrats and scientists, laws and regulations, and in doing so have distorted the picture of the diverse and often conflicting in-the-field execution of state policies. In this book, race and religious opposition to vaccination, often featured in reports by British bureaucrats, are portrayed as proxy explanations for a more nuanced and contingent set of political interests, petty disputes within government agencies, and the diverse power relationships between all levels of government and, of course, the public. For example, they argue that tensions and conflicts arose frequently between British bureaucrats, and within government departments, such that even when adequate funds were available, vaccination was occasionally impeded by the competing interests of various government officials. This systems analysis sheds new light on the idiosyncratic uptake of vaccination technology in India throughout the period of study.

The second half of the book explores the technical and medical history of vaccine research in India to explain trends in the perception and uptake of the different vaccination technologies. By the late nineteenth century, it was obvious to both Indian and British civil servants that western vaccination techniques and seed strains had to be adapted for the Indian sub-continent, due to the technical challenges of preserving and maintaining pure and reactive vaccine lymph. Government-supported provincial vaccine institutes became centres for such vaccine innovation. Vaccination and re-vaccination itself played a larger role in Indian strategies to control the disease because of the lack of infrastructure for quarantine, and because the

circulating smallpox strain was far more lethal than the strains in Europe and the UK. The development of less reactive vaccines, and techniques that elicited milder constitutional and local side-effects, were thus necessary to encourage people routinely to submit to re-vaccination. The authors argue that the introduction of safer vaccine technologies gradually improved vaccination rates, and, during the 1930s, improved the public's perception of vaccination. Medical innovations and made-in-India technocratic solutions to the problems of production, storage and delivery were clearly significant features in this smallpox story.

By analysing the inter-governmental systems and the technical history of smallpox vaccination, this work has opened up a new array of explanations for why, and in what context, diverse publics resisted state-sponsored vaccination. Unlike explanations that pit western scientific medicine against religious and cultural backwardness, this approach allows for a certain symmetry in the analysis of resistance and the ultimate acceptance of vaccination. It equally highlights the situations where technical, bureaucratic, social and cultural factors led to the enthusiastic adoption of vaccination. Many of the technical and systemic variables identified by this work can be applied to other case studies of smallpox vaccination, and indeed scholars studying its implementation in other regions can now utilize the findings of this important and groundbreaking study for comparative research.

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Simon Szreter, *Health and wealth: studies in history and policy*, Rochester, NY, University of Rochester Press, 2005, pp. ix, 506, £50.00 (hardback 1-58046-198-0).

For more than two decades, the relation between health, social change and politics has been a primary target for Simon Szreter's historical studies. The present book is mainly a collection of previously published and slightly revised articles with an added introduction and final reflections. The empirical example is Great Britain during the nineteenth and, to a lesser extent, twentieth century, but his conclusions concerning the threats of social disruption caused by rapid change are general indeed.

One article, 'Economic growth, disruption, deprivation, disease and death', published in 1997, has been widely read and quoted by historians, scholars and practitioners interested in the fate of contemporary developing societies. Later, Szreter has used ''linking social capital'' as a tool to understand why some societies are healthier than others. One of the articles is written together with Michael Woolcock, where this concept incorporates politics, the state and other formal and informal institutions as important and necessary means for the creation or preservation of trust, safety, a fair distribution of resources and a good life, especially during periods of rapid social change.

The author is not afraid of drawing wide-ranging conclusions almost entirely from one historical case, the history of Great Britain. If we accept Szreter's interpretation of British experiences, it may of course still not be valid for what has happened in other parts of the world. Generally, however, there is by now a wide acceptance of his critique of Thomas McKeown's famous thesis that economic growth, increased standard of living and improvement of the nutrition of the population were the key factors behind rising life-expectancy in Europe during the last two centuries. A growing number of studies in other countries are, for instance, supporting Szreter's view that public health interventions were much more important than McKeown thought, particularly when implemented on a local level.

Although details might still be diffuse, the first half of the nineteenth century and the most intensive first phases of industrialization and urbanization were obviously accompanied by hardship and severe health problems for