

volume fit to stand alongside its predecessors in this splendid series.

Peter Murray Jones,
King's College, Cambridge

Gérald Jorland, Annick Opinel,
George Weisz (eds), *Body counts: medical quantification in historical and sociological perspectives/ La Quantification médicale, perspectives historiques et sociologiques*, Montreal and London, published for Fondation Mérioux by McGill-Queen's University Press, 2005, pp. x, 417, £64.00 (hardback 0-7735-2829-6).

The seventeen essays (plus Introduction) in this book complicate and deepen the narrative about the use of quantification in medicine over the *longue durée*. I say "complicate", because in their Introduction, Gérald Jorland and George Weisz make the point that there is much more to the history of medical numbering than the received wisdom of persistent rejection until the acceptance of mathematics as a research tool in medicine after the Second World War. The chapters take the reader from the early eighteenth through to the early twenty-first century and cover a lot of international ground (though with recurring attention to Great Britain and France in particular). Written in either English or French (a paragraph abstract in French of the English chapters and *vice versa* would help non-bilingual readers), the chapters are organized into four broad themes, namely: 'Medical Arithmetic'; 'Quantification and Instrumentation'; 'Statistics and the Underdetermination of Theories'; and 'Reducing Uncertainty and the Politics of Health'.

Of course, many individual chapters overlap these categorizations and it strikes me that three themes should be emphasized further as contributions to the debate about quantification. The first is the two-way link between quantification and policy. I was

impressed with Andrea Rusnock's essay on eighteenth-century attempts to use Bills of Mortality and parish registers to quantify and explain infant mortality in England and France. Not only does Rusnock's chapter serve as an important corrective to the assertion that infant mortality was "invented" in the nineteenth century, but it also teases out the possibility that by drawing distinctions between ages, places and social classes in the overall picture, infant mortality calculations in fact influenced "reform" for the care of foundlings and the timing of smallpox inoculation. On an altogether different note, in tracing epidemiology and statistics in post-Second World War France, Luc Berlivet observes that ministerial desire for data and analysis during the HIV crisis furthered the development of applied epidemiology.

A second topic is the relationship between the numeric method and the state, notably as a tool of governance and administration. One is now used to reading about this issue from particular national contexts and especially in relation to public health. In his essay on the mid-eighteenth-century debate between Daniel Bernoulli and Jean D'Alembert about the "value" of smallpox inoculation, Harry Marks encourages us to think not only about what such quarrels tell us of "moral expectation", but also about what the State actually is and means. Lion Murard takes us one step further by considering the supranational context, specifically the massively diverse measures of quality of life and health reported on by the League of Nations in the inter-war period. The unwieldy range of survey tools used by individual countries defied distillation and provides us with an informative historical backdrop to the more recent preoccupations of international public health with rural under-development and global health indicators.

The third issue concerns statistical and/or epidemiological methodology. It hardly goes without saying that forms of quantification are crucial to the practice of modern medicine and public health. One of the most enjoyable aspects of this book is the compelling treatment

of otherwise dry methodological-statistical debates. The chapters by Mark Parascandola on tobacco and cancer epidemiology in the mid-twentieth century, by Iain Chalmers on the disputed reasons for the use of randomization in the Medical Research Council's clinical trial of streptomycin in 1948, and by Nicolas Dodier on the politicization of randomized control trials in AIDS research in the final decades of the twentieth century, all weave together discussions about disciplinary advances across statistics and medicine, the role of institutional priorities, biographical trajectories of key protagonists and wider social contexts. Achieving such complexity in such a short space is a tall order, but extremely satisfying when done well, as it is here.

By selecting these three themes I do not seek to criticize the editors' choice of structure; rather, I am trying to suggest that there is much in this volume that can and should be taken up in the future but can barely be covered in a short review such as this. I could expand on even more analytic frameworks, such as Canguilhemian standardization (Christiane Sinding's chapter on diabetes; Weisz's reflections on evidence based medicine); the transformation of qualitative information into biomedical quantitative "platforms" in cancer pathology (Peter Keating and Alberto Cambrosio); or the fascinating chapters on instruments of quantification such as the thermometer (Volker Hess) and physiological measurement (Ilana Löwy). Many of these essays show that such frameworks could profitably be developed for other diseases, medical specialties and devices.

Graham Mooney,
Johns Hopkins University

Pamela Michael and Charles Webster (eds),
Health and society in twentieth-century Wales,
Cardiff, University of Wales Press, 2006, pp. xii,
332, illus., £45.00 (hardback 0-7083-1908-4).

*Health and society in twentieth-century
Wales* is a welcome addition to the still

relatively scant academic literature on the history of medicine in Wales, which originates in a conference to mark the new millennium, held on St David's Day 2000 at the University of Wales, Bangor. The first seven chapters—the historical core of the book—address public health, female health, and the professions. In a short review it is impossible to comment on every chapter, but some contributions are especially worthy of note: Steven Thompson's adept statistical survey of unemployment, poverty and women's health, for instance; Kate Fisher's innovative interpretation of the delivery of contraceptive advice; and Paul Weindling's perceptive reading of the Jewish medical refugee crisis before and during the Second World War.

From chapter 8, the volume adopts a more contemporary stance. Pamela Michael profiles Julian Tudor Hart, the legendary GP and researcher from the south Wales valleys, who framed the "inverse care law". He himself then offers a characteristically robust appraisal of *The citadel*, criticizing A J Cronin for not showing "how primary medical care might become both scientific and humane" (p. 212). In asking "What was Wales?", Martin Powell argues for the use of contingency theory—imported from the social sciences—to analyse the medical past in terms of uniform, concurrent, and exceptional policies. And two further chapters examine the administration of the NHS after the establishment of the Ministry of Health and the Welsh Board of Health in 1919, Charles Webster developing a masterful exposition of the tortured transfer of health powers to the Welsh Office up to 1969 and John Wyn Owen reflecting on his decade as Director of the NHS in Wales between 1984 and 1994. Finally, an excellent chapter from Gareth Williams insists that understanding health inequalities "will need not just more and better statistical data and tools, but more interpretative and historical approaches, bringing together the stories of individuals and the histories of social structures in particular areas—cities, towns and communities" (p. 299).

In their preface, the editors explain that mental health and occupational health are