

with ordinary settlers whose greatest concern with Indian bodies often ran no farther than whether or not they still moved after having been shot. Moreover, any discussion of racism must include a thorough treatment of Africans, a topic necessarily beyond the book's scope. Her tale about race is at best half-told.

A second theme concerns the "transatlantic argument on the connection between the natural and imperial worlds" (p. 3). Colonists' sense of who they were within the empire took shape, as Chaplin documents, in conversation with metropolitans as well as aborigines, yet she never fully limns that identity, perhaps because her colonists correspond only with scientists and never with courtiers, bureaucrats, or merchants. We learn how seventeenth-century creoles imagined themselves inhabiting North America with (and over against) the Indians but not how they may have accepted (or, in some precincts, chafed over) Whitehall's definition of their "libertyes". An English colonist had always to think of the king's two bodies as well as his own.

Charles L Cohen,
University of Wisconsin-Madison

Jordan Goodman, Anthony McElligott, Lara Marks (eds), *Useful bodies: humans in the service of medical science in the twentieth century*, Baltimore and London, Johns Hopkins University Press, 2003, pp. vii, 217, £31.00 (hardback 0-8018-7342-8).

Over the past fifteen years, the topic of research on human subjects has attracted considerable interest among medical historians. Following on from earlier work on the notorious human experiments of doctors in Nazi Germany, historians have turned to the practices and ethics of human research in other periods and countries. Among others, we have now such studies on the USA before the Second World War (Susan E Lederer, *Subjected to science*, 1995), on nineteenth-century Germany (Barbara Elkeles, *Der moralische Diskurs über das medizinische Menschenexperiment*, 1996), and on France after 1945 (Giovanni

Maio, *Ethik der Forschung am Menschen*, 2002). Much of this work focused on the professional and public discourses on human experimentation, with a view to the issues of information and consent.

The present volume takes a somewhat different perspective. Providing seven case studies of British, Australian and US American human trials from the 1930s to the 1970s, this book's focus lies on the legitimating factors, especially the role of government committees initiating or overseeing such research. Moreover, there is an emphasis on the attitudes and justifications of individual experimenters. In the aftermath of the 1995 *Final report* of the President's Advisory Committee on Human Radiation Experiments, three case studies examine radiation research (uranium injections, radioisotope studies, atomic weapons tests), while the remaining four discuss experiments on malaria, jaundice and hepatitis, and germ warfare.

It is nowadays undisputed that any serious evaluation of past human experimentation must derive from its specific historical, ideological and social contexts. As the essays of this volume make very clear, however, there is no simple recourse to an earlier lack of risk perception or of ethical awareness. This is illustrated on several levels. As Margaret Humphreys shows in her study of Mark Boyd's research in the 1930s on malaria therapy in neurosyphilis patients in a Florida mental hospital, there was an obvious tension between his role as a physician and as a scientist. Jenny Stanton, in her contribution on the work of the British MRC Jaundice Committee during the 1940s, highlights concerns about risk, expressed by medical staff involved in hepatitis studies on experimentally infected patients suffering from rheumatoid arthritis (who were believed to benefit from attacks of jaundice). Or, Glenn Michell, in his study of the "Indoctrinee Force", a large group of senior officers that was made to watch atomic blasts at Maralinga, Australia, in the 1950s, emphasizes curious differences between the assessments of safety given by scientific advisors in public and in private. Finally, Brian Balmer, discussing British large-area spray trials with non-pathogenic bacteria as part of a defensive

policy on biological warfare in the 1960s and 1970s, points out that the secrecy surrounding the tests was not only due to obvious security reasons, but also to fear of potential political embarrassment.

Such evidence of the perceived moral ambiguity of human experimentation could have been supported by paying more attention to the historical debates on the subject or to the development of ethical guidelines on human research after the Nuremberg Code of 1947. While Henry Beecher's whistle-blowing article of 1966 on the ethics of clinical research is repeatedly mentioned in this volume, there is no sustained discussion of his efforts, nor of the similar criticisms voiced about the same time by Maurice Pappworth in Britain. Also, there is no detailed discussion of the Helsinki Declaration of 1964, or, for example, of the guidelines of the British Medical Association and the Medical Research Council of 1963.

However, the strength of this collection consists in discussing the forces that legitimated human trials in various contexts: potential therapeutic improvements (for example, in malaria and venereal disease treatment), development of new medical technologies and specialties (such as radiation therapy and medical physics), the contribution to the war effort and national security (Second World War and Cold War), occupational and public health. The underlying utilitarianism of human research transformed human subjects into "useful bodies", so that risks, information and consent appeared less important. Therefore, this volume can be recommended to anyone interested in the dynamics and motivations of human research in the twentieth century.

Andreas-Holger Maehle,
University of Durham

Vincent J Cirillo, *Bullets and bacilli: the Spanish-American war and military medicine*, New Brunswick, Rutgers University Press, 2004, pp. xiv, 241, illus., US\$55.00 (hardback 0-8135-3339-2).

The Spanish-American war of 1898 broke out after a period of deteriorating relations

between the United States and Spain, following the brutal suppression of a nationalist insurgency in the Spanish colony of Cuba. The conflict, which lasted from April to August, ranged from the Caribbean to the Pacific, with US forces deployed as far afield as the Philippines. By the end of the war, the United States had sustained 385 combat deaths and 2,061 from disease, in addition to considerable financial costs. But as the victorious power, the USA annexed Puerto Rico, Guam and the Philippines, and Cuba became nominally independent.

As Vincent J Cirillo shows in *Bullets and bacilli*, the medical significance of this "splendid little war", as it was sometimes called in the USA, has been largely overlooked. The war may have been small but it had an impact on military medicine that belied its proportions, resulting in significant reforms in military hygiene and medicine, as well as improved training in these areas for combatant officers.

For much of the nineteenth century, the status of medicine in the US army had been low. Most line officers had little confidence in their medical counterparts because they had little success in preventing and treating disease. The Civil War, which saw major losses from disease and widespread infection of wounds, was a case in point. Over thirty years later, this "Civil-War mind-set" was still dominant among American officers, and many were indifferent or hostile to medical recommendations. As medical officers were permitted only to advise (as in the armed forces of most other countries), this gulf between medical and combatant officers could have disastrous consequences. In 1898 there were 1,590 deaths in the US army from typhoid alone, most occurring when soldiers were concentrated prior to deployment overseas. Typhoid was also a problem during the campaign in Cuba, in addition to malaria, dysentery, and yellow fever. The entire 5th Corps had to be withdrawn from combat owing to sickness after just forty days in the field.

The public outcry caused by what many perceived as "unnecessary" or "preventable" deaths culminated in some important reforms which included the establishment of the US