disease concepts can reveal the history of health and medicine in its most deep-rooted relationship to society at large.

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Melissa Leach, Ian Scoones and **Brian Wynne** (eds), *Science and citizens: globalization and the challenge of engagement*, Claiming Citizenship: Rights, Participation and Accountability Series, London and New York, Zed Books, 2005, pp. viii, 295, £55.00, $75.00 (hardback 1-84277-550); £18.90, $25.00 (paperback 1-84277-551-0).

Citizen has become something of a ''buzz word'' of late. It is entwined in a very complex manner with responsibility and duties. Although associated with the French Revolution, its circulation remained relatively geographically limited in the nineteenth century compared with twentieth-century global use. Not surprisingly, only radicals in Britain seem to have employed it widely in the Victorian era. Its sustained employment appears to have taken off around the First World War, at which time, surely by no coincidence, the term ''health education'' first appeared. Thereafter use of the term citizen in a medical context increased steadily until after the Second World War when an exponential rise in its employment seems to have taken place. There is a complex story here about the death of voluntarism, charity and reciprocal obligation as the ''natural'' basis of society and the rise of democracy. Medical uses of citizen are probably only a subset of those associated with science. In both instances the idea of citizenship has been entwined with the idea that knowledge was constitutive of responsible citizenship. Lancelot Hogben was the most famous proponent of this view between the wars. It was preserved, relatively unadulterated in the public understanding of science movement. This top down ideology cherished the notion that if you knew the difference between an atom and a molecule you were in a position to make an informed decision about nuclear power. Strangely, it took a long time for it to be admitted that this notion was belied by the fact that experts, who know far more subtle sub-atomic differences than your average auditor at a mechanics' institute, could not agree about the benefits or otherwise of nuclear fission. The tension between citizenly and expert scientific knowledge is one of the main themes of this book. There are two other equally important dimensions though. First, the relations between science and public policy are by no means straightforward. Are there ways in which science when framed as strategies, protocols, plans, etc., implicitly excludes citizens from participation in decision making? Second, citizenship, which was once considered only in western terms, is these days thought about on a global scale (why is an inhabitant of an African country any less a citizen of their state than a European?).

The volume is composed of a number of case studies and theoretical reflections. The best essay, in the sense of being provocative and well-written, is a study by Steven Robins of AIDS and apartheid in South Africa. Robins addresses the ways in which different groups in that state have appropriated different understandings of AIDS for different political ends. There are also studies here on biotechnology in China, GM crops, environmental health in India and in South America, genetics and expertise in developing countries. Safety and risk are themes which also cement the whole volume. The overall admirable aim of the book is to bring together modern work in science studies and disciplines devoted to investigating global and national development. The political agenda of the work is to demystify expertise and think about participatory activity in areas customarily closed off by science. However, if ever a work was devoted to constructing an obscure expert-driven subject inaccessible to the citizen, this is it. The theoretical contributions are, to say the least, opaque.

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