health in Norway, Northern Russia and Spain, capitalism spurred anti-malaria campaigns, Spanish liberalism stimulated international studies on rural hygiene, and changes of government through dynastic heritage or revolution could spell the end or the beginning of energetic public health efforts in most areas.

This volume is certainly not the last word on rural health. But it is an important contribution to the field and, hopefully, it will inspire numerous follow-up publications.

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Jacalyn Duffin, Lovers and livers: disease concepts in history, 2002 Joanne Goodman Lectures, Toronto and London, University of Toronto Press, 2005, pp. xvii, 234, £35.00, \$55.00 (hardback 0-8020-3868-9); £29.95, \$27.50 (paperback 0-8020-3805-0).

In Lovers and livers, Jacalyn Duffin offers a witty, clear and comprehensible account of disease concepts and how they are constructed and change over time. Originating in three lectures delivered in 2002, the book retains the best of the spoken form in its admirable brevity and ability to engage—it should rapidly become a staple of course reading lists. As Duffin emphasizes, the problem of understanding disease concepts is not a new one. And what she offers here is not a polemic or radical hypothesis, but a carefully thought out and balanced account of the different ways in which concepts are formed and operate. Her basic argument is that "disease constructs emerge from social as well as biological conventions, and they are constantly revised to fit moral and intellectual premises" (p. 83). This careful presentation of a moderate view deserves to be warmly welcomed by those frustrated by the artificiality and vitriol of some recent discussions about constructivism and its alternatives.

Duffin begins her study with a tidy exposition of the ways historians, philosophers and doctors have thought about disease concepts. As is standard, she distinguishes illness and disease, and then dissects the "components of a well-dressed disease concept" (p.10)—illness/symptoms; patients; name; outcome; cause; and treatment/prevention. To this she adds the idea of the Hippocratic triangle of patient, illness and observer. This provides her with the basis on which to analyse the different "shapes" of diseases, and to describe the four main extant disease models (organismic, population, ontological and physiological) that she deploys in the rest of the book.

The lovers and livers of her title form the centrepiece of the book. The chapter on lovers shows how lovesickness moved from metaphor to disease, and then was further transformed from ailment to sexual perversity. She goes on to challenge those who presume that love is no longer a disease, showing how even today some kinds of love are fitted into disease concepts with labels such as codependency, erotomania, and countertransference. Interestingly, Duffin's final explanation for the pervasive connection between love and disease is rooted in the "loss of control" it promises. In its uniqueness, private happiness, loss of self, and overwhelming commitment, love offers an affront to society and the rest of the world. These essential elements of the symptom-complex of love thus provide a structure for its social understanding. The chapter on livers takes a newer subject, Hepatitis C, the virus for which was discovered only in 1989. Liver disease and hepatitis does, of course, have a much longer historydiscussed here. But it is the ways in which this older concept was split into new diseases over the later twentieth century that is Duffin's main concern. As she shows, the clinical sorting of hepatitis was a slow and provisional story with effects that were in turn affected by external factors—the use of blood transfusion. HIV—and social concerns, particularly the legal debate over compensation. Finally, by highlighting how morals, culpability, and incidence interact, she argues that Hepatitis C is dividing further into two groups, one symptom-free and externally caused, the other symptom-rich and the result of "lifestyle" choices. Together these studies demonstrate how effectively the careful and close analysis of

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 wellwritten, 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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