Island Epidemics (review)

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evidence to back it up) that cholera had long been endemic in Egypt. Haggett's way of dealing with this is "interesting": reprinting a map he first produced in 1988 that is said to chart the movement of cholera in "1881–5," he omits any reference to Egypt, to Bombay, or to the Suez Canal (p. 70).

But aside from these topics, it is likely that statistical geographers will be impressed by the cogency of Haggett's arguments. His book is clearly written and nicely produced.

Sheldon Watts
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Andrew Cliff, Peter Haggett, and Matthew Smallman-Raynor. *Island Epidemics.* Oxford Geographical and Environmental Studies. Oxford: Oxford University Press, 2000. xxi + 563 pp. Ill. $120.00 (0-19-828895-6).

Following closely on the heels of the authors' *Deciphering Global Epidemics* (1998), the present work provides a world picture of disease for the past century and a half. It is the latest in a series of elegant epidemiologic studies by British professors Andrew Cliff and Peter Haggett, recently joined by Matthew Smallman-Raynor. One of the hallmarks of these authors is a meticulous and rigorous approach to their studies, which *Island Epidemics* exemplifies. A quick survey of the contents indicates something of the wide range of the book.

The authors begin with the explanation that the book follows Charles Darwin's argument that islands can serve as natural laboratories for the study of epidemics (among other things), and they then proceed to discuss, define, and probe both islands and epidemics. Chapter 2, "Islands as Laboratories," looks at the use that various individuals have made of such laboratories, ranging from Darwin (the Galápagos Islands) through Peter Panum (the Faroe Islands) to the relatively recent work of Princeton biologists Robert MacArthur and Edward O. Wilson, who formulated *The Theory of Island Biogeography* (1967). This is followed by an examination of the question of the size of a population required for an infectious disease to be endemic in a region (critical community size, or endemicity threshold) in chapter 3. Chapter 4 explores "The Virgin Soil Question" in considerable detail, with special attention paid to the 1875 epidemic in the Fijian islands.

For an island to experience an epidemic disease it has to be accessible to that disease, and chapter 5 examines the interesting question of changing external accessibility over the past 150 years as sailing ships have given way to jet airplanes. Many illustrations here are drawn from Australia's epidemiologic history. Once present on an island, a disease may or may not find its way to all of its corners depending on internal accessibility, with Iceland's internal isolation of primary interest. A major theme of chapters 5 and 6 is the breakdown of both external and internal isolation, especially since World War II, with a concomitant "McDonaldization" of the biosphere.

Chapter 7, however, deals with the *global diversity* of islands and examines connections between disease, on the one hand, and climate and seasonality, on the other. To this point the plagues under scrutiny have been the old and classic ones such as measles, cholera, and the like. But in chapter 8 new diseases are dealt with, such as AIDS (within the Caribbean archipelago), and unusual ones like kuru (New Guinea) that do not necessarily fit (at least not well) into a general theory of island epidemiology—this treatment taking place within the context of a global survey of disease outbreaks. A concluding chapter considering "Island Futures" once again stresses the importance of islands as laboratories, and suggests they can serve as surveillance devices for monitoring global disease activity, including the chronic diseases of affluence.

Such a brief sketch does little justice to this intricately detailed study that is crammed with plates and figures, including charts, graphs, maps, drawings, handwritten medical records, and even photographs of the early and modern ships and airplanes and of many of the individuals discussed. The authors are adept at the statistical and mathematical modeling of spatial processes, and many of their chapters are followed by appendices setting forth such evidence. These can be heavy going, but they do not detract from the book's readability because of their placement. Appendices following the text provide sources of morbidity, mortality, and population data for each of the many islands the authors have studied, and a bibliography of island epidemics. An extensive (and invaluable) general bibliography, along with a comprehensive index, round out the work. *Island Epidemics* is a definitive effort that should be required reading, not just for epidemiologists, but for all individuals interested in the historical geography of disease.

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Richard H. Steckel and Roderick Floud, eds. *Health and Welfare during Industrialization.* National Bureau of Economic Research Project Report. Chicago: University of Chicago Press, 1997. viii + 459 pp. Tables, figures, map. $80.00 (0-226-77156-3).

This book questions whether the industrial revolution resulted in unmitigated advantage in terms of the quality of life or standard of living, or whether, as "the pessimists" argue, it produced disamenities that (at least for some time) altered standards of living downward. The tentative and qualified answer is that it depends on when industrialization took place: the early industrializing countries, most notably Britain and the United States, suffered early in their revolutions, while countries that industrialized later seem to have gone through the process with more-continuous positive trends. The hope of the editors in raising what is