Book Review

A History of Epidemiologic Methods and Concepts

Alfredo Morabia, editor. Boston: Birkhäuser Verlag; 2004. Softcover; 405 pages; \$84.95

Writing histories of intellectual ideas and traditions is almost as dangerous as the penchant of music company executives to release “greatest hits” collections before the musicians have accumulated a body of work sufficient to fill the media. While some disciplines have storied histories, others are of more recent origin and may not warrant extended treatments, even at the hands of practitioners of modern history. Epidemiology is, to all accounts, a rather young discipline, though it does have tenuous antecedents far into the recorded past. In this ambitious volume, Alfredo Morabia has combined a detailed epistemological perspective on a number of essential epidemiologic concepts with a series of authoritative chapters on the historical antecedents of major epidemiologic methods contributed by leading epidemiology scholars.

This book consists of two parts, linked to some extent by cross-referencing. The first section by Alfredo Morabia comprises approximately one-third of the volume. Here Morabia reviews the origins of many basic epidemiologic concepts, and shows how they have evolved from earlier beginnings and usages into more common practice in contemporary epidemiologic research. These are grouped into four sections, focusing on population thinking, group comparisons, epistemology of epidemiology, and finally an attempt to characterize the evolution of the discipline into four phases (preformal, early, classic, and modern).

In the second section, the history of selected epidemiologic methods and concepts is reviewed in a series of brief chapters, interspersed with examples from the historical literature and comments from some of the key figures in the 20th century evolution of epidemiologic ideas. While these chapters don’t make for exciting reading when read one after another, several are outstanding and well worth the effort to locate a

copy of this book. Especially notable are the comments of Sir Richard Doll on the evolution of cohort studies, Nigel Paneth on the early origins of the case-control study, and several brief chapters discussing Farr’s and Snow’s perspectives on cholera.

The epidemiologic concepts are illustrated with numerous tables, diagrams and examples, together with quotations from contemporary writings of the authorities of the day. Perhaps the most significant contribution of this text is its persistent linkage of the science of epidemiology with the broader tenets of philosophy of science. Morabia tends to write with a somewhat self-deprecating tone, particularly in describing the potential contributions of his own work to our understanding of the history of the field of epidemiology, but that, if anything, adds to the book’s charm.

Who, then, should read this book? Initially, its greatest audience may be instructors of graduate courses in epidemiology, for although the book is not well-suited to assign as an introductory text, it is a wonderful resource for examples and discourses on methodological controversies in the field and appears to be written more for teaching purposes than for students. Historians of science may also find the book useful, as may graduate students seeking a broader context for the scientific methods selected for their research studies. Because the field of epidemiology is comparatively new, this book is unlikely to be the final word on the subject of its history, and indeed Morabia explicitly states that it is not a formal historical analysis (pp. xiii–xiv). For those interested in the origins and evolution of epidemiologic concepts, including population measures, study designs, bias, confounding, and causality, at present Morabia’s edited volume is as good a place as any to start.

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