

Book Reviews

Quantitative Research in Human Biology and Medicine, by SIGISMUND PELLER, Bristol, John Wright, 1967, pp. xii, 422, 63s.

This book contains thirty-seven chapters, each a largely self-contained essay on some aspect of the quantitative method in biology and medicine. The first eight of these deal specifically with historical topics and include commentaries, for example, on Harvey's discovery of the circulation of the blood, Mendel's basic theories and experimental findings, immunity against smallpox, the prevention of puerperal fever, and the observations of Snow on the mode of spread of cholera. Moreover, historical allusions and references pervade the whole book, and each chapter contains a combination of ancient and modern examples on its particular subject. The breadth of the author's reading and knowledge is remarkable, and, to judge from those subjects with which I am familiar, his historical summaries are detailed and authoritative:

Although the book is interesting to consult on specific topics, it is not easy to read through. The historical presentations do not form part of an adequately connected exposition. They are included as illustrative material contributing to a diffuse variety of tendentious themes, such as the fruitful contribution of 'logical medical statistics' to the development of biology and medicine, compared with the barrenness of the mathematical statistical approach, the virtues of epidemiological and clinical enquiries, compared with the deficiencies of laboratory experimentation, and the tendency of some scientific workers to ignore previous or rival workers in their field, or even to vilify them, to gain credit for themselves. On each theme the author appears to do justice to his thesis, but to be less than fair to the antithesis.

IAN SUTHERLAND

Jan Swammerdam (1637–1680). His Life and Works, by A. SCHIERBEEK, Amsterdam, Swets & Zeitlinger, 1967, pp. vi, 202, illus., no price stated.

This monograph was originally published in Dutch in 1947, and its present appearance in English belatedly fulfils a hope expressed many years ago by F. J. Cole. The translation has been well done in the sense that it reads like an original work, and the production is of a high quality. The author's method has been to reproduce virtually *in extenso* the comprehensive Introduction by Boerhaave to the *Biblia Naturae* (1737), but with additional material and commentaries interspersed throughout. His survey of the literature is judicious and comprehensive, and in this new edition he has taken the opportunity to incorporate occasional references to modern genetical theory, for instance, in order to illustrate how closely it resembles some of Swammerdam's ideas concerning embryological development: he was not nearly so naive as were later writers in contrasting 'preformation' and 'epigenesis'.

Swammerdam was a general biologist of genius, who saw structure and function as two aspects of a single phenomenon. He also recognized the fundamental similarities in all forms of living matter, in a way that is only just again becoming possible (and inevitable) with those interdisciplinary studies that modern molecular biology demands. If ever the relevance of history to modern biological science is to 'get across' to those contemporaries who think in terms only of the present and the immediate past, the position of Swammerdam, as outlined in this monograph, could with justice become a case-study or paradigm case.

BERNARD TOWERS