

Science and Its Background

By Dr. H. D. Anthony. Third edition. Pp. ix+352. (London: Macmillan and Co., Ltd.; New York: St. Martin's Press, Inc., 1957.) 20s. net.

TWO former editions of Dr. Anthony's short history of science received favourable notice in *Nature* (175, 962; 1955 and 162, 354; 1948). The present edition, the third, appearing only three years after the second, testifies in itself to the popularity of the work.

The author, a former grammar school headmaster, colonel in the Royal Army Educational Corps and university extra-mural lecturer, has a wide knowledge of the requirements of the earnest student of the history of science in relation to social needs.

In the third edition of the book most of the chapters deal with the work of individual men of science selected not merely as a part of scientific history but also because of the value of their work to-day. Nevertheless, the historical background is that not only of isolated biography but also of the continuous history of human affairs. Even in so comparatively short and straightforward a work the temptation to turn a short history of science into the achievements of a hundred great men has been avoided. In this connexion the various time-charts will be invaluable.

The present edition of the book includes a chapter on the International Geophysical Year (which appeared before the Russian Earth satellites) and two new chapters on the post-war utilization of science and the pursuit of science for its own sake.

The book is an admirable short introduction to the history of science for the sixth-form pupil and the intelligent layman. The social importance of such a book increases every year. W. L. SUMNER

Britain's Nature Reserves

By E. M. Nicholson. Pp. 175+65 plates. (London: Country Life, Ltd., 1957.) 30s. net.

THE Director-General of the Nature Conservancy has written this book to explain the objects and scope of the Nature reserves, and especially the functions of the Nature Conservancy itself. The greater part of the book consists of concise descriptions of the more important reserves, indicating the reasons why they are of interest and, sometimes, the character of the work in progress and the way the reserve contributes to the larger scheme. The location of the reserves is clearly indicated and the book is illustrated by numerous well-chosen photographs which further indicate the nature of the work and may well help to enlist co-operation and goodwill as well as the understanding which Mr. Nicholson seeks to promote. The book is not limited to the Conservancy's own reserves, but includes some of the important local reserves and also some of those of other bodies such as Wicken Fen, of the National Trust, Skokholm, of the West Wales Field Society and Field Studies Council, and Minsmere Level, of the Royal Society for the Protection of Birds.

The core of the book, however, is in the introduction. In those twenty pages Mr. Nicholson gives an account that could scarcely be bettered of the Nature reserve movement in Britain, the tasks that confront it and the way it is setting about those tasks. He explains clearly just why it is necessary for access to some reserves to be restricted and the ways in which Nature lovers can help the work, as well as some of the implications of its work for

Britain's economy and for the advancement of science. This is a book that was needed, but Mr. Nicholson's introduction deserves to be issued as a reprint at a price which would place it in the hands of thousands whom a 30s. book is unlikely to reach.

Art and Analysis

An Essay toward a Theory in Aesthetics. By Prof. Edward G. Ballard. Pp. xv+219. (The Hague: Martinus Nijhoff; London: B. T. Batsford, Ltd., 1957.) 30s. 6d.

IN this book, Prof. Ballard has performed a valuable duty in discussing the place which aesthetics should occupy in the broad hierarchy of knowledge. Many people have attempted this before; what distinguishes the present work is its emphasis upon the historical development of the subject, and how the persistent effort to 'locate' the beautiful has stimulated contemporary interest. There is no doubt that much aesthetic theory shares a common boundary with philosophy, especially that part of it which embraces experience, as in the work of Whitehead.

But however elusive an aesthetic object seems to any particular generation of thinkers, we come back to the presence of symmetry as an essential, not sufficient in itself (by traditional standards), but coercive. To Plotinus this extra something was a 'shining through', but the concept gained strength centuries later in the *claritas* of St. Thomas Aquinas and other scholastics. This factor is closely related to form, as if to suggest that inanimate shape could achieve sublimation (under the appropriate conditions) in a way not wholly different from human advancement. It is this element of the sublime which sensitive mathematicians have felt in their preference for one approach to a problem rather than another. In brief, Prof. Ballard's theme is analytic rather than synthetic, though he manages to hold a delicate balance with aesthetics nicely poised between metaphysics and criticism.

F. I. G. RAWLINS

Studies on Fertility

Including papers read at the Conference of the Society for the Study of Fertility, Birmingham, 1955. Edited by Prof. R. G. Harrison. (Vol. 7 of the Proceedings of the Society.) Pp. ix+156+28 plates. (Oxford: Blackwell Scientific Publications, 1955.) 25s. net.

"STUDIES on Fertility, 1955" is Vol. 7 of the Proceedings of the Society for the Study of Fertility. It contains certain papers selected from those read at the Birmingham conference of the Society in 1955 (see *Nature*, 176, 340; 1955), and a number that report original work. Part 1 deals with the male and includes a lucid account by Clare Harvey of the cytology of abnormal spermatogenesis in subfertile men, and three useful papers, by members of the Department of Anatomy of the University of Liverpool, on testicular physiology in the rat and guinea pig. Among them is a study by R. Harris and R. G. Harrison of the damaging effects of cold on the seminiferous epithelium of the guinea pig. In other papers, Marcus W. H. Bishop discusses the inter-relationship of semen characteristics in seventy-six bulls of seven breeds, and T. D. Glover the effects of scrotal insulation on the semen of rams. Three clinical papers introduce the section of the book dealing with the female, to which A. M. Daleq, of Brussels, contributes a valuable summary of the