## BOOK REVIEWS

## Stapledon in Fashion

Human Ecology. By Sir George Stapledon. Second edition. Edited and introduced by Robert Waller. Pp. xi+ 252. (Charles Knight: London, January 1971.) £2.25.

It is embarrassing in 1971 to have to review so wise and timely a book as this knowing that when he wrote it a quarter of a century ago Sir George Stapledon became so discouraged about its prospects of being read that he left it as an unfinished manuscript. Only now, after the usual costly time lag, has informed opinion begun to catch up sufficiently for some of the message to be understood by some readers.

In this Stapledon shared the fate of a number of scientists of deep and wide ranging imagination, who were respected within a narrow professional field but ignored on wider issues. Tansley, whom he perhaps most nearly resembled, was luckier partly through being even longer lived, coming into his own in his eighties. But Stapledon never lived to see the great current impact of ideas which he had shaped and championed on the pervasive role of ecology in agriculture, in government and in human affairs generally.

This book consists of a closely reasoned argument, cosmic in scope, relating man's current gropings and backslidings to biological principles and to less ephemeral values than have been in fashion lately. It gives few references and is only lightly buttressed with scientific support, yet the steady penetrating perspective of its view, the discriminating choice and use of words, the restrained but prophetic and convincing vision behind it, and the knowledge of its author's scientific and practical achievements go far to disarm criticism. This might not have been the case, however, but for the new awareness of an immense body of data and fully documented case histories which now make it idle to question whether certain obiter dicta are soundly based.

While it is quite respectable for a scientist to use his talents in exploring the lithosphere, the atmosphere, the biosphere or even the technosphere, he is still looked on askance for trying to understand the noosphere—the manmade "thinking layer" (as Teilhard de Chardin called it, which since the end of the Tertiary "has spread over and above the world of plants and animals". Vastly important as its content is, this book raises an issue of even greater significance to science. When, if ever, are scientists to be permitted, if not encouraged, to apply their gifts and techniques to systematic survey and analysis of the nature of the noosphere, man's crowning inheritance, of which science itself is a fine flower? How many more Stapledons and Tansleys must be either warned off it if they are timid, or live in frustration if they are courageous enough, before it becomes intellectually acceptable to probe into whether the noosphere is round or flat? Mr Waller and the publishers are to be congratulated, not only on making Stapledon's stimulating argument available, but on providing this awkward case history of an issue which science must sooner or later face. The book would, however, have been better without Mr Waller's appendices, which make no more than an anticlimax, and pursue arguments much more questionable than Staple-E. M. NICHOLSON don's

## Making Decisions

Making Decisions. By D. V. Lindley. Pp. 195. (Wiley-Interscience: London and New York, March 1971.) £1.95.

In many areas of planning efforts at decision making seem to be characterized by unsystematic, irrational methods and procedures. Boards and committees are influenced by the most persuasive speaker, or by irrelevant or misrepresented data. There is little attempt to reduce problems to their fundamental components nor to proceed logically from these. Possible eventualities are rarely listed in a table, they may also be inconsistent. What this book does-far more than to explain and prove the laws of probability-is to advocate clarity and precision and coherence in decision making. Its lucid text and very careful progression to the simple laws of probability make it an ideal introduction to the subject. There is a wealth of practical and amusing examples (and a refreshing absence of absurdly useless data such as those relating to unlikely fatalities in the Prussian army which used to appear in standard works). There are details of actual uses of the laws in military, factory, and private decision making.

In spite of a final chapter devoted to the vagaries of subjective judgment, there is perhaps an overemphasis on logical procedure—designed no doubt to counterbalance loose and imprecise thinking that prevails wherever ordinary people are left to make decisions. A somewhat mechanical approach can lead to surprising inconsistencies (as with the famous ass who, finding himself equidistant from two identical piles of hay, was unable to decide which to move toward first and so starved). The book has not allowed for this sort of situation where perhaps common sense must triumph.

Furthermore, although there is mention of other methods of decision making, there appear to be omissions. Cost benefit analysis allows us to consider personal taste, maximization of public and of private utilities (together), risks, interest rates and more. Perhaps because these preferences cannot always be quantified (though they may be ranked or otherwise ordered), Professor Lindley avoids this sort of method.

In spite of this, the book reads so clearly and it is so careful and conscientious in presentation that it is to be recommended as an example of purity in style and expression which lends much to its simple and clear explanations of formulae and expressions. This clarity and rationality will influence the reader and will be useful even in the most mundane situations where judgment is called for, and where all too often the arguments will be found to be based on false assumptions and are further confused with irrelevant information. Professor Lindley would like politicians, for example, to rank their priorities on public expenditure. PAULINE JONES

## Information Reviewed

Annual Review of Information Science and Technology, Vol. 5. Edited by Carlos A. Cuadra. Assisted by Ann W. Luke. (American Society for Information Science.) Pp. 468. (Encyclopaedia Britannica: Chicago. Distributed in UK by Wiley: Chichester, January 1971.) £8.29.

THE fifth Annual Review of Information Science and Technology covers the literature of 1969, the last year of a decade which was both formative and significant in establishing information as an important factor in maintaining world progress. Actually in the year under review there were no spectacular developments; it was application rather than innovation-as one author puts it, was "fine-polishing and it cost reduction".

It is worth summarizing some of the main trends which are reported. Thus there is the intake and evaluation in one computerized centre of duplicate magnetic tapes from many sources: profes-