

fascinating account of the epic struggles that scientists are now making to understand this mysterious universe. As effective owner of the world's largest telescope, Prof. Lovell naturally tends to lay emphasis on the importance of fabulously expensive equipment for solving these major problems, but unless strongly supported at every stage by theory, and the intelligent imagination needed to develop it, the meaning of the messages produced by such equipment will not always emerge. The encouragement of originality of thought, with the conflicts this involves, is perhaps the main social problem of science in our time or any other time so far, as Prof. Lovell is at pains to bring out in his talks.

The theories so far developed to account for the expansion of the universe, described herein, illustrate how easily theory can slip over into metaphysics. The 'big-bang' exploding super-atom hypothesis, with its attempt to 'explain' the expansion by postulating far less known things, seems to me reminiscent of Huygens' rarefied medium moving round the Earth with great velocity, introduced to 'explain' gravitation, when what is always wanted is a workable theoretical structure that can enable predictions to be made. My own feeling is that there is some major element still missing in our appreciation of this whole problem, and I would venture to predict that until some new theoretical approach on less mystical lines than hitherto is forthcoming, no serious progress with the problem will occur however large a telescope we or others build—mainly it seems at present, according to Prof. Lovell, to impress the neighbours. Nature seldom yields her secrets to this sort of wooing, but prefers the subtler approach.

I believe that the continued creation and maintenance of the universe will eventually seem as natural and intelligible by means of theory (yet to be established) as the view that the Earth is round seems natural and intelligible on gravitational theory, and that in such an attitude lies the only hope of solving this or indeed any other problem. Even though at present it seems difficult compared with problems already solved, there are not the smallest grounds for suspecting that its solution is destined to remain for ever beyond the range of man's intelligence and inventiveness. And this spirit of hopefulness for scientific method is the main message that pervades Prof. Lovell's enthralling lectures.

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## CAMBRIDGE ANTHROPOLOGY

The Developmental Cycle in Domestic Groups

Edited by Dr. Jack Goody. (Cambridge Papers in Social Anthropology, No. 1.) Pp. vii+145. (Cambridge: At the University Press, 1958. Published for the Department of Archaeology and Anthropology.) 21s. net.

THIS is the first in a projected series of symposia in social anthropology, each to be devoted to essays by Cambridge anthropologists on a particular theoretical topic. The theme of this issue is the changing form and significance of the domestic group during its development, and the analytical use of taking this process into account.

The volume comprises an introduction by Prof. Fortes and four papers, three of which are based on field research by their authors. Freeman, in a characteristically thorough ethnographic description,

deals with the formation and partition of the family among the Iban of Borneo: his essay is of especial value in that they reckon descent cognatically, a widespread mode of relationship the theoretical interest of which has been obscured by an almost exclusive concern of anthropologists with lineal descent systems. Goody correlates differences in social groupings and processes of production with variant rules of inheritance in West Africa. Stenning relates the composition and stability of the pastoral Fulani domestic group to the herd on which it depends, and incidentally gives some information on a highly interesting dyadic system of symbolic classification. The concluding essay, not based on field research but an analysis of Trobriand data, is a brilliant demolition by Leach of Malinowski's assumption that the different and apparently conflicting meanings of the word *tabu* are unrelated homonyms. This theoretical exercise is related to the volume's theme mainly in its consideration of the significance of the change of a Trobriand youth's residence from his father's to his mother's brother's hamlet; but it is of far wider theoretical import than this theme, for Leach deals also with origin myths, incest and exogamy, political hierarchy, local groupings, land-holding, economic obligations, and why the Trobrianders happen to have four clans. It is a little chastening to reflect that such ingenuity as Leach displays is required to give systematic conviction to Malinowski's renowned data and to order the facts of Trobriand life as the people themselves do. This fascinating structural analysis shows how necessary and profitable it is to take native categories seriously, and how essential it is to understand the social structure if we are to grasp what the terms denoting these categories mean. The essay bears the marks of a sociological classic, and alone would justify the launching of a new publication. Its author is to edit and introduce the second number in the series—on caste—and one eagerly awaits this as any vehicle for the ideas of one of the most fertile and penetrating minds in social anthropology.

RODNEY NEEDHAM

## EXPERIMENTAL STUDIES OF PERCEPTION

Readings in Perception

Selected and Edited by Prof. David C. Beardslee and Prof. Michael Wertheimer. (The University Series in Psychology.) Pp. xiii+751. (Princeton, N.J.: D. Van Nostrand Company, Inc.; London: D. Van Nostrand Company, Ltd., 1958.) 66s.

THIS book is a valuable attempt to represent the present position in the experimental psychology of perception, and to some extent also the steps which have led up to that position, by means of outstanding papers and chapters from important books. The result is an extremely interesting and often rather bewildering collection of fifty-two selections grouped under five main headings.

The authors consider that they have selected studies which represent the core of the experimental psychology of perception, upon which so much current research in the fields of personality, motivation and social psychology is built. They have included a large number of recent investigations, which show the reader clearly what has been and is being done in the study of perception, and will certainly give him a vivid impression of the tremendous interest,