

that Prof. Firth, who is an economist by training and in his ways of thinking, is writing in that piece of the field of social anthropology which he has made particularly his own and with which, as he justly says, most social anthropologists are unfamiliar.

One of the difficulties and weaknesses of the holistic approach in modern social anthropology is that the student feels that he has to cover a wide range of different and special subjects. It can scarcely be expected that someone who can speak with authority on economics can speak with equal authority on art, morals and religion, to which subjects the last three chapters of the book are devoted. Prof. Firth's treatment of these subjects does not go very deep, especially his treatment of religion, which is naïve and appears to be based on insufficient reading and reflexion, particularly in what he says of Christianity and Islam. However, he would, no doubt, have been able to do himself greater justice in writing on this subject, and to tell us more of the scientific import of the humanism he defines as his own position, had he had more space in which to develop his argument and had he not been also handicapped by the popularizing requirements of a general audience and by a particular kind of platform. Prof. Firth has got round these difficulties as well as they can be got round. He has also, quite rightly in a general survey of this kind, not attempted to put forward any new opinions; and in the main he has well and fairly summarized the point of view of most social anthropologists in Britain to-day, though more especially of those in the tradition of Malinowski at the London School of Economics.

This is an interesting, and often stimulating, book. It is clearly printed, illustrated by excellent photographs, and has an adequate index.

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SCIENCE AND INSIGHT

The History of Nature

By C. F. von Weizsäcker. Translated by Fred D. Wieck. Pp. 180+8 plates. (London: Routledge and Kegan Paul, Ltd., 1951.) 12s. 6d. net.

THE author of this highly significant book, Dr. C. F. von Weizsäcker, is well known as one of the two independent originators (the other being H. A. Bethe) of the generally accepted theory of the 'carbon-nitrogen cycle' as the predominant process of stellar energy-generation. He has also advanced a widely discussed modern version of the Kant-Laplace nebular theory of the origin of the solar system. One might therefore suppose that a book by him under the present title would be an account of the evolution of stars and planets. This it does contain, but only incidentally. The book is, in fact, an investigation of that side of knowledge which the author terms "insight".

It is clear from Dr. von Weizsäcker's opening remarks that he understands the outlook of the professional scientist as a scientist. However, "the scientist is never only a scientist . . . he is a member of mankind". As such he shares responsibility for the effects of the knowledge he helps to produce. Knowledge is power: the use of that power requires choices which lie in the sphere, not of science, but of morals and of religion. Again, knowledge is, or

confers, "insight". The knowledge that is power is specialized science: the knowledge that is insight concerns itself with the coherence of the whole of science and with the nature of man himself. This insight cannot produce the right moral choices, but, if we make these choices, then we desire this insight. It is to be gained by a union of natural science and humanistic studies. To achieve this, a requirement is a unification of science itself. As a contribution to this unification, the author here surveys the historic aspect of Nature.

If one has followed him correctly, such is the setting in which Dr. von Weizsäcker sees the task which he has undertaken. He begins by retracing the history of the earth to where it has to be related to that of the rest of the universe. This leads to chapters on the "Spatial Structure" and "Time Structure" of the universe. The reasoning in the important next chapter, on "Infinity", is briefly as follows. If it is asked what is beyond the limit of our knowledge of space and time, the question may not be meaningful, but attempts to answer it produced the ancient and medieval religious 'myths'. These were later displaced by the 'myth' of objective science. This has been shown to be a myth by the present-day recognition of the subjective aspect of fundamental science. The present situation may produce the attitude which the author calls "honest nihilism".

"The heavens brought forth the earth, on earth life grew, within life stirs the soul, and in man the soul becomes conscious of itself. This is the outline . . ." It is the outline into which Dr. von Weizsäcker fits his account of the broad scientific developments traced in the subsequent chapters on "Star Systems", "Stars", "The Earth", "Life", "The Soul" and "Man: Outer History". The chapter on the soul is particularly illuminating, being in part a philosophical discussion closely related to scientific results and in part a general discussion of instinct and intelligence. It bears immediately upon the study of the broad aspects of human history, the rise and decay of civilizations, in the next chapter. This ends with some reflexions upon what is to be the outcome of the experiment that is man.

As the author says, this goes "beyond the confines of objectifying science", and his concluding chapter on "Man: Inner History" is frankly outside such confines. It is a truly remarkable statement of the place of religion in human experience. Dr. von Weizsäcker sees the Christian one as the only solution to the conflict that "exists between two sets of facts both of which can be established objectively: on one hand, the instinct to fight our fellows . . .; on the other hand, the conditions that have to be met if mankind is to go on living". This solution is the alternative to the attitude of nihilism described earlier in the book.

A short review cannot do justice to the depth of thought and the sustained reasoning of the work. It is not easy to read. This is partly because the book is a translation, though a skilful one. But it is mainly because the author is weaving together so many strands of thought. Loose ends there may be; nevertheless the fabric holds together. The pattern may be intricate; but it is rich in significance. It deserves the most careful study by all who sense the responsibility stated at the outset, particularly by those who believe that the pattern they would weave for themselves might be a different one.

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