

the interest of the exiles as in that of scientific workers as a whole.

The Society must maintain its authority and integrity in the face of its increasing task. In Germany alone, fourteen hundred university teachers and research workers have been displaced, many of them among the most distinguished in the world; not merely debarred from teaching and research, they are not allowed to make a living at all. More than four hundred Austrian men of science and other students have been displaced, and of these only about a hundred have been able to leave the country. The full effects of the 'racial' policy in Italy and of the partition of Czechoslovakia have yet to be felt; Spain, from which scholars of both parties have been helped, is still no place for tolerant, sensitive academic people; and the U.S.S.R. has disappointed our hopes by turning out those who originally found work and refuge there.

Caution in the circumstances must often seem intolerable to humane men, but the Society's stringent caution in accepting responsibility bears fruit. Work has been found permanently for about 550 scholars in thirty-eight different countries,

from Australia to Venezuela; for about 330 temporarily in twenty-five countries. Turkey, which is building a new civilization, has welcomed numbers of the displaced university men.

In November 1937, the Society called an informal conference at Oxford of representatives of European universities, and the ideal of an international exchange for information and employment came nearer to realization. The Society's register of exiled scholars is now unique, authoritative and international. Any academic or research institution can have the benefit of its records of those "exceptional abilities exceptionally trained", lost to their own countries, but not, if the Society can prevent it, to the service of knowledge anywhere else in the world.

Funds and interest are, however, an imperative need; first, for the work of administration, information and advice; secondly, for direct help in human emergency. It is to be hoped that the wider educated public, particularly in the English-speaking countries, will respond generously to the appeal for support which the Society is making, and come to the help of science and learning in distress.

Serialism and Immortality

The New Immortality

By J. W. Dunne. Pp. 157. (London: Faber and Faber, Ltd., 1938.) 3s. 6d. net.

THIS little book is intended to supply the general reader with a more or less popular account of the theories about time and the self which Mr. Dunne has developed in considerable detail in his previous works, "An Experiment with Time" and "The Serial Universe". Mr. Dunne thinks that these theories are entailed by certain quite general facts about time and change, on one hand, and about self-consciousness on the other. The former reduce to the linguistic fact that we talk of future events as 'becoming real' or 'coming into existence', of past events as having 'ceased to be real' or having 'passed out of existence', and so on. The latter reduce to the linguistic fact that each of us uses expressions like 'my self' and 'your self', which seem to imply, in the case of each of us, the existence of an owned self and an owning self and an 'I' which knows them both and sees that the one owns the other.

Mr. Dunne assimilates this latter distinction with another, about which he makes much ado. This is the distinction between a recording instrument, for example, a magnetometer; a body which influences it in virtue of one of its properties, for example, a magnet; and the reading which the instrument records when thus influenced. Mr. Dunne thinks that we are liable to confuse the reading of the instrument with the agent which causes the instrument to record this reading; and that many important consequences follow, on which the distinction throws a flood of light. I find it hard to believe that anyone except an extremely eminent mathematical physicist engaged in writing extremely bad philosophy ever would make such a gross mistake.

Taking these linguistic expressions literally and seriously, Mr. Dunne quite correctly infers that he is committed to an endless series of 'times' and an endless series of 'observers'. He also infers that each term in the series of 'times' reduces all the previous terms to additional dimensions of *space*. Time would be the last term of a series which, from the nature of the case, would have no

last term. This appears to me to be a plain *reductio ad absurdum* of Mr. Dunne's theory. He disguises it from himself by talking airily about "the observer at infinity" and by palpably false analogies with infinite series which have upper limits.

Mr. Dunne thinks that his theory is supported by certain empirical facts about dreams. He also claims to show that the characteristic features of the special theory of relativity and the quantum theory are necessary consequences of his serial theory. I have never been able to follow this deduction even in the full exposition of it in "The Serial Universe"; one part of it appears to depend on a juggle with the square root of minus-one based on a misapplication of Argand's diagram. I should think that the condensed form of it in the present work would be completely unintelligible to all readers.

The main object of this book is to expound and

illustrate a theory of immortality which is closely bound up with the serial theory of time and the self. The first-order observer collapses with the death of the body, but the higher-order observers are unaffected. Although they can get no more sensory experiences, they retain and can rearrange, in any order they like, those sensory experiences which were obtained before death by use of the first-order observer. Mr. Dunne explains and illustrates this theory very well by analogies with music and with typewriting. Even if Mr. Dunne's general theory were intelligible and true, he produces no cogent positive reason for holding that the higher-order observers would survive the death of the body. He is content to argue, by what seem to me to be quite unconvincing analogies, that the burden of proof lies on anyone who doubts this. However this may be, if the theory is self-contradictory, as I believe, it can lend no support to any conclusion.

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Birds of Britain

The Handbook of British Birds

By H. F. Witherby (Editor), Rev. F. C. R. Jourdain, Norman F. Ticehurst and Bernard W. Tucker. Vol. 2 (Warblers to Owls). Pp. xiii + 352 + 30 plates. (London: H. F. and G. Witherby, 1938.) 21s. net.

THERE are to be five volumes of the "Handbook of British Birds", and the second volume which has just been published deals with the warblers, the thrush family, wheatears, whinchats and redstarts, nightingale and robin, hedge-sparrow and wren, the water ousel, the swallow and the swift family, the nightjar and the kingfisher, the woodpeckers and the wryneck. The cuckoo and its strange habits are described, and there is a series of photographs of a young cuckoo in the act of throwing an egg out of the nest. The latter part of this volume is given up to the owls—the snowy and the short eared owls, the little owl, and others.

It is stated that the reception of the first volume has been most gratifying, and the second volume is fully up to its high standard. The illustrations are clear, and the coloured plates especially helpful. A series of valuable diagrammatic maps are incorporated in the text. H. F. Witherby has compiled three of these maps. The first shows the breeding distribution in the British Isles of the reed warbler, the second shows the nesting distribution of the

greater spotted woodpecker, and the third the breeding distribution of the little owl in Britain. It is, by the way, of interest to know that a full inquiry has proved that this alien owl, introduced in Britain during the nineteenth century, is not so destructive as is generally supposed; but Mr. R. M. Lockley has shown that they work great havoc among storm petrels when they take up their quarters on islands where the petrels are nesting.

Other maps in the book show the breeding distribution of the nightingale (N. F. Ticehurst) and the recovery in Africa of swallows ringed in Europe (E. Schüz).

In an interesting map compiled by H. N. Southern is shown the northward migration of the swallow through Europe during spring and early summer. Mr. Southern has found that swallows make the northward flight from Spain to the north of Norway, a distance of more than two thousand miles, in about seventy-seven days, at a fairly steady rate. The average date of the arrival of the swallow in Spain and Italy is March 15 and, in the north of Scandinavia, June 1. It is to be hoped that Mr. Southern may later compile a similar map showing the northward migration of the swift, and that he may be able to explain the late northward movement of these birds, which the reviewer has seen flying northward at a great height over the Cairngorms in mid-June, and again passing north-east over the Isle of Skye (where the swift does not nest) at the same time of year.