

psychologist, he is doubtful of the soundness of the Freudian analysis. Its weakness is that it explains normal mental experience in terms of the abnormal, without supplying any clear criterion as to what is normal and what is not. No one would attempt to explain physiological function in terms of pathology. Furthermore, whereas pathological mental processes of projection and regression, and the influence of an Oedipus complex, are commonly diminished or eliminated by a course of psycho-analysis, this is not so in the case of religion. Dr. Brown's experience has been the exact opposite. After an analysis extending over ninety-two hours, supplemented by many hours of self-analysis later, his religious convictions were found to be stronger than before, while his religious feelings had been purified and freed from much that was merely infantile.

The Freudian theory of 'complexes' would seem to have something in common with A. F. Shand's theory of 'sentiments', which he defined as "organized systems of emotional dispositions, centred about the idea of some object". Dr. Brown would term these 'sentiments', which are normal healthy features of the mind, 'interests', and the word does give a clearer idea of what the thing is. In contrast to these sentiments or interests the complex is an abnormal, unhealthy mental system, produced in general by some painful experience in the past. It is essentially of the nature of a fixation, anchoring the mind down, whereas a sentiment is a normal, healthy growth. Through the sentiments, which grow by including within themselves a larger and larger number of objects, the mind gains greater and greater freedom and a wider scope of activity. A complex, on the other hand, ties the individual down to the incident which caused it, and the mind cannot develop. Nor is a sentiment subject to disintegration by psycho-analysis, as a complex is. Such at least is Dr. Brown's experience.

Dr. Brown suggests that the religious attitude should be considered as distinct from the logical, the aesthetic and the ethical attitudes. Religion is based on a fourth general attitude—that of the individual towards the universe "so far as he envisages it as something upon which he completely depends and to which he attaches ultimate value". So far as we value the universe, and worship it or hold it worthy, so far are we adopting a religious attitude. The man who pursues truth for its own sake and studies science in an impersonal way, with rigorous self-discipline, is really showing his belief in a religion and is taking up a religious attitude. Science may be made a religion, and in so far as it is so made, it becomes more than mere science. Philosophy too may be made a religion, but in so far as it is so made it is more than mere philosophy. Instead of regarding scientific advance as freeing us from the 'superstition' of religion, we may find that in the advance of science religion is needed more and more to restore the balance, and to keep us from reaching views which are a caricature of existence.

With regard to personality, Dr. Brown holds that it should be distinguished from individuality, which indicates a mere difference from other people. But as the individual reaches maturity he is carried towards the pursuit of values classified under the three headings, goodness, beauty and truth, which values are general, teaching us that we belong to one another, are all members of the one universe.

"We find ourselves in the universe. This is what I call personality. We see the paradoxical nature of

the term. Personality is general, but it is also creative. The universality of personality is creative because it partakes of the creativeness of the totality of things."

Thus personality is to be regarded as a process rather than a product, since it is never completely produced. As it grows it produces something new, and brings with it increased insight into the nature of things and the values of the universe. Thus personality and religion are indissolubly connected.

Dr. Brown, as psychologist and philosopher, has written a book full of valuable and suggestive ideas.

J. C. HARDWICK

PRINCIPLES OF HUMAN ^{6/6} PHYSIOLOGY

Principles of Human Physiology

Originally written by Prof. E. H. Starling. Ninth edition, by Prof. W. Lovatt Evans; the Chapters on the Special Senses, by Prof. H. Hartridge. Pp. x + 1155. London: J. and A. Churchill, Ltd., (1945.) 30s.

THE first edition of Starling's "Principles of Human Physiology" appeared in 1912. It set a high standard then, and that position has been fully maintained by subsequent editions. The present one is the ninth. From time to time after its first appearance many parts have been re-written, so that now little of the original remains, though in general its plan is the same. It gives within the compass of one volume an account of the present state of physiological knowledge which will be adequate for the student of science or medicine and serve as a useful book of reference to biologists in general.

Physiology is a science that, like others, is continually expanding and it is not easy to keep a book of this kind within a reasonable size. Much credit is therefore due to Prof. Lovatt Evans, its present author, for the judgment he has exercised in his pruning and grafting. A new and welcome feature of this most recent edition is the introduction of "Historical Notes". Since the importance of any new discovery can only be properly appreciated by reference to what has gone before, it is very desirable that students should, whenever possible, have the past and present put into proper perspective. The inclusion of these summaries of the history of the subject should help to bring this about. It certainly ought to excite their interest as well as make them realize that the roots of physiology go very deeply into the past.

A chapter on the "Temperature and Heat Balance" of the body replaces the former one on "Body Temperature and its Regulation". It gives among other matters a more extensive discussion of the various physiological and physical factors which control the heat balance of the body, the effect of climate and clothing on this, and the phenomena observed when heat regulation breaks down.

In every major section of the book alterations and additions have been made to bring it up to date, in so far as that is possible in a book of this kind. When it is borne in mind that this edition was produced under the adverse conditions of war-time and, as the author states, often under actual enemy attack, all those concerned are to be congratulated on the result.

H. S. RAPER