

Book Reviews

PERSPECTIVE PERCEPTION

The Intelligent Eye

By R. L. Gregory. Pp. 191. (Weidenfeld and Nicolson: London, April 1970.) 42s.

As a rule those books which interest the specialist cannot be expected to attract the general reader; and all too often books of wide appeal have nothing to offer the advanced student. Professor Gregory's latest work is an exception. The non-specialist will probably find it even easier than the same author's celebrated *Eye and Brain*; that book covered most of the principal phenomena of visual psychology, rather than selecting those relevant to a personal point of view. Now we have a volume which concentrates more on Gregory's own research interests, but does so in the same attractive style of presentation. Again we find a brilliant selection of illustrations, from the perspectiveless drawing of the Ancient Egyptians to the deliberate mixing of contradictory signs of depth by Hogarth and later artists. This time, however, the personal choice of topic brings out a few broad themes, so that the general message becomes even less likely to be lost amongst the interesting details.

This general theme is that perception cannot be understood merely as an effect determined by stimuli from the outside world. Rather it is the end-product of a gamble by the brain, in which the most probable interpretation of the incoming data is selected and used as an internal model of outside reality. In understanding this process, the perception of distance is particularly crucial because we perceive objects located in a three-dimensional framework rather than isolated patches of colour. Within the phenomenon of distance, those connected with the interpretation of pictures are especially important. In pictures we see two-dimensional patterns and are aware of their flatness; yet also of the third dimension which is "represented". So the system is given conflicting information, and although it remains correct in assigning the picture to a flat surface, it may show the results of the conflict in other ways such as distortions of size. In this process may lie the roots of symbolization, where some physical events begin to stand for other and quite different ones; and thus of language and of a different mode of function which Gregory illuminates by the analogy between digital and analogue computers.

How far will this book satisfy its various kinds of reader? The non-specialist perhaps will come off best; this is not a book which uses glamorous presentation to put over doubtful views. Most perceptual psychologists would agree with the broad themes summarized above, though few have the skill to present them so intelligibly. For the layman, it does not matter whether the distortion of size in the Müller-Lyer illusion is produced by the particular mechanism Gregory suggests, and on which

others disagree with him. What matters is rather that the fascination of the problem has been communicated.

For the specialist, Gregory may have shown his skill in leaving us wanting that little more. His discussion of analogue versus digital models of the brain could hold us at much greater length. His technique of assessing apparent distance is so ingenious that one would welcome numerical results from its application in a number of situations. One would also welcome a more formal statement of the relationships he believes to hold between perceived size and distance and their environmental cues. So psychologists, unlike those with other interests, will remain unsatisfied, because of the whetting of their appetites. Nevertheless, they should read this book.

D. E. BROADBENT

PUTTING THERAPY TO PRACTICE

The Practice of Behavior Therapy

By Joseph Wolpe. (Pergamon General Psychology Series.) Pp. x + 314. (Pergamon Press: Oxford, London and New York, 1969.) 80s, \$8.95 boards; 50s, \$5.95 flexi-cover.

DR WOLPE is one of the leading practitioners of behaviour therapy and his book is a clear and readable exposition of the principles and practice. The theory explicitly rejects all psychodynamic formulations of personality problems and the view that behaviour may be maladaptive but still meaningful and unconsciously motivated. Various techniques are used to teach the patient to eliminate the undesirable habit and to replace it with desired responses. These include assertive training, systematic desensitization, aversion therapy and operant conditioning methods. Wolpe emphasizes the need for a detailed history of all manifestations of the undesired habits to assist the therapist in designing a made to measure desensitization programme which proceeds by gradual steps up the subjective distress scale, while the therapist provides emotional support for the patient.

Learning theory provides the theoretical underpinning, medical treatment the model (in which the doctor takes charge and the patient cooperates). The procedures used are quite successful in their stated aim of changing behaviour. Aside from the use of speech for communication and the subjective scale for ranking distress, the procedures used are based on successful animal training methods. Although the techniques used often require considerable ingenuity from the therapist, they are doubtless much more readily learned by beginning therapists than by the skill of psychoanalytic psychotherapy.

Many people will get all the help they want from this mode of treatment. There seems no practical conflict between this approach and the psychoanalytic one, in spite of the wide theoretical differences, in that patients who have the opportunity to choose will probably self-select the mode of treatment they can use. Psychoanalytic psychotherapy is not likely to be of use to a person whose problems consist (in his own view) of totally meaningless dysfunctional habits which he sees as unrelated to himself and isolated from any context of his human relationships. Similarly, behaviour therapy is not likely to be of use to a person who does not have symptoms in the classical sense but requires help in certain problems of living which have to do with self-fulfilment, such as difficulty in sustaining a love relationship, feelings of depression or futility, or lack of creativity and satisfaction in work, to mention a few of the typical problems which bring people into psychoanalytic therapy today. It is time both schools of thought dropped their claims to exclusive possession of the truth and considered more fully the spheres of usefulness as well as the limitations of each approach.

LEONARD J. FRIEDMAN