ideas, the author considers the theories of many scientific disciplines, ranging from mathematics, physics and cybernetics, through neurophysiology and the psychology of language, to sociology and epistemology. The reader in search of new sidelights on psychotherapy will be rewarded by this book and enjoy the author's gift of finding epigrammatic expressions for many of his views.

F. KRAUPL TAYLOR.

Conceptions of Perceptual Defence. The British Journal of Psychology Monograph Supplements, XXXV. By WILLIAM P. BROWN. London: Cambridge University Press, 1961. Pp. 107. Price 25*s*.

This monograph reviews the literature from 1947 to 1959 on experiments which have sought to show the relationship between the emotional disturbance produced by a stimulus and its threshold for recognition. The commonest, but not the only, estimate of the emotionality of stimuli, when these have been words, has been the reaction-time in a word-association test; the commonest method of estimating the threshold has been tachistoscopic, exposure-time being increased until the criterion of recognition has been reached. As emotionality increases, the threshold might remain the same, or become longer (i.e., higher) or short (i.e., lower). Psychologists have taken special interest in findings that the threshold tends to be higher for stimuli of greater emotionality, and, to account for them, have referred to the conception of perceptual defence, a process akin to repression. Yet there is at least as good evidence of a tendency for the threshold to be lower for these stimuli, because of perceptual sensitization.

The core of the monograph is the author's advocacy of the hypothesis that the relationship is not linear, but has the shape of an inverted U, the threshold at first rising, with increase in stimulus emotionality, then reaching a peak, and subsequently falling. He also examines the several theories which have been advanced to account for experimental results, and elaborates on a Hullian type of S-R behaviour theory. Hitherto, the "hypothesis" theory of Bruner and Postman has been regarded as the most effective.

The test is a revision of, presumably, a part of a Ph.D. thesis and shows several stigmata of its origin: the conscientious inclusion of the trivial, the officious disinterment of investigations better forgotten, the scrupulousness in being fair, the eschewing of speculation, and the need to keep close to the topic and to make explicit each elementary step in the argument. Nevertheless it serves its purpose, and will be of help to those interested in work in the area, which is of some importance.

The reviewer is not impressed by the criticisms made of the "hypothesis" theory, and remains unconvinced that the shape of the relationship is an inverted U. It has sometimes been supposed, admittedly on not fully satisfactory grounds, that it is an uninverted U when the emotionality rises to the intensity commonly observed in clinical work. In most of the experiments discussed in the monograph, the level of emotionality is very much lower. In the author's experiments, for instance, the subjects were male and female arts students taking a course in psychology, and the stimuli were relatively familiar six-letter words. These were divided into four classes according to the reaction-times observed in each subject in the first session. In the second session they were exposed tachistoscopically, and the threshold was determined. The inverted U relationship was shown most clearly in a sub-group of girls with relatively low scores on the MPI Neuroticism scale, and also relatively low scores on the MPI Extraversion scale. The threshold was at a peak for words in the second class of emotionality, and was lower for those in the third class, and lower still for those in the fourth class. Before accepting that the relationship is N-shaped, however, it would be as well to consider whether there were not two or more processes at work, whose effects might be separated by refinements in experimental method.

D. RUSSELL DAVIS.

Freud's Concept of Repression and Defence, its Theoretical and Observational Language. By PETER MADISON. University of Minnesota Press, 1961. Pp. 296. Price 38*s*.

This volume by an Associate Professor of Psychology at Princeton, who also runs the student counselling service, serves a useful purpose. The author found that his

contact with psychoanalytically trained psychiatrists disturbed him. Whereas as a psychologist he had regarded Freud "as history," in his clinical work he was confronted with a nation-wide acceptance of psycho-analysis as the basis of American psychiatry, in the post-Meyerian era.

He was, however, equally jolted by the fact that there were no psycho-analytic techniques for evaluating or measuring results of therapy, considering how freely such concepts were used in diagnosis and treatment. He takes up this challenge and examines Freud's written output, in order to clarify the cornerstone of psycho-analytic theory—the concept of repression and defence "on which everything turns in psychiatry." The clinicians had also opened his eyes to the "thinness" and irrelevance to human tragedy of most of the laboratory studies claiming to measure something bearing on repression, without discussing how the work related to the theory. He says that while Freud was an innovating genius, he was no systematic theory builder. While this had led many to discard him because of the inconsistencies and loose ends in his complex and rich contributions, it makes this author want to distil coherence.

So Professor Madison analyses from the standard edition of Freud's works all the references to repression and to defence, and concludes that the two concepts are really the same. This most able process of boiling-down and comparing of Freud's own ideas occupies Part I of the book. The reader will surely find this a great help—even if he thought he knew his Freud. In particular the chapter on Resistance (as a major part of psycho-analytic observational data) is very valuable and can be read with profit by any psychiatrist confronted with a mentally ill patient.

But this is the work of a scientist, not of a mere simplifier. Madison's aim is so to re-express this vast and spreading theoretical structure that it can be used to derive research hypotheses from it, ultimately for testing by measuring techniques. This is attempted in Part II. The first task is to order and clarify the theoretical language in Freud's own terms. The next task is to construct an observational language, which the author does by analogy with physics—a highly developed science in which, he reminds us, many theoretical concepts are equally insusceptible of direct observation. He further distinguishes between indicators and specific techniques for quantification of a given indicator. As an example, he cites as an indicator of Heat (in physics) the presence of expansion of solids and liquids, and of Defence (in psycho-analysis) the presence of resistance in therapy. The corresponding quantifying techniques would be "the number of units of expansion of alcohol in a glass tube," and "the number of minutes out of 50 spent in silence," being the arbitrary 50-unit time gauge. Thus, multiplying this type of example systematically, Madison concludes that psycho-analytic concepts, and in particular the one he has chosen to examine, are capable of being tested by scientific method. He does not minimize the labour or complexity of devising such research projects, and in this book he only suggests possibilities and reviews some (American) work in this field, including also some of Freud's patchily impressive reasoning.

I think this book will prove of great value as a saver of spadework for those who, like the author, are not content with curt dismissals of psycho-analysis and are looking for manageable operational definitions and hypotheses for clinical investigation. It will also put the mainstays of Freud's psychopathology and personality theory in a refreshing perspective for the interested student.

The author's own dissent from the "pan-sexual" theory of Freud is neatly put as a sting in the tail of the book. He concludes as follows: "I believe that Freud's theory of repression and defence was actually worked out largely on the basis of *real sex* and other *real motives* which were treated by Freud as translation-rule sex (i.e., elaborate devices of interpreting non-sexual manifestations back into his libido theory—*Reviewer*). Insofar as this is true, and I believe it to be mainly so, much of Freud's theory of repression and defense not only is confirmable in principle, but can be made testable in fact."

Like many of us, Professor Madison thinks it high time that psycho-analytically trained scientists should be employed to test their own basic working hypotheses and not let them go by default to be mauled by their detractors.

H. V. DICKS.