aspects of psychopharmacology given by a group of psychiatrists, pharmacologists and psychologists to a series of audiences composed of psychiatrists and others working in the hospitals and clinics of the Massachusetts Mental Health System. In reading a book which includes among its authors many well known workers in the field of psychopharmacology, expectations are high. These are to some degree fulfilled, but the book suffers from many of the deficiencies of a multiauthor publication originally delivered as a series of lectures. Some chapters, such as that by Schildkraut on the biochemistry of affective disorders, are admirably clear and succinct; others suffer from a conversational style clearly betraying the origin of the text, others are too narrowly based on the authors' own clinical experience and publications, and others lack clarity. There is little evidence of editorial direction, and this gives rise to repetition, incompleteness, and irritating changes in the form and style of contributions.

The classification of drugs used in the first chapter and elsewhere will cause some uneasiness among British psychiatrists: the use of the term 'antipsychotic agents' to subsume the rauwolfia derivatives, phenothiazines, thiozanthene derivatives and butyrophenones suggests that they have some specific effect in psychotic illness; this notion, although it cannot be excluded, is not supported by the available evidence. Could not tricyclic anti-depressants be regarded as antipsychotic drugs too? These points probably reflect Anglo-American differences in the diagnosis of mental illness as well as the difficulties in classifying psychoactive drugs.

There are a few items of detail which require comment. To my mind the topic of prophylaxis of mental illness is inadequately treated. The account of the use of lithium, both in prophylaxis and in the treatment of acute mania, is not given the space it deserves, although the author is appropriately cautious in recommending the drug and gives a full account of its dangers. The inadequacy of the chapter 'Prevention of Recurrence (Maintenance Therapy)' reflects the lack of information on the topic but does not clearly state that this lack exists. The chapter draws attention to the serious adverse effects of prolonged medication, especially with phenothiazines, but produces little evidence of the beneficial effects which might justify taking these risks. British readers will be surprised to see both the Medical Research Council (The Clinical Trial of the Treatment of Depressive Illness, 1965) and Dr. William Sargant quoted in support of the use of the monoamine oxidase inhibiting antidepressants in the treatment of 'atypical depressions'! However, the author is sceptical of the value of these drugs, and does not recommend them as a treatment of first choice in any type of depression.

The book illustrates the difficulties in producing an up-to-date and comprehensive account of psychopharmacology. Although it is easily read, provides a good selection of references on many of the topics covered, and will fulfil the needs of many readers, it is by no means the best available review of psychopharmacology. I do not recommend it to individual buyers.

R. H. S. MINDHAM.

### **PSYCHOLOGY**

Readings in Extraversion-Introversion. I. Theoretical and Methodological Issues. Edited by H. J. EYSENCK. Staples Press. London. 1971. Pp. 416. Price £4.00.

This is the first of three companion volumes and. as befits a first volume, concentrates attention upon those foundations which, according to the dust cover, serve '... to place the entire work in historical perspective'. Of course the idea behind these Readings is to bring together in a convenient form those papers which will provide a coherent account of the many aspects of Extraversion-Introversion, from evidence as to its existence and measurability to its value in a variety of contexts. So much attention, sometimes laudatory, often hysterically oppositional, has been focused upon Eysenck's own exposition of E-I theory that this alone would justify the attempt to provide a substantial review of work in this area. However, the primary justification for this publication must be that the ideas generated by Eysenck and his colleagues, in their numerous researches and publications, have exerted a profound influence on the character and nature of psychological investigation, particularly in the personality field. For anyone wishing to encompass these ideas and findings in a digestible way these Readings will prove invaluable.

Naturally, any attempt to provide a complete and comprehensive account of work on Extraversion-Introversion is out of the question, and making a selection from a voluminous literature has posed a difficult problem for the Editor. What he in fact offers us, in this first volume, is material which falls into five different categories: Historical and Theoretical, Internal Validity, Response Sets, Correlational Studies, and Genetic Studies. Altogether there are 33 papers, involving almost as many different authors and spanning the years from 1929 to 1967. No doubt some critics will be outraged by one criterion for exclusion of material which has entailed the rejection of papers '... with negative results or papers which served merely to contradict some specific theory or other'. Such individuals may suspect, or even brush aside, the reasons which Eysenck advances for adopting this policy. Certainly, if the reader were to remain unaware of the existence of contradictory evidence or alternative ideas to those put forward, then the critics might have an important point. As it is, with the main purpose of the Readings being that of providing a set of papers pertaining to a particular viewpoint, presented in a convenient and readable form, and for consumption by the intelligent and sophisticated reader, such objections will have little force.

### **H. R. Веесн.**

## Perception, Motives and Personality. By George S. KLEIN and ALFRED A. KNOPF. New York. 1970. Pp. 464. No price stated.

This book brings together a series of mostly reprinted essays which explore many of the problems surrounding the relationship between perception, motivation and individual personality. The author, an avowed antiseparatist in perception research, has some success in bringing together the diverging views that represent on the one hand the researches of academic laboratory psychologists, and on the other hand the many important observations that have been made on perception in a clinical setting.

Perceptual theories are seen as being broadly of two types; firstly those person-centred theories which emphasize motivation in perception which is regarded as reflecting intention and self-interest, and secondly, psychophysical theories which see perception in terms of information-processing models or selfcontained mechanistic systems which reflect reality, much in the same way as a motion picture. The author is clearly most in sympathy with the idea of perception as a form of motivated cognition, and sees perception not as an end in itself but as something occurring in the context of some aim and action.

We must at least try to explain how different people differ in what they see. This is easy to demonstrate, but near to the heart of the matter is the psychiatric case conference. Different psychiatrists will tend to perceive the patient in different ways according to their personal orientation and experience, but each will tend to see each other's perception as having a distorting effect on reality. Much the same considerations will undoubtedly affect the reader of this text. Your reviewer was no exception and found that certain sections seemed boring, difficult to comprehend and irritatingly irrelevant, whereas other sections sprang to life and appeared full of meaning and significance.

The way in which perception and cognition are

simultaneously blended, and the conditions which either undermine or support reality orientated perception, are perhaps the most important perspectives for the clinician. The last chapter, entitled 'Credo for a "Clinical Psychologist"', is certainly of great interest in understanding the ambivalent status of that specialty in the United States. Had it been included as a preface rather than a postscript it might have helped the reader to orientate himself more readily for what is to come.

### J. A. HARRINGTON.

# Image Formation and Cognition. By MARDI J. HOROWITZ. Butterworths. 1970. Pp. 351. Price £5.80.

This a monograph on visual images based on clinical and experimental studies carried out by the author at the Langley Porter Neuropsychiatric Institute over a period of ten years. He is now teaching psychiatry at the University of California. The book is divided into four sections. Part I is a description of the range of image experiences and of the circumstances which evoke and modify them. Part II relates visual imagery to perception and thinking as well as to emotional processes. Part III deals with neurobiological influences on image formation including psychodelic drugs. Part IV reviews the therapeutic uses of image formation and its application in psychotherapy with special consideration of psychotic art and art therapy.

Images are classified according to vividness, context, interaction with perception and contents. The psychodynamics of image formation and the role of mental mechanisms is discussed. The psychopathology of image formation, with special consideration of 'unbidden visual images', was investigated in psychiatric patients who were encouraged to draw their visual experiences. The author arrives at the conclusion that unbidden images were due to a failure in repression. Two experiments using stressful and non-stressful films were designed to validate clinical observations about this type of image following psychic trauma. The effects of electrical stimulation of structures within the temporal lobes in patients with temporal lobe epilepsy were analysed. The images produced in this way were found to be related to current motivations as well as to physiological responses. The interaction between psychological and neurobiological influences received special attention.

Considering the magnitude of the subject, this is a remarkably informative and stimulating book. With its useful bibliography it should be of considerable value for teachers and research workers alike.

E. STENGEL.