pages; the second, on clinical aspects, covers 160 pages; while the third section represents the contribution to the discussion in relation to various papers as some sort of afterthought by several of the participants.

It is impossible to do justice to the various authors in a brief review, as obviously each one is an expert in his own relatively narrow but extremely deep field of work. The reader, therefore, will have to be tantalized by the titles of the chapters and by the main impressions of the reviewer. M. Jouvet (Lyons) describes the neurophysiological mechanisms of habituation, reviewing some of the literature, which includes a considerable amount of his own work. It deals much more with the electrophysiological aspects (mostly EEG) than with the behavioural ones. The second chapter, by P. B. Bradley (Birmingham) discusses the neurophysiological mechanisms of pharmacological deafferentation, covering in particular the effects of chlorpromazine and of LSD-25.

Austin H. Riesen (Riverside, California) discusses the effects of visual deprivation on perceptual function and the neural substrate, from rats reared in total darkness to cats and higher primates reared under conditions of diffused light (pattern-deprived). His work is both behavioural and electrophysiological, including electroretinography and EEG. A number of interesting hypotheses are discussed in this paper, which appears to contain some previously unpublished work. H. F. Harlow and M. K. Harlow (Madison, Wisconsin) discuss the effects of early social deprivation on primates and consider their data in relation to basic psychiatric and psychoanalytic theories.

A review of the literature on experimental deafferentation in man is presented by Sanford J. Freedman (Medford, Massachusetts) with nearly three pages of references and seven pages of text. His exposition is lucid, and his critical analysis of experimental design and of the findings of various authors (including his own) is well worth reading carefully.

The second portion of the book is on the whole much more rich in words and in reports of clinical cases. The report by J. de Ajuriaguerra and G. Garrone on partial deafferentation and psychopathology covers 67 pages (6½ of bibliography). It covers a large field, from specific troubles (blindness, deafness) to less easily definable perceptive troubles involving several sensory modalities. Neil O'Connor (London) discusses "social deafferentation", analysing the relationship between social isolation and three main forms of mental illness (backwardness, suicide, schizophrenia). C. Cherpillod, O. Koralnik and J. de

Ajuriaguerra (Geneva) give a vivid report on psychosensory troubles due to deafferentation in the course of curarization, and compare patients with poliomyelitis, paraplegia, and tetanus. The two papers by P. A. Lambert (Chambéry) and R. Tissot (Geneva) deal with the effect of drugs in man.

The short papers given as discussion by the various contributors are mostly of considerable interest, but impossible to summarize. Some of the contributions are more like relatively short papers (sometimes including bibliography) than more spontaneous interjection at any kind of meeting.

A very nicely written epilogue by J. de Ajuriaguerra completes this interesting volume. The reviewer was unable to find the price of this book either inside or outside its elegant blue binding.

G. Pampiglione.

The Content Analysis of Dreams. By CALVIN S. HALL and ROBERT L. VAN DE CASTLE. New York: The Century Psychology Series. 1966. Pp. 320. Price not given.

Content analysis is a technique for converting verbal or other symbolic material into numbers, so that statistical operations may be performed. It has been applied to such things as propaganda, Shakespeare's plays, Richard Wright's autobiography, classical English novels and motion pictures. Coming nearer home, it has been used in studies of psychotherapy and, as in this book, on the material of dreams. A general description of the method is to the effect that psychologists use content analysis of verbal material in order to say something about the personality of the individual who has produced the material.

The authors begin with a defence of the method and of quantification generally, holding a brief for those who prefer numbers of words. This apparently perennial conflict has been characterized in various ways; as being between artists and scientists, or clinicians and statisticians: or even between humanistic psychologists and rat psychologists. There has been much mistrust and fear of numbers when applied to literary productions, and the authors anticipate the same sort of reactions to their treatment of dreams, which are a form of creative work. They note that there are many who see the baleful and monstrous Dr. Strangelove in the lineaments of the quantifiers and statisticians. It is admitted that many people have a hard time with equations and other mathematical operations, but, the authors imply, this is the only way to be scientific.

They then go on to discuss the first step in content

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analysis, that of formulating a classification system. Empirical categories are taken out of the material; theoretical categories are read into the material. In this study, as might be expected, the theoretical categories used are taken from Freudian psychology.

The bulk of the book is concerned with a detailed description of material and methods. Eight chapters are devoted to the classification and scoring of the various items of dream material reported by the subjects used in the investigation. One of these chapters covers the theoretical scale, in which dreams are interpreted as symbolizing castration anxiety, castration wish, penis envy, orality and regression. Two chapters are devoted to scoring reliability and norms.

A chapter on scales of content analysis devised by others shows that the method in psychology dates back to 1935, when the analysts Franz Alexander and George Wilson published an article entitled "Quantitative Dream Studies: a Methodological Attempt at a Quantitative Evaluation of Psychoanalytical Material". No doubt "rat psychologists" would be expected to react with some satisfaction to any efforts by psychoanalysts to treat their material in the approved respectably scientific way. But this is not the place to continue that particular controversy.

This book makes laborious reading for those not well attuned to the statistical way of thinking. This is no fault of the literary style, which is clear and well-expressed, but is due to the necessarily extensive preoccupation with scoring, tables of figures and technical discussion. A book more for departments of psychology than for the psychiatrist's bookshelves.

H. M. FLANAGAN.

Theories in Social Psychology. By MORTON DEUTSCH and ROBERT M. KRAUSS. New York: Basic Books. 1965. Pp. 244. Price 25s.

Five types of approach to social psychology are considered through an exposition of the theories of their leading proponents. Gestalt psychology is represented by Asch and Heider, field theory by Lewin and Festinger, reinforcement theory by Miller, Dollard, Bandura, Hovland, Skinner and Homans, psychoanalysic by Freud and several post-Freudians, and role theory by Mead, Merton and Goffman. The book is intended for undergraduates and intelligent laymen and is as readable, comprehensible and accurate as such a brief summary can be. The authors have taken a critical view of their subject matter and give plenty of useful references.

J. K. Wing.

## 5. ADDICTION

Alcoholism. By Neil Kessel and Henry Walton. London: Penguin Books. 1965. Pp. 179. Price 4s. od.

This Pelican in the new Studies in Social Pathology series should prove most useful and fill a very real need. A paperback of this type which has to sell a minimal 30,000 copies must be widely bought on impulse by many people with no medical knowledge or scientific training. With possibly 300,000 alcoholics in the United Kingdom and an uncounted number of close relatives indirectly affected by this illness, the number of people who require a short accurate and up to date account of alcoholism should assure it a wide sale. Those who do buy it will find that it gives a succinct and reliable account of most of the information acquired in the past twenty years.

One of the points made by the authors is that many doctors have a very limited knowledge of alcoholism and it is to be hoped that some of them, too, will buy this book so that they may painlessly bring themselves up to date before informed public opinion becomes aware of this deficiency.

T. H. Bewley.

The Addict in the Street. By JEREMY LARNER and RALPH TEFFERTELLER. London: Penguin Books. 1966. Pp. 251. Price 4s. 6d.

This account of young heroin addicts in New York was first published in the U.S.A. in 1964. It consists of descriptions of their addiction by ten subjects, with further short accounts of two of them given by their mothers. They are derived from tape recordings of interviews with a social worker, Ralph Tefferteller. The original tapes were edited by a professional writer, Jeremy Larner. None of the accounts is long enough to do more than give a superficial idea of the person concerned, though the overall effect of the book is to convey the emptiness and repetitiveness of these addicts' lives. Those interested in addiction in this country will find many similarities with heroin addicts here. A fuller subjective account of the progress of heroin addiction can be found in Helen McGill Hughes, Fantastic Lodge, which was similarly compiled from tape recordings made by an addict over a period of years before her death.

T. H. Bewley.

## 6. CRIMINOLOGY

Comparative Criminology. By HERMANN MANN-HEIM. 1st Edition. London: Routledge and Kegan Paul. 1965. Vols. 1 and 2. Pp. 763. Price 84s. the set.

Those who think of themselves, however remotely, as criminologists have long looked forward to the