

Book Reviews

R. W. Rieber (Ed.)

The Neuropsychology of Language. New York: Plenum, 1976. Pp. 230.

Reviewed by M. B. Simmonds

This collection of 9 papers is dedicated to the memory of E. H. Lenneberg, a linguist and psychologist whose theoretical works laid the foundations for the study of language in its biological context. The articles included represent a diversity of approaches to the study of language; indeed some of them were begun in collaboration with Lenneberg and have been brought together in this volume by his surviving colleagues.

Chomsky's contribution states some of the methodological problems that underlie the study of language. He revoices his view that psychological theorising continues to promulgate an excessively narrow view of language and he offers new criticisms of the Psychologist's tendency to view language as a special case of "generalized learning strategies." Other chapters in the book provide excellent contributions on aphasia, dyslexia and speech impediment; the introduction to Rieber's comparison of stutterers and clutterers being a particularly readable and noteworthy example.

The papers on language difficulties are among the more worthwhile contributions in this collection, but here the approach is strictly biological rather than neurological; indeed one gains the impression that the neuropsychology was added as an afterthought in some of the earlier chapters.

The book highlights some of the difficulties inherent in the direct experimental investigation of language processes of the neurological level; this is borne out particularly in the section on evoked potentials and in the rather metaphysical treatment of consciousness in the chapter on consciousness and language pathology. There is an interesting chapter on the embryology and development of the auditory system, though its relevance to language development in particular is not examined in any detail.

The last three chapters, which deal with hemispheric asymmetry, are excellent contributions to the neuropsychology of language and here one feels that a fitting memorial to Lenneberg's pioneering work has been achieved. One is left with the impression that the biological approach emphasised by Lenneberg has proved to be both timely and fruitful as a context for studying the psychology of language.

G. Serban (Ed.)

Psychopathology of Human Adaptation. New York: Plenum, 1976. Pp. 382.

Reviewed by R. A. M. Gregson

This is a symposium collection with some integrative discussion sections, centered on the theme of stress. It is extremely diverse in content and rigour, and at times infuriatingly intangible. Stress, is, according to Selye, "a general adaptation syndrome" embodying a number of non-specific features, mediated by the pituitary-adrenal-cortical system, and underlying the psychosomatic disorders which have become a wide-spread focus of interest and concern in Western societies.

Unfortunately the general idea of stress is far too simple, either to fit the data or to serve as a cohesive theme for the symposium; so contributors like Mason review neurohormonal work showing that "there appears to be no single hormonal response of any neuroendocrine system which occurs nonspecifically as a common element of all the various response profiles studied." Recognizing that simple concepts and experiments leave an area like this as confused as when we began, Corson and Corson appropriately advocate a systems approach, quoting the view that "with living organisms... putting the pieces together again, whether in reality or just in our minds, can yield no complete explanation of the behaviour of even the most elementary living system." Unfortunately they do not carry this through, but potter with demonstrations that responses to stress vary widely from animal to animal in terms of both physiological and endocrine reactions.

There is a deal of conjectural jumping between physiological and psychological cognitive measures of responses to stress. Frankenhaeuser does this with conspicuously more success than the other symposiasts, reviewing her work which demonstrates sex differences and job differences in response to the psychosocial environment. A safe interim conclusion here is that any stereotype of the demand imposed on people by sex or work roles is inevitably going to induce stress in some minority of subjects, with necessarily physiological consequences. The behaviour pattern of "hard driving competitiveness, a sense of time urgency and impatience, constant struggling to meet deadlines, a strong need to be in control of life events" are socially conditioned for some people, with consequent changes in their susceptibility to

diseases associated with the action of peripheral catecholamines.

Mowrer, and J. W. Atkinson, make characteristic contributions which, in Lazarus's words "do not interdigitate" with the rest. The same goes for Berlyne's excursion into hedonics. McClelland however does try to attack the relation between stress and the drive for power. This complements the other neurohormonal work and extends it into cross-cultural comparisons of power-seeking role creation and disease incidence. This is speculative, but it is addressed to substantive questions. It is of interest, for example, that crying appears to be the stress response that brings adrenaline levels down whereas other responses push levels up; a good weep has its long-term rewards. More generally, rate of change of life stress is an apparent precipitator of the release of hormones like epinephrine, and consequent cardiovascular disease.

The clinical psychologists Marks, Wolpe and Hunt manage in their three papers to provide a nice contrast in that Wolpe oversimplifies, Hunt points out the vacuousness of ignoring cognitive features in behaviour therapy, and Marks offers data contradicting some of Wolpe's generalizations about necessary elements in the treatment of phobias. The reader is thus excused from being committed to any firm views on the contribution of psychotherapies to stress reduction and coping.

The book as a whole has some relevance for those of us who are dealing with highly stressed subjects. Isolates in Antarctica, and the problems of chronic hypervigilance and insomnia at the South Pole station get a mention. One has to attempt, however, to put all the bits together for oneself. This activity is itself stressful, and you need an intact dopamine system to cope, and not be under excessive pressure to achieve. If you are a chronic alcoholic you have probably failed on both requirements.

E. M. Pattison, M. B. Sobell, and Linda C. Sobell (Eds.)

Emerging Concepts of Alcohol Dependence.
New York: Springer, 1977. Pp. xii + 369.
\$29.95.

Reviewed by R. A. M. Gregson.

The view that alcoholism is a disease is tenacious, widespread, encouraged by many medical practitioners, clergy, and lay alcoholics, and almost certainly wrong. It is the view that gets support from welfare agencies which have the ear of government in some countries, and it will be around for a long time, however much scientific evidence we accumulate about the maladaptive

behavioural patterns that necessarily and sufficiently characterize alcoholics.

This symposium is a mixture of commissioned and reprinted contributions. It provides a useful terse critique of the traditional view, and reviews evidence of the outcome rates and patterns of some better-documented controlled drinking studies. The evidence on therapy outcome is building up rapidly so that even this recent volume already needs supplementing with new work in press.

The authors list formal propositions for an emergent model which are obviously saner than the AA 12 steps and can be translated into evaluable therapeutic programs with collateral assessment research. Their use of propositions with "not necessarily related" in them is however a trap for the amateur statistician and of little help to the serious constructor of addiction models. Perhaps the best feature is the rejection of the myth of alcoholism, and the Jellinek typologies and progressions, in favour of a multiplicity of related syndromes, each with sociopsychological components.

This book should be on the reading list of clinical psychologists who are interested in our commonest type of drug addict.

Daniel N. Robinson

An Intellectual History of Psychology. New York: Macmillan, 1976. Pp. xiii + 434.

Reviewed by Peter McKellar.

A well-written book — like a good lecture — may reorientate. It may also provoke, annoy, and intellectually stimulate. This is such a book. In a volume of real substance Daniel Robinson has provided a lucidly written account of the history of psychology in three parts: Philosophical Psychology, from Philosophy to Psychology, and Scientific Psychology. These are preceded by a quite brilliant chapter on 'The nature of history and the nature of science'. A tough-minded historian, and a well-informed psychologist, has made a substantial contribution to an area in which, perhaps for too long, Edwin Boring has held rarely-challenged papal power. The chapters on the Hellenic Age, Patristic Psychology, Scholasticism, and the Renaissance have much to say that is new. The same sure touch is evident in the later treatment of Francis Bacon, Immanuel Kant, Darwin and others. More might have been said about Galton, and influences on psychology in Britain other than McDougall, though healthy weight is given to earlier influences including William of Ockham, Thomas Hobbes and J. S. Mill.

In acknowledging the help of his colleague Fred S. Keller, the author expresses doubts that Dr Keller will agree with his own assessments. I suspect this is true. Nor do I suspect that Karl Popper would wholly support some parts of the book, though Robinson's preferences lie very much with Popper and his orientation to science. This is a difficult book, lucidly written but intellectually exacting. On first sight of it I chose it as a central text for my own History of Psychology Course. Further study of it has confirmed this decision. The title precisely defines content: a stimulus to intellectual activity about the history of psychology, and of science more generally. I recommend the book strongly to colleagues elsewhere.

J. S. Strauss, H. Babigian, and M. Roff (Eds.)
The Origins and Course of Psychopathology: Methods in Longitudinal Research. New York: Plenum, 1977. Pp. 455.

Reviewed by M. W. Abbott

Adherence to strict environmentalist and trait schools in personality study and psychopathology is breaking down. The interactionist perspective that fills the vacuum concerns itself with the development of models that specify relations between person variables, environmental determinants removed in time, and situational factors. Experimental designs employing random allocation to treatment groups are part and parcel of the situational or cross-sectional approach to clinical research. Although long respected, this methodology has the effect of playing down the role of individual differences brought into the experimental situation. Undoubtedly, neglect of these factors has contributed to the slow rate of progress in identifying the causes of psychiatric disorder and evaluating treatment effectiveness.

Longitudinal research, typically employing observational and naturalistic experimental methods, has traditionally been considered a second best to the more rigorous experimental designs, to be used where the researcher was too lazy to employ "proper" methods or where experimental manipulation was impossible or unethical. The papers presented by the editors of the present volume show that longitudinal research, when employing sophisticated statistical approaches afforded by recent computer technology, rather than being a second best strategy, provides a much needed corrective to the hazards of excessive situationalism. The book documents a diversity of research techniques and suitable statistical procedures that, applied to longitudinal research in a variety of substantive

areas, have led to advances in knowledge of the effects of such varied factors as biochemical variables, genetics, early environment, stress, treatment, and recent environment on the course of psychiatric disturbance.

The opening section of the book addresses the merits and methodological issues involved in controlled versus natural history studies. The final chapters discuss procedures for assessing the relative importance and interaction of the diverse variables that longitudinal research strategies can identify. Sandwiched in between are sections illustrating the application of these strategies to the study of stressful life events, high risk (vulnerability) research, and follow-up studies of psychiatric patients. Although substantively disjointed, the separate content areas are presented primarily as case studies to demonstrate the wide applicability of the longitudinal methodology. Some continuity is provided by useful reports of brief panel discussions on issues raised in each article.

As a novice in the field looking for guidance, this volume has assisted me by demonstrating methods that can help bridge the gap between the ideal and the practicalities of meaningful clinical research. It shows how, by a cautious and informed use of current statistical models, the power and utility of longitudinal research methods can be advanced. The book should be of particular value to researchers interested in the longitudinal study of psychiatric disorder and to psychologists and others concerned with research in applied, institutional settings.

M. Hersen and D. H. Barlow
Single Case Experimental Designs: Strategies for Studying Behaviour Change. New York: Pergamon Press, 1976.
 Pp. xii + 374. \$18.75.

Reviewed by A. R. Forbes

Change in experience and behaviour poses three problems: devising a procedure for bringing it about in the first place, demonstrating that it was this procedure and no other which brought it about and, finally, specifying how great a change the application of the procedure produced in the experience and/or behaviour concerned. These problems can be dealt with fairly simply given a combination of a controllable environment and relatively simple dependent behavioural variables in the territory of the laboratory-based experimental psychologist. In the nastily untidy Real World of the applied psychologist, however, the problem of inducing and specifying change in experience and behaviour appears to be distinctly

more intractable. The solution to the latter aspect of the problem was not hastened by the adherence of those trying to measure change to statistical procedures designed for the analysis of groups of subjects supposedly homogeneous with respect to all relevant variables — the so-called Patient Uniformity Myth. Given the emphasis on such procedures in the typical under- or post-graduate training of clinical, educational and penal psychologists, it is not surprising, firstly, that conclusions on the efficacy of therapeutic programmes (regardless of their nature) should be more often equivocal than not and, secondly, that the majority of such psychologists appear unaware that a sample of size $N = 1$ is still a sample upon which observations can be made and about which conclusions can be drawn on just as firm a basis as the design of the experiment *as an experiment* permits.

To be sure, procedures for the experimental study of individuals could be found scattered in texts (e.g. Maxwell, 1958, in which a quasi-experimental design is exemplified) and journals (e.g. Chassan, 1960; Payne and Gwynne Jones, 1957; Shapiro, 1964, to name but a few). These and several others were collected by Davidson and Costello (1969) to form what the writer regards as a classic but by no means antiquated set of basic readings in $N = 1$ research.

Hersen and Barlow's book was designed from the outset, however, as a basic text on single case experimental design strategies. The result is a superb account of much of the present state of the art in this area. It can be used merely as a recipe-book of the form: "If you want to demonstrate *this*, then you take the following steps ..." On the other hand, the discussions of the theoretical and practical issues involved in applied research in general as well as the issues specific to the particular designs presented, are lucid, scholarly and thoroughly documented. The experimental designs described and discussed cover the gamut from the simple Condition A — Condition B quasi-experimental design with one dependent variable (targetted problem behaviour) to multiple baseline and multiple- and concurrent-schedule designs, and the issue of the generalisability of $N = 1$ studies is also dealt with.

The statistical analysis of the outcome of such procedures, is dealt with in a chapter contributed by Kazdin, who clearly states the serious objections to the use of analysis of variance in the context of the single-case design. (Some readers may recall the controversial article on this topic by Gentile and others (1972) in *J.A.B.A.*) In its place, the use of time series analysis is illustrated, together with other serviceable statistics such as Revusky's R_n .

Some readers may object to this book on the grounds that it is written by Behaviourists for

Behaviour Modifiers. This is true. For example, Hersen and Barlow appear more oriented towards behaviour as behaviour rather than as an indicant of the operation of some personologist's construct. On the other hand, the issues and designs dealt with by these authors apply equally to behaviour as behaviour and to the pattern of symptoms or interpersonal attitudes reported by persons in interview or by questionnaire or rating scale, so not only is the potential objection invalid, but psychotherapeutically-oriented applied psychologists would actually be doing themselves a disservice by not relating the contents of this book to the variables with which they deal.

In summary, Hersen and Barlow (and Kazdin) have produced an excellent work, which should be difficult to displace as the standard text in this area for quite a time to come.

References

- Chassan, J. B. Statistical inference and the single case in clinical design. *Psychiatry*, 1960, 23, 173-184.
- Davidson, P.O., & Costello, C. G. *N = 1: experimental studies of single cases*. New York: Van Nostrand, 1969.
- Gentile, J. R., Roden, A. H., & Klein, R. D. An analysis of variance model for the intra-subject replication design. *Journal of Applied Behaviour Analysis*, 1972, 5, 193-198.
- Maxwell, A. E. *Experimental design in Psychology and the Medical Sciences*. London: Methuen, 1958.
- Payne, R. W., & Gwynne Jones, H. Statistics for the investigation of individual cases. *Journal of Clinical Psychology*, 1957, 13, 115-121.

H. J. and S. B. G. Eysenck

Psychoticism as a Dimension of Personality.

London: Hodder and Stoughton, 1976.

Pp. xi + 232. 6.50 pounds.

Reviewed by A. R. Forbes

In the context of contemporary research in personality, this is an unusual book. First of all, it is a report of the present state of the Eysenck's research, akin to the earlier *Scientific Analysis of Personality and Dynamics of Anxiety and Hysteria*, and as such may validly be regarded as vintage Eysenck. Secondly, it is concerned with the elaboration of a construct within a dimensional system of personality description, an activity unusual on the present personality scene, an amiable eccentricity which the Eysencks share with Cattell. As such, this effort is also vintage Eysenck.

This time the focus is upon the basis for the fact that the differentiation of psychotic patients from neurotic patients and normals is typically in terms

of at least two composites of relevant variables: the first the one labelled "Neuroticism", and the second, "Psychoticism" a composite originally defined by symptoms, signs and performance on cognitive and psychomotor tasks. (See, for instance, *Perceptual Processes and Mental Illness*.) In this book the Eysencks describe the process they used to arrive at a definition of this supposed source trait of psychoticism by means of self-report, both in adults and in children. Four chapters deal with this in considerable detail and make, at the very least, interesting reading for anyone planning to use the Eysenck Personality Questionnaire, the development of the E.P.I. which includes the present Psychoticism scale. These chapters follow one on the dimensional description of personality, little of which should be new to an Eysenck aficionado, and one on the possible genetic basis of psychoticism.

The remaining chapters report the results of empirical studies on the relationship of psychoticism, most usually defined by scores on the P scales in their various stages of development, to features of behaviour including psychiatric disorder, social deviancy and "maleness", as well as performance in such things as vigilance tasks, and to other constructs ranging from creativity to punitiveness. These, together with accounts of genetic studies and experiments on physiological responsiveness, comprise a well-marshalled body of evidence concerning the validity of the construct of psychoticism. Precisely what are the implications of the evidence presented is evidently clear to the Eysencks, but inevitably there will be those who will take issue with many of them and, hopefully, will do so armed with the results of their own carefully designed experimental enquiries.

For those interested in such activities, this book should be certainly a sufficient stimulus, and additionally, written in their usual clear and tren-

chant style, it is an excellent source book for any interested in keeping track of the activities of two of the most productive people in contemporary personality research.

Books Received and Available for Review

The following books have been received by the *New Zealand Psychologist* and have as yet not been allotted to reviewers. Members may request them for review, by writing to the Book Review Editor, M. J. White, Department of Psychology, Victoria University of Wellington.

- Beatty, Jackson, and Legewie; Heiner. (Eds.) *Biofeedback and Behaviour*. New York, Plenum, 1977. Pp. x + 531. \$US45.00.
- Hart, Joseph; Corriere, Richard, and Binder, Jerry. *Going Sane*. New York: Jason Aronson, 1975. Pp. xiv + 472. No price.
- Eysenck, H. J., and Frith, C. D. *Reminiscence, Motivation, and Personality*. New York: Plenum, 1977. Pp. xxi + 430. \$US33.00.
- Izard, Carroll, E. *Human Emotions*. New York: Plenum, 1977. Pp. xvi + 495. \$US30.00.
- Kerr, M. G. (Ed.) *Violence: The Community and the Administrator*. Wellington: N.Z.I.P.A., 1977. Pp. 145. No price.
- Mackie, Robert R. (Ed.) *Vigilance*. New York: Plenum, 1977. Pp. x + 862. \$US59.00
- Meichenbaum, Donald. *Cognitive-Behaviour Modification*. New York: Plenum, 1977. Pp. 305. \$US17.94.
- Nixon, Mary, and Taft, Ronald. (Eds.) *Psychology in Australia*. Rushcutters Bay, N.S.W.: Pergamon, 1977. Pp. xi + 348. \$16.00 (hard), \$9.50 (soft).
- Plog, Stanley, C. and Ahmed, Paul, I. (Eds.) *Principles and Techniques of Mental Health Consultation*. New York: Plenum, 1977. Pp. xiv + 234. \$US23.40.
- Riegel, Klaus, F. *Psychology of Development and History*. New York: Plenum, 1976. Pp. ix + 263. \$US22.75.
- Weitz, Shirely. *Sex Roles*. New York: O.U.P., 1977. Pp. xi + 283. \$7.30.