anecdote, this part of the book succeeds well, providing entertaining and informative reading.

This is a modestly priced book by current standards and can be recommended as a worthy introduction to the effects of hormonal action and human behaviour.

R. J. DOLAN, Consultant Psychiatrist, Department of Psychological Medicine, The National Hospitals for Nervous Diseases, London

Search for the Causes of Schizophrenia. Edited by H. HÄFNER, W. F. GATTARZ, and W. JANZARIK. Berlin: Springer-Verlag. 1987. 386 pp.

Lord Rutherford is said to have observed in a physics colloquium that he could not keep up with the literature in his subject because he was too busy writing it. Today, in the case of schizophrenia, scanning even the majority of the relevant new papers and books could leave little time for original research, but in this flood of information-which is in fact far from consistent within itself - a special volume from Heidelberg deserves some priority. It is special firstly because it records a meeting held on the University's 600th anniversary, and secondly because that city has almost certainly been the most important single venue in the history of schizophrenia. As Carpenter points out, many of the essential questions, methods, and initial contributions first emanated from there, while its professorial trio of Kraepelin, Jaspers, and Schneider is almost certainly unbeatable in any international league. The occasion resulted in a work of 33 chapters which contains much impressive material. Each section concludes with a critical discussion, and there is a final summing-up by Häfner.

One major theme is that of cohesion versus diversity. On the question of classification, Sass describes both increasing uncertainty as to where the boundary should be drawn between idiopathic psychoses and those of organic origin, and a prevailing view that the schizophrenias are a group of aetiologically heterogeneous disorders, which break down into different nosological subgroups. On the other hand, Wing says firmly that "I cannot see the concept of schizophrenia being abandoned for a long time to come", even though it is unlikely to emerge as "a kind of inviolable Platonic disease entity". For him, the reliable description of phenomena is the central issue, not least because "it does justice to what patients and their relatives are most concerned about"; the great achievement of Heidelberg psychiatry was "the limpid exposition of phenomenology"

Probably the most important contribution here is Häfner's own on epidemiology. He rightly points out that aetiological models should be consistent with epidemiological data, but that because of their composite nature, prevalence rates are not generally suitable for testing such hypotheses. One intriguing aspect is the delayed onset and relatively more benign course in females over the first three years; after that, a rapid catching-up of morbidity suggests that a possible protective effect of oestrogen on dopamine metabolism might have become eroded. Zubin asks whether incidence rates might be affected by differences in mortality, but does not stay for an answer; this could well be a most important question about the data from developing countries. In relation to the course of illness, Strauss suggests that recent research is returning to the Kraepelian notion of longitudinal processes. He sees outcome as heterogeneous, with such features as symptoms, work capacity, and social relationships all related to each other yet partly independent, and each tending to show some consistency over time. In Strauss' view, studies of arousal, like most other concepts of schizophrenia, see patients too much as the passive objects of environmental forces and of the disease itself, whereas they might be helped to play a more positive role, for instance through Brenner's attempts to modify cognitive deficits.

The section on genetics shows Strömgren somewhat playing devil's advocate, suggesting that adoption studies have over-estimated the genetic contribution. Yet it certainly seems true that whatever may be inherited, schizophrenic symptoms and malfunctioning are acquired by social learning and human interaction, and that as long as we have no markers for any nosological entity within schizophrenia, the 'validity' of diagnostic criteria remains quite arbitrary. Hirsch, reviewing the biological chapters, suggests that the concept of a maturational defect could both fit the generally accepted genetic evidence and explain the early onset of adult schizophrenia. The model of neuroleptics simply blocking the dopamine receptor has become more sophisticated, and he suggests the possibility that variations in dopamine levels within schizophrenic brains might be due to inherent left-right differences, which are not related to the illness but become evident after the brain has been exposed to neuroleptics.

A focus of much discussion here is the role of life events and their 'independence' of the relevant illness, which proves to be a much more complex matter than was envisaged 20 years ago. Tsuang points out that their occurrence may in fact be related to a patient's social network and his personality, while Dohrenwend devalues recent stressful events and network factors, in comparison with class-related socialisation experiences in adverse family and other early environments. Like his countryman John Paul Jones, Dohrenwend refuses to haul down the flag, which in his case proclaims 'social stress'; however, the weight of evidence suggests that this ship is slowly sinking. What does seem to be generally agreed is that recent environmentally-induced stress is far less of a risk factor in schizophrenia than in major depression.

Expressed emotion inevitably causes some well-

known material to be re-exhibited, but with such new comments as Angermeyer's that the effects of family intervention measures are in the opposite direction to that predicted by labelling theory. (What does Scheff think?) He also identifies the success of such intervention as being in the extent to which it modifies nonspecific factors which are either stressors or moderators of social stress. Leff usefully makes clear that in schizophrenia, the association between EE and relapse is nonspecific and cannot account for the particular form of the disorder.

In a magisterial summing-up, Häfner is optimistic that competing theories about schizophrenia need not be mutually exclusive, but could represent different aspects of the same central function. Although advances in genetics and in biological investigation seem most rapid and are securing most attention today, it might in fact be epidemiology - a tortoise rather than a hare - which really illuminates the fundamental nature of this protaean disorder. WHO's international studies increasingly suggest a close parallel between the distribution of schizophrenia and that of moderate-severe mental retardation, so that research effort in one field could well have significant overlap into the other. This volume, notwithstanding some problems of translation, is probably the most comprehensive single discussion of current ideas and developments in research on schizophrenia, and should be read by everyone with a serious interest in the subject.

HUGH FREEMAN, Editor, British Journal of Psychiatry

An Introduction to Neuropathology. By J. HUME ADAMS and D. GRAHAM. Edinburgh: Churchill Livingstone. 1988, 309 pp. £29.95.

This book is written for general pathologists, particularly those in training, and for clinicians interested in the neurological sciences. The authors' stated aim has been to convince general pathologists that a proper examination of the brain and spinal cord is a straightforward exercise, and to achieve their objective they have provided a well-illustrated section on post-mortem technique, valuable notes on the dissection of an infant's brain, a simplified description of the development of the central nervous system, and a section of applied neuroanatomy, all of which are very useful. Most welcome of all, however, is their insistence that in virtually all circumstances the brain should be fixed in formalin *before* its examination.

The meat of the neuropathology section is also wholesome, with detailed informative sections on vascular and hypoxic disorders (25 pages), cerebral trauma (18 pages), and cerebral oedema (12 pages), and a particularly interesting chapter devoted to the neuropathological effects of vitamin deficiencies and neurotoxins. Almost inevitably however, a book of this size will have some weaknesses; in particular, there is virtually no mention of the neuropathology of epilepsy, even though the death of a patient in an epileptic fit is not an unknown problem in the working life of an autopsy pathologist. In addition, the chapter on 'Ageing and the dementias' (6 pages) is minute compared with others. This difference in emphasis obviously reflects the interests of the co-authors, but it also leads to some inbalance in an otherwise excellent volume.

The book can be highly recommended for its intended audience, but it is not so valuable for young psychiatrists training for their MRCPsych. They will find much more to their liking in the relevant chapters in Greenfield's *Neuropathology* or Shepherd's *Handbook of Psychiatry*.

C. J. BRUTON, Neuropathologist, Department of Neuropathology, Runwell Hospital, Wickford, Essex

The Halfway House: On the Road to Independence. By SYLVIA L. GOLOMB and ANDREA KOCSIS. New York: Brunner/Mazel. 1988. 244 pp. \$30.00.

An authoritative source like the substantial volume of research reviews accompanying the recently published Wagner Report Residential Care: A Positive Choice (Residential Care: The Research Reviewed. HMSO, 1988) discloses - yet again, some might say - that, compared with other client groups such as the mentally handicapped or children in social need, the adult mentally ill are notably ill-served by the available literature. Golomb & Kocsis provide a useful addition: a clear and comprehensive 'state of the art' description of work in mental health hostels. The book occupies a territory between the literature on psychiatric rehabilitation and that on residential work, and may be recommended to the growing body of psychiatrists with clinical responsibilities in this area and also to their community psychiatric nurse, social work, and residential or day care colleagues.

The authors are social workers attached to the Futura House Foundation, New York. It gradually becomes manifest that although they write in generalisations they are mainly describing the practice of a particular institution. The social context is explicitly American, but their practice, as described in seven substantial chapters from intake through to aftercare, is very much in line with that of good quality British hostels. They are helpfully clear about their management of such familiar tight corners in residential work as clinical relapse, violence, suicide threats, and love affairs between residents.

The model in operation, which could with advantage have been more clearly and succinctly set out, provides for stays of, typically, 20–24 months for discharged inpatients or direct community admissions. Residents are out of the place, at day hospital or in employment,