Atlas des Maladies Chromosomiques.

By Jean de Grouchy and Catherine Turleau. (Pp. 355; 516 Figures.) Paris: Expansion Scientifique Française. 1977.

This beautifully produced pictorial atlas illustrates the cytogenetic and clinical features of the ever increasing number of new chromosomal syndromes. It is published at a time when geneticists and paediatricians are just beginning to associate the dysmorphic features seen in some mentally retarded infants and children with the more recently described specific chromosomal anomalies.

Each chromosome is shown in both the unbanded and banded states and a map depicts what is known about gene loci assigned to that specific chromosome. It is, however, for the presentation of the anomalies that the clinician will want to acquire this atlas. The excellent clinical photographs showing children and infants with partial and complete aneuploidies will save the clinician the trouble of searching through the half-dozen genetic journals to see whether his patient's features fit those of a partial trisomy 9 or a 22. The only disappointing feature is that pictures are not annotated with a clear indication as to what dysmorphic features are being shown.

One hopes that the atlas will be updated regularly. An English edition is published by John Wiley and Sons, New York.

M. BARAITSER

Advances in Human Genetics.

Vol. 7. Edited by H. Harris and K. Hirschhorn. (Pp. xiii + 261; Figures + Tables. \$35.40.) New York: Plenum Press. 1976.

This annual series of reviews, together with its companion '*Progress in Medical Genetics*', has provided workers in the field with an authoritative range of articles over recent years. With increasing cost—\$35.40 for the present volume of 250 pages—it has to be asked whether the contributions have sufficiently wide appeal to be of value in a book of this type, as opposed to appearing in a journal devoted to more specialised interests. For this particular volume the answer is undoubtedly yes.

The outstanding contribution in lucidity, critical approach, and in relevance to the broadcast issues of genetics is the chapter by Barton Childs and colleagues on human behaviour genetics. It is to be hoped that it will be read not only by geneticists but by other workers in the behavioural sciences, even

though they may not like all that the article has to say. The distinction of both aims and methods between the biometrical approach, which has largely dominated the field, and the Mendelian approach, using defined inherited disorders as its starting point, is clearly set out, and the authors make no secret of their view that the second approach has been under-utilised in this area of genetics, and that it is likely to be more fruitful in increasing our understanding of the specific genetic mechanisms at work in the determination of behaviour. A clear vindication of this view, and of the inadequacies of the biometrical approach has been seen in the persistent controversy over heredity and intelligence. Dealing with more specific items, valuable information is given on the genetics and genetic risks of schizophrenia and the affective disorders, as well as the author's own data on specific reading disability. The importance of differences in drug metabolism and the lack of information on the relation between this and the basis of behavioural disorders is also stressed. In all, this is a stimulating and provocative review for those outside the immediate field as well as those within.

Two further articles of wide appeal are on mammalian X chromosome interaction, by Gartler and Andina, and on the genetics of the complement system by Alpeen and Rosen. The first of these provides valuable comparative information on the completeness, timing, and reversibility of inactivation, and on the relation of the observed morphological changes to the underlying biochemical processes. It is clear that many important questions are still unanswered in this subject. The chapter on complement illustrates how a series of metabolic processes which originally seemed lacking in specific inborn errors of clinical importance is assuming increasing importance in a number of syndromes characterised by immune deficiency and other problems.

The opening chapter of the book, the biochemical genetics of carbonic anhydrase, by Tashian and Carter, is the only one which can be criticised by its relatively restricted scope, and it is doubtful whether geneticists other than those specifically in human biochemical genetics will wish to have the detail that is given for this system alone rather than in conjunction with other enzyme polymorphisms. To a lesser extent the same may be said of the final chapter on selective systems in somatic cell genetics, by Chu and Powell, but here the implications of this have been so important in advancing the study of a whole range of genetic problems that this contribution will be usefully read by the outsider as well as by the experimental worker in somatic cell genetics.

PETER S. HARPER