experts from all over the world met to discuss these problems, compare notes, and present cases. The result is a book profusely and beautifully illustrated, which unquestionably contains the most up-to-date clinical information available. It is difficult to single out individual contributions, but there is a thorough discussion of the achondroplasia-like syndromes, now split into many distinct entities, as well as other dwarfing conditions only recently described. The mucopolysaccharidoses are also discussed fully, both clinically and biochemically and in relation to fibroblast culture work. Where the genetics of these dysplasias are known they appear all to be of the single mutant gene variety. Though, since many of the disorders are extremely rare only single kindreds are described and many cases are sporadic.

The value of this conference lies in the gathering of information from all over the world in order that distinct entities can be clinically identified and some progress made in determining their mode of inheritance and specific biochemical defects. It is an outstanding record of knowledge in this difficult field, chiefly of interest to clinical geneticists, paediatricians, orthopaedic and plastic, surgeons and radiologists. It is to be hoped there will be further conferences arranged along similar lines.

RUTH WYNNE-DAVIES

The Post-natal Development of Phenotype. (Proceedings of a Symposium held in Liblice, near Prague, Czechoslovakia, 18–22 September, 1967.) Edited by S. Kazda and V. H. Denenberg. (Pp. 420; figures + tables. £8.) Academia (Prague). London: Butterworth. 1970.

The title of this volume, the result of a symposium organized by the Czechoslovak Academy is somewhat misleading; it is not concerned with phenotypes as they develop on the basis of segregating genotypes, but rather with the average physiological and behavioural aspects of the development of genetically non-defined individuals with particular emphasis on 'critical periods' and their manipulation.

Of the 32 contributions only 2 deal with man, one with the neuro-integrative development of children of school age, the other with the relation between the suckling period and later development. The other contributions are descriptions or summaries of a great variety of experiments on mice, rats, rabbits, pigs, dogs, or monkeys. The nearest any of these comes to genetics is the first paper by Scott, which deals with 'The critical periods for the development of social behaviour in dogs' and touches on some differences between different breeds. There is hardly any mention of pathological or deviant 'phenotypes' whether in animals or man. This book is well produced and reasonably indexed.

H. KALMUS

Genetic Epistemology. By Jean Piaget. Translated from the French by Eleanor Duckworth. (Pp. 84.) New York: Columbia University Press. 1970.

One of the occasional pleasures of reviewing books chosen by computerized lists is that due to errors, one may read a book about another subject. 'Genetic epistemology' has nothing to do with genetics, but is, in its literal sense, a child's guide to knowledge, in which Piaget summarizes part of his life's work in asking children questions which some philosophers have made incomprehensible, especially to themselves, and in attempting a scientific study of philosophical assertions by assuming some phylogenetic and ontogenetic equivalence in the genesis of thought. This approach is strangely lacking among the great British empiricists who modestly regarded their own endowments as typical. In some ways his approach is complementary to the problems of communicating with automata.

Piaget casually dismisses the claims of many of those who labour to spin new clothes for their emperors. Even Whitehead and Russell are challenged on their definition of numbers as classes, on the apparently incontrovertible ground that children can define numerical equality without explicit pairing.

Children, to Piaget, are strangely uniform and there is little here of aberrant, or of exceptional, responses; the linguistic arguments are restricted to Indo-European languages, and the author does not venture into the strange worlds of the deaf or the blind.

The book is translated, but the publishers were unable to provide an original which is hard on the reviewer, and may be hard on the author.

J. H. EDWARDS

Advances in Twin Studies. (Proceedings of the 1st International Symposium on Twin Studies, Rome, 4–7 September 1969. *Acta Genet. med.* (*Roma*), **19**, Nos. 1–2.) Edited by P. Parisi. (Pp. xvi+381; figures + tables.) Rome: Acta Geneticae Medicae et Gemellologiae. 1970.

This volume reports the Proceedings of the First International Symposium on Twin Studies held in Rome in September 1969. There are 102 papers: 65 in English, 26 in Italian, 10 in French, and one in German; the papers in foreign languages are not summarized in English. The subjects covered include the epidemiology of twinning as well as the use of twins in genetic studies, though most of the papers are concerned with the latter field. The standard of the papers is very variable. Many are merely summaries of work published in full elsewhere, or preliminary reports on work in progress; some of the other papers are very thin. There is only room here to single out one or two of the more interesting papers for special mention.

Nylander reports data on the inheritance of dizygotic twinning in western Nigeria, which is of great interest both because of the high twinning rate in that region, and because the practice of polygamy provides an opportunity of separating paternal and maternal factors; the same author also reports on the placentation of Nigerian twins.

Among the twin studies on the heritability of normal and pathological characters, there is an interesting