

in northern Thailand in 1936–37. The document is fuller than a casual traveller's description, but falls well short of the standards of post-war ethnography. In this voluminous but poorly produced format, it is not a book for the general reader; but the specialist seeking information about peoples who are likely to have undergone considerable change in the intervening 35 years will not know how much reliance to place upon these notes, compiled with the help of interpreters, and often impressionistic rather than authoritative. It is illustrated by numerous photographs and line drawings made by the author. For a psychiatrist the most interesting sections are those on child-rearing, family life, sexual behaviour, attitudes to sickness and death, and funerary customs. Essentially, however, this is documentary source material of historical rather than contemporary interest.

G. M. CARSTAIRS.

CHILDHOOD

The First Five Years of Life. A Guide to the Study of The Pre-School Child. Edited and partly written by Arnold Gesell. Republished as a University Paperback. Methuen: London. 1971. Pp. xiii + 393. Price £2.

Gesell's clear and detailed observations of children's behaviour are as relevant today to the student of child behaviour as they were when first published in 1950. His account of the development of motor, adaptive, language and personal-social behaviour from birth to 5 years formed the basis of the developmental tests now in use, and his approach to development and to its assessment has rightly had a wide influence on psychology and paediatrics. The passage of time has made his account of the early development of perception and pre-linguistic skills seem rather weak and occasionally inaccurate, and his description of language appears rather dated. There is little mention of emotional development, and environmental influences are given scant attention. Nevertheless, his very practical and lucid description of how to conduct a developmental examination at each age, of how to approach children in the test situation, of how to pace and order the examination and how to cope with the handicapped child still has much to teach us. Gesell's concern with human individuality is at last receiving its deserved attention in the psychological literature, and his painstaking and meticulous studies of child behaviour certainly warrant this republication in paperback form.

MICHAEL RUTTER.

Mental Imagery in the Child. By JEAN PIAGET and BÄRBEL INHELDER. Routledge and Kegan Paul. 1971. Pp. 396. Price £3.50.

This book, written by Piaget and Inhelder in collaboration with their Geneva colleagues, seems much more in the mainstream of general experimental psychology than many of their previous ones. The reason might be twofold. Firstly, there has been some accommodation on the authors' part to the frequent criticism regarding Piaget's reporting of methods and results. Secondly, current psychological thinking has gone through an assimilation process, so that much of what is concluded here in regard to images has also been stated recently, for instances by Neisser, in regard to perception and memory.

The method used throughout in these studies is to present children with a visual stimulus and ask them to draw, as well as to select from prepared drawings what they have seen or what they would expect to see under certain changed conditions. A distinction is made between reproductive and anticipatory images, such as predicting subsequent points of location of a plane moving along a circular path, the future position of a square appearing from behind a second superimposed one, or the lines on a piece of paper, folded several times, when straightened out.

Piaget and Inhelder conclude that the image, though also a copy of an object or event, is fundamentally a symbol, and is closely bound up with the process of conceptualization. Reproductive images are formed at the pre-operational stage, while anticipatory images do not develop until the level of concrete operations is reached. The images of the first period remain essentially static and thus unable to represent the results of movements and transformations. In those of the latter, the child has begun to reconstruct kinetic and transformational processes and to foresee a series of sequential events. However, familiar a movement, such as a rod falling, the hands of a clock moving or a car overtaking another, there is no simple relationship between familiarity of content and the stage of development at which adequate corresponding images appear. This is because images are a function of the intellectual level of complexity of the relationships in question, and not of the degree to which the child is conceptually familiar with them.

There is some parallel between the nature and function which the authors ascribe to images and that which Piaget has previously assigned to words. Neither the presence of images nor words is held to be sufficient for giving rise to knowledge. However, both are regarded as symbols which can be effectively used in cognitive operations.