

Book Reviews

ranging from their vital and social statistics to their defects of vision, about the drawings of chimpanzees and stick drawings of children. Unfortunately much of this seems to be of slight value. There are also essays on the development of visual perception in children and art education, but for the historian the chapters on visual art in primitive man and the defective visual acuity of artists will be of special interest.

ANDREW WOODFIELD, *Teleology*, Cambridge University Press, 1976, 8vo, pp. viii, 232, £6.50.

In biology, psychology, social science, theology, and engineering, teleology is frequently invoked to account for purpose, goal, end or function. We usually use the term when we say that a certain phenomenon takes place in order to fulfil some purpose, and it was used extensively in ancient biology and physiology by Aristotle and Galen when they wished to link structure and function. It was a simple and satisfactory means of explication at a time when information in these areas of knowledge was still relatively meagre.

Teleological explanations are thus used in several disciplines and a comprehensive investigation of their varieties, logical structure and their proper uses has long been needed. Dr. Woodfield's book is, therefore, welcome, for he discusses this difficult and diffuse area of knowledge in a competent and lucid fashion. He also gives a survey of the relevant literature, but although there is ample reference to Aristotle, Galen does not seem to be mentioned, perhaps because he was merely purveying Aristotelian concepts. Likewise insufficient attention has been paid to the use of teleological arguments in biology in general and in its history in general.

MAGDA WHITROW (editor), *Isis cumulative bibliography. A bibliography of the history of science formed from Isis Critical Bibliographies 1-90, 1913-1965*, vol. III: subjects, London, Mansell, 1976, 4to, pp. xviv, 678, £28.00.

The first two volumes of this work contained references to personalities in Volume 1 (1971) and institutions in Volume 2 (1971). The third deals with subjects, the organization of which presented a much more difficult problem of classification, and Mrs. Whitrow must be congratulated on conceiving an excellent arrangement of a huge mass of widely disparate material. In the case of medicine and pharmacy (pp. 360-518) there can be few criticisms of the method adopted, although no doubt some will be dissatisfied as is always the case with this type of compilation. In addition to this purely medical section there are, of course, a number of areas which will be of interest to the historian of medicine: biology, anthropology, psychology, food technology, etc. At the end, a classification scheme for the history of science, medicine, and technology is offered.

The first two volumes of this excellent work have already received deservedly high praise and there is every reason to believe that the present volume will achieve the same accolade. Workers in the field of history of science, medicine and technology have reason to thank those who have by financial support made the publication possible, as well as the publishers, and last, but by no means least, Mrs. Whitrow whose devoted labours over a number of years have earned her the indebtedness of generations of scholars extant and in the making.