

## Book Reviews

**Orthoptics - Theory and Practice.** By H. G. BREDEMEYER and K. BULLOCK. 1968. Pp. 284, 134 figs, bibl. Mosby, St. Louis; Kimpton, London. (123s. 6d.)

This book is intended for orthoptists but it will reach a much wider audience because it provides a concise and up-to-date account of the problems of ocular motility. Its main part is concerned with a discussion of the sensory and neuromuscular anomalies of latent and manifest squint, and this is enhanced by an excellent preliminary survey of the anatomical, physiological, and optical mechanisms which are concerned in the elaboration of normal binocular function. The "American" flavour of the book is endorsed by the emphasis which is placed on the theoretical and practical applications of an understanding of the mechanisms of accommodative convergence and accommodation (the AC/A ratio), although it would have been improved by a more detailed account of the clinical methods which are readily available for its measurement.

In a book of this type which is designed for the "beginner" it is a pity, however, that somewhat inadequate descriptions of certain conditions are given in earlier parts of the text, such as the angle lambda, internuclear ophthalmoplegia, and monofixational phoria (microtropia), without any indication that more detailed accounts follow later.

There are also some contradictions in the text; for example, it is stated that visual perception is poor at birth and yet this is disclaimed later with an account of modern methods of investigation of vision in early life such as the assessment of the nystagmus which is induced by quantitative optokinetic stimuli; it is stated also (correctly) that the precise location of the centres controlling ocular movement in the brain-stem are unknown and yet a description of a subcortical centre concerned with vertical movement is given elsewhere which is far from accepted and is at variance with experimental findings in primates which have a pattern of brain-stem anatomy similar to that in the human; the fixation reflex is regarded (correctly) as part of the optomotor reflex but in another section the two reflexes are regarded as separate.

There are also certain misleading parts of the text. It is doubtful if strabismic amblyopia and anisometropic amblyopia are "basically identical" because the former is essentially an active inhibition induced by the phenomena of diplopia and confusion, whereas the latter tends to be more passive in nature. The definition of eccentric fixation as a disturbance of the fixation behaviour is somewhat incomplete (despite the fact that its association with amblyopia is specified) because it fails to emphasize the fundamental sensorimotor disturbance which follows its development and which distinguishes it from eccentric viewing. The statement that amblyopia can usually be cured is true in a large number of cases, but it should be qualified in the context of stimulus-deprivation amblyopia and in amblyopia with an associated eccentric fixation. The projectoscope is described as a combination of a euthyscope and pleoptophore but it also has an important use as a visuscope. It is certainly essential to stress the importance of a period of occlusion of the fixing eye even when there is an absence of central fixation of the squinting eye, but this should not be continued for three to four months before starting inverse or indirect occlusion (of the squinting eye) when there is a failure to restore central fixation by conventional occlusion. It is correct that true fusion occurs only in the presence of a normal retinal correspondence, but emphasis should have been made of the important form of fusion which occurs in an established anomalous retinal correspondence. Finally, the declared aim in surgery slightly to overcorrect exotropia should not be applied too rigidly in certain cases, particularly when there has been a persistent effort in the past to attempt to control the deviation by an effort of convergence.

These criticisms, however, do not detract from the fact that this is an excellent, clearly written, and well-produced book with a modern approach, which should be of great practical value to students of orthoptic practice, and of value also to all who are concerned with the problems of disorders of ocular motility.