

as a subject in its own right at the beginning of the century. During the past 20 years there have been relatively few books devoted to ophthalmic genetics and this excellent publication is, therefore, particularly welcome. While every chapter has much to offer the reader, several have been singled out for particular mention, either because of their clinical value or because they are a reflection of the reviewer's particular interests.

Part One is devoted to 'Methods of study in genetic eye disease'. It includes a chapter by George Spaeth on the carrier state and lists more than 60 conditions with ophthalmic manifestations in which the carrier state can often be detected by a biochemical abnormality or an abnormal clinical appearance. Since this chapter was written, the list could probably be considerably enlarged. Fraser discusses the aetiology of severe visual handicap in childhood, a subject which is at last receiving the attention it deserves. It is apparent from his discussion of acquired and genetically-determined causes that there is still much we have to learn about this topic. In a comprehensive and extremely useful chapter Berman describes genetic and metabolic eye diseases and their biochemical diagnostic tests. To illustrate the recent advances that have occurred in this subject, only 2 per cent of the 322 references are over 10 years old.

Part Two is concerned with 'Genetic determination of clinical eye disease'. Bron and Tripathi review the isolated corneal dystrophies and those associated with systemic and with genetically-determined disorders. There is a strong emphasis on the clinical appearance of the cornea in these various conditions, making this chapter particularly valuable to the practising ophthalmologist. The macular dystrophies are ably discussed by Deutman who has finally laid to rest the monistic view of this group of disorders. Until these lesions can be classified biochemically, their morphological classification, as presented here, will be the most useful clinically. The complex group of heredofamilial disorders of the optic nerve has been ably handled by Glaser while the rapidly growing topic of chromosome deletions and eye disease is discussed by Howard.

Part Three, 'Therapy and prevention of genetic eye disease', consists of chapters on therapeutic principles by Cotlier, ocular pharmacogenetics by Lieberman, and genetic counselling by Irene Maumenee. This is by far the shortest part of the book, but one which could hardly have been envisaged a few years ago. It is hoped that a section such as this written in 10 years' time will be very much larger.

The editor is to be congratulated on producing such a valuable book covering one of the fastest growing areas of ophthalmology. It can be highly recommended to all ophthalmologists for repeated perusal, and should be obligatory reading for all those studying for higher degrees.

BARRIE JAY

More Help for Dyslexic Children. By T. R. MILES and E. MILES. 1975. Pp. 74, figs, refs. Methuen, London (£1.20)

Developmental dyslexia, or congenital word-blindness as it was then called, was first anticipated in 1896 by a Glasgow eye-surgeon—Dr James Hinshelwood. Actually

the very first case of this kind was described by the father of the Emeritus Ophthalmic Surgeon to Guy's Hospital, Mr Gayer Morgan. Because of the nature of the presenting symptom, namely inability to make head or tail of printed or written words, it is not surprising that visuoperceptual errors were queried. The early literature upon this subject was largely made up of case reports published by distinguished ophthalmologists, mainly British, among whom the names of Nettleship, Thomas, Hubert Fisher, Treacher Collins, Stephenson, and Doyne are conspicuous. Later, the focus of attention switched to neurologists who nowadays visualize a genetically-determined localized form of delayed maturation within the learning-process.

In some places, mostly in the United States of America, ophthalmologists for a time renewed their interest in dyslexia, some of whom postulated that a disorder in the eye movements during the act of reading was responsible for retardation in reading, to be cured by courses of eye-exercises. Fortunately, that particular heresy never reached this country and is on its way out in America.

Many eye specialists, however, still see these cases in the early stages and are intrigued thereby, for dyslexia cannot be diagnosed until all perceptual errors have been eliminated.

To those who are interested in this topic, this simple book—and particularly the first two chapters—may be warmly recommended.

M. CRITCHLEY

Ophthalmic Electrodiagnosis. By N. R. GALLOWAY. Vol. 1, Major Problems in Ophthalmology, edited by P. D. TREVOR-ROPER. 1975. Pp. 169, figs, tables, refs. Saunders, Philadelphia (no price given)

Ophthalmologists are in a privileged position among clinicians because the eye is readily accessible for inspection and there are many reliable and sensitive tests of function. It is probably for this reason that electrical methods of investigation have not achieved the wide application apparent in other disciplines. The electrical responses of the visual system were discovered more than a century ago and their study has been most valuable in physiological research. Much basic information has been acquired but unfortunately many of the contemplated diagnostic prospects have proved disappointing because they are less sensitive than established techniques. On the other hand there is a special field in which these methods have a vital use. Many clinicians are unaware of the scope and even of the existence of some of these tests, possibly because of the lack of a clinically orientated description. This book is an attempt to fill this gap.

The first half of the book comprises a glossary of basic electronic terms, the physiological bases of the various retinal tests, and a brief, and perhaps irrelevant, note on other tenuously related investigations.

The second half of the book is devoted to clinical investigations. It is introduced by a chapter on the organization of an electrodiagnostic clinic and the methods of recording normal response. The rest of the section discusses the results of such tests in various ocular diseases.

This book will fulfil the needs of most ophthalmolo-

gists who wish to understand the place of electrodiagnosis in contemporary ophthalmology. A valuable feature is the list of references at the end of each chapter. Apart from a superficial discussion of cortical responses there are numerous deliberate omissions in the application of retinal tests because these are not of great clinical value.

Many illustrations have been drawn to explain certain points and in general they are clear and useful but Fig. 7.1 does not make clear the enormous amplitude as well as time difference of the EOG and ERG. The clinical ERG traces may also be misleading. The author uses a high intensity stimulus and this, together with the effect on the ERG waveform, is noted in the text. Unfortunately the reader may miss this point and find it difficult to equate some of the author's traces with those in the literature using more conventional stimuli.

Ophthalmic electrodiagnosis is generally accepted to date from 1945 with Karper's monograph although excellent earlier studies had appeared. In the 30 years since then extensive studies have been published and a very active international society has helped the development of the various techniques. It is never safe to say that further major development will not occur but it would seem that the indications and applications of tests of retinal function are fairly clearly established. It is this aspect of visual electrophysiology to which the book is almost entirely devoted. A future edition will no doubt be more concerned with cortical electrical responses.

J. H. KELSEY

The Perception of Colour. By R. M. EVANS. 1974. Pp. 248, figs, tables, refs. Wiley, Chichester (£9.95)

Evans wrote a standard work on colour a quarter of a

century ago, and in this posthumous publication he stresses the dissatisfaction he experienced in trying to organize basic colour-matching data in terms of stimulus parameters. This is why he wanted to put forward a design for a new system, called 'perceptual colorimetry'. Classical 'stimulus colorimetry' is a sharp tool, perfected for the protection of manufacturers but it is uninformative when it comes to communication on the subjective experience of colour. This is what he tried to remedy in this book.

Few other works on this subject cope without some coloured illustrations, and none with only 13 diagrams and a description of the structure of the eye by the printed word alone. Evans nevertheless manages to get across his message, which is, basically, that conventional colorimetry represents an unrealistic abstraction. He is much concerned with simultaneous contrast and with surface attributes, since what matters to him is colour as he perceived it. We rarely see colours in the isolation enforced by a colorimeter, however sophisticated it may be in concept. Evans was emphatic about the inadequacies of standard systems, yet, true physicist that he was, he believed in the possibility of a standard observer.

Evans takes tentative steps to deal with adaptation but seems wholly ignorant of the work done on this aspect of perception by R. W. G. Hunt and others. While he sees the difficulty associated with ingrained terminologies, he is as baffled by object colours as Aristotle was. However, Evans had an advantage over the Greek philosopher; he could (but does not seem to) have conversed with physiologists. He would have learnt that the very crystalline lens which he believed to image the outside world on to the retina makes impossible a standard study or a universally valid system.

R. A. WEALE

Notes

Rudolph Ellender Medical Foundation

New Orleans, 2 to 3 October 1976

The Rudolph Ellender Medical Foundation will present the first annual Ophthalmocryosurgical Seminar in conjunction with its third annual Dermatocryosurgical Seminar.

The faculty will include: Frederick T. Fraunfelder MD, Little Rock, Arkansas, John Sullivan MD, San Jose, California, and Setrag A. Zacarian MD, Springfield, Massachusetts.

10th Panhellenic Ophthalmological Congress

Greece, 27 to 29 May 1977

Topics to be discussed at the 10th Panhellenic Ophthalmological Congress include: heredity in ophthalmology, and surgery of congenital cataract.

Simultaneous translation in Greek and English will be available. For further information write to the

Secretariat of the 10th Panhellenic Ophthalmological Congress, c/o Hellenic Ophthalmological Society, National Ophthalmological Centre, 170 Avenue, Messoghion, Chologros, Athens, Greece.