

Book reviews

Radiant Energy and the Eye. Ed. SIDNEY LERMAN. Pp. 321. \$45.00. Macmillan Publishing Company: New York. 1980.

The author of this unusual book holds posts as both professor of ophthalmology and adjunct professor of chemistry, and he combines his 2 fields of interest here. He discusses current knowledge of physical and biological chemistry as it relates to the potential hazards of radiant energy on the eye.

After discussion of the basic principles of the electromagnetic spectrum, absorption of radiant energy, and classical and quantum mechanics, he describes the functions and structure of the eye. Subsequent chapters are devoted to biological and chemical effects on the eye of different types of radiation—ultraviolet, infrared, microwave, radiofrequency, and ionising radiation. A full account of damage which may be produced by laser irradiation is included. Throughout the book detailed diagrams and many clear photographs illustrate the structure and function of normal and damaged tissues, although most readers will not profit from the many biochemical pathways given in full. A printing error has unfortunately led to the omission of 8 pages from the chapter on ultraviolet irradiation (chapter 3).

This book is clearly written and easy to follow, but the wealth of detail and its wide scope may make much of it irrelevant to most clinicians. In spite of its comprehensiveness it is difficult to see for what readership it is intended. It will find a place as a reference work for ophthalmologists and exceptionally for radiotherapists or radiobiologists but may be most useful for research workers in similar fields requiring a detailed survey of previous experimental data and publications.

A. BARRETT

Congenital and Acquired Colour Vision Defects. Eds. JOEL POKORNY, VIVIANNE C. SMITH, GUY VERRIEST, A. J. L. G. PINCKERS. Pp. 409. £22.20. Academic Press: London. 1980.

This highly informative book deserves great praise and recommendation: praise because it presents a thoroughgoing, if at times a little uncritical, review of the elements underlying the acquisition of colour data useful for diagnostic purposes; recommendation because it is readable. It is well documented and illustrated, and the multi-author presentation seems less of a drawback than usual.

It is too much to expect that, even where it deals with matters of fact rather than opinion, the text should be faultless, but clinicians and research workers alike have only themselves to blame if they fail to consult original sources in matters they consider important. They are assisted in this with the large bibliography which elaborates the topics the book covers. These include stimulus specification and the basic physiology and pathology of colour vision together with a description of some clinical techniques. Attention is paid also to acquired defects and their consequences for the patient. At the same time

it is a pity if former follies are perpetuated. For instance, if Pickford had ever heard of macular pigmentation, his anomaloscope, let alone the Pickford-Lakowski equation, would hardly ever have come into being. No wonder its usefulness is circumscribed.

Finally, this excellent tome illustrates the value of a multidisciplinary approach to Ophthalmology. It is a seed bed of ideas which will, one trusts, be exploited by clinical and scientific workers alike. If some of the cobwebs over some of the topics can be swept away, even the patient may benefit—if only by having his time saved.

ROBERT WEALE

Repair and Reconstruction in the Orbital Region. By J. C. MUSTARDE. Pp. 400. £35.00. Churchill Livingstone: Edinburgh. 1980.

The first edition of this book became essential reading for anybody interested in reconstruction in the orbital region. Since it was written there have been many new developments in the field, and this new edition has been eagerly awaited by ophthalmic and plastic surgeons. They will not be disappointed. The author has retained his previous style and sets out the techniques which he personally finds most useful. Although alternatives are mentioned, the reader is left in no doubt which methods the author favours. They are set out in a very clear and logical manner, with excellent line diagrams and photographs.

The book covers all aspects of reconstructive surgery from basic techniques, such as how to insert a needle, to the more complex repairs. Some of them have been modified in this new edition, such as the author's lower lid rotation flap for repairing an upper lid defect. Mention is also made of the recent advances in craniofacial surgery and the treatment of hypertelorism. However, primarily the author attempts to keep the surgical principles and techniques simple and logical, and the appendix of instruments which he has designed further supports this aim.

As its title suggests, the book concentrates on repair and reconstruction in the orbital region. It does not devote much space to more ophthalmological problems such as entropion and trichiasis, and it does not mention recent advances in management such as cryotherapy. However, it is not intended specifically for ophthalmologists but rather for everybody dealing with reconstruction in the orbital region. In this field the author has an unparalleled experience, which makes this new edition an essential book for anybody involved in such surgery.

J. R. O. COLLIN

Computer-Assisted Eye Examination. Ed. ELWIN MARG. Pp. 146. \$10.00. San Francisco Press: San Francisco, California. 1980.

There really should not be any need for this excellent book. We are rational creatures, whose thinking is guided by logic, by operational economy, with an eye to efficiency and to efficacy. We do not allow any of our actions to be perturbed by ill considered or illogical elements, and consequently are completely au fait with computer principles in general and their logic as applied