

extended by this volume, which has a somewhat conservative tone.

The book's essayists are leaders who have contributed importantly to their own specialties. The editor tells us he chose them for that reason. But the essays are filled with the works of others and barren of the kind of information that one might relish from an important actor on the stage of history, the kind of information that only he possesses. In a felicitous chapter on



Georges Hayem (1841–1935), one of the 'fathers of haematology'.

"blood and mountains" Erslev refers to his discovery of erythropoietin in one sentence in the third person. Why did he do this experiment? How did he do it? There is no one better qualified to tell us than Erslev himself. Beutler deserves praise for having interviewed several major figures in preparing his chapter but he omits to explain how his own work on glucose-6-phosphate dehydrogenase deficiency anticipated what is now called the Lyon hypothesis. London tells us a bit about the Schoenheimer school at Columbia but not enough about his own perceptions of it. Castle speaks interestingly of Minot's personality and antecedents but is a shadowy figure in his third person references to himself. Spaet does not mention his own work. Such modesty!

Of course, this is probably not fair comment because it suggests that the editor and authors should have written a different book. In fact, this book is splendid and highly recommended. My only quibble is that ample room exists for more effort in this area. We all should hope that Professor Wintrobe continues to explore the many trails he has blazed with this welcome work. □

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Russian holography

P.W. Hawkes

Holography and Coherent Optics. By L.M. Soroko. Pp.818. (Plenum: 1980.) \$59.50, £37.49.

THE decision to publish this translation, of a Russian text which first appeared in 1971, is most astonishing. At that date it was remarkably up to date, but holography is surely one branch of applied physics that has progressed out of all recognition during the 1970s. Further, the book lacks the merit of bringing early Russian work in this field to the attention of Western eyes, for there are no references at all. To cap this, it has the defect common to many Russian scientific texts: there is no index.

The book opens with some general ideas about holography, after which three chapters deal with various transforms of

particular importance in optics, random signals and optical coherence. A chapter is then devoted to information theory in optics, followed by one on holography. The Russian text then concluded with a discussion of optical information processing, but for the English edition, the 'translation editor', G.W. Stroke, has included three of his own publications. Each topic is dealt with at some length, but for almost every subject much progress has been made since the book was written. In short, there really was not much point in translating this text, for in so fast-moving a subject students and research workers of the 1980s will need more recent information than that collected here. Access to a set of Professor Wolf's annual *Progress in Optics* (North-Holland) would be a great deal more useful. □

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More of the Amboseli baboons

John M. Deag

Baboon Mothers and Infants. By Jeanne Altmann. Pp. 242. (Harvard University Press: 1980.) \$17.20, £10.50.

EVER since the publication of *Baboon Ecology* by S.A. Altmann and J. Altmann (University of Chicago Press: 1970), primatologists have been waiting for further information on the social behaviour of the Amboseli baboons. *Baboon Ecology* set a new standard for primate ecological studies and Jeanne Altmann's *Baboon Mothers and Infants* will have equal influence on research into social relationships. This is no ordinary report of mother-infant behaviour and those most familiar with laboratory studies will find its scope unusual. Altmann summarizes her aims as follows: "... to assess the nature and extent of external influences on baboon mothers and their young infants. My general goal was to identify and measure factors affecting survival and behavior during motherhood and infancy, and to identify likely ontogenetic origins of differences in adult behaviour and life history patterns". The book therefore represents one of the first serious attempts to portray the total behavioural and ecological relationships among mothers, infants and the social group of which they form such a fundamental part.

It starts with an introduction to baboons and their habitat, and a short but important section on demography. During the first two years of life there was a per

annum mortality of 0.3. Several infants were ill, wounded or suffering from possible nutritional deficiencies or poor mothering, and the author uses such cases when considering the costs and benefits of different sorts of behaviour. Mothers with young are themselves vulnerable, and older females with dependent young were found to be particularly at risk of dying when compared with younger females or those in other stages of the reproductive cycle. The effects of infants on their mothers' feeding patterns and time budgets are described and formalized in a theoretical model. It seems that if a mother had to provide all her infant's nutrition, severe time-budget problems would occur with infants more than 6–8 months old, even at slow rates of infant growth. A mother simply cannot gather enough food to maintain her body weight and to feed her infant; weaning is consequently forced upon the pair. Later sections of the book deal more directly with behavioural topics such as maternal care, infant development, spatial relationships, weaning and independence, and with how a mother's social relationships are affected by her infant's age.

The study group has been under observation since 1971 and a great deal of background information is available. The quantitative results on mothers and infants in the present study are drawn from 15 months of field work and 18 infants. Sound quantitative methods are used to provide an extremely detailed picture of the infants and their mothers. The major strength of this book lies in the detailed analyses attempted; but this is paradoxically also its main weakness, since it may make much of the book of little interest, except to the specialist prepared to wade through all the intimate details. The necessity of referring to individuals is a problem faced by all who