

often unhappy and sometimes disastrous. The reader must also accustom himself to the curiosities of the phraseology employed; the present writer, nevertheless, was gratified to find the accession of Queen Victoria referred to as 'the ascension of the youthful princess Victoria'.

Yet, despite the foregoing criticisms, there is much of value in Dr Harrison Smith's two volumes, and in particular, every student of the history of Malta will be grateful to the author for the many references to the vast mass of material which he has collected.

GEOFFREY DE C. PARMITER

GENETICS IN THE ATOMIC AGE. By C. Auerbach. (Oliver and Boyd; 8s. 6d.)

This book presents genetics to the layman. In the preface the author indicates her intention of writing without using the symbols and technical terms peculiar to her subject. She has succeeded, and the result is a story in one hundred pages, delightfully illustrated, easy to assimilate and demanding no scientific background of the reader.

Some material in the early chapters is open to criticism. A statement on page six could leave the reader with the idea that X-ray sterilization of men is a common procedure. It is not. Another example on page seventeen is the belted Galloway cow, a polled breed, shown here with horns. These matters do not however affect the validity of Dr Auerbach's conclusions.

The essentials of nuclear division affecting both body and reproductive cells are adequately dealt with and the nature of chromosomes and their distribution in these different cells described. The concept of genes as responsible for the control of inherited characters is outlined and leads to a consideration of the occurrence of mutated genes and their effects. A convincing account of the distribution and inheritance of normal and mutated genes follows.

The ability of ionizing radiations to produce mutated genes is described fully and its significance for the future of the human race assessed. The reader is left with a clear appreciation of the extent of the ethical problem confronting man in the use both of nuclear weapons in war and of atomic energy in peace.

I liked this little book and wished many of the textbooks I suffered in my youth had its clarity of style.

R. W. KIND

SPECIES REVALUED. By Desmond Murray, O.P., F.R.E.S. (Blackfriars Publications; 13s. 6d.)

This book could have been important, because as the author tells us in his preface, a better title for it would be *The Making of Species*, but this name has already been used for a similar book. Unfortunately,

we are not told much about the way in which species are formed. In fact, the information given us on this aspect of biology is entirely negative, and the book has become merely another tirade against Darwinism and natural selection in particular. Because the author's opinions about Darwinism do not seem to have advanced much beyond those of Darwin himself, much space in this book is devoted merely to the consideration of various difficulties in the way of a too facile acceptance of Darwinism. These are difficulties which modern evolutionists freely acknowledge. Points in favour of even the old-fashioned Darwinism are ignored. Although the modern mutation theory is mentioned, its conspicuous place in present-day biological theory is glossed over. Hence, the place of natural selection in contemporary ideas of evolution is entirely missed, or at least misunderstood. Biologists do not as a rule now hold that natural selection in the Darwinian sense actually creates species. Natural selection itself is a self-evident principle of nature.

In his central thesis, i.e., the revaluation of the species problem, Fr Murray gives an account of various ideas which have been held about the meaning of the word 'species', but there is little attempt to correlate past and present ideas about the meaning of this word. Fr Murray, however, does attempt to show that his criticisms of natural selection as a creative factor in evolution are bound up with the difficulty of evaluating a species, and he comes to the conclusion that a species can only be a *unit* in nature—a unit which can undergo minor changes but not any major structural alterations. His examples are mostly taken from orchids and the insect world. If he had given us a further account of what he considers this unit in nature to be, then his thesis would have had some lasting value. The species problem is still a problem. The author also seems to find a distinction between 'change' and 'evolution', while the latest historical study of evolution shows clearly that evolution is solely one aspect of change and therein lies its saving feature by giving it a direct connection with philosophy.

Unfortunately, too, this book is badly written. There are many mis-prints and mis-spellings, for instance, 'from' instead of 'form', or 'chitenous' instead of 'chitinous'. Many sentences are clumsily written and do not make sense, or only vaguely so. The arrangement of some sections is clumsy and haphazard. Most important of all, however, many quotations have no references, or if they have one, often the page number is not given. At least one quotation (from a writer whom Fr Murray apparently considers to be highly authoritative) is altered without any indication being given (see p. 43, a quotation of Clark, pp. 180-1). In another case Fr Murray gives a quotation from Alfred Noyes' *The Unknown God* covering twenty-three lines, where the

original text shows fifty-seven lines including a stanza of poetry. The reference page is given as p. 155, where my copy gives pp. 125-126. Besides this piecemeal condensation of Noyes' writings, in the quotation as given by Fr Murray there are at least thirty-nine mistakes. All this indicates some confusion which is reflected in the actual text of the book. Hence, but reluctantly, we cannot recommend this book in any respect. It would seem that the publisher's reader was not critical enough because the book obviously requires drastic editing and checking *in extenso*.

PHILIP G. FOTHERGILL

ENGLISH RELIGIOUS DRAMA OF THE MIDDLE AGES. By Hardin Craig. (Oxford University Press, Geoffrey Cumberlege; 42s.)

This repetitive and largely unoriginal book might have met the needs of serious students if it had been reduced to a third of the present length and price. Its author should have assumed, to begin with, that we know the work of Sir Edmund Chambers and those which have largely superseded it, notably the late Karl Young's austere and highly technical studies of drama in the Western liturgy. Had he acted on this assumption, and had he pointed out, once only, that we can fill the many gaps in the English evidence by consulting the histories and texts of medieval Continental drama, he could have started at what is now his page 150, where he first comes to grips with his subject as his title announces it. If he had spared us his elaborate examinations of matters which are neither controversial nor obscure, such as the dependence of the Chester Cycle upon French originals, and if he had left his *coda*, his story of the decline of the English miracles and mysteries, where he found it in H. C. Gardiner's *Mysteries' End*, his real matter, notably his discussion of the archetypal cycles, and his interesting if uneven account of the 'Coventry' or 'Hegge' plays, would have gained in significance. He might then also have found space and time to fulfil some of the promises of his portentously-announced 'Critical Approach to the Subject', to tell us, for example, what the guilds and their cities did in fact contribute to the plays which they performed. A worthwhile study of this field might take as its basis the development in the late Middle Ages of the Church's policy of giving the laity regular and organized religious instruction, and might compare such a preaching syllabus as Pecham's *Ignorantia Sacerdotum* with the mystery cycles. Or again, it might seek to solve the question of why the Latin plays were replaced by vernacular versions through studying recent investigations of the comparable problem presented by Latin texts of sermons manifestly addressed to the laity: and one would welcome some discussion of the economics of medieval dramatic production, using such material as the strange anecdote of how Chester petitioned Rome for an indulgence for those who visited its plays. But the present