Within its chosen limits, the book is excellent; terms are clearly defined, problems are confronted, experiments are critically analysed and, above all in this jargon-ridden field, it is readable.

G. G. HENSHAW
School of Biological Sciences, University of Bath

DARWINIAN IMPACTS: AN INTRODUCTION TO THE DARWINIAN REVOLUTION. D. R. Oldroyd. The Open University Press, Milton Keynes. 1980. Pp. xiv + 398. Price £7.95 (paperback).

There is now a vast literature on the life and work of Charles Darwin, on his predecessors in geology and biology and on his influence on his contemporaries as well as those who came after him. Much of the more recent literature is found in journals which are not easily accessible by the non-specialist. Yet hitherto there has been no book which attempts to deal with the Darwinian Revolution as a whole. The present book was written with the intention of filling this gap and the fact that it has been published in the U.K. by the Open University Press indicates that it is considered to be useful to students.

The book is divided into three main parts which deal with the antecedents of Darwinism, with Darwinism itself and with the cultural impact of Darwinism. The first part begins with a discussion of ideas about man's place in nature and taxonomy before Linnaeus and the doctrine of the Great Chain of Being. There then follows chapters on Linnaeus, Buffon, Lamarck, Cuvier, Lyell, Chambers, Paley and Malthus. In discussing these antecedents of Darwin, Dr. Oldroyd is careful to avoid a Whiggish interpretation of history for reasons that he gives in a useful appendix to the book which is devoted to a brief discussion of some historiographical considerations. The second part of the book begins with a brief account of Darwin's life and work, moves on to chapters on the "Origin", Wallace, the structure of the Darwin/Wallace theory and criticisms of the theory, Darwin's later work, Mendel and the synthetic theory of evolution and concludes with a chapter on Neo-Lamarckism. The last part of the book deals with the public reception of the "Origin", Herbert Spencer and Social Darwinism and with the influence of Darwinism on Politics, Theology, Philosophy, Psychology, Anthropology, Literature and Music.

As is clear from this brief description of its contents, the coverage of the subject in this book is very wide. Dr. Oldroyd writes in a simple and straightforward manner and deals with topics that are matters of dispute, on the whole, in a fair and balanced fashion. His chapter on the structure of the Darwin/Wallace theory is useful, particularly in view of the widespread misunderstanding about the nature of scientific theories that appears to exist in the minds of many when they argue that the Darwin/Wallace theory is wrong. Indeed, I would like to have seen a fuller treatment of this matter so as to include, for example, the point that Monod made in the Herbert Spencer lectures of 1973 that this theory requires both that the age of the Earth must be considerably greater than was thought to be the case in 1859 and that inheritance must be particulate, both of which, of course, were confirmed after the publication of the "Origin".

On the principle that every reviewer is allowed a quibble or two, it should be pointed out that the large-scale changes observed by de Vries in *Oenothera* were subsequently shown to be due to structural heterozygosity, rather than polyploidy (p. 167); that the mushrooms that grow under the author's house are a poor example of his suggestion that natural selection may not always accompany the struggle for existence and variation since they are a vegetative unit rather than a population (p. 119); and that not everybody would take the opinions of Messrs. Lewontin and Levins on the reason for the failure of agriculture in the U.S.S.R. very seriously. These are, however, minor blemishes in a good and very useful book, which I greatly enjoyed reading.

M. J. LAWRENCE
Department of Genetics, University of Birmingham