Book Reviews

ROBERT OLBY, *The path to the double helix*, London, Macmillan, 1974, 8vo., pp. xxiii, 510, illus., £12.50.

In view of the ever-increasing rapidity of scientific advances, the history of very recent science is becoming increasingly popular. It was shunned by earlier generations of historians of science who believed that the perspective of several decades was always necessary to assess events and individuals correctly. The modern worker, although admitting this, is also aware that a great deal of data available to him today may not be in twenty or thirty years' time. Thus the fact that men can discuss by interview their own researches and those of others adds a new dimension to historiography. Moreover, it is better by far to record now, with accurate scholarship, as much as possible concerning a revolutionary advance in science so that the information can be used by future historians in making a more balanced appraisal. How often have we said during our historical researches, "I wish someone at the time had written an account of this topic, it would be so much more accurate than having to piece the picture together from scattered shreds of unreliable evidence"? On the other hand, some may say that the meticulous assembling of facts is one of the fascinations of historical research, and the existence of voluminous documentation takes away the pleasure and challenge of the hunt.

Be this as it may, Dr. Olby has elected to compile a large and excellent book on an aspect of the very recent history of biology, molecular biology. He has used research reports, previously unpublished correspondence and oral history, in addition to the extensive literature in periodicals and books. The result is very different from Jim Watson's account, *The double helix,* for this was an autobiographical approach to the discovery of the structure of DNA and it was not meant to be historical *per se*. However the two works will complement each other, Watson's being put in perspective. Dr. Olby has done to Watson what future historians will do to Olby.

With immense scholarship and careful objectivity Dr. Olby has amassed his data in detail and divides his book into five sections: the first deals with work leading up to the concept of long-chain macromolecules; the second with nucleic acids and the nature of hereditary material; the third with bacterial transformation; the fourth with intellectual migrations and the consequent entry of the physicist and structural chemist into biology; finally, with the coming together of the several disciplines and the discovery of the molecular structure of DNA. In each of these parts the main contributors and their work are discussed, and the various research schools they established are described, thus providing a useful account of how science develops and functions, and of the influence of these groups. Documentation is extensive throughout and there is a large bibliography (pp. 445–496).

Parts of this book are somewhat technical, as is to be expected, but Dr. Olby carries his reader along with an attractive and lucid style. There is, however, a noticeable lack of critical discussion so that the reader must often make his own judgments. Nevertheless this book can be highly recommended as the first study of the ideas that culminated in one of science's major advances. It will be of interest to biologists and sociologists as well as to historians of the life sciences, and above all it will provide the future historian with a remarkable source-book of material.