

Biochimie. Edited by Francois Chapeville and Hubert Clauser. Pp. 872. (Hermann: Paris, 1974.) Fr. 178.00.

THE appearance of a comprehensive new textbook of biochemistry in French may well be met by English-speaking biochemists with an equanimity verging ever on indifference. For all that, it is an event of no little note, for creeping Americanisation has been threatening increasingly the character and individuality of European science. In most areas of research the European languages have been all but displaced by the new *lingua franca*. Very recently a discovery in a French laboratory was given wide publicity in the press, and *Le Monde* thought it worth remarking, in a tone of apparent asperity, that the work was being published in the American journal *Proceedings of the National Academy of Science of the U.S.A.* (rather, by implication, than in the corresponding French organ), and in French.

That this comment should ring so quaintly, shows how completely the realities of the situation, unpalatable as they may be, have been accepted by French (and no doubt other European) scientists in recent years. If English is the currency of research, however, it must nonetheless not be allowed to become the exclusive language of science. If French science is to preserve its own distinctive flavour and personality, matured through centuries of tradition and evolution, the language must be kept alive in the science faculties and textbooks. That in itself seems to me good reason to be grateful to the publishing house of Hermann, which has followed its admirable series of silver paperback monographs with a substantial new text, edited by Chapeville and Clauser and comprising separate contributions from 11 authors.

The publisher has secured a distinguished line-up of contributors, who have provided a well-balanced coverage. The book deals with bioenergetics, reaction mechanisms, proteins and amino acids, enzymes and catalysis, structure and metabolism of the saccharides, lipids and steroids, nucleotides and nucleic acids, intermediary metabolism, oxidation, phosphorylation, photosynthesis, biosynthesis of metabolites, and the chemistry of heredity. The treatment throughout is authoritative and clear. Some of the authors lean to a conservative view of what constitutes the established canon, and tend, therefore, to stress the classical rather than the topical.

The book is altogether not free from the inevitable drawbacks of multi-author treatises; in particular one

misses the unifying thread that a single author can at best impose by his view of the subject. There are also places in which the fields of interest do not interlock. For example, there is no mention of muscular contraction, chromatin, or nervous conduction, and the word rhodopsin is not in the index. But these lacunae are almost universal in the standard text-books in English, and I do not wish to cavil with what strikes me as a notable achievement. All of the authors have long teaching experience behind them, and many

French versions

generations of undergraduates and graduate students (myself included) have sat at the feet of most of them. They seem to me to have fulfilled their tasks admirably. And though it would be invidious to draw comparisons my personal choice for style and stimulus would be the chapters written by the two editors.

The book is attractively laid out in the modern style, with elegant typeface and attractive diagrams in pastel shades, which I hope will now generally supplant the rather stately and oppressive format, too often characteristic of scholarly works in European languages. I do not doubt that it will benefit French undergraduates, medical students and research workers for many years to come, and one may hope that translation may also render it ultimately accessible to English readers.

Anne d'Albis

Geologie de la France. Vols 1 and 2. By J. Debelman. Pp. 1-294, vol. 1; 295-539, vol. 2. (Doin Editeurs: Paris, 1974.) Fr75.00 each.

THIS book is a series of articles written by various specialists, each of them working on one of the natural geological regions of France. In the preface, Jacques Debelman, who dealt with the coordination of the various articles, states the ambitions and limitations of his undertaking: "... the problem is not only to give a perspective of the stratigraphy, and the tectonics of the various regions, ... but to link both, so that it is possible to recognise a structural evolution through a succession of features and, on the other hand, to use this evolution when it is known, for a better understanding of these features through time and space ...". There is another requirement, conciseness: "... it is a mainly didactic introduction to the geology of

France". This is not a treatise, but more a manual of regional geology for the use of students, which excludes numerous discussions and hypotheses, and long bibliographical lists.

The book is divided into two volumes. In the first, after a general introduction to the geology of France, the reader will find a description of the "Ancient massifs" — the Ardennes, Vosges, Armorican Massif and Massif Central—and a study of the vast sedimentary basins—the Paris Basin and the Aquitaine Basin—in which the pre-Mesozoic structure is depressed although the secondary and tertiary layers are only slightly deformed. In the second volume, there is a description of the folded ranges of the Alpine cycle: the Pyrenees, Provence, the Franco-Italian Alps, Jura, Corsica, Burgundy and the Rhone valley and Languedoc.

One is left with two impressions. First, the work has achieved part of its aims: because of its legibility, many illustrations, logical presentation, and also because of the care of the authors to reach the quintessence of their subjects, the book is both easy to read and interesting, and its success among students is assured. It is very convenient to have, assembled in one book, records of the large number of geological studies made in France since the last century.

The second impression which remained was of the disappointing lacunae within the book. All discussion of plate tectonics is set aside. Certainly the reader is made aware of this in the preface; but is it really defensible to omit a subject which has revolutionised earth sciences in the last few years? In addition, surface geology, easily observable, is highlighted at the expense of depth geology, which demands the indirect methods of geophysics; for example, no information is given on the thickness or structure of the crust. An analysis of seismology (which could have introduced a chapter on neotectonics), and of the interpretation of magnetic and gravimetric ideas, though essential to all structural studies, are missing. Finally, the presentation of the deep structural levels of the "Ancient massifs" does not pay enough attention to the recent results of microtectonics, the study of metamorphism (facies and facies series) and geochemistry of magmatic rocks.

This is an instructive and attractive book; but perhaps it will give students too incomplete a picture of the geology of France; and it may give foreign readers a false impression of French research in the earth sciences.

G. Boillot and R. Capdevila