

Archives de l'Institut de Paléontologie Humaine,  
Paris

Mémoire 28 : La Grotte de Fontéchevade. Première Partie : Historique, Fouilles, Stratigraphie, Archéologie. Par G. Henri-Martin. Pp. 288 + 10 planches. (Paris : Masson et Cie., 1957.)

**F**ONTÉCHEVADE is a Palaeolithic cave-site in the Charente department of France, where Mlle. Henri-Martin has been working for some years, and prehistorians have waited a long time for publication. This first 300-page volume deals with the history of the site, with the various digs which have taken place, with the stratigraphy of the section, and with a description of the industries unearthed from the various levels. This work worthily upholds the high standard we have learnt to expect from the volumes of the Archives de l'Institut de Paléontologie Humaine. Naturally the position of the human remains in the section is given, but no account of the remains themselves. Doubtless such an account has been reserved for a future specialist work. Several excavators have tried their hand at Fontéchevade, but it was only during more recent digs that it was realized that the apparent bottom was not the real rock base of the shelter, and so a whole new series of levels came to light. Industries belonging to two main cultures are present, Mousterian with Tayacian below. Over the Mousterian a little Upper Aurignacian was found.

A somewhat odd, very roughly made series of industries intercalated with the end phase of the Acheulean has long been recognized at La Micoque, and similar industries have been found in other places, notably at Tayac. But the Tayacian as a culture has always seemed somewhat elusive and the industries hard to describe or to compare with those of any other culture. But now at Fontéchevade two layers of Tayacian occur in stratigraphical sequence below two typical Mousterian levels, the lower one being early with some Acheulean tradition. Actually, the human remains come from one of the Tayacian levels and their date is therefore certain. No hearth or evidence of careful burial could be observed. The whole volume is important, but perhaps the chapter descriptive of the Tayacian industries can be especially mentioned. A large number of well-drawn illustrations in the text help the student to get an idea of what these industries are really like. There is also an interesting discussion of the use of bone by Tayacian man, and what sort of bone was preferred. The other cultures present have not been forgotten, and a detailed account of their industries duly appears. No prehistorian can afford to neglect this important contribution to our knowledge of prehistoric man.

M. C. BURKITT

### The Invertebrata

A Manual for the Use of Students. By the late L. A. Borradaile and F. A. Potts. With Chapters by Prof. L. E. S. Eastham and J. T. Saunders. Third edition revised by G. A. Kerkut. Pp. xvii + 795. (Cambridge : At the University Press, 1958.) 55s. net.

**T**HE appearance of a revised third edition of 'BEPS', as this manual on the Invertebrata is affectionately called by English-speaking zoologists, was awaited with great expectations. In the twenty-three years that have elapsed since the publication of the second edition, some of the more recent ideas on the phylogeny and classification of the Invertebrata have become more widely accepted, and other

well-established ones have had to be thrown into the melting pot in the light of new and sometimes startling discoveries which have recently enlivened the scene of invertebrate morphology.

In the new edition, note has been taken of this as well as of the necessity for quite a number of overdue improvements in text and illustrations. Of the seventy additional pages, twenty-three are devoted to a most welcome chapter on literature. There are certain gaps, but the selection of recommended reading matter represents a most useful guide to the student.

More than a hundred new illustrations have been added. Many are didactically well conceived, but quite a number of them suffer from an almost deliberate carelessness in execution, a fault that is frequently accentuated by a windblown alignment on the page. The insertion of labels on the text-figures scarcely ever interferes with clarity and does away with the tedium of deciphering abbreviations by means of lengthy legends.

The sections on the Nemertea, Nematoda, Araneida and Onychophora have been expanded, and the chapter on the Insecta has been completely rewritten by Prof. Eastham and supplemented with a number of useful new text-figures.

A book of this kind is bound to contain many half-truths and even outright mistakes, but to quote what, one hopes, may be an extreme case, the account of the Trematoda contains so great a number of inaccuracies as to make one question its usefulness to the undergraduate student. However, on the whole, the work bears witness to the revisers' sound judgment and didactic enthusiasm. They ought also to be congratulated on having successfully resisted the temptation to disrupt the morphological story unduly by insertion of specialized physiological, behavioural, and ecological information. Thus this great text-book was made to remain true to its original conception. There is a good index.

O. LOWENSTEIN

### Passive Network Synthesis

By Dr. James E. Storer. (McGraw-Hill Electrical and Electronic Engineering Series.) Pp. x + 319. (London : McGraw-Hill Publishing Company, Ltd., 1957.) 64s.

**T**HERE is, it would seem, almost a fashionable demand these days for books on network synthesis as distinct from analysis, for the reason, of course, that by comparison the latter has found much more ready authorship for decades past and, in consequence, is more deeply entrenched. Synthesis, however, is coming into its own, although its methods relate principally to the telecommunication class of networks.

In the present book the author provides a concise survey of the field of modern synthesis methods, each procedure being illustrated with numerical examples. The text is in four parts which relate respectively to impedance synthesis, network synthesis using image parameters, modern realization methods for two-terminal-pair networks, and rational-fraction approximations. Linear networks containing lumped elements only are covered, and for these the mathematics required does not exceed the standard of the operational methods commonly employed in network theory.

Having in mind the stated scope of the work, it is one that can well be recommended as an introduction to more advanced studies.

S. A. STIGANT