

Sherrington, as an "organ of liaison" with mind. The second principle, however, raises difficulties. Pavlov did not deny the existence of subjective states. Nor did he attempt to reduce them to nervous action. On the contrary he declared that "only one thing in life is of actual interest to us—our psychical experience", but its mechanism remains "wrapped in deep mystery". Psychical experience, he believed, can only be studied scientifically in terms of nervous activity. He denied that psychological phenomena may be studied directly. Indeed his conception of science rules this out.

The theory of conditioned reflexes relates, however, only to performance. What has it to tell us about the perception of form, our grasp of logical, linguistic or other mental structures, or about that most distinctive of human characteristics—understanding? A chimpanzee may be taught to use a typewriter and by chance, sooner or later, he may type a page of Shakespeare. But he would never understand what he had done. Pavlov's refusal to try to understand the mental patient's difficulties as they appear to him subjectively may explain a recent statement by Prof. Ivanov-Smolensky: "How hard," he said, "our psychiatrists find it to assimilate Pavlov's teaching."

Thus the choice that Pavlov offers to the psychologist is either to renounce the study of psychological phenomena or abandon Pavlov's conception of science.

JOHN COHEN

ANCIENT MAN

Finding Fossil Man

By Robin Place. Pp. 126+31 plates. (London: Rockliff Publishing Corporation, 1957.) 21s. net.

THIS book is intended primarily for secondary school pupils, as well as for students taking classes in further education. It is admirably suited to its purpose. Not only is it written in simple language and in an interesting manner but also the author is well qualified academically to undertake such a work.

Mankind in the animal setting is first discussed, and here the subject is lightened by a number of illustrations. The geological setting is next considered and there are interesting notes on what amphibians and early mammals contributed to man's bodily make-up. The earliest finds of true man then come under review, followed by an account of that queer sport of evolution—Neanderthal man. Then we come to the kind of man who could and has survived, the kind least specialized in its hard parts, *Homo sapiens*.

The work continues with an account of a number of well-known finds of human remains and how they were discovered. Finally, there is a chapter linking up prehistoric finds with the earliest civilizations.

Altogether the book is well worthy of study by heads of schools, whether grammar or secondary modern. In these days of more pay for less work it is high time we offered our children some interesting intellectual hobbies, which, should they attract, will be a joy to them throughout their lives. This book only deals with the foundations of the subject of man himself; we can hope that a sequel will continue the story of his early cultures, tools, and way of life.

M. C. BURKITT

NOXIOUS AND OBNOXIOUS INSECTS OF THE PACIFIC

History of Entomology in World War II

By Emory C. Cushing. Pp. vi+117+9 plates. (Washington, D.C.: Smithsonian Institution, 1957.) n.p.

Insects of Micronesia

Volume 12, Number 1. Diptera, Culicidae. By Richard M. Bohart. Pp. iv+85. (Honolulu: Bernice P. Bishop Museum, 1957.) 1.75 dollars.

THE first of these books is a popular account, not to be taken quite so seriously as its title suggests. It offers, however, some food for thought. In a fascinating introductory chapter we are presented with such curiosities as the primordial "ooze of a nebular universe", Hannibal "stymied in Syracuse", poetic alliteration, "by the inroads of malaria" and the modern Scythians and Peruvians who "still search for a living morsel of protein and vitamin in the head hairs of their young". Progress, it seems, pursues devious paths, a fact not always appreciated across the Atlantic. So it proves, for in the ensuing chapters we are treated to the spectacle of man endeavouring to exterminate himself while at the same time perfecting, under the spur of military exigency, drugs and insecticides which in a short time will save millions of lives. The tone throughout is eupeptic. Insecticide resistance, a post-war phenomenon in the medical field, is nowhere mentioned. "Many living Americans remember the day when the most expedient method of ridding the home of houseflies was for each member of the family to take a cloth and wave it frantically, converge on a convenient door, and with one concerted rush 'shoo' out the flies. That day is gone for ever." Is it? The price is still eternal vigilance.

It is perhaps unkind to both to couple the second work with the first, but they have a common origin in the enlightened and liberal attitude to entomological research adopted by the United States Armed Forces both during and after the Second World War. This is something which it is always a pleasure to acknowledge. Almost the whole of the available information about Micronesian mosquitoes has been published since 1938 and the bulk of it since 1945. Nor is the present monograph merely a review of past work. On the contrary, it contains much that is new and affords welcome evidence of continuing effort in the area concerned. As a specialist monograph it invites little criticism. The general discussions are interesting but savour a little of parochialism. Thus the point is well made that in most parts of the tropics container habitats are used more extensively than in the temperate zones. This is interesting and could well have been pursued further. It seems to be less true of continental Africa than other parts of the tropics, a point which might not be wholly devoid of practical significance since we are told that the predaeous African mosquito *Toxorhynchites brevipalpis* Theo. has recently been introduced into Truk and Guam in the hope that it will prey on other container breeders. There is news also of the (unpremeditated) introduction of an *Anopheles* breeding in ground pools from the Philippines into Guam, the first Micronesian record of this genus. This is a notable contribution to mosquito literature and should be in the possession of all who are interested in the group.

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