## **Book Reviews**

## IDEAS FOR ARCHAEOLOGISTS

Analytical Archaeology
By David L. Clarke. Pp. xx+684. (Methuen: London, October 1968.) 147s.

ARCHAEOLOGY has reached a most exciting stage of development; contacts with other disciplines, especially with the physical and biological sciences, have been increasing steadily and the whole conceptual framework of the subject has expanded as a result. Mathematics and statistics are at last beginning to add their weight to this liberating process, so that archaeology is developing into a real discipline where statements may be validated and not simply pronounced. It is still possible to read despairing pleas for the good old archaeological days in the popular press, but this book appears at a time when most professional archaeologists have welcomed the need for a fresh, objective approach to their subject, and when they are seriously trying to find the best methods to achieve this. Analytical Archaeology airs many of the possible approaches that are being intensively debated, especially by archaeologists in the United States-mathematical and statistical procedures backed up by the high-speed computer, models taken from machine systems theory which may suggest fruitful ways to interpret past societies, techniques for studying spatial distributions that are being developed by geographers. Clarke has read widely in these fields and draws on them to elaborate a hypothetical system of "central archaeological theory". He does not pretend that this system as a whole or even that parts of it are definitive in any way, but it is his chosen way of linking a wide range of speculations into a connected account. Some aspects of the construct are less speculative than others—quantification of archaeological data and their analysis by numerical techniques are of established practical value, and Clarke describes some published analyses of this type where convincing results have been achieved with actual material. these methods are not described in sufficient detail for the text to serve as a practical handbook, and although references to some standard multivariate techniques like principal components are misleading, a good idea is given of the general scope of these procedures.

The greater part of this long book, however, is more speculative. Its starting point is the claim that "archaeologists do not agree upon central theory although they employ similar tacit models and procedures based upon similar and distinctive entities". Much of the book attempts to make more explicit such "models, procedures and entities" as Clarke currently sees them. Previous writers on method, like V. G. Childe, and many contemporary archaeologists prefer to regard "central theory" in archaeology as fairly concise and basic, little more in fact than a few general assumptions like "patterns in archaeological data reflect patterns in the societies and processes that produced them". This particular general principle is then applied at the specific level by searching for and interpreting patterns in artefacts and in assemblages. Clarke proposes, first, to replace the generalized pattern concepts of type and culture by arbitrary, discrete levels of them (for example, subculture, culture, culture group, techno-complex), although this sacrifices the generality of the basic concept. Second, he seems to advocate studying patterns or structure in archaeological material by referring directly to a series of predetermined general models of human behaviour, rather than by exploring the data by more general structure-seeking techniques: "It is not so much a search for regularities in our data as the deliberate organisation of our data into powerful regularities" (page 637). This is a rather dangerous approach for a subject like archaeology where one of the great failures of its practitioners recently has been the overspecific interpretation of non-specific data. Clarke's own practical examples are not very reassuring in this respect. For example, he has used the famous Robinson seriation model to analyse attributes of British beakers. The data turn out not to fit this model (Fig. 127b), but the procedure seems nevertheless to be used to provide a seriation and clustering of beakers.

It is clearly not the purpose of this book, however, to provide a practical manual but rather a storehouse of ideas, and as such it is of great interest.

F. R. Hodson

## UPLAND REVOLUTION

The Inviolable Hills

The Ecology, Conservation and Regeneration of the British Uplands. By Robert A. de J. Hart. Pp. xix + 244 + 8 plates. (Stuart and Watkins, in conjunction with the Soil Association: London, October 1968.) 42s 6d.

MR HART has a message, important for all of us, which becomes more relevant as years go by. Unfortunately it is so obscured by mysticism and non-science that it may not get through to the people who need to receive it. The book has many irrelevancies and is too repetitive. A shorter, crisper book would have had much more impact. He will be dismissed by many as a crank, and this is a pity, because behind the folksiness there is much good sense.

Hart's case rests on two premises: that this country will be forced increasingly on to its own resources in food production as the demands of increasing world population become more urgent, and that the British uplands constitute a misused or unused land resource of tremendous potential. One cannot disagree with these premises. Further, he argues that agricultural development of our uplands by the ecologically most meaningful methods will enhance their appearance as well as their productivity. For much of our upland country, turned into unproductive desert by generations of overgrazing by sheep, this is true. The creation of shelter belts, forests for water conservation, and productive agricultural land could well enhance the beauty of much (but certainly not all) of our upland country, and by increasing its variety would almost certainly produce greater floristic and faunistic variety as well, particularly if Hart's advocacy of "organic husbandry" is followed, with its firm eschewal of the use of artificial fertilizers, herbicides and insecticides.

The first section of this rather expensive book deals with the history of our uplands and their steady impoverishment. Next comes a section entitled "The Conservational Imperative", a brief summary of the ideas of some leading conservationists ranging from Aldo Leopold to Sir Arthur Tansley, and of those he calls "writer prophets" such as D. H. Lawrence and H. J. Massingham. Part three, "Ecology, Wholeness and Health", is an extraordinary mixture of science, pseudoscience, mysticism and mumbo-jumbo, which does his case more harm than good. Finally, in his "design for the hills" he makes some suggestions as to how Britain could increase the productivity of the uplands.

While Hart is practical in realizing the need to increase home food production, he is an idealist concerning the upland revolution that he advocates. The time may come, sooner or later, when it is economically possible or