
 B O O K R E V I E W S

ROBERT WHALLON and JAMES A. BROWN (EDS), Essays on Archaeological Typology. Center for American Archaeology Press, Evanston, Illinois, 1982. 200pp. \$33.50 (Hard) ISBN 0-942118-14-6.

Reviewed by G.L. Barnes

The view of a type as a class of items:

related to each other by their similarity and separated...by their dissimilarity ... corresponds well, in my experience, with types as used and defined in European archaeology.

With this statement, Hodson (p. 23) distinguishes European efforts at taxonomic typology -- based on the arrangement and classification of items -- as diametrically opposed to typological activities in America, where Alex Krieger in 1944 first formalized the paradigmatic approach to typology using associations between attributes for defining types.

This issue, concerning the units of classificatory procedures, is only one of several important issues raised in this new volume, which grew out of a series of closed-session seminars held on 'brilliant autumn days' in 1975 and 1977 in Kampsville, Illinois. The purpose of the seminars was to bring together a group of scholars who could confer openly and thoroughly on matters of typological procedure. Formerly thought to be self-evident, typological procedure is now recognized to be incredibly variable, each variant needing justification in terms of the function and goals of typologies, the structure of the data and the need to expose it, and the

methods by which this can be accomplished. The seminars were to provide a forum for establishing a consensus on typological procedure, but in fact, consensus was obtained only on one issue: that the act of classification should be designed to recognize and elucidate natural structure in the data, and typologies should not be artificial impositions of structure onto the data. In all other areas of inquiry, there was tremendous diversity of opinion, as concerning the units of typologies mentioned above; and this volume serves to illustrate and document state-of-the-art thinking about typologizing. As such, the volume is relatively lacking in historical perspective. Only quick reference is made back to seminal works, for example, Krieger (1944), Spaulding (1953) and Whallon (1972); and certainly no explicit discussion is contained in this volume on the development of the type-variety methods or the Ford-Spaulding debate over the reality or artificiality of types. This is refreshing in its own way, if the 'commitment to typology as the search for structure' (Brown, p. 76) is seen as a resolution of the latter debate in favour of the reality of types.

Other important lessons gleaned from this volume include a necessary flexibility in approaching different kinds of data and increasing emphasis on proper data screening before (or even in place of) the application of sophisticated analytical techniques. As regards the former, several authors (e.g. Hodson, Whallon) illustrated that object-clustering and attribute-association techniques are complementary. Some data sets may respond to one's technique more fruitfully than ano-

ther; and it is one task to choose whichever is more productive, rather than asserting dogmatically that there is only one way to do 'proper' typology. Regarding the latter, there is a feeling that numerical procedures are still too 'simple-minded' to do justice to the 'full reality of archaeological problems and data' (Hodson, p. 28), and that 'before such complex analytical techniques, with their extensive in manipulations of the data and their many implicit prerequisites and assumptions, are called into play, it may be advisable to see how far we can get with simple methods of data screening and manipulation' (Whallon, p. 139). The presentation of multilinear distributions or clusterings in scatterplots (by Whallon Fig. 6.12 and Cowgill Fig. 3.9), which are entirely missed in principal components or factor analysis, argues strongly for preliminary data screening with simple descriptive statistics.

One issue unresolved in the volume is how we should proceed in handling nominal and interval data. Nominal data (documented as presence/absence or mutually exclusive properties) seem to be most easily handled within attribute association analysis. Spaulding argues, because of his vested interests in this kind of analysis, that interval and ratio scales (e.g. length) can and should be converted to nominal scales (long, short) using modality in univariate data. Cowgill, however, argues that modality often does not appear in univariate data, only when bivariate distributions are investigated. By prematurely converting univariate ordinal scales to nominal scales, one would preclude investigation into bivariate modality.

Finally, I am surprised at the small amount of space devoted to comparison of the relative merits, in typology of polythetic agglomerative strategies (cluster analy-

sis) versus monothetic divisive strategies (tree-type keys). After the exposure by Whallon in 1972 of the nature of intuitive typologies as following the latter rather than the former strategy, I expected its advantages and disadvantages to be more thoroughly inspected. Monothetic-divisive has worked well in my own research together with Whallon's ratio approach to constructing vessel-shape types -- a very welcome inclusion here.

This volume is a necessary reference for anyone who constructs or employs typologies in pursuing questions on the operation and development of past societies -- i.e. all of us. We can no longer believe the issues of typology to be 'natural' or 'innate' in our investigations. We must make conscious choices and/or justifications of what strategies we use for which purposes. Attempting to do so, however, promises to be chaotic until agreement can be had concerning the terminology of variables, value, and attribute. A major cause of despair in the volume is that some authors use attribute to mean the value of any variable, whether continuous or nominal, while others reserve its use to mean discrete or nominal variables only. Not only does this result in the terminological confusion that pervades the literature on typology, it also masks the question whether (continuous) variables and (nominal) attributes can be utilized equivalently and within the same analysis or whether they require different methods.

Volume Contents

- A.C. Spaulding, Structure in archaeological data: nominal variables.
- F.R. Hodson, Some aspects of archaeological classification.
- G.L. Cowgill, Clusters of objects and associations between variables: two approaches to archaeological classification.

- D.W. Read, Toward a theory of archaeological classification.
- A. Voorrips, Mambrino's helmet: a framework for structuring archaeological data.
- R. Whallon, Variables and dimensions: the critical step quantitative typology.
- R.K. Vierra, Typology, classification, and theory building.
- J.A. Brown, On the structure of artifact typologies.

References

- Krieger, Alex D. 1944. The typological method. American Antiquity 9, 271-88.
- Spaulding, A.C. 1953. Statistical techniques for the discovery of artifact types. American Antiquity 18, 305-13.
- Whallon, R. 1972. A new approach to pottery typology. American Antiquity 37, 13-33.

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RICHARD BRADLEY, The Social Foundations of Prehistoric Britain: Themes and variations in the archaeology of power. Longman, London, 1984. 195 pp. £6.95 (Soft) ISBN 0-582-49164-9.

Reviewed by Simon Buteux.

This volume, in the new Longman Archaeology Series, represents a significant departure in both subject matter and approach from Bradley's earlier book, The Prehistoric Settlement of Britain (1978). It is altogether a more satisfactory and readable book, and indeed, six years on, it is also cheaper (but available in paperback only).

The book is about social organisation and social change in prehistoric Britain, and covers the period from the beginning of the Neolithic to the Roman Conquest. The structure is broadly chronological, but the whole is given unity by a central concern with the de-

velopment, maintenance and expression of power. In no way can the book be considered (nor is it intended to be) a survey of British prehistory. It is an essay in interpretation, and as such, requires familiarity with the basic material. The figures, with the rather odd exception of an illustration of conjoined huts at Pilsdon Pen, are confined to maps or diagrams of various sorts.

The introductory chapter, 'Oaths of Service', stresses both the possibility of, and need for, a social archaeology, and Bradley takes issue with some of the pessimists on this score. By singling out for criticism two articles written as long ago as the mid-fifties Bradley is describing battles already fought, rather than contributing many original thoughts. If anybody is to change sides now, it will rather be as a result of the substantive content of his book. Subsequent chapters deal with particular time periods and lay stress on particular approaches or interpretive models. Thus, chapter 2, 'Constructions of the Dead' deals with earlier Neolithic society between about 3500 and 2500 BC, and is primarily concerned with, on an empirical level, long barrows and cairns and, on a theoretical level, with the exploitation of ancestry. Chapter 3, 'Weapons of Exclusion', covers the later Neolithic period, from c. 2700 to 2000 BC, and is focussed primarily on the production and exchange of prestige objects; the development of long-range interaction; and what might be termed the 'Grooved Ware problem'. Chapter 4, 'Unnecessary Pyramids', although dealing with the period 2000 to 1300 BC, is in some respects complementary to chapter 3. Attention is focussed on the role of public monuments and elaborate burial practises. Chapter 5, 'The Embarrassment of Riches', is again concerned with prestige objects, but, in contrast to chapter 3, lays