

The "new archaeology" from an old perspective: an appraisal of current trends in archaeology

Archaeology today would appear to be in a state of ferment: important new journals are being published⁽¹⁾, new societies founded⁽²⁾ and, above all, major contributions to archaeological theory have made their appearance⁽³⁾. In view of this flurry of new activity, it may be far too early to perceive the directions in which archaeology will go in the next decade. However, since the field of archaeology is expanding its frontiers, it is not inap-

propriate to consider whether we are expanding the wrong frontier or neglecting areas that are critical to the foundations of the discipline for it may still be possible to influence the direction of change. The basic thesis of this article is that in a thrust toward novelty we are in danger of neglecting the kind of ecological studies essential to the discipline as well as the recognition that archaeology is above all a multidisciplinary study. It will be evident that

the perspective of the article is quite provincial and largely directed toward North American archaeology.

Having stated the essentially simple thesis, it is now necessary to introduce some complexity into the argument. The very term archaeology requires some clarification. Grahame Clark, one of the foremost practitioners of archaeology today, tells us that "Archaeology is often defined as the study of antiquities. A better definition would be that it is the study of how men lived in the past" (Clark, 1947, p. 1). Those with a more meticulous concern for definitions might argue that the first sentence characterizes archaeology, while the second is a statement of one of the aims of archaeology. There is an advantage in distinguishing between a statement which characterizes the kinds of materials studied or the methods employed to study the materials, from one directed toward the ultimate objective of the study. If this is done, variation in either class in the dichotomy can be used to formulate subdivisions within the field. So far as Clark's definition is concerned, unless we are dealing with the classical archaeologist, in a North American context there would be a tendency to substitute the word "artifacts" for "antiquities" which would recognize the relationship of archaeology to anthropological studies (cf. Clarke, 1968, p. 13 for a similar statement by an English

practitioner). Realizing that there are many definitions that are nuances on this basic theme, and that there is a wide range of expressed aims, the central focus upon artifacts or antiquities will certainly be the core of the commoner definitions of the field. If we accept such a viewpoint, it will clearly establish limits as to what the archaeologist may properly concern himself with as archaeologist. Thus a scholar such as Dr. L. S. B. Leakey in his investigations of the Australopithecines in East Africa would perhaps be regarded as operating as an archaeologist in his study of the living floors of these creatures when they manufactured tools, but is he simply a paleontologist when he uncovers a pre-tool stage of this same creature? Or is it inappropriate for the archaeologist to also study the animal bones recovered in the same midden with his artifacts, for being non-artifactual they obviously fall in the province of the zoologist? We may be certain that a Leakey is not going to be deterred from following his problem to a logical conclusion no matter what his activity might be labeled and thus we could be here accused of raising an academic question of no real relevance to the working archaeologist. But while the label will make no difference when a qualified investigator is following the ramifications of a particular investigation, it can make a very real difference in

an academic institution when establishing a curriculum to train students to practice archaeology. Are they simply to be trained to investigate the ramifications of artifact analysis, or something broader than this? The label may also make a difference in terms of foundations and other institutions granting funds for research purposes. After all, each proposal must go to its proper pigeonhole.

One may argue then that far preferable to this restrictive approach to the nature of archaeology is a statement by V. Gordon Childe:

"...an archaeologist studies and tries to reconstruct the process that has created the human world in which we live — and us ourselves in so far as we are each creatures of our age and social environment. Archaeological data are all changes in the material world resulting from human action or, more succinctly, the fossilized results of human behaviour". (Childe, 1956, p. 9).

The obvious merit of this statements is that one does not immediately canalize all archaeological attention into the study of artifacts. Man's impact upon the world in which he lives becomes not only useful data for the archaeologist but also one of the aims of his study. Since the balance of V. G. Childe's little book, *A Short Introduction to Archaeology*, from which this definition is derived is largely devoted to a discussion of artifacts, it might

be questioned whether we are not reading more into these few sentences than Childe intended. He does, however, comment on the value of things that are not artifacts:

"The deforestation of Southwestern Asia and the conversion of the prairies of Oklahoma into a dust-bowl are results of human action. Both are historically significant events and by definition archaeological data" (op. cit.: 11-12).

This view, then, sees archaeology as concerned with man as a culture-producing animal, with the consequences of cultural activities on the environment and with the impact of the environment, whether altered or not, upon man. The archaeologist is thus a paleoecologist, but a paleoecologist who always has man as one element in his equation. We shall accept this perspective of the nature of archaeology and it is the implications of this point of view that form the point of departure for a critique of recent trends.

The emergence of a self-styled "New Archaeology" in North America coincides in time with a vocal and critical movement by young archaeologists in Europe. Since it coincides in time with an even broader protest movement, it is tempting to view the emergence of a "New Archaeology" as the subversion of an intellectual field by the widespread and essentially anti-intellectual conflict between generations so prevalent today, but the phenomena

are essentially not related. It is tempting, for such a facile explanation would then resolve our own intellectual doubts and eliminate the necessity of attempting to understand the deadening jargon in which much of the new work is couched. But like the emergence of the "New Physical Anthropology" some twenty-five years ago, the present concern with the character of archaeological research would seem to represent a stage in the evolution of the discipline. It is characterized by a shift in problem orientation and the development of analytical techniques appropriate to the new problems. It is also inappropriate as a response to point out that the prototypes of these new developments are old, for the present shift is a massive one. Yet it is an evolution from multiple older trends and we should abandon any tendency to label the developments as though they represented a school or coherent body of theory. Still, to facilitate exposition it is useful to group these new developments as though they did reflect a unified approach.

A convenient point of departure for an assessment of the nature of the new developments in archaeology is the volume of essays, *New Perspectives in Archaeology* (Binford & Binford, 1968). In particular, the introductory essay by Lewis R. Binford, "Archeological Perspectives" (op. cit.: 5-32) attempts to concisely characterize the aims of archaeology and to in-

dicade how the new differ from the older version. He indicates, and I assume he is speaking for the North American archaeologist, that there is general acceptance of three aims of archaeology⁽¹⁾ the reconstruction of culture history; ⁽²⁾ the reconstruction of past lifeways; and ⁽³⁾ the study of cultural process. While Binford as well as the other authors represented in the volume offer numerous, skilful examples of the manner in which each of these operations might be improved, the major concern of the new archaeology is clearly in the latter category and with the revisions in method and theory by which all of the aims might be more adequately pursued. L. R. Binford, in particular, reflects an unlimited optimism in regard to the degree and extent to which all aspects of a cultural system can be revealed by archaeological research. And through this reconstruction of the past, we are lead to a position where the "... ultimate goal is the formulation of laws of cultural dynamics" (op. cit.: 27).

It is not my objective to take issue with either the methods or the theories proposed in this group of imaginative and welcome studies or, indeed, in others of the same genre. Yet it is appropriate to question whether the evolution of archaeology as a discipline will or should take the form which they envision. The scholars represented in this particular volume were all trained as anthropo-

logists and the papers included were in nearly every instance presented at a meeting of the American Anthropological Association. It is thus understandable that the ultimate goal of these investigations is envisioned as the formulation of the laws of *cultural dynamics*. As an archaeologist who was also trained as an anthropologist, I agree that this is a worthy aim but I would submit that it is an aim which grows out of their membership in a body of professional anthropologists and not from their role as an archaeologist. Or if this seems to be too arbitrary a dictum, then I would argue that there is a place for a special kind of archaeologist, an anthropological archaeologist if you will, whose special aim is the formulation of the laws of cultural dynamics. But for archaeology as an overarching discipline, there is a much broader aim of an ecological character as has been stressed earlier in the definition of the field which has seemed most satisfactory.

A notable feature of modern archaeological research is the remarkable extent to which a variety of disciplines are being drawn upon to provide data for archaeological interpretation. The perspective we have been advocating is not the precision added by new analytical techniques in chemistry, metallurgy or similar approaches, but the dimensions of understanding provided by palynology, seed analysis, molluscan studies, ped-

ology and other disciplines of an environmental character. Here indeed is nothing new, for the importance of cooperation with other scientific disciplines was recognized quite early in archaeological studies. The change is both a qualitative and quantitative one and the development has gone a great distance from the time when simple and gross faunal studies were seen as the critical need beyond the study of the artifacts recovered. It is now not a question that one must admire those occasional broadly staffed expeditions where a variety of disciplines are involved, but whether we will soon reach a point where the field expedition which neglects to consider such a host of potential approaches is not regarded as engaging in site vandalism.

It is of course easy to say that every archaeological investigation should include in its program of work provision for the analysis of mammal, bird, reptile and fish bones, seeds and other plant materials, pedological studies including facets of soil genesis that might throw light on the conditions under which the soil was formed, molluscan analysis and examination of the soil for the presence of pollen and phytoliths. Doubtless some approaches have been overlooked in this inventory and new ones will surely develop. As was indicated above, it is easy to say these aspects should be included

and no archaeologist is going to say he does not want to have them done if a competent individual indicates a desire to do them. But as a practical problem, every archaeologist has doubtless experienced difficulty in getting even the most elementary faunal identifications for his excavated material. Is it not then absurd to maintain that this host of specialists should be involved in archaeological field excavations today? It is indeed impractical today but we have been attempting to see the frontiers and look into the future in terms of where archaeology needs strengthening or developing. If a multidisciplinary approach is indeed essential for the productive development of archaeology, the training of a new kind of archaeologist and the reorganization and development of our institutions needs to begin now.

The problem of how best to deal with the study of non-artifactual materials is not a new one. The most recent occasion when a concerted attempt was made to tackle the problem in North America was at a conference held in 1956 by the Committee on Archaeological Identification, Division of Anthropology and Psychology, National Academy of Sciences — National Research Council. Brief digests of the papers presented were published the following year under the title, *The Identification of Nonartifactual*

Archaeological Materials, W. W. Taylor Editor, as Publication 565 of the National Academy of Sciences — National Research Council. Lest the title create the impression that here we have a guide to the identification of non-artifactual materials, it should be emphasized that the papers by the archaeologists are largely an expression of the need for assistance in this area as well as an evaluation of the manner in which these have been met in some institutions, while the papers by the specialists in other fields frequently stress the difficulty involved in having the identifications made. In the resolution that was the formal outcome of the conference it was stated that "...it has become increasingly apparent that the most satisfactory solutions of problems facing those concerned with Man and his environment, both natural and cultural, call for increased emphasis on interdisciplinary collaboration" (Taylor 1957: 64).

This, they indicated, could be best achieved by:

"1) the encouragement of regional centers based at institutions where interest in such problems exists or can be fostered,

"2) the encouragement of individual investigators interested in contributing to the solution of such problems,

"3) the encouragement of specialized research programs and organizations which can

assist in the solution of such problems,

"4) the organization of interdisciplinary seminars, handbooks, and other means of communication among interested parties,

"5) the encouragement of general interest in the problems of interdisciplinary collaboration." (ibid)

The seed planted by this conference has been exceedingly slow in sprouting, but there are signs of growth at the present time. Professor James B. Griffin of the University of Michigan, one of the participants in the conference, stressed the fact that one of the best suggestions to emerge involved improving the professional training of the archaeologist in our universities. He argued that some part of our difficulty in integrating archaeology with other disciplines was that the training of the archaeologists emphasized the data, methods and techniques of the social sciences and humanities while what was needed was greater exposure to the natural sciences (Taylor 1957: 59-60). It should be noted that two of the distinguished doctoral dissertations prepared in recent years under the supervision of Professor Griffin reflect precisely this sort of training. These studies ("Aboriginal Relationships Between Culture and Plant Life in the Upper Lakes Region," by Richard Asa Yarnell, 1964; and "The Prehistoric Animal Ecology and Ethnozoology

of the Upper Great Lakes Region," by Charles E. Cleland, 1966) are but examples of a sustained interest in paleoecology at this institution. Beyond this, we have seen the establishment or improvement of a number of regional centers in various institutions as was also recommended by the conference. In the area of handbooks, two important contributions have been prepared by Stanley J. Olsen (1960, 1964).

But at best, while progress is being made it is still exceedingly slow. Perhaps this is in part but a reflection of the character of the work which does require a very considerable investment of time, but it may also indicate that other solutions are needed. Dr. Volney H. Jones, an ethnobotanist at the University of Michigan, had an interesting comment at the same conference we have been just discussing:

"Archaeologists have pre-empted the right to the excavation of sites in which there is a cultural record and have developed techniques appropriate to this purpose. Their techniques may or may not suffice for the recovery of the non-cultural materials and data. I would maintain that the other disciplines concerned have equal right of access to the things applying to their fields. I would argue that, in a site where the biological materials exceed the cultural ones, that it would be entirely justifiable

for a biologist to excavate the site and to send the artifacts as a handout to the archaeologists for report. In any event, it is apparent that to serve the purposes and to protect the rights of all concerned, there should be the highest degree of cooperation and communication through the period of destruction of the site and the record which it contains and through the laboratory and report stages as well." (Taylor 1957: 37-38). Is this perhaps an indication of the direction in which we must proceed? Is it not critical that the anthropologically trained archaeologists give up the monopoly they have maintained on excavations and encourage fuller participation by specialists in other disciplines? One can not get full cooperation from botanists, zoologists, etc., if these scholars are simply handed specimens for study from one's excavations. Should they not be encouraged to be full-fledged participants in the complete cycle of archaeological investigation? Archaeology should be recognized, then, as truly a multidisciplinary study requiring the cooperation and participation of a wide spectrum of scholars.

In the preceding pages we have argued that the increasing specialization in the cultural aspects of archaeology and the elaboration of cultural theory which is characteristic of new trends in archaeology is but one frontier that requires expan-

sion. It has been suggested that it is of greater importance to expand an older sector, the analysis of non-artifactual materials so that sounder and more wide-ranging paleoecological interpretations can be made. No single approach can bring about this latter objective. Not only must we broaden the training of archaeologists but we must also recognize that this objective can not be attained unless we perceive archaeology to be a multidisciplinary study and accord the various approaches equal status to encourage wider participation in the full spectrum of archaeological activities.

Archaeologists such as Jacques Hawkes who have stressed the humanistic aspects of archaeology which may be seen clearly stated in her 1968 article in the British journal *Antiquity*, may see such a trend as justifying all their concerns about the future development of the discipline. But this may be a failure to appreciate that in the broad interplay between man and nature we can indeed attain a true historical synthesis. The opposition of a humanistic approach to a scientific one has grown through a focus of attention upon the means rather than the goals. The recognition of archaeology as a study as multi-faceted as man himself, entails a recognition that it can not be primarily a study of artifacts but a study of man in

the totality of his relationships with his environment. The complexity of these relationships, many of which man himself has been unaware, demands a multidisciplinary approach.

DAVID A. BAERREIS

¹ Limiting this account to the highlights of the last five years, among the new journals should be mentioned *Historical Archaeology*, published by the Society for Historical Archaeology, v. 1 appearing in 1967; and *World Archaeology*, published by Routledge & Kegan Paul, v. 1, n. 1 appearing in June, 1969. The editor of *Antiquity* in the March, 1969 issue (p. 3-5) called attention to seven new journals which came to his attention during the preceding quarter.

² The establishment of the Society for Historical Archaeology is noted in conjunction with the mention of its journal above. In a recent editorial (*Historical Archaeology*, 3: 1-2) the president of the Society, John H. Rick, also calls attention to the multidisciplinary character of archaeological work.

³ While other specific studies are mentioned in the text, what are perhaps the two most important publications of the past few years are: Clark, David L. *Analytical Archaeology*; and Binford & Binford, ed. *New Perspectives in Archaeology*.

BIBLIOGRAPHY

- BINFORD, Sally R. & BINFORD, Lewis R., ed. *New Perspectives in Archaeology*. Chicago, Aldine Pub. Co., 1968.
- CHILDE, V. G. *A Short Introduction to Archaeology*. London, Frederick Muller, 1956.
- CLARK, Grahame. *Archaeology and Society*. 2nd. ed. rev. London, Methuen, 1947.
- CLARKE, David L. *Analytical Archaeology*. London, Methuen, 1968.
- CLELAND, Charles Edward. *The Prehistoric Animal Ecology and Ethnology of the Upper Great Lakes Region*. Ann Arbor, University of Michigan, Museum of Anthropology, 1966. (Anthropological Papers, 29).
- HAWKES, Jacquetta. The Proper Study of Mankind. *Antiquity*. Berkshire, 42 (168): 255-62.
- OLSEN, Stanley J. *Post-Cranial Skeletal Characters of 'Bison' and 'Bos'*. Cambridge, Harvard University, Peabody Museum of Archaeology and Ethnology, 1960. (Papers, v. 35, n. 4).
- . *Mammal Remains from Archaeological Sites; southeastern and southwestern United States*. Cambridge, Harvard University, Peabody Museum of Archaeology and Ethnology, 1964. (Papers, v. 56, n. 1).
- RICK, John H. Man and Superman. *Historical Archaeology*. 3 : 1-2, 1969.

- TAYLOR, Walter W., ed. *The Identification of Non-Artifactual Archaeological Materials*. Washington, D.C., National Academy of Sciences, 1957. (Pub. 565).
- YARNELL, Richard Asa. *Aboriginal Relationships between Culture and Plant Life in the Upper Great Lakes Region*. Ann Arbor, University of Michigan, Museum of Anthropology, 1964. (Anthropological Papers, 23).