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Current Trends in Method and Theory of Ethnoarchaeological Research in Africa

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Ref:

CURRENT TRENDS IN METHOD AND THEORY OF ETHNOARCHAEOLOGICAL
RESEARCH IN AFRICA

EMMANUEL KOFI AGORSAH

"We are now seeking to interpret the archaeological living sites in terms of the products of natural phenomena and the human activities that can be seen taking place today. To someone who is not a prehistorian it may seem surprising that it should be necessary to stress this. Geologists have used the present to interpret the past ever since the days of Sir Charles Lyell. But in the early years of the century the naive and indiscriminate use made by archaeologists of ethnographic analogy provoked such intense reaction that it is only recently that prehistorians have more generally again turned to using the evidence from ethnography, - this time systematically and with much more rewarding results." Desmond Clark (1981) made this statement in his lecture which was the seventeenth in the Raymond Dart Lecture series instituted and organised by the Institute for the Study of man in Africa, Witwatersrand University. Although this statement presents a summarized picture of the situation I find it too consoling. It gives the impression that all is well with the current practice of ethnoarchaeology in Africa. The statement will also encourage the increase in the rate at which "quack" ethnoarchaeologists are entering the field. There is no doubt that beyond the few good examples cited by Clark in his address one can hardly find any more than just a handful ethnoarchaeological studies worthy of the name in terms of methodology and theoretical frameworks. The stage is not strictly "systematical" as it is made to appear to be, because there is a growing misuse of the available ethnographic data for purposes that deny their maximum utility to archaeology. In the Social Sciences there is the need to imitate approaches that are based on properly organised theoretical and methodological frameworks. This also applies to ethnoarchaeology. It is from this perspective that this paper views current trends in the ethnoarchaeological enterprise as one that needs to be reviewed in order to give it a scientific touch that will carry it beyond the boundaries of mere accumulation of ethnographic data or the making of half-baked generalisations.. Beyond such boundaries and with emphasis on explanation rather than description, the ethnoarchaeological enterprise can be considered "Systematic".

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Desmond Clark was not just calling attention to the need for ethnoarchaeological approach that would have features on the systematic use of analogy but was initiating a methodological discussion that would involve the identification of a body of empirical phenomena that clearly involve interpretive and theoretical inferences beyond data.

The Ethnoarchaeological "laboratory":

Perhaps, with the exception of the study of the origins of man, ethnoarchaeology more than any other branch of archaeological science, continues to attract a large following, and although many scholars in its practice attempt not to face the challenges of the complacent strategy of evading crucial methodological issues, a survey of the literature indicates a long history and development of a body of methodological speculations and theorising about it, (Kluckhohn 1939, Clark 1953, Ascher 1961, Binford 1968, Freeman 1968, Rappaport 1968, Turnbull 1962, Orme 1973, Donnan and Clewlow 1974, Schiffer 1978, Kramer 1979, Oswalt 1974, Stanislawski 1974, Gould 1980, Lee 1980, Lee & De Vore 1976, Yellen 1977). In sub-Saharan Africa, considered a major "laboratory" or testing ground for ethnoarchaeology the popularity is even greater at least in the area of data collection (Thomas 1959, Lee & De Vore 1976, van der Merwe & Scully 1971, Yellen 1976, Ingersoll, Yellen & Macdonald 1977, Gifford 1977, David 1971, Clark & Kurashina 1981, Schmidt & Avery 1979, Agorsah 1983, McIntosh 1974, 1977, David 1971, Anquandah 1985, Sarevaka 1964, Scherer 1978).

Ethnoarchaeology in Sub-Saharan Africa has its roots in ethnographic research and "analogy". By the early seventies several studies had shown an awareness of the importance of the interface of ethnographic data with archaeology. At the Dallas Conference of Africanist archaeologists in America in 1973, Desmond Clark presented a model concerning plant foods in prehistory drawing comparison from "present day pattern and differences observed (Clark 1973); James Gallagher discussed the ethnographic uses of Stone tools in south-central Ethiopia stating that "the pattern of the manufacture and use of these implements were nearly identical in all the twelve sites visited which included villages ethnographically classified....." (Gallagher 1973). David Lubell and Achille Gautier using results of palynological analysis together with ethnographic data advanced a suggestion concerning the subsistence base of the prehistoric cultural ecology of a Capsian tradition in the Tebessa and Ouled Djellal regions of Algeria (Lubell & Gautier 1973); Shiner (1973) reported on replicative experiments on harvesting blades to show that harvesting different grains produced different wear patterns on Stone tools; Yellen reported on his classic study of the Kung Bushman settlement patterns.

Wilmsen (1974) also researched among the Kung Bushmen with the sole aim of obtaining detailed account of their procurement strategies. Ultimately Wilmsen hoped to complement his study with archaeological survey of the area to determine their spatial behaviour now and before. In 1978 Graham Connah reporting his ethnographic research on Borno, clearly stated that "This work has reinforced my conviction that at the moment the most urgent research in West African archaeology is ethnographic not archaeological." (Connah (1978) Connah's study aimed at investigating settlements situated in different ecological regions in order to achieve a better understanding of the traditional adaptations to the environments. Later (Connah 1985) he reiterates this conviction. Scully's Phalaborwa Iron Age study (Scully 1978) as well as Schmidt's study of the Buhaya (Schmidt 1983) are also examples that indicate the ethnographic research fever that had crept gradually into Archaeological research in Africa.

In Ghana the West African Trade Project (Ronsansky 1973) records well known research ventures and mistakes undertaken by McIntosh (1974) and Fletcher (1978) and by others under the West African Trade Project (Ronsansky 1973, 1976) which indicate definite awareness of the significance of ethnographic data for explaining archaeological phenomena. In a fashion similar to that of Peter Schmidt's study of the process of iron smelting in Tanzania, Leonard Role (1975, 1982) has also placed on record a most detailed study of iron smelting process among a Ghanaian Society. Lee and De Vore (1976), Turnbull (1962), Thomas 1959, Nic David (1976) Van der Merwe, are names that have been quite popular with references to ethnographic research in Sub-Saharan Africa. There are several ethnographic studies most of them rather obscure and hidden in traveller's accounts and colonial reports, that cannot be listed here. In fact when Thurstan Shaw reconstructed the burial chamber of the site of Igbo Richard in his famous Igbo Ukwu discoveries, he was performing an act that was purely ethnoarchaeological although it has never been called by that name (Shaw 1970) and when Glynn Isaac (1978) compared "men and apes" in his discussion of "food sharing behaviour of proto human hominids" he was undertaking an ethnoarchaeological enterprise.

Reviewing the Ethnoarchaeological enterprise:

Although the tendency towards the use of ethnographic data as an additional aid for archaeological interpretation had a long history in Africa it was not until the late seventies and early eighties that clear-cut pronouncements began to appear on methods and theories regarding the ethnoarchaeological enterprise (Stiles 1977, Clark 1979, Schmidt 1983, Atherton 1983, Agorsah 1983).

Like ethnoarchaeology in the New world discussions have centred on the definition and scope of ethnoarchaeology, the use of analogy, the study of processes, cultural or other, human behaviour and adaptation (especially ecological), and finally the research process that embraces all these. When Desmond Clark made the remark that ethnographic research was becoming more "Systematic" he was in fact hinting that there was the need for well defined theoretical and methodological applications of ethnographic to archaeological data that would make interpretations or generalisations more meaningful. How far have we travelled from there?

Although the term "Ethnoarchaeology" was not in general use in Africa before the seventies work in many of the areas associated with the term has a considerably longer history. Because ethnoarchaeology's historic roots in Africa are diverse (Schmidt 1983, Atherton 1983) and located in such research areas as ethnography, linguistics, oral tradition, stone age archaeology, traditional religions medical beliefs and practices which had been gathered by cultural anthropologists in earlier years, its current orientation and interests are varied. Nevertheless, one can identify a limited number of commonalities around which the sub-discipline has developed. The first common feature is that the subject of ethnoarchaeology has been considered to be societies that are "strange" to Western researchers. Such groups have often been referred to as "primitive" a term that, fortunately, the better informed scholars do their best to avoid today in ethnoarchaeological contexts. The definition of the subjects of ethnoarchaeology on such terms applies to its practice generally and is not limited to Africa and is one of the areas that recent work has attempted to redefine (Gould 1980, Gould & Watson 1982, Agorsah 1983) and should constitute a "living archaeology" the subject of which is human societies traditional or other. That ethnoarchaeology is a study of huntergatherers (Peterson 1971) is now a phenomena that its practitioners have over the years abandoned for good. The view proposed in this paper is that ethnoarchaeology should be a means of explaining non-observable behaviour of past societies on the basis of observed behavioural or cultural phenomena of living societies-traditional or other. The important thing is an orientation towards explicitly well defined interface between models drawn from modern traditional behaviour and archaeology. The redefinition of the subject of ethnoarchaeology thus constitutes one of the major areas that is an asset to its practice in Africa. Because anthropologists have typically done fieldwork among people whose cultural traditions are quite different from Western societies to which they mostly belonged they have often been considered as "culture brokers".

Ethnoarchaeology is nearly a limitless sub-discipline with wings which spread over anything that is "strange" about any society to any scholar. Owing to this wide coverage many scholars, in choosing to do ethnoarchaeology do not realise that they are setting off on a voyage across waters that are often rough and, in some areas, poorly charted. There is often a failure to distinguish between descriptive studies which tell you what is or happened, and explanatory studies which tell why and how. This problem constitutes another feature common to ethnoarchaeological research in Africa where the practice of Archaeological ethnography has numerous excellent studies of processes of construction and manufacture (Friede and Steel 1977, 1980, Schmidt and Avery 1979, Role 1975, Van der Merwe 1971, McIntosh 1974, Yellen 1973, Agorsah 1983, Clark and Kurashina 1981, Gallagher 1973, 1977, Lubell and Gautier 1973, Shiner 1973), of settlement patterns. (Hodder 1977, Lee 1980, Yellen 1976, David 1971, Wilmsen 1974, Connah 1978, Agorsah 1983, Maggs 1976, Atherton 1972, 1979, Roshansky and de Barros 1980, Clark and Kurashina 1981). Such studies indicate the wide range of subjects that ethnoarchaeology has covered in Africa. In fact most scholars who do some kind of ethnographic research and are able to make the slightest link with archaeological material have enjoyed the liberty of claiming that they are doing ethnoarchaeology. It is in this connection that one sees problems with the definition and scope of ethnoarchaeology. We still therefore seem unclear about what is ethnoarchaeology.

Theoretical orientations in African ethnoarchaeology:

Several attempts have been made to define the subject and its scope (Ascher 1961, Binford 1968, Donnan and Clewlow 1974, Stanislawski 1974, Oswalt 1974, Stiles 1977, Kramer 1979, Orme 1973, 1974, 1981, Gould 1980, Atherton 1983). These definitions in some cases explicitly state the aims of the sub-discipline or clearly indicate its coverage. However, they still need to be extended to explain certain theoretical and methodological principles that differentiate, for example, ethnoarchaeology from ethnography or ethnology because some scholars profess ethnoarchaeology while in reality they are practising something else. Or is it be assumed that any archaeologist doing ethnography or ethnology is by virtue of being an archaeologist doing ethnoarchaeology in Africa? ~~But because it is difficult to~~ But because it is difficult to incorporate underlying theoretical and methodological principles in the definitions the research designs should be the areas where their identification should be sought rather than the mere presentation of data. In recent review of ethnoarchaeology in Africa there is the emphasis on a kind of research design that are "explicitly scientific" (Stiles 1977, Atherton 1983, Schmidt 1983).

Atherton (1983) for example has called for a systems approach in ethnoarchaeology. Stiles has proposed a scheme of the stages that ethnoarchaeological fieldwork should take. But it seems that is the only distance we have covered after Desmond Clark's call noted above.

Research design and data collection are mutual dictators. The research design chosen will dictate what data to be collected. Similarly, advanced knowledge of the type and amount of data that can be collected will partially dictate the research design to be used. Research design and data collection are in harness together, and the pulling that each does to the other depends on the individual study or the orientation of the research. Although ethnoarchaeologists working in Africa are aware of this there still are a large number who either do not make any design at all or who design their research in such a way that it must be complementary to the data collection. Others preach the need to, and the importance of research design but never really practice it. The result is the proliferation of descriptive material in the literature on ethnoarchaeological research. Some allow research design selected for statistical attributes, to pull them around in the field attempting to collect nearly impossible (and sometimes behaviourally impossible and meaningless) data.

Recent literature indicates that there is a growing dissatisfaction with the increasing amount of narratives and descriptive ethnoarchaeological data. (Hodder 1985, Atherton 1983, Agorsah 1985). In Africa because of the prejudice that, until recently, plagued the study of its past (Ki-Zerbo 1981) the charge is even more gravious. In many cases one could hardly distinguish between ethnoarchaeological research data and a colonial traveller's account of the life and cultural traditions of African societies.

The problem of the misuse of analogy (particularly ethnographic analogy) in archaeology has been extensively discussed in the archaeological literature (Ascher 1961, Binford 1968, Hodder 1985, Atherton 1983, Wylie 1982, 1985, Smith 1955, Sollas 1924, Thompson 1956, Gould 1985, Gould & Watson 1982, Moko 1969, Shaw 1983, Donnan & Clewlow 1974). Here again, like the problems related to the overemphasis of narrative and descriptive material, the situation with Africa is more alarming. The reason may be mainly because of the ready availability of material on the so-called "primitive traditions". The search for consistency, along with the continuing availability of new empirical data has led to revisions which are also clearly demonstrated by recent literature.

These revisions are continually bringing up questions and seeking answers to them.

One way of seeking answers is the scientific method at the heart of which, in ethnoarchaeology, is observation of modern human behaviour. As incidental observation motivates the scientist to ask questions about a phenomenon, he must also make further observations to find answers. The ethnoarchaeologist should work like any other scientist. He gathers facts about human behaviour, verifies his data and subjects the implications to rigorous tests. That is, he is to predict and explain human behaviour. This further implies that he does not only make observations but he also makes statements about the behaviour and related cultural material and patterns he observes.

The Research Process:

When in 1983 I proposed a research procedure for ethnoarchaeology the main aim was to provide a methodological framework that would not only direct a smooth flow of research, but also a procedure that would contain within itself a self correcting research element. This is because at each point in the research process set out below it is imperative to answer questions of relevance of the search. (Fig. 1)

Travelling through the above research process is not a straightforward affair and can sometimes be very winding because research problems vary and require different emphasis at different specific stages in the process. However, the stages outlined above provide a generalised picture that can be applied to the ethnoarchaeological enterprise. The flow diagram of scientific ethnoarchaeological inquiry (Fig. 2) defines the stages in more practical terms.

The process of initial perception of the question or problem to be considered in ethnoarchaeology is not different from that of other aspects of archaeology. Few ethnoarchaeological studies have seriously considered this aspect (David 1971, Atherton 1983) of the study. Many others dodge this because of the theoretical ramifications required. But theory at the initial stage is important because it directs one to the right questions to ask and methods to use to acquire data, which will more effectively answer the questions. The ethnoarchaeologist cannot observe the entire world to be observed but intelligent selection of phenomena lies in theory. It is the quality of theory or conceptualisation that gives our ethnoarchaeological research and of course other similar ones, direction and focus.

The important relationship between theory and data collection has been clearly expressed by Von Bertalanffy (1962), and clearly illustrates the important link between perception of research question and the hypothesis formulation that follows it.

Another characteristic and function of scientific theory is that it establishes certain expectations that the theory's set of assumptions directs one to perform particular acts and to be ready to observe particular consequences of those acts. The anticipatory function of theory is often labelled prediction. Predictions can be made only in terms of given relationships and occurrences of specified events. Therefore, theory specifies the conditions under which the prediction be hypothesized. When these predicted consequences do not occur one may doubt the theory or wonder whether he has adequately applied the theory's specifications to the data being examined. If he has not, he must then revise the theory.

Although ethnoarchaeologists in Africa are aware of the research process outlined above and indicate that there are important implications in how it affects generalisations, most of the literature reporting on ethnoarchaeology shows an alarming absence of practical attention to this consideration.

This approach has been tried (Agorsah 1983, Schmidt & Avery 1979) and has yielded useful results that should encourage other ethnoarchaeologists in the real sense of the word to be a little bit more explicit. However, one is aware of the problems that the ethnoarchaeological enterprise in Africa faces, the main one being the selection of units and sources of data. There are problems related to geographical restrictions to data, methodological restrictions, sample restrictions, as well as thematic restrictions. Most of these problems have been discussed by Atherton (1983) and Schmidt 1983) and need no repetition.

It is clear in the discussion of this paper that the importance of a theoretical and methodological orientation in the ethnoarchaeological enterprise in Africa cannot be over emphasised. In the light of the discussion and the examples cited the paper may be dissociated from the mentality that confuses scientifically based knowledge with wisdom. Wisdom involves sound ethical direction, the exercise of good taste and distinguishing the worthwhile from the not-so-worthy.

The scientific method on the other hand does not tell us how to use empirically verified knowledge other than to further the ends of science. It is the view of this paper that ethnoarchaeologists should conceive of their enterprise as a unity of science in terms of common methods or procedures. This belief in the unity of science, however, should be derived from assumptions, the discussion of which is beyond the scope of this paper. The change in our approach is necessary for ethnoarchaeology if we want to obtain "much more rewarding results" to which Desmond Clark refers in the statement that opens the discussion of this paper.

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RESEARCH PROCESS	
I PROBLEM FORMULATION	<ol style="list-style-type: none"> 1. State and describe research question. 2. Identify research orientation and assumptions.
II BACKGROUND DATA COLLECTION	<ol style="list-style-type: none"> 1. Identify background information about data base and define pre-existing conditions: <ol style="list-style-type: none"> a. Natural resources b. Social resources c. Other 2. Identify changes and new factors that may have affected resources 3. Declare theory and method to be applied to research <ol style="list-style-type: none"> a. General theory-method b. Specific methods.
III ETHNOGRAPHIC OBSERVATION	<ol style="list-style-type: none"> 1. Collect data on behavior patterns <ol style="list-style-type: none"> a. Subsistence b. Construction c. Manufacturing 2. Identify regularities in patterns with explanations
IV PREDICTIONS	<ol style="list-style-type: none"> 1. Declare assumptions and identify basis of predictions; provide for each prediction <ol style="list-style-type: none"> a. arguments of relevance b. test implications
V TEST OF PREDICTIONS	<ol style="list-style-type: none"> 1. Test of predictions by resort to empirical data: archeological historical etc. 2. Analysis of evidence 3. Validation of predictions discuss and explain with reference to IV
VI GENERALISATION	<ol style="list-style-type: none"> 1. Discuss result of test in the light of research question 2. Re-state question 3. Discuss relationship of research in the light of general archeological knowledge 4. Take a look into the future prospects of your research result and later work.

Fig. 1