Hukay vol. 2 no. 2

ETHNOARCHAEOLOGY

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DEFINITION

Archaeology attempts to reconstruct the cultural forms of the past and to trace their growth and development in time.

Archaeology is not pure guesswork because the artifacts studied are patterned. Material remains are products of human behavior, which is patterned and based on certain rules (norms), which survived time and which constitute fundamental evidences in archaeological research.

Archaeologists study artifacts which can tell or reflect the types or forms of behavior patterns or culture existing, but not all behavior are reflected by the artifacts, and not all artifacts reflect all kinds or sets of behavior.

If this is the case, there is a great need for archaeologists to understand the artifacts, processes/systems, or social patterns of the archaeological sites one discovers.

Schiffer (1976) proposed four strategies of Behavioral Archaeology. Strategy 2 pursues general questions in present material culture in order to acquire laws useful for the study of the past. In other words, the present-day material culture is investigated in order to provide information needed for studying the past. Ethnoarchaeology is one way of answering these questions (Schiffer 1978:230).

A new source of information for analyzing archaeological processes emerged and this is **Ethnoarchaeology**.

Ethnoarchaeology is becoming an increasingly important source of information and method for archaeologists.

Ethnoarchaeology is the study of modern peoples for the light their practices may shed on prehistory (Hole and Heizer 1977). Ethnoarchaeology is concerned about the relationship of man's visible and measurable modification or changes of his/her environment and his/her invisible and less easily measured social and ideological life.

Ethnoarchaeology goes well beyond the usual limits of analogy. Simple ethnographic analogy has some limitations for archaeology.

Archaeologists eventually realized that ethnographers often did not return with the kind of information that archaeologists need: for they were more interested in marriage practices than in the kind of houses people lived in; or in their religious rituals than in the tangible traces that religious activities might leave behind. Ethnographers are not interested in how and where the people dump their garbage, in which the archaeologists are more interested. Ethnographers do not usually draw a detailed map of the settlement or place of study in their reports.

While it is true that ethnographers have stockpiled great quantities of data from "primitive" peoples, much of this research is irrelevant to archaeology. Many ethnographers focus only on the ideational aspects of culture: what people think, what people say, how people dance, what people call their grandmother. While these data

are relevant to some brands of anthropology, ethnology has been guilty of ignoring many of the physical processes that also constitute human behavior. Time and time again, we find the ethnographer recording a thousand recipes for turtle soup, but never bothering to record what tools were involved, how the turtles were caught, what kind of fire was built, and what physical residues resulted from all of this activity. Yet, it is only the tools and the physical debris that last in the archaeological record, long after the recipes have disappeared.

Most ethnographic studies of material culture tend to emphasize aspects of manufacture and use or else look for elements of symbolism in design and artistic representation. Those ethnographic studies of material culture that do exist also tend to lack the detail necessary for discovering those aspects of behavior most crucial in explaining the pattern of discard involved (Gould 1978:3-4).

Most ethnographic and ethnological technology studies tell us only of the production phase and not the distribution, consumption, and reuse or abandonment phases of activity involving the artifact.

We know how the artifact was made, on the average, but not:

a. why individuals differed, the ideal shape, the actual result, what variations are allowed, or what innovations are permitted;
b. the native's concept of type as compared with the archaeologist's;
c. the actual use, meaning, and function of the artifact in the ongoing society;
d. the final behavior that results in the artifact's becoming part of a site.

What archaeologists need are clues in the living community as to how material objects and the places they used relate to specific activities. These findings can then be compared with remains that may be thousands of years old, to answer such questions as how many people lived here, what was their social organization, their basis of subsistence, and so on.

Ethnoarchaeology is the study of material culture in systemic context for the purpose of acquiring information, both specific and general, that will be useful in archaeological investigation. This involves pursuit and study of an actual situation in which specified behaviors can be observed (Schiffer 1978:229). The ethnoarchaeologist is an anthropologist conducting ethnographic research for an archaeological purpose, that is linking material remains to human behavior from which they had resulted.

It is not so much involved with the study of specific forms and arrangements of contemporary material culture and their projection back into prehistory (since it is an essential assumption of archaeology that these forms and arrangements change through time). But, it is a study of how socially patterned activities, relationships and organizations express themselves in the material record created by human groups. Ethnoarchaeologists are interested in a much broader class of residues than artifacts. They look at the natural processes that might affect deposits of residues over time.

We can then say that one cannot separate ideological and technological aspects, for they are always an integral part of the human behavioral set. For example, a knife. Before this was created or manufactured, there existed an idea of what this should look like. A knife is useless (even though it was created) if there is no idea or knowledge on how to use it and what for.

Material objects are said to be in systemic context when they are participating in a behavior system (Schiffer 1976). The study of material items in systemic context allows the derivation of both specific and general types of information and statements. The specific and general kinds of information produced by ethnoarchaeologists may be used in a variety of ways, including analogical reasoning (or model-building and formulation of hypotheses).

All ethnoarchaeological analysis is based on the concept that artifacts are not to be treated as things in themselves, or as an individual work of art, but are always to be related as part of the specific social system and a specific type of behavior. This does not mean that material remains always "mirror" human activities equally in all domains or institutions (Stanislawski 1978:210).

For example:

1. Robbins and Pollnac (1974) had indicated that the people over the age of 40 years in Buganda, East Africa had the most traditional religious and political beliefs, but also had modern artifacts in their homes, which does not mean that if they have modern artifacts they have modern religious and political beliefs.

2. Several ceramic studies had demonstrated little material evidence of the Tewa migration to the Hopi Mesas in AD 1700 (Ellis 1961), this does not mean that the Tewa did not migrate to the Hopi Mesas (which are supported by historical documents); or of the Spanish invasion of Mexico (Charlton 1972).

3. Like in the Philippines, if you happen to have celadon wares or tradeware ceramics which you had inherited from your Lolo or Lola, it does not mean that you have the same traditional values and beliefs as they had before.

So, ethnoarchaeologists invariably turned out to be trained archaeologists who have turned their attention to the study of present-day human material behavior. The ethnoarchaeologists look first at the ways in which material items are made, used, and discarded (or collected, processed, and disposed of), and they try to make these observations as empirical as possible.

Because ethnoarchaeology is based upon a materialist approach to human behavior, it must confront the totality of behaviors that may account for the observed patterns of material remains. Human beings do manipulate symbols, and their symbolic behavior can affect the total pattern of material residues in any society. Symbolic systems play a vital role in human adaptation. They can be approached from the same materialist point of view by the ethnoarchaeologist as such items of "behavioral hardware" as technology and subsistence (Gould 1978:6).

Ethnoarchaeology is not a negation of symbolic or ideational variables in human behavior. Rather, it is an empirical approach designed to discover the totality of variables that determine human behavior in particular situations and to posit general principles that will show how these variables consistently interact (Gould 1978:10).

Ethnoarchaeology is a new branch of the discipline of archaeology followed particularly in America. It seeks to compare the patterns recognized in the material

culture from archaeological contexts with patterns yielded through the study of living societies (Champion 1980:42).

Another definition of ethnoarchaeology is that this is the study, from an archaeological perspective, of material culture based on verbal information about artifacts obtained from persons, or their direct descendants, who were involved with the production.

The archaeologist is the ethnographer - but an ethnographer with particular interests and a special orientation. The ethnoarchaeologist focuses specifically on the study of artifacts being used and made in the context of a living culture. By understanding the patterns of artifact manufacture, use, and loss in the context of a living society, he or she hopes to better be able to interpret the patterning found in an archaeological deposit. Working assumptions about how people behave with respect to material culture can be tested with living examples, which amplify and illuminate current theory (Knudson 1978:338).

Ethnoarchaeology is the use of ethnographic methods and information to aid in the interpretation and explanation of archaeological data (Stiles n.d.).

It is the direct observation field study of the form, manufacture, distribution, meaning, and use of artifacts and their institutional setting and social unit correlates among living, non-industrial peoples for the purpose of constructing better explanatory models to aid archaeological analogy and inference (Stanislawski 1978:204).

SCOPE/OBJECTIVES OF ETHNOARCHAEOLOGY

The basic goal of ethnoarchaeology is to link artifacts and their behavioral correlates in such a manner that archaeologically testable propositions may be attempted. The ethnoarchaeologist should learn those technological ideas, behavior, and end results of members of other ongoing traditional societies, and then to base statements concerning the relationships among artifacts and other parts of the Institutions of Culture, on those beliefs, actions, and patterns of material remains that are actually observed.

Since the particular focus of ethnoarchaeology is on collecting ethnographic data of archaeological interest, archaeological testing must form the controlling factor by which the evidence from ethnography can be organized to form relevant models.

The subject matter of ethnoarchaeology is broad-- the relationships between human behavior and the material-spatial-environmental matrix in which it takes place. So, it should be noted that the ethnoarchaeologists are not limited to studying primitive, non-literate, or non-industrial societies. All socio-cultural systems are within the province of ethnoarchaeology.

The purpose of ethnoarchaeology is to systematically integrate archaeological finds with ethnographic information.

The theoretical basis for ethnoarchaeology is the use of analogies derived from present observations to aid interpretation of past events and processes (Watson 1979).

The reason the archaeologists do this— make observation in contemporary communities— is to provide ourselves with as many and as varied interpretive hypotheses as possible to help us understand (explain and predict) archaeological remains. But, it should be put to mind that the relationships, techniques, functions, etc.

that can be observed in detail ethnographically and that appear to be highly appropriate to the archaeological remains are no more than hypotheses that must be tested before being accepted as explanatory of those archaeological remains.

As mentioned earlier, it was assumed that some behavioral elements of sociocultural systems have material correlates, and if these are incorporated in the archaeological record, such residues may be used to develop inferences about behaviors with which they were associated.

Observations of contemporary behavior can facilitate the development and refinement of insights into past behaviors, particularly when strong similarities can be shown to exist between the environments and technologies of the past and contemporary sociocultural systems being compared.

Ethnoarchaeological research investigates aspects of contemporary sociocultural behavior from an archaeological perspective. Ethnoarchaeologists attempt to systematically define relationships between behavior and material culture not often explored by ethnologists, and to ascertain how certain features of observable behavior may be reflected in remains which archaeologists may find.

However, it cannot be assumed that all past behaviors have analogs available for observation today and we cannot assume that all forms of cultural behavior which may be observed today have analogs in the past (Kramer 1979b:1).

Ethnoarchaeology is designed to meet the special needs of archaeologists, who can rarely question informants about the remains with which they work.

The primary focus of ethnoarchaeological attention is the way material items enter the archaeological record: what gets thrown away, how often, and why (Sharer and Ashmore 1979).

The specific aim of ethnoarchaeology is to improve the quality of the gathered information to make it more useful to archaeologists in formulating models and applying analogies.

There is a need:

1. for detailed information on all aspects of organized human activity of the kind which will leave preservable traces in the archaeological record;

2. for an understanding of the relationship of the patterns of these traces to the patterns of activities which produced them; and

3. information is needed from living groups on how the inter-relationships of factors mentioned function in society today.

These meant that studies are necessary of living societies of a nature normally out of bounds for traditional ethnographers. Studies focus on the relationship of human behavior to the physical world, and the influence that the physical world will have on behavior and the imprint that this behavior will leave on the physical world for future archaeologists to puzzle out.

When an archaeologist excavates a site he uncovers artefacts (in the broadest sense, including structures, food residues, etc.) and the organization of these artefacts in a spatial pattern. There is a complex relationship between these artefacts and the human behavior which produced them and in turn all of the economic and social

activities in which they were engaged. In addition, there exists the relationship of these factors with the surrounding environmental and ecological situation, which introduces the dimension of time in the form of seasonality and ultimately the concept of culture change (Stiles n.d.:90-91).

The various approaches of ethnoarchaeological studies center around one or more of the following objectives:

1. to observe the relationship between cultural and natural processes in determining refuse patterning.

2. to observe the life of artefacts from raw material procurement through discard in order to understand better the aspects of variation in what is left on an occupation site floor.

3. to observe man-land-artefact relationships for creating hypotheses and models of prehistoric settlement patterns and subsistence behavior.

We should remember that the purpose of ethnoarchaeology is to render ethnographic evidence strictly comparable to that from excavated sites, and in turn, to use archaeological data to lead to an understanding of ethnographic systems in dynamic change.

RESEARCH METHODOLOGIES/TECHNIQUES USED

Ethnoarchaeologists unaccountably adopted many ethnographic techniques of gathering data such as informant interviewing. Informant interviewing was devised to answer questions posed within the framework of various mentalist ethnological theories (Schiffer 1978:234). Formal interview and questionnaires both have their place, but these are adapted to the conditions of lengthy residence.

When key informants must be used, it is important that ethnoarchaeologists should give careful attention to the design of their eliciting techniques, in full awareness of the situational determinants of speech behavior. That is, the native or the informant may well categorize the ethnoarchaeologist as “naive” or “untutored” and answer his/her questions as if they had been posed by a child.

If the most time-honored and frequently used ethnographic method of data gathering, the informant interview, is often inappropriate for ethnoarchaeology, then how are we to gather our uncompromisingly behavioral data?

Fortunately, there is a broad range of scientific techniques available for obtaining such data at minimal expense.

A number of Sociologists have derived non-reactive or unobtrusive measures of behavior, some of which may be useful to ethnoarchaeologists.

Architects are now becoming concerned with examining the relationships between the intended and actual uses of their creations. In their investigations of space-use behavior, Architects are beginning to devise techniques of potential applicability to ethnoarchaeology (Schiffer 1978:236).

Schiffer (1978) cited an example: that David Saile and his associates under contract with the Rockford Housing Authority have employed a nonreactive technique

to acquire data on the use of extramural space in a suburban Illinois community. Observers with recording sheets walked predetermined routes throughout the housing tract at hourly intervals, sampling on weekdays, weekends, and during different seasons. They noted the artifacts carried out, their locations, social and biological characteristics of the participants, the distribution of material culture, and other factors of special relevance to their project.

The essence of the social anthropologist's field approach is her/his combination of verbal enquiry with direct field observation. A major key to fieldwork and data collecting in ethnoarchaeology, must be an emphasis on the direct- or participant-observation technique in specific and individually described ongoing societies, whose socio-cultural systems are still relatively intact and which thus allow the observation of variations in behavior leading to variations in material culture or other changes in the natural landscape (Stanislawski 1978:206).

Participant-observation or direct observation field techniques must attempt to discover:

a. what people do rather than what a few informants say they do, or did;
b. how the physical remains are actually left;
c. what is the range of variation and activities (such as difference in individual and subgroup performance in stone chipping or pottery making).

Participant or direct-observation techniques are a type of "peculiarly intensive" apprenticeship training which provides data derived from time consuming shared experiences that cannot be replicated.

When data are collected in the field, it would be desirable to observe what is done rather than depend on what informants say they do. Some of the information obviously must be obtained during interviews, but most topics are amenable to direct observation. By recording observed behavior, the normative statements or ideal patterns often offered by informants are avoided. This is important for the interpretation of archaeological remains (Oswalt n.d.)

Borrowing of techniques from sociology, architecture, anthropology, and other behavioral sciences will provide for a greater measure of flexibility in data gathering for future ethnoarchaeological studies. Even so, the most useful techniques, those firmly integrated with archaeological question and hypotheses, will probably be devised by ethnoarchaeologists themselves.

For some kind of ethnoarchaeological study the costs of gathering relevant behavioral data by archaeological and other social scientific techniques may be prohibitive - in terms of time, money, or interaction effects with the system being observed. In such cases, one will of necessity come to depend appreciably on interview data. In order to assess the biases and omissions in informants' statements, one should also obtain a limited number of carefully selected behavioral observations (Schiffer 1978:237).

With the growing realization in archaeology that successful description and explanation of past behavioral systems depends on the availability of a broad range of laws, ethnoarchaeology is finding itself in the position of having to adapt its questions, data-gathering techniques, and range of relevant data in order to become the principal source of these laws.

Conklin (1978:12) wrote that ethnoarchaeological research will be enhanced by paying attention to five factors:

1. **Contexts** - alert use of locally meaningful settings, rather than reliance on predetermined frames of reference, can increase opportunities to discover context-sensitive distinctions.
   Careful contextualization of new data can help identify the distinctive attributes of sets of cultural objects.
   For example, artificial waterworks may on first sight be taken as evidence of "irrigation", but intrasystemic contrasts may prove them to be protective drainage channels.

2. **Concepts**
   It is advisable to examine critically even the most worldly or routine conceptual rubrics in order to ensure accuracy and to avoid categoric cliches and impoverished or inconsistently used technical terms.
   Use of the dominant local language is essential for most ethnographic work.

3. **Relations** - where materials and practices can be compared in natural settings, the chance to record systematic economic, social, and cognitive as well as technological relationships should not be ignored.
   An inventory of stored foods is far more culturally revealing if items are intercorrelated in locally used sets and rankings and if other dimensions like ownership and time are added.

4. **Scale** - extent in terms of size, magnitude, and density.
   Patterns may vary considerably when structures are examined at household in contrast to village or regional levels.
   Less obvious, but nevertheless equally important are specifications of culturally significant distances and size ranges at which natural substances, objects, and spatial arrangements are to be assessed.

5. **Scope** - the extent to which one makes controlled use of available analyses of specific measurable concrete evidence from analogous climatic or other precisely situated sources.
   This factor applies with special force to the study of how material properties are related to methods of manufacture and processing, and also to specific uses of resulting final products (artifacts, etc.).

APPLICATIONS

It is now time for archaeology to attempt to offer a few theories, methods, and data sets to the study of contemporary societies (Rathje 1978).

Ascher (1961) had noted the desirability, if not the necessity, of archaeologists examining living communities. He emphasized that all living communities are

constantly in the process of discarding and decomposing, forming cultural residues that misleadingly appear to reflect a single point in (archaeological) time.

Some recent studies of butchering practices, and of modification and dissemination of animal bones by scavengers and geological agents have potential applications in the analysis and interpretation of archaeological faunal residues (Binford and Bertram 1977).

Ethnoarchaeological studies are conducted among:

1. the hunter-gatherers
2. complex societies
   - fishermen in Mexico (Ascher 1962, 1968)
   - nomadic pastoralists in East Africa (Gifford 1976; Robbins 1973)
   - nomadic pastoralists in Southwest Asia (Hole 1975)
   - agriculturalists in Africa (David 1971; David and Hennig 1972; McIntosh 1976)
   - relationships between activities and objects functionally specific to them (Krotsker 1974; Peterson 1968; Yellen 1976)

Nicolas David's study (1971) was basically ethnographic in nature in that he resided in the community and was able to determine the kinship of the people, their residence patterns, and activities along with the tangible artifacts and remains that related to these practices. To augment his analysis, he drew a map of the settlement.

David then pointed that it would be impossible for archaeologists to make accurate interpretation of some of the features, though not of others.

To cite a simple example, "wealth was never expressed in hut size". David found hut size a function of "expected frequency of white ant infestation". When a roof might be eaten in six months or less, the smaller the hut, and thence the roof, the easier it is to replace.

David's study provided us with a set of solid data to use in judging how far we may allow interpretations to go, and it extends our range of useful information concerning reasons houses may be of a certain size and duration.

Carol Kramer (1979a) studied a traditional village in Iran. She used variables such as total compound area, roofed area within the compound, and size of the dwelling area. Then, she correlated these with wealth and number of people in the household.

Her findings were that built-in features such as hearths, ovens, and storage bins were not good indicators either of socio-economic status or of the number of people residing in the compound.

Michael and Susan Blake (1979) in Chiapas, Mexico had collected data concerning household features such as walls, pits, floors, ovens, and sweatbaths in an effort to isolate variations in constructions, placement, and use which are influenced by socio-economic and cultural variables.

Their findings suggested the opposite of Kramer's study. The results suggested that empirical differences were present between features which can be correlated with wealth and ethnic differences.

Because Kramer's and Blakes' studies contradicted each other, this does not mean that it is not important for archaeology.

The lesson one can get from here is that the same material item does not necessarily have the same meaning/function in different contexts. However, in both cases there were material items that are indicators of wealth and ethni differences. It just does not happen to be hearths for both cases.

There are some ethnoarchaeological studies dealing with refuse deposition.

In western archaeology, "outhouse" is an important source of information about diet, and sometimes health conditions of the inhabitants. Karen Mudar (pers. comm.) studied the effects of socio-cultural variables on food preferences in early 19th century Detroit. She had found out that animal bones reveal ethnic and socio-economic differences.

In anthopological literature, it is very common to find and read studies about pottery manufacture. There are also a number of studies available concerning manufacture as well as distribution and utilization of ceramic vessels.

For example, Fontana and Robinson (Fontana et. al. 1962) demonstrated how Papago Indian pottery relates to general theoretical anthropological problems. They felt that the study of pottery of a living culture has a great deal to offer the archaeologists.

Stanislawski (1972) had conducted an ethnoarchaeological study of Hopi pottery making. His specific objectives were to collect information:

- concerning the traditional tools and techniques of Hopi and Hopi-Tewa pottery making;
- on modern uses of pottery and potsherds;
- methods of teaching pottery making to children and adults;
- social patterns of transmission;
- distribution of pots and potsherds and pottery types within the Hopi and Tewa communities;
- to collect Hopi and Tewa linguistic terms referring to pottery and pottery making in order to understand their own classification of ceramic types.

Calder (1972) had conducted an ethnoarchaeological study of a village in Thailand. She investigated on vessel and sherd distribution in a Thai-Lao village.

Solheim (1964; 1965; 1967) had done many studies on pottery manufacture in Sting Mor and Bang Nong Sua Kim Ma in Thailand; pottery manufacture in Luang Prabang, Laos, and so many others.

In the Philippines, only a few ethnoarchaeological studies were conducted. Majority of these studies were about how artifacts were produced or manufactured. Most of ethnographic and ethnological studies we have only tell us of the production phase of an artifact, not the distribution, consumption, and reuse or abandonment phases.

Lionel Chiong (1975) had studied the pottery making center in Daro, Dumaguete City in Negros Oriental. He only described how the potteries are manufactured.

Hart's (1958) ethnographic monograph provided us with valuable information about house construction. This dealt with a different problem orientation. There was little attempt to correlate variations in house construction with socio-economic status or other social variables.

Solheim (1952) had done many studies on pottery manufacture in the Philippines, for example in Masbate and Batan.

In ethnographic studies we know how the artifact was made, on the average, but not why individuals differed, the ideal shape, the acutal result, what variations are allowed, or what innovations are permitted (White and Thomas 1972); not the native's concept of type as compared with the archaeologist's (Laura Junker, Pers. Comm.); not the actual use, meaning and function of the artifact in the ongoing societies (Susan Kus, Pers. Comm.); not the final behavior that results in the artifact's becoming part of a site (William Macdonald, personal communication).

In ethnoarchaeology, one should go further or beyond describing how artifacts are produced.

William Longacre's study (1974) on Kalinga pottery making villages in northern Luzon is a good example. He studied how pottery making was learned and who taught whom; collected detailed information on the use of pottery by the society and the native system of classification; and recorded the disposition of pottery and other items of material culture made and used by the people.

Longacre determined and measured the use-life of various types of pottery by tagging pots in the system and recording their use-life directly.

There were a series of ethnoarchaeological studies conducted by some of the team members of the Bais Anthropological Project in Negros Oriental last 1979.

William J. Parry (1982) made some observations on the arrow technology of the Negritos up in Bago Watershed Reserve of northern Negros Occidental. His fieldwork was directed towards obtaining information on Negrito hunting practices and arrow manufacture and discuss the archaeological significance of these observations.

His findings were:

1. variation in Negrito arrows is patterned, and that the patterns of variation reflect environmental and social features of Negrito culture, as well as individual conditions and preferences.

2. each individual manufactures arrows slightly differently, according to his individual physique, skills, needs, and aesthetic preferences.

3. the Negritos are able to identify the maker of a set of arrows based on individual variations in arrow length, lashing material, proportions of the point, and angles formed by the lateral edges of the points.

Dorothea Saligan (1982) had studied the manner in which earthenware pottery manufactured in different centers in southeastern Negros was distributed throughout the area of study of the Bais Anthropological Project (BAP), and the kinds of market mechanisms which affected their distribution.

She found out that the different centers of manufacture varied greatly in size as well as complexity of their economic and social organization, and the range of distribution of wares from different centers is related not only to distance but also to the size and organization of the pottery industry in a given center.

I did an ethnoarchaeological study of a Visayan household with the help of Karen Mudar (de la Torre and Mudar 1982). We studied a single household in the survey area of BAP in an attempt to visualize the present house as an archaeological site in

the future. We were interested in applying archaeological concepts such as "tool kits" and "activity areas" to a Southeast Asian assemblage of materials. We wanted to predict the level of archaeological visibility of this household, for comparison with surface "sites" found in archaeological survey. We wanted to test if any traces of activities performed would be visible in the archaeological record. And we hoped that these descriptions will provide comparative materials for further ethnoarchaeological studies in the Philippines.

A series of extensive interviews were conducted with the informants; observations were made on their house located in Sitio Alawihao, Barangay Basang, Pamplona, Negros Oriental. The structure of the house was measured and recorded, a household inventory was made, and the property was mapped.

Economic activities of the couple were reflected in the household goods inventory. The tools, their utilization and history had been recorded. We found out that the area to the west of the house is the most heavily used. Its position between the house and the road invites the most traffic, and the lack of trees facilitate the drying of firewood and "buri" palms for hats. The household animals are fed here, and coconuts are also processed in this area. And this is also the only area to be swept daily. Inorganic debris from sweeping is simply pushed to the periphery of the area; there are no permanent trashpits. Organic material is fed to the animals or burned.

So, in the course of this study, it became apparent that the area most intensively used is also the area that containes the fewest artifacts, as it is swept everyday. The swept area contains a low density of very small and very large sherds but is totally devoid of medium-sized sherds. Medium-sized sherds are present only at the periphery of the area where solid non-perishable refuse generally accumulates. Refuse accumulates along the edges of these areas, among trees and fences which border the house or property.

An activity area is a specified unit of space within which a set of activities are repetitively performed (Streuver 1968:135). In general, an activity area can be recognized archaeologically by the presence of certain indicators such as discarded tools and work debris. This assumes that the area of activity coincides with the area of refuse deposition.

However, activity areas at the Becino Site are characterized by a lack of debris. This suggests that the concept of activity area, as presently used, may be too simplistic.

Schiffer (1976:31) had proposed that the placement of refuse may be related to the nature of sites. Short-term occupation sites may contain activity areas in which the area of use coincides with the area of refuse placement. Long-term occupation sites may contain mostly areas of secondary refuse deposition; that is, trash is not deposited where it is produced but refuse from several sources may be deposited in specially designated spots.

Our assessment of activity areas at the Becino Site seemed to support this proposition. This should prompt archaeologists in the Philippines to reconsider their expectations for artifact pattern in open air sites.

BRIEF COMMENTS/RECOMMENDATIONS

There is a great need to develop Ethnoarchaeology in the Philippines as a subdiscipline of Archeology. There are many aspects that can be studied or remain unexplored, except pottery making centers and manufacture. There are many indigenous groups which are still marginalized and which can supply plenty of data on how to cope with and adapt or survive in a tropical environment.

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