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Contribution of Ethnographic / Ethnoarchaeological Investigations to Northeast African Archaeology

by HIRUY Daniel¹

It would be extremely difficult for archaeologists to interpret the archaeological record if they thought that people and cultures of the past bore no resemblance to those of today. It is generally assumed that there has been some continuity through time, thus archaeologists commonly use information from the present to interpret the past. One way they accomplish this is by doing archaeological research on present-day societies—studying the ways in which people live today and the material traces that their activities leave behind. This method of archaeological research is called ethnoarchaeology.

Ethnoarchaeology is the ethnographic study of peoples for archaeological reasons, usually focusing on the material remains of a society, rather than its culture. The study actually assists archaeologists in reconstructing ancient life style by studying the material and non-material traditions of contemporary societies. Archaeologists can then infer that ancient societies used the same techniques as their modern counterparts given a similar set of environmental circumstances. This will help archaeologist to better understand the archaeological context.

Ethnoarchaeological studies here in Ethiopia started mainly in the 1970s. Several Ethnoarchaeological studies are available on hide-working and associated lithic tool production (e.g., Clark and Kurashina 1981; Gallagher 1977; Brandt 1996), on pottery production (Messing 1957), as well as on the examination of traditional agriculture practices associated with domesticated plants (D’Andrea 1999, Hildebrand 2003) and more recently on vernacular architecture (Lyon 2007). Ethnoarchaeological research on traditional agriculture is currently an expanding field of study here in Ethiopia. Ever since

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the Russian botanist Vavilov in the 1920s identified the Ethiopian highlands as one of eight centers of plant domestication in the world, a great deal of research on the origin of agriculture was done by scholars. Several theories / hypotheses were put forward with little or no archaeological support. Archaeological researches in the Horn of Africa that sought to recover archaeobotanical remains are few or just starting (Boardman 1999). Many of the current theories / hypotheses developed to elucidate the origin of agriculture in the Horn of Africa try to give a broad and general explanations for the origin, not taking into account the implications of the diverse environment, social and ecological situation of the origin. These theories also fail to consider the specific individual crops and the socio-ecological context in which the various crops grow (Hildebrand 2003).

It is through ethnoarchaeology and ethnographic research that the link between the crops, the society that cultivate and use them, and the ecology in which they grow, could be established. Based on the present day situation, archaeologists could develop testable hypotheses to explain past associations and archaeological materials (D'Andrea 1999, Hildebrand 2003).

Archaeobotanical investigations cannot provide clues as to when - and which of - the plants concerned came to be selected for further breeding and cultivation because of the absence of a crop's very first domesticated individual in archaeobotanical records (Hildebrand 2003). Ethnoarchaeology can elucidate the process of selection that may have been carried out during domestication. Through direct observation and information gathered from traditional farmers, the selection pressures that can affect the plant morphology can be understood (Harlan 1989, Hildebrand 2003).

Archaeological plant remains are used to identify activities related to crop production, processing and consumption. But as Hastorf (1996) pointed out, several factors limit the accuracy of directly correlating plant remains in archaeological data with these activities. Among the reasons outlined, the location of these activities might not correspond to the places where archaeologists excavate. Even if the location is identified, it is not always easy to define one individual activity from the other or the range of possible activities that might have occurred at that site (Hastorf 1996).

Based on the detailed ethnographic studies of traditional processing, paleoethnobotanists were able to identify the sequence of events in crop processing and correlating these with the plant material composition in archaeological context. Paleoethnobotanists observe traditional crop processing and recording, and the frequencies of crop plant parts and wild plants associated with threshing, winnowing, hand sorting, sieving, parching, storing, etc. By this they were able to build a predictive model which can help to relate the different activities with excavated archaeological plant remains (Hillman 1984, Hastorf 1996).

Ethiopia has an immense potential for research into the origins of plant domestication and ethnoarchaeological studies. This aspect is recognized by scholars such as Harlan (1969) who said:

Finally, we have in the Ethiopian center a survival of an entire agricultural system little changed from Prehistoric times. Ancient methods of tillage, sowing, reaping, threshing, winnowing, dehusking and processing for consumption, all have been preserved, as have the uses and attitudes of the people toward their ancient crops.

Similarly, other scholars such as Crummey (1983) stated:

The peasant of revolutionary Ethiopia till with ox-drawn plows, sow the seed of a peculiar and richly varied collection of plants, cultivate, harvest and process food their ancestors have done since time of great antiquity.

With much information available for ethnoarchaeological research, this makes ethnographic work in Ethiopia very relevant. To this end, the works of D'Andrea et al. (1999, 2002) and Butler et al. (1999) in the study of grain-plough complex and Hildebrand (2003) in the study of *enset* complex represent the use of ethnographic fieldwork to construct a model of prehistoric agricultural practices in Ethiopia.

A number of problems and limitations exist in the ethnoarchaeological study in reconstructing local crop processing activities. There is lack of very detailed ecological information for many of Ethiopia's plant species and genera. Many of the wild plants are not well documented. These factors limit the morphological and ecological information needed to build or use models in relation to crop processing activities (Phillipson 2000).

Another problem is that plants compositions resulting from present day local crop processing activities do not always correspond to archaeological plant composition remains. The archaeobotanical samples from Aksum have in them a mixture of different crops, whereas in today's Aksum, there is no evidence of these crops being processed, stored and used together in a mixed form as found in the archaeological samples (Phillipson 2000). There is also under representation of African and Ethiopian crops, compared to Near Eastern crops in archaeological samples (Dombrowski 1971, Clark 1988, Boardman 1999). These indigenous crops are a key evidence, showing the emergence and development of food production (Clark 1988).

Despite the above difficulties, ethnoarchaeological investigations are important ways in understanding human's strategies and decisions taken in order to adapt to their environment. These decisions and strategies have an effect on archaeological records. On the one hand ethnoarchaeological studies, which examine traditional agriculture systems, are just beginning in Ethiopia (D'Andrea et al.1999). On the other hand Ethiopia, with its diversity in geographic and environmental conditions, has developed a multitude of modes of local adaptations and strategies (Westphal 1975, Barnett 1999). More ethnoarchaeological research is needed to shed light on these traditional agriculture systems before they become swallowed by modern system. They need to be studied for better understanding of the pre-historic arena.

Finally this journal can play an important part in promoting ethnoarchaeological study here in Ethiopia. Many of the archaeological sites in Ethiopia are found in Tigray. As a result many of the ethnoarchaeological studies in Ethiopia were conducted in this region. This is especially true with regards to the ethnoarchaeological research works conducted by the Canadian scholar Prof. Catherine D'Andrea and her colleagues from Simon Fraser University and other Universities. In fact scholars from Mekelle University's College of Dryland Agriculture and College Veterinary Science have participated in the research. But since the publication of the research work was made abroad, the results of the researches as well knowledge about ethnoarchaeology study were not disseminated so much in Ethiopia. As a result, until today, very few ethnoarchaeological research is done by Ethiopian scholars. This journal, by publishing future ethnoarchaeological work can contribute to the growth of this crucial discipline.

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**The Recording of the Local Cultural Context:
Its Importance and Necessity**

by Denis NOSNITSIN¹

Today, recording of the cultural context is not an issue in the most European or other (post-) industrial countries. In most of the European countries, the task of the thorough recording of the local cultural contexts had been completed many years ago. It happened in the course of the 19th - early 20th century and mostly coincided with the formation of big European nations in the frames of national states, and with the emergence and quick maturing of the modern European intelligentsia and university scholarship. At one point,

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