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Comments on the scope of ethnoarchaeology in Palaeolithic research

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Abstract
Ethnoarchaeology, considered as a subdiscipline of archaeology, has a growing significance for prehistory research as the significance of ethnology is reduced by the withdrawal of ethnologists (at least in German speaking countries) from fields such as the "incipient" peoples and their material culture which traditionally had combined the two disciplines.
When 30 years ago L.R.Binford wrote about 'archaeology as anthropology' and initiated thus a "revival" of archaeological material, the time of processual archaeology had come. Binford's views on different behaviour during hominisation especially in the Middle and Upper Palaeolithic inspired discussions also among European archaeologists.
An applied example (Simek 1987) concerning the French Palaeolithic is critically considered which refers to Binford's model of changing human behaviour in land use and social structure. Different levels of behaviour and the impact on the archaeological record are stressed. Further on, a theory of Binford (1991) is discussed which demonstrates that the social role of elderly male members in a community is dependent on living conditions and environment for a hunter society.

Key words: Ethnoarchaeology, behaviour, Palaeolithic

Ethnoarchaeology, considered as a subdiscipline of archaeology, has a growing significance for prehistory research as the significance of ethnology is reduced by the withdrawal of ethnologists (at least in German speaking countries) from fields such as the "incipient" peoples and their material culture which traditionally had combined the two disciplines.

The question we should ask here is how far is ethnoarchaeology relevant to the Palaeolithic period. The processual approach of L.R. Binford and others has been applied to hunter-gatherer groups as well as in a Palaeolithic context and material.

In this paper, I would like to discuss two examples which are interesting and, in my opinion, exhibit a certain weakness in the method.

Binford's call for "archaeology as anthropology" implies that there are no historical facts available for archaeologists to observe. Past events are gone, archaeologists have no informants (Binford 1987, 392). He points out that the way archaeologists produce their data is to record the events of observations in which they participate. He asks for a searching "through pattern recognition studies to gain an insight into how the past was organized" (403). Fisher & Strickland (1991, 215) put it this way: "ethnoarchaeologists can witness human behaviours and link behaviour securely to its material products, including spatial patterns of materials at campsites."

In a review article Ingold (1992, 798) makes the criticism that middle-range theorists (as Binford) have not been entirely clear about their objectives. Their theories are not meant to be theories of behaviour, but are meant to predict - in terms of the formation of an archaeological site - the material consequences of particular circumstances of behaviour. For the most part it implies simple mechanics.

Today's ethnologists are hardly interested in spatial patterns of material at campsites. Clearly, it is for archaeologists to learn more about this subject; but on the other hand: can one draw con-

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clusions about human behaviour from a certain pattern of material distribution excavated? It is a genuine archaeological problem to decide what is the living floor in a certain stratigraphical situation. The solution is sought together with sedimentologists and involves the detection of post-depositing strata movements during thousands of years as well as ideas on how human beings are likely to distribute material while carrying out certain activities. It is in this field, the behaviour of human beings, that ethnoarchaeologists play a part in providing the methodology.

If one deals with behaviour, it is necessary to define its meaning. Ethologists give differentiated answers to this question. Tembrock (1982, 87-88) wrote about three phases of behavioural dynamics (Verhaltensdynamik): Firstly, a phase of searching (Suchphase), secondly, a phase of orientation (orientierte Phase) and, thirdly, the execution of an activity (Handlungsvollzug). It should be considered that evolution went from point 3. to point 1. Tembrock continues by distinguishing three classes of demand on the environment (Umweltsanforderungen): related to the body itself, to the behaviour of the individual and to the effect of a group. There is, according to Tembrock, a fourth class, which is based on traditions and gains central importance only with regard to human beings. This is where the prehistoric factor becomes significant. Archaeologists have to remember that activity, to a certain degree, is determined by tradition. This, of course, is a pitfall for ethnoarchaeologists concerned in the Palaeolithic, as it means overcoming a gap of tens of thousands of years, and can not be easily evaded by making comparisons with recent hunter-gatherer-societies.

Leacock (1986, 154) wrote about four levels of integration within human society. In her opinion the behaviour of individuals can not be predicted, as different conditions and a mixture of potentials and preferences play a part in it. Leacock brings in language as a means of influence which manipulates reactions in an even less predictable way.

This distinction in Leacock's levels and Tembrock's behavioural phases implies that the distribution pattern at an archaeological site would mostly reflect an individual psycho-social level of behaviour and that of interacting individuals.

Without a theory on the society under archaeological investigation, one can hardly draw valid conclusions by just relying on an ethnoarchaeological approach. Binford himself has provided several deductive examples, in postulating, for instance, a model for early human hunting.

An example concerning the French Palaeolithic

In his article "Spatial order and behavioural change in French Palaeolithic" Simek (1987) implies Binford's ideas of behavioural changes in land use comparing material from French Middle and Upper Palaeolithic contexts. Binford's theory suggests that hunter-gatherers of the Middle Palaeolithic were chiefly organised in an opportunistic foraging mode, whereas in the Upper Palaeolithic the chief method was a planned, logistic collecting. For the Middle Palaeolithic, a foraging strategy is supposed to be characterized by residential mobility; and little functional specificity is expected among forager sites. On the other hand collectors practised a distinct kind of land use, usually specificity; in general, greater ranges of intersite variability as a function of increases in the logistical components of the subsistence-settlement system are to be expected. Many sites should therefore exhibit functional specificity.

From two Dordogne sites, Le Flageolet I, with one Upper Perigordian (layer V) and two Aurignacian levels (layer VIII-1 and VIII-2), and a Mousterian level of the Abri Vaufrey / Cave 15 (layer VIII) Simek analyses the distribution of bone fragments, lithic artefacts and for the latter site also of bone fragments.

In order to provide results from the Mousterian stratum he tried to statistically isolate distribution clusters of bone and stone artefacts and interpret them by using factor analysis as a method. It is shown that most variation in cluster content is accommodated by a single factor, thus clarifying the redundant nature of the spatial pattern. Bone and stone distributions on the highest clustering scale have comparable patterns (see Simek 1987, fig.10 & 11). Simek interprets the outcome as reflecting occupation by an unspecialized group (perhaps for several or many times).

Comparing the Upper Palaeolithic levels from Le Flageolet I he draws the conclusion that all three levels show a remarkable consistency in spatial order and in changing patterns of heterogeneity (see ibid.,fig. 7-9). The shelter was appa-

rently occupied by similar groups, which performed a limited set of specialized tasks, over a long period of time. Simek then comes to the conclusion that the specific nature of on-site activities suggests a use within a logistically organized system.

Although it is possible to agree with the arguments which he draws from his statistics, I would like to make the point that one surely expects activities to be carried out in a cave in a different way from in a shelter and to be dependent on the size of the activity area. The question of season and which prey was hunted would provide us with a more reliable answer about behavioural differences than trying to undermine a hypothesis by introducing the interpretation of overlapping distribution patterns, caused by successive visits of the Palaeolithic people. The importance as a heuristic method is not to be questioned as such.

The difficulty, I believe, lies in the attempt to demonstrate differences in a general, higher level of behaviour, as explained before, using the limited material and distribution patterns of the two sites. The information provided should be combined with intersite and inter-area spatial results - as Simek himself considers as further dimensions of an analysis - before a valid answer of a socio-economic nature can be found.

Farrizy & David appear to both doubt the validity of Binford's model on the hunting strategy of the Neanderthals. They conclude that although Middle Palaeolithic data often appear monotonous and unspecialized, this does not mean that their producers were incapable of more specialized and long-term foraging strategies (see Knüsel 1992, 983).

An application to recent hunter-gatherer conditions

An alternative way of using results from ethnological research is provided by Binford in a detailed article published in 1991. This is a further contribution to the ethnoarchaeological work he did from 1969 onward when he documented the camps of the Nunamiut hunters in Alaska and interpreted their society.

The investigation of the Nunamiut local groups, their camping patterns and economic organization presented in a recent article leads Binford to the conclusion that security-seeking by a group determines the role of the elder men within a group. His arguments and results show that in environments where uncertainty is likely to be a major problem, older, experienced persons take on enhanced social roles. Binford links this situation with the degree to which the terrestral mammals are highly mobile and subject to cyclic variation in both patterns of movement and of population within a given range, which means high risk and high uncertainty of resources. He writes:"we can expect strong selection favoring increased social importance for experienced older persons as guides to decision-making in uncertain situations" (131). Therefore it is not solely prestige-seeking that increases the influence of the experienced.

This situation of high mobility and cyclic variation could be compared with the Upper Palaeolithic, especially the Magdalenian in Europe. I would like to point out here that, in a completely different environmental and economic situation, among Australian Aborigines, the role of men who were beyond their physical optimum - of over 40 years of age - gave them a key position in social organization (Rose 1987, 108-113). This also undermines the argument of security-seeking by a hunter-gatherer society.

Binford goes further and stresses that one can expect age to be increasingly important relative to kin distance as an organizing dimension of labour. There I can see no contradiction between age and kin and I would like to follow Service's argument that contact with Europeans influenced the role of kinship and marriage in early societies (see Binford 1991, 27). Binford, on the other hand, strongly disagrees with these attempts "to characterize the hunting and gathering way of life" (132) and for his part is "seeking to understand why the world is the way it appears to be" (ibid.). This attitude of putting all emphasis on testing and little on theory development is regarded critically by Shennan (1989, 832).

Indisputedly, the importance of an ethnoarchaeological approach in Palaeolithic research lies in proposing ways to read and interpret the archaeological record of a site. This leads to arguments about the theoretical prerequisites and methodology too - an unavoidable undertaking if we consider the Palaeolithic period as part of prehistory.

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