The Social Organization of Early Copper Age Tribes on the Great Hungarian Plain

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Abstract

This paper discusses some methodological implications of the theoretical concept of 'organizational flexibility,' and applies this notion to a particular archaeological example. It is argued that the social re-organization that occurred on the Great Hungarian Plain at the end of the Neolithic occurred within the range of variability that was subsumed by a single, flexible social structure. This tendency of tribal societies to frequently rework their social networks has been documented in a wide variety of cultural contexts. When these changes occur, they often do so along predictable lines of fission and fusion that are dictated by social structures, which manifest themselves in systems of kinship, religion, and economy. These structures shape the various trajectories that tribes take as they reorganize themselves to deal with changing social and ecological environments. By distinguishing between particular archaeological *patterns* and the social *structures* that produced those patterns, we will be in a better position both to discuss tribes in a cross-cultural framework, and to understand the place of tribal societies in an evolutionary context.

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Introduction

In the first paper presented in this symposium, Sev Fowles introduced the idea of 'organizational flexibility' as a way of thinking about how tribal societies are organized and change over time. In that paper, Sev suggested that tribes possess two characteristics that endow flexibility: 1) segmentary principles of decision-making; and, 2) pan-residential corporate institutions – or sodalities – that mediate interaction within and between those social segments (Fowles and Parkinson 1999). My goal today is to discuss some of the methodological implications of this concept, and to apply it to a particular archaeological example.

I will argue that the radical social changes that occurred on the Great Hungarian Plain at the end of the Neolithic occurred within the range of variability that was subsumed by a single – albeit very flexible – social structure. This tendency of tribal societies to frequently rework their social networks has been documented in a wide variety of cultural contexts, and seems to be one of the defining characteristics of tribal systems (cf. Fowles 1997; Gearing 1958). Nevertheless, when these changes occur, they often do so along predictable lines of fission and fusion that are shaped by social structures which manifest themselves in systems of kinship, religion, and economy . These structures shape the various trajectories that tribes take as they reorganize themselves to deal with changing social and ecological environments (cf. O'Shea 1989).

By distinguishing between particular archaeological *patterns* – what we see on the ground – and the social *structures* that produced those patterns – which we must infer from the available data, we will be in a better position both to discuss tribes in a cross-cultural framework, and to understand the place of tribal societies in an evolutionary context.

Integration and Interaction

In prehistoric contexts, we usually try to model tribal social organization by looking at changing patterns of integration and interaction over time (e.g., Braun and Plog 1982; Saitta 1983; Plog and Braun 1984; Creamer and Haas 1985; Haas 1990; Habicht-Mauche 1990). Unfortunately, we seldom provide precise definitions for these terms. There is some general consensus that *integration* refers to a group level phenomenon – individuals are integrated into sociopolitical units of decision-making. *Interaction*, on the other hand, usually refers to a more general process that occurs at both the group and individual level. While these two processes are intimately intertwined, it is important to distinguish between them methodologically, since different types of archaeological data tend to speak more to one process than the other.

For example, we tend to use evidence of integration to measure the size and scale of social segments. By looking at the size of houses people lived in, we get an idea of how the basic units of prehistoric societies were organized – at the nuclear family level, or at the multi-family or lineage level. Similarly, by looking at the size and internal organization of villages or hamlets we try to understand how these basic segments were integrated into corporate units of greater scale. Beyond the village or hamlet level, it becomes extremely difficult in the absence of ethnohistoric documentation to determine

how different tribal villages were integrated into functioning units. This is where interaction comes in.

We use evidence of interaction to infer how these different segments linked up. By looking at ceramic assemblages and architectural features from different sites, we infer spheres of interaction that we hope correspond to what were actual 'integrated' units. This is where tribes are particularly annoying. Since they are by definition acephalous and decentralized, tribes frequently appear as smears across the archaeological landscape – having few discrete social boundaries. Nevertheless, by comparing how prehistoric tribal societies were integrated into units of varying size, and how these units interacted to varying degrees, we can begin to model how things changed over time. The remainder of this paper represents an initial attempt at such an analysis.

Social Change on the Great Hungarian Plain, 4,500 BC

The transition from the Late Neolithic (*ca.* 5,000-4,500 BC) to the Early Copper Age (*ca*. 4,500-4,000 BC) on the Great Hungarian Plain is marked by dramatic changes in the archaeological record (Bognár-Kutzián 1963, 1972; Forenbaher 1993; Raczky 1987). These changes include:

Changes in the spatial scale of 'cultural groups'. During the Late Neolithic the Plain is sub-divided into three geographically-discrete 'cultural groups' (i.e., Tisza, Hérpaly, and Csőszhalom) each with distinct ceramic assemblages, house forms, settlement types, and economic strategies (cf. Kalicz and Raczky 1987). During the Early Copper Age these discrete sub-divisions give way to a homogeneous cultural horizon (i.e., Tiszapolgár) which extends across the entire Plain (cf. Sherratt 1982; *contra* Bognár-Kutzián 1972). While there are some minor differences in ceramic assemblages from Early Copper Age sites, these ceramic differences tend to follow geographic boundaries, rather than discrete social boundaries.

Changes in house form. The large domestic structures of the Late Neolithic (up to 20m long) are replaced in the Early Copper Age by much smaller (*ca*. 5m long), less substantial dwellings (Bognár-Kutzián 1972; Goldman 1977; Kalicz and Raczky 1987; Siklódi 1982, 1983).

Changes in settlement type. The Late Neolithic settlement pattern, which combined the habitation of large, fortified tells (up to 4 ha) with large 'flat' (i.e. horizontal) settlements (up to 11 ha), gives way in the Early Copper Age to the almost exclusive habitation of small, unfortified, flat settlements (*ca*. 0.5-1 ha) (Bognár-Kutzián 1972; Chapman 1997a; Kalicz and Raczky 1987; Sherratt 1984).

Changes in settlement pattern. In addition to being much smaller than Late Neolithic settlements, Early Copper Age sites are less nucleated and more evenly distributed across the landscape (Bognár-Kutzián 1972; Sherratt 1983b, 1984).

Changes in mortuary practices. Throughout the Neolithic in eastern Hungary, burials occur in and around settlement sites. During the Early Copper Age, large formal cemeteries appear. These cemeteries are usually isolated in the landscape – entirely unassociated with settlement sites (Bognár-Kutzián 1963, 1972; Chapman 1997b).

Changes in economic practices. Domestic and wild species appear in roughly equal proportions throughout the Neolithic. During the Early Copper Age, faunal assemblages are dominated by domestic cattle (Bognár-Kutzián 1972; Bökönyi 1959, 1962; Sherratt 1983b; Skomal 1983).

Changes in trade networks. The long-distance trade networks of the Neolithic, which brought 'exotic' goods – such as spondylus bracelets – from as far away as the Black Sea, are re-structured in the Early Copper Age to bring copper, gold, and chert from the Carpathians onto the Plain (Biro 1998; Sherratt 1987).

All of these changes in material culture indicate a dramatic re-organization of life on the Plain at about 4,500 BC. Probably not coincidentally, this time coincides with the development of copper smelting technology in the Balkan and Carpathian mountains (Jovanovic 1982), and the beginning of the 'secondary products revolution' in Eastern Europe (Sherratt 1983a; Milisauskas and Kruk 1991). We may never know what exactly caused these dramatic social changes. Nevertheless, by looking at the levels of integration and interaction that characterize the region during both periods, it is possible to build up a picture of the structural changes that produced each of these very different patterns.

Modeling Social Structure During the Late Neolithic and Early Copper Age

Throughout the Late Neolithic, the smallest integrative unit is indicated by large domestic structures. While the exact form of Late Neolithic houses varies across the Plain, their floorplans regularly exceed $100m^2$ (Kalicz and Raczky 1987). Frequently these big houses are sub-divided into discrete rooms, but often they are reminiscent of Iroquoian longhouses – with no apparent architectural divisions, but several spatially discrete areas organized around hearths and storage pits. The structure of these big houses, with internal sub-divisions, suggests some sort of multi-family group (or large lineage?) as the basic integrative unit during the Late Neolithic. While it is unclear whether this represents the basic productive unit or the basic pooling unit, it is safe to assume that some degree of decision-making had to occur at this basic level.

The next largest integrative unit during the Late Neolithic is the large, nucleated village. Late Neolithic sites, which are frequently fortified with ditches and ramparts, regularly cover 5-10 hectares, with some as large as 28 hectares . Some villages are made up of spatially-restricted house clusters, which may indicate internal social divisions – or intermediate corporate units – within the village (Kalicz and Raczky 1987).

While Late Neolithic sites tend to be rather large, they are relatively few in number. For example, in the Körös River Valley in northern Békés County – an area of approximately 2000 km^2 –Hungarian research teams identified only 31 Late Neolithic sites. In the same area, almost 250 Early Copper Age sites were identified (Ecsedy et al. 1982; Dénes et al. 1989).

Beyond the village level, we need to infer integration based upon archaeologically identifiable spheres of interaction. This is a relatively simple matter during the Late Neolithic, when we are presented with three spatially discrete ceramic assemblages. From this, it seems we would be justified in adding a third level of integration to the model – based upon these three discrete spheres of social interaction, which indicate the functioning of social boundaries within the Plain. While we cannot be certain whether this level actually existed as a unit of sociopolitical decision making, it is clear that interaction occurred more intensively within these groups than between them, as indicated by the relative homogeneity of ceramic assemblages, house forms, settlement types, and economic strategies within these three spheres.

We are thus left with a four-tiered structural model for the Late Neolithic – 1) large, probably multi-family residential groups, integrated into; 2) house clusters, which were integrated into 3) large villages, which, in turn, were incorporated into; 4) three discrete spheres of intensive interaction, which most likely indicate some sort of supra-village level of integration. This basic four-tiered structure gives way to a very different pattern at the beginning of the Copper Age.

The basic unit of integration during the Early Copper Age is indicated not by the large, probably multi-family, dwellings characteristic of the Neolithic, but by much smaller (5 x 4 m), probably single-family houses (Bognár-Kutzián 1972; Siklódi 1982, 1983). While the single-family level of integration may have been foreshadowed in the internal subdivisions of the big houses during the Late Neolithic, it is only at the beginning of the Copper Age that the single family assumes its dominant role as the most basic integrative unit. This point becomes more salient when viewed in light of the internal organization of Early Copper Age settlements.

In stark contrast to the Late Neolithic pattern of intensive nucleation, the Early Copper Age pattern is dominated by complete dispersal. Now, sites are very small (0.5-1 ha.), and tend to have only a few small houses on them (Siklódi 1982, 1983). It is as though the big houses of the Late Neolithic – with their internal subdivisions – have become the very settlements of the Early Copper Age.

Finally, the three discrete spheres of interaction which characterized the Plain throughout the Late Neolithic give way in the Early Copper Age to a more homogeneous pattern. The social boundaries that sub-divided the Plain during the Neolithic are relaxed, and interaction occurs continuously across the entire Plain. Differences in ceramic assemblages now follow geographic boundaries – in particular, river valleys – rather than social ones.

The picture that emerges for the Early Copper Age is thus quite different from the Late Neolithic – 1) single-family units, integrated into; 2) multi-family hamlets, which seem to interact continuously across the entire Plain. This pattern is further enhanced by

the lack of fortifications at Early Copper Age settlements, suggesting that the locus of aggression shifted from that of inter-village warfare – during the Neolithic – to something more like inter-family feuding – during the Copper Age.

Conclusion

While the material culture of the Early Copper Age yields a substantially different picture of social organization, we need to ask whether this pattern is really all that different from the Late Neolithic – structurally. Certainly, a great deal changed. But the trajectory of change that produced the small dispersed settlements in the Copper Age was molded by the same flexible social structure that produced the large, nucleated settlements of the Late Neolithic. The only real difference between the two periods – structurally – seems to be the relaxation of the social boundaries that once sub-divided the Plain, which is somehow correlated with the preference to settle in smaller villages during the Early Copper Age. But each of these minor structural changes were already foreshadowed in the material culture of the Late Neolithic.

By accessing a different set of social options than their Neolithic predecessors, the Early Copper Age inhabitants of the Great Hungarian Plain left us with a very different cultural pattern. But this different pattern did not emerge overnight – it developed gradually, over half a millennium. Fortunately, in this case, these changes had material correlates that we can trace archaeologically. This makes the Hungarian example somewhat exceptional. It allows a rare insight into the variability – and flexibility – that 'makes a tribe a tribe.'

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