Eötvös Loránd University of Sciences, Faculty of Humanity

PHD THESIS

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Early Copper Age Settlement Patterns in the Middle Tisza Region

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I. The aim of the dissertation

The PhD thesis aims the evaluation of the Early Copper Age settlement patterns in the Middle Tisza Region. The picture of the mentioned period that evolved in the 20th century has been changed radically in the last decade mostly due to specific projects and the easier availability of different natural scientific methods. The research of the cemeteries in the period has outnumbered the settlement researches. A Hungarian-American joint project carried out in the last few years aimed the evaluation of the Late Neolithic, Early and Middle Copper Age settlement patterns in the Körös Region amended the situation. As its result, we have information about the structure of the society in the mentioned period not only from cemeteries, but from settlements as well. An other significant change in the research can be connected to the absolute chronology. Instead of the linear development of successive Early and Middle Copper Age cultures they seem to be partially coeval. The model of successive phases of the Early Copper Age Tiszapolgár Culture, the Middle Copper Age Bodrogkeresztúr Culture and the Hunyadihalom Culture of the final MCA has been tumbled, the different ceramic styles existed partially in the same time.

These results inspired me to approach the evaluation of the ECA settlements in the Middle Tisza Region from a different point of view. The basic problem is that if the Tiszapolgár and Bodrogkeresztúr ceramic styles are not signs of chronological differences, then what caused their appearance? What makes a find material Tiszapolgár or Bodrogkeresztúr style? What is the relation between these two cultures and the Hunyadihalom style material?

My approximation to explain the reasons for the existence of these two ceramic styles, if not chronological differences, was to try to find people and communities behind them. My idea was to approach the making of pottery not as a static phenomenon, but as a process of intensional human decisions that defined the shape and the decoration of pots, and were determined by social rules. In this case, I was hoping to have an opportunity to reconstruct the rules and traditions of the people and communites that made the pots, and to define the groups that used similar ceramic styles and therefore similar rules. If these groups were equal to those that the research labelled as Tiszapolgár and Bodrogkeresztúr cultures, two real entities could be delineated as archaeological cultures.
My attention has been drawn on the archaeology of identity for this reason. I summarized shortly the discussion about the term of archaeological cultures that took place in the discourse in the last few decades. The main goal of my dissertation was to try to delineate identity groups based on the settlement pottery, and to analyse if these groups are equal to archaeological cultures.

II. The methods and the sources of the evaluation

The settlement pottery from 13 Early and Middle Copper Age sites was analysed from the Middle Tisza Region. The minority of the sites were situated in the northern part of the research area, on the so-called Polgár Island. The dissertation contains two sites form this region, a Tiszapolgár settlement at Polgár-Király-Ér-part, and a two Hunyadihalom pits from Polgár- Ferenci-hát.

The majority of the sites were situated in Szolnok County near the Tisza river. The northernmost of these sites was a Tiszapolgár settlement at Tiszaszőlős-Alsórépart. The other sites from north to south are: a Tiszapolgár site at Tiszagyenda-Vágott halom NKT 17.; a Tiszapolgár site at Kenderes-Kulis, a Tiszapolgár site at Szolnok-Zagyvapart, a Tiszapolgár and a Hunyadihalom site at Rákóczifalva-Bivaly-tó 1/a, a Bodrogkeresztúr site at Rákóczifalva-Bivaly-tó 1/c, a Tiszapolgár and a Hunyadihalom site at Rákóczifalva-Bagi-földek 8-8/a, a Tiszapolgár site at Tiszaföldvár-Újtemető, and a Bodrogkeresztúr site at Kiskunfélegyháza-Pap-dülő.

The cultural definition of the sites was based on the traditional pottery typology. It was a good starting-point to demonstrate the newly emerged problems of the ECA and MCA cultures on the Great Hungarian Plain.

The amount of the find material and the approximation form the identity required a method that differed from the traditional one. Therefore I built a database, with which it was easier to handle more than 13000 ceramic sherds, and I was able to record them in a standard system. The categories were configured along four main lines. The first group contained the technological parameters, the second group contained the shape parameters, the third and fourth contained the plastic and incised decorations.
I tried to form these categories so that they can preserve as much information as possible. The material found at settlements is fragmented, therefore I could not make very detailed categories, it could have foiled the analysis. I tried to treat the pottery objectively, there were no predeterminative categories, so I avoided groundless cultural definition and artificial differentiation. I explained the different characteristics of the material as the result of intensional human decisions referring to the making of pots.

I made the analysis using different statistical methods. Besides the descriptive statistics, I used multivariable statistical analyses (principal component analysis, factor analysis, correspondence analysis) to compare the pottery from different sites.

**III. Results**

I analysed the material on different levels. The first was the settlement level, the material was presented by descriptive statistics in every case. If I had the opportunity, I tried to examine whether the material in the features was a part of a uniform pottery or not. In the cases that could be examined, the principal component analysis (PCA) proved the uniformity of the pottery assemblage. Where PCA was not successful due to the amount and the value of the material, correspondence analysis showed the same results, however, a little less accurate. In some cases only descriptive statistics could show a general picture of the pottery.

The result was similar in every successful examination, the pottery found in the features of a given settlement was a part of a uniform assemblage of pottery. Structures that suggested the transformation of the pottery within a settlement could have been observed at only one site, Rákóczifalva-Bivaly-tő 1/c.

Further levels of the analysis were the level of regions and cultures. The main observations are summarized below.

- The pottery used at the Hunyadihalom settlements differs significantly in most dimensions from the Tiszapolgár and Bodrogkeresztúr style pottery.
During the comparative analysis of the settlement pottery no groups could be delineated that could be identified as Tiszapolgár or Bodrogkeresztúr cultures.

No standard directions of development of settlement pottery could be identified that were valid in all settlements.

The pottery found at the settlements was a part of a standard repertoire.

All of the communities at the analysed settlements had their own preferences, therefore every settlement had its own characteristic pottery that was composed based on the above mentioned repertoire.

The pottery assemblage was constituted based on the decisions of the integrative units on the settlement level. No standard decisive rules of the making of pottery above the settlement level could be proved.

No identity groups within settlements could be delineated based on settlemet pottery.

Traces of integrative units above settlement level could be observed, these were not expressed by pottery, but spatial distribution. The common identity was expressed in these cases by common space.

The enclosures and the separate cemeteries can be seen as an expression of group identities of the same kind.

Artifacts that are labelled as leading finds of the Bodrogkeresztúr culture, such as milk jugs, heavy copper tools or golden pendants are known outside the Great Hungarian Plain as well. Their meaning, their symbol therefore exists in a larger area connecting a greater community. These finds are known almost exclusively from burials, or other special contexts. It suggests that their role and meaning is not common as well. Based on these artifacts an identity group can be delineated that is larger than the integrative units observed on the Great Hungarian Plain, and is not similar to the unit thought to be the Bodrogkeresztúr culture.

Summarizing the observations about the expression of identity it can be stated that its place and method depends on the type of identity. Individual identities as gender and age identity, or personhood identity are expressed mostly in burials. In the formal cemeteries sometimes
there is a possibility to observe small group identities as well. The cemetery itself is an expression of the unity of the community that use it. A part of the artifacts that appear in the burials, such as milk jugs, copper and gold finds, show a symbol that is widely known in the Carpathian Basin, the Balkans, moreover north from the Carpathian Basin. It means that the connection to these symbols appears in the burials as well.

The very rare number of these finds at settlements is not a coincidence. It seems, that the expression of these identities were not that important or not important at all at settlements. It seems then, that one identity appers very sharply at settlements, and it is the expression of the community living at the settlement itself and the expression of the separation from other settlement communities. The archaeologically visible expression of that group identity was, besides the spatial separation, the pottery assemblage made by own preferences.

One of the basic questions of the dissertation was whether the Tiszapolgár and Bodrogkeresztúr cultures are a real identity group, or are they only artificial units. The answer is complex. Based on the above mentioned results, it could be easy to state that the Tiszapolgár and Bodrogkeresztúr cultures are astrays of the research.

In my opinion the creation of archaeological cultures was a result of the generalisation of observations in the last century of research. Cultures were sometimes based upon certain artifacts (i.e. Bell Beaker), certain decorations (i.e. Linearbandkeramik), in other cases settling strategies (i.e. tell-cultures), or burial customs (i.e. the people of the pit-grave kurgans). These models ignore variability and the complexity of human behaviour. In these cases such units were created that were later proved to be incoherent, as it happened in the case of the Baden-complex or the Trichterbecher-complex. The situation of the Tiszapolgár and Bodrogkeresztúr cultures is inverse, it seems that the research distinguished a unit that is more likely coherent.

But if I state as a conclusion of the dissertation that the Tiszapolgár and Bodrogkeresztúr cultures were only virtual units, I would commit the error of generalisation. The traces of several forms of identity in the Early Copper Age were listed above. In the cemeteries it seems that an identity group appears which expresses itself with milk-jugs, heavy copper tools and golden pendants. Nevertheless there seems to be an other group which is characterised by such finds that are labelled as Tiszapolgár-style finds. So it may be possible that two identity groups exist in the Early Copper Age of the Great Hungarian Plain that express themselves in
a way that is known as Tiszapolgár and Bodrogkeresztúr cultures. Although these identity groups appear only at one arena, in cemeteries.
Selected publications of the author

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