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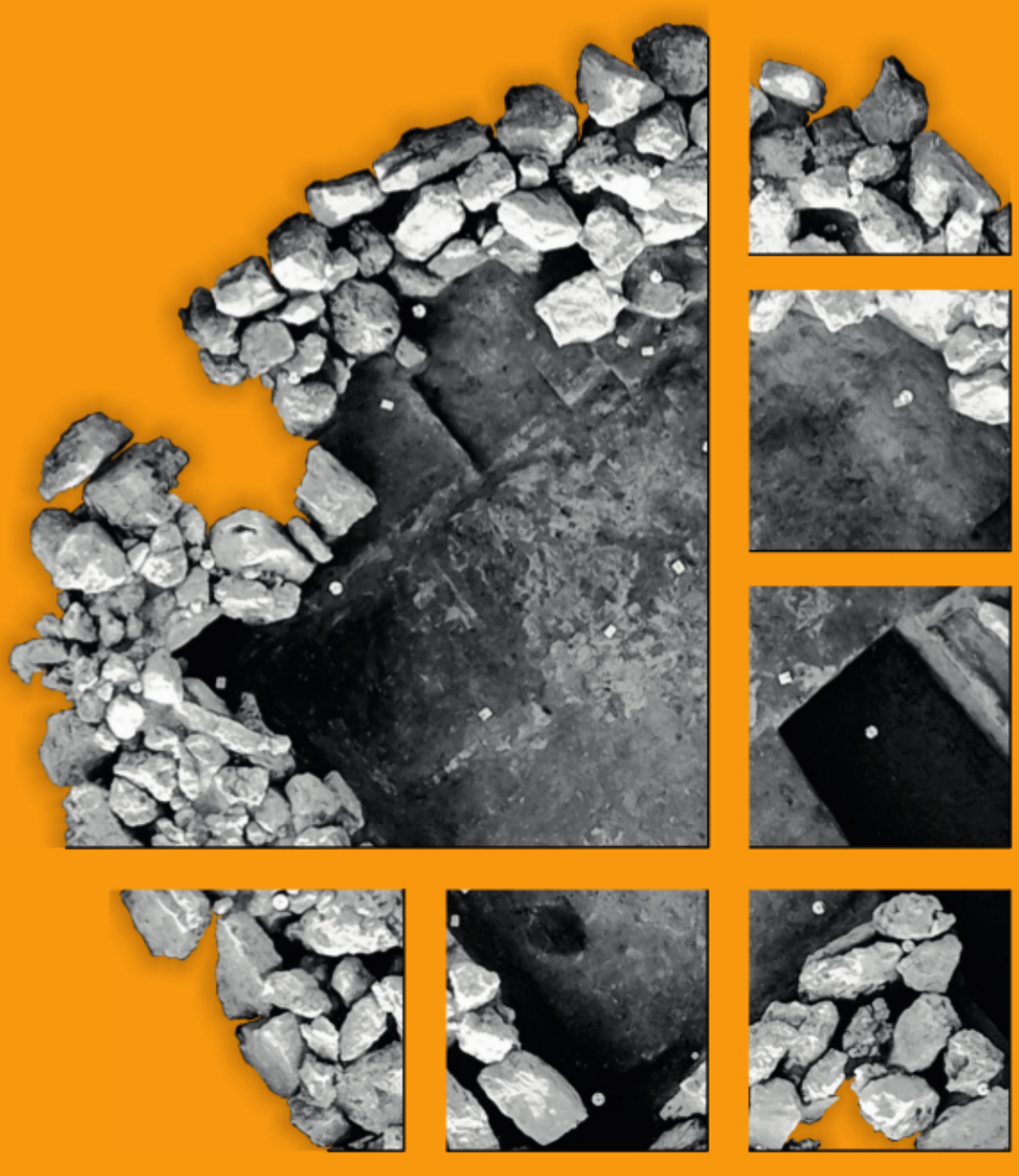

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Contents

Articles

Method

Field Reports

Thesis abstracts

Book reviews

Early Copper Age settlement patterns in the Middle Tisza Region

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Abstract

Abstract of PhD thesis submitted in 2016 to the Archaeology Doctoral Programme, Doctoral School of History, Eötvös Loránd University, Budapest under the supervision of Pál Raczky.

The aim of the dissertation

My work aims the evaluation of 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. Our picture on the Early and Middle Copper Age (henceforth ECA and MCA) Tiszapolgár and Bodrogkeresztúr cultures derived mostly from cemeteries, and only a very few settlements were known until the end of the 20th century.[1]

This situation has changed as a Hungarian-American joint project was carried out in the last decade, which aimed the evaluation of the Late Neolithic, Early and Middle Copper Age settlement patterns in the Körös Region. The analysis of the settlement network resulted the reconstruction of a complex system of integrative units on different levels.[2] Another significant change in the research is related with the rapid development of absolute dating, namely the easier access to AMS-measurements and the rise of the Bayesian method. New evidences suggest that instead of a linear development of successive ECA and MCA cultures they seem to be partially coeval. The model of successive phases of the ECA Tiszapolgár Culture, the MCA Bodrogkeresztúr Culture and the Hunyadihalom Culture of the final MCA has been strongly questioned; the different ceramic styles existed partially in the same time.[3]

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 results of chronological differences, then what caused

1 Bognár-Kutzián 1963; 1972; Patay 1975; 2005.
2 Parkinson 2006; Parkinson – Gyucha 2007.
3 Raczky – Siklósi 2013.

their appearance? What makes a find material Tiszapolgár or Bodrogkeresztúr style? What is the relation between these two units 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 pottery making not as a static phenomenon, but as a process of intentional human decisions that defined characteristics such as 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 communities 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.[4] I shortly summarized the discussion about the term of archaeological cultures that took place in the archaeological discourse in the last few decades.[5] The main goal of my dissertation was to try to delineate identity groups based on the settlement pottery, and to analyse whether these groups are equal to archaeological cultures or not.

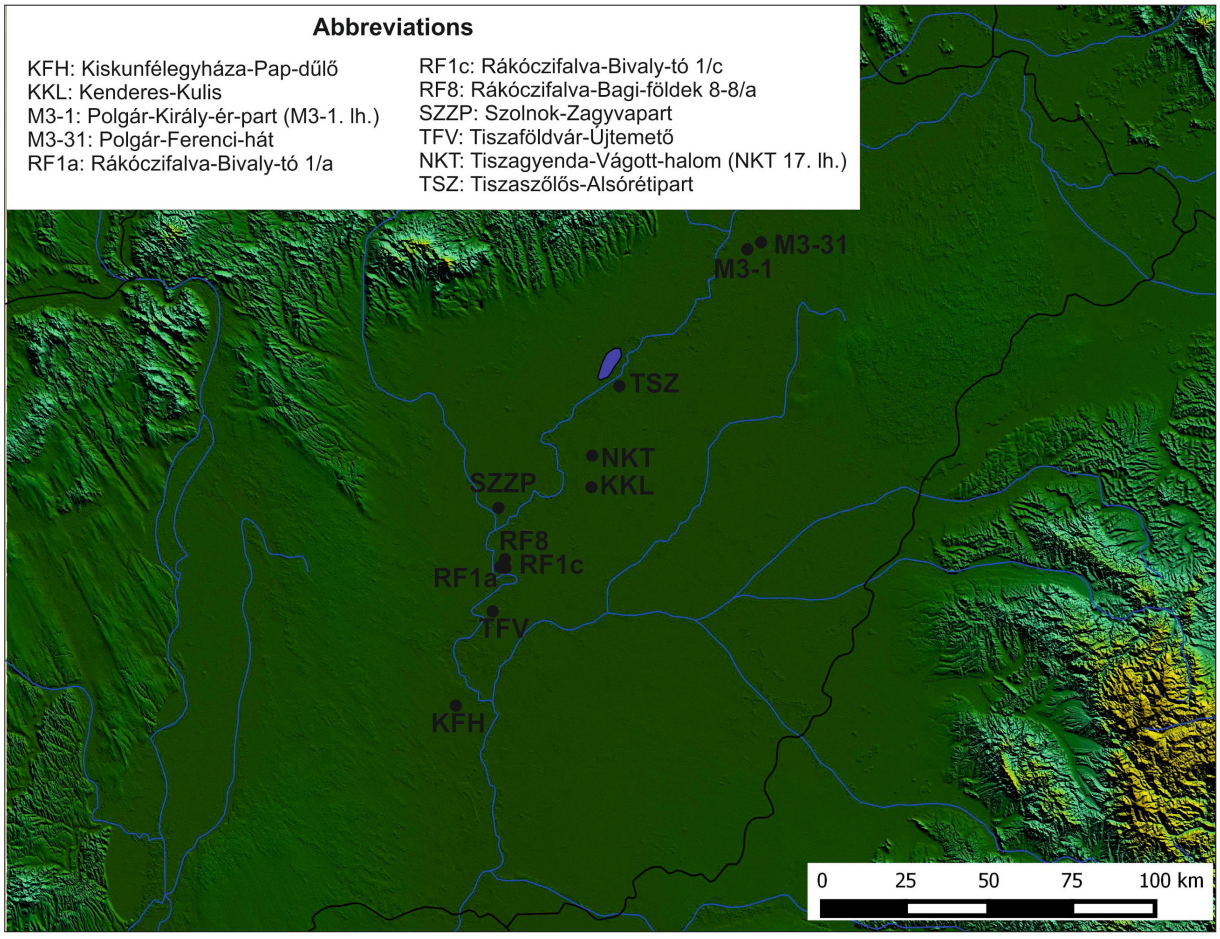

Fig. 1. The studied ECA-MCA settlements on the Great Hungarian Plain.

4 Casella – Fowler 2005; Díaz-Andreu et al. 2005 and Insoll 2007 with further literature.
5 Roberts – Vander Linden 2011 with further literature

The methods and the sources of the evaluation

The settlement pottery from 13 ECA and MCA sites was analysed from the Middle Tisza Region *(Fig. 1).* The minority of the sites are situated in the northern part of the research area, on the so-called Polgár Island. The previous stylistic classification of the sites was based upon the earlier typochronological systems. The dissertation contains two sites from this region, a Tiszapolgár-style settlement at Polgár-Király-Ér-part, and two Hunyadihalom-style pits from Polgár- Ferenci-hát.

The majority of the sites are situated in Szolnok County near the Tisza River. The northernmost of these sites was a Tiszapolgár-style settlement at Tiszaszőlős-Alsórétipart. The other sites from North to South are: Tiszapolgár-style sites at Tiszagyenda-Vágott halom NKT 17., Kenderes-Kulis, Szolnok-Zagyvapart, Tiszaföldvár-Újtemető; sites that contained both Tiszapolgár-style and Hunyadihalom-style pits at Rákóczifalva-Bivaly-tó 1/a and Rákóczifalva-Bagi-földek 8-8/a; and Bodrogkeresztúr-style sites at Rákóczifalva-Bivaly-tó 1/c and Kiskunfélegyháza-Pap-dűlő.

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 point of view from identity required a method that differed from the traditional one. Therefore I built a database, with which it was easier to handle the more than 13 000 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 such as tempering and surface treatment, the second group contained the parameters of the pot shape, and 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 abstained from making 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 intentional human decisions referring to the making of pots.

I performed a complex analysis using different statistical methods. Besides the simple descriptive statistics, I used multivariable statistical analyses (Principal Component Analysis, Factor Analysis, Correspondence Analysis) to compare the pottery material from different sites.

Results

I analysed the material on different levels. The settlement level was the first one; the material was studied using descriptive statistics in every case. In case the opportunity was given, I tried to examine whether the material in the features was a part of a uniform pottery set or not. In these cases the principal component analysis (PCA) proved the uniformity of the pottery assemblages. Where PCA was not successful due to the low 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 part of a uniform pottery assemblage. Structures that suggested the transformation of the pottery within a settlement could be observed at only one site, Rákóczifalva-Bivaly-tó 1/c. Here a constant evolution of the material could be detected, some changes were more rapid (i.e. incised decoration motifs) and others were more or less rigid.

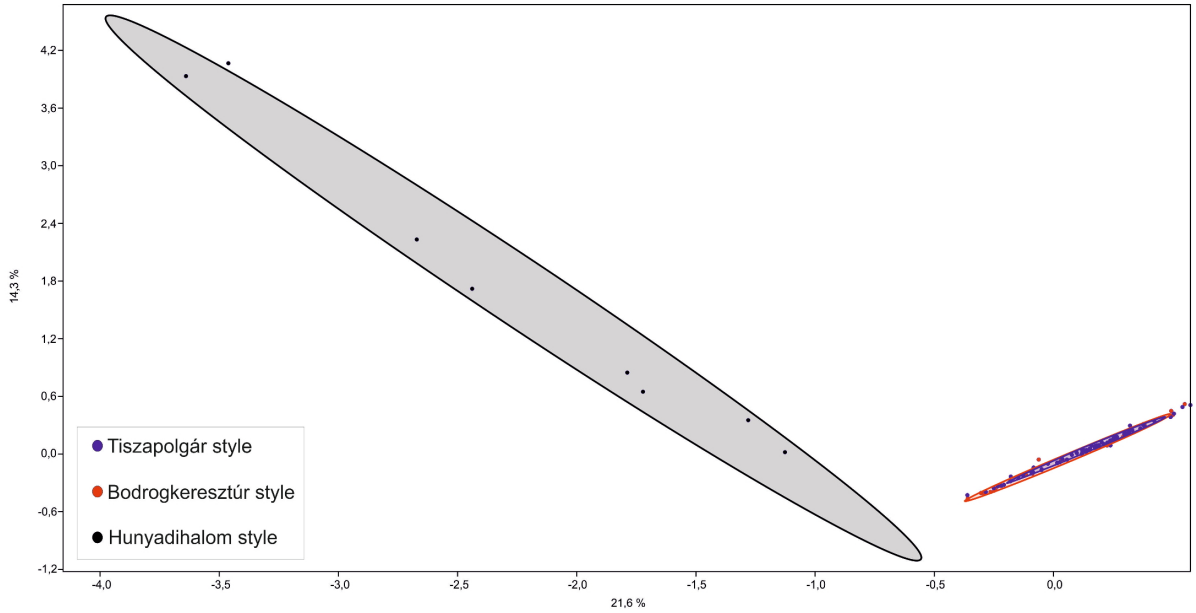

Fig. 2. Correspondence Analysis performed on the Tiszapolgár-, Bodrogkeresztúr- and Hunyadihalom-style settlement pottery using variables of technology, pot shape, plastic and incised decoration. Concentration ellipse level: 68,2%.

The next stage of the study was a comparative analysis. Its first step was setting the material of the three pottery styles against each other. It is clearly visible on the plot of the Correspondence Analysis that the Hunyadihalom-style pottery differs significantly in all aspects from the other two styles *(Fig. 2)*. The next step was to compare the ceramic assemblages that were previously labelled as Tiszapolgár- and Bodrogkeresztúr-styles. The single cases are arranged in a more or less homogeneous cloud, the 1σ ellipses show a significant overlapping. This means that there is no clear division between the two styles when comparing all variables of the pottery characteristics. The elements that are supposed to be dividing ones appear to be statistically irrelevant, and their significance is very low in the whole material *(Fig. 3)*. However, during conducting descriptive statistics for each settlement it was clear that every site has its own „dialect" in pottery making, and it is expressed in the different ratio of variables, for example some communities used certain pot types and decorations while others preferred different elements. It is visible on the third plot that is basically the same as the second one, only the cases are coloured by sites instead of typology. There is a clear alignment of 1σ ellipses (and single cases as well) in the cloud of points on the plot *(Fig. 4)*.

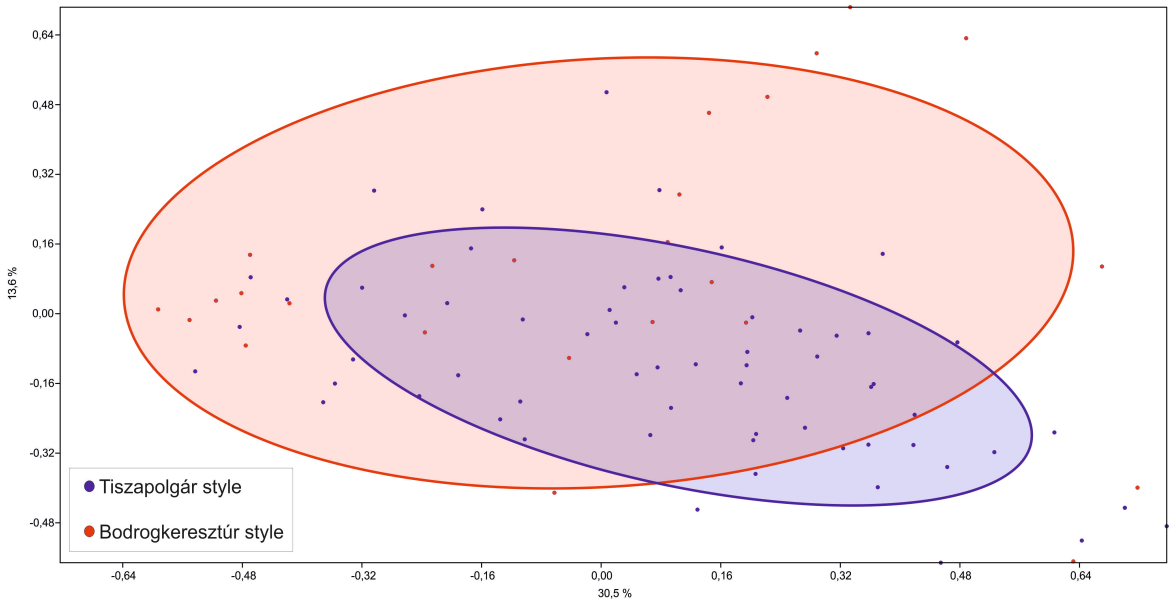

Fig. 3. Correspondence Analysis performed on the Tiszapolgár- and Bodrogkeresztúr-style settlement pottery using variables of technology, pot shape, plastic and incised decoration. Concentration ellipse level: 68,2%.

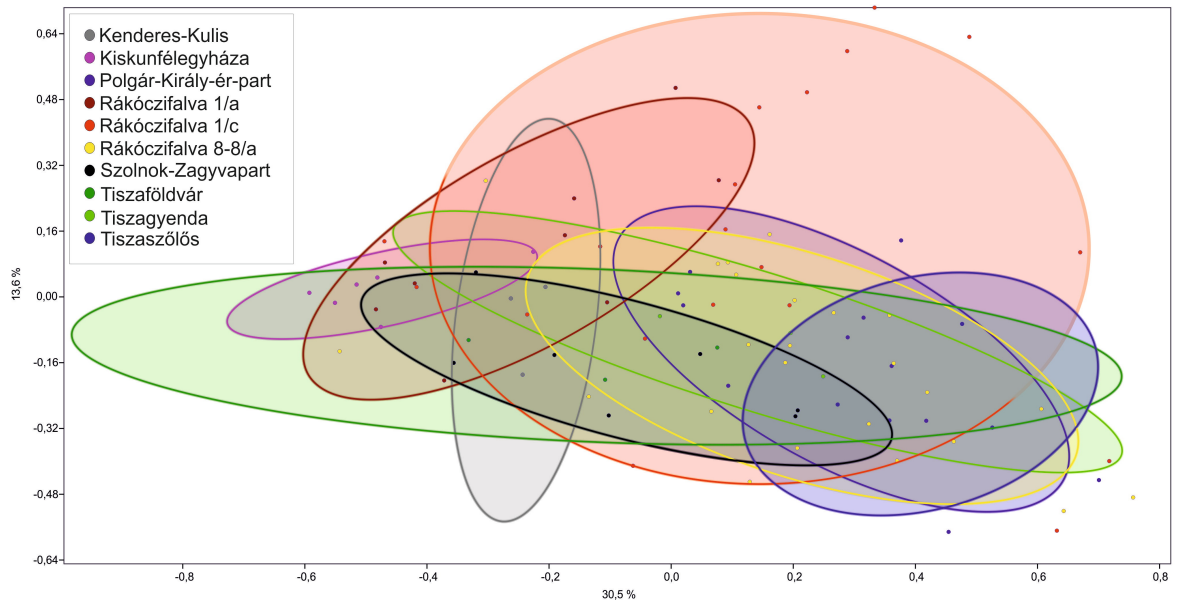

Fig. 4. The same Correspondence Analysis plot as in Fig. 3. coloured by single sites. Concentration ellipse level: 68,2%.

The main observations of the dissertation are summarized below:

- The pottery used at Hunyadihalom settlements differs significantly in most dimensions from the Tiszapolgár- and Bodrogkeresztúr-style pottery.
- During the comparative analysis of the settlement pottery without Hunyadihalom sites no groups were delineated that could be identified as Tiszapolgár or Bodrogkeresztúr cultures. The separation of settlement pottery into two cultural groups was not possible, the analysis showed a high level of homogeneity. That uniformity is more striking when comparing it to the differences between Tiszapolgár-Bodrogkeresztúr- and Hunyadihalom-style potteries. The traditional separation of Tiszapolgár and Bodrogkeresztúr pottery styles was based upon the existence or lack of some elements (i.e. milk jugs or incised net-motifs). It seems that the formation of pottery assemblages in settlements were under different rules than in cemeteries, and the elements that separated the Tiszapolgár- and Bodrogkeresztúr-style graveyards did not play a separative role in the settlement material.
- No standard directions of the development of settlement pottery could be identified that were valid for all settlement communities.
- The pottery found at the settlements was 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 on the basis of the above mentioned repertoire.
- The pottery assemblage was constituted based on the decisions of the settlement-level integrative units. No standard decisive rules for pottery making above the settlement level could be proved.
- No identity groups within settlements could be delineated based on settlement pottery.
- Traces of integrative units above settlement level could be observed, which were not expressed by pottery but spatial distribution. Common identity was expressed in these cases by using a common, a geographically more or less delineated space.
- Isolated enclosures and cemeteries might be seen as an expression of group identities of the same kind.
- Artefacts 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 symbolism therefore exists in a larger area and connects 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 artefacts an identity group can be delineated that is larger than the integrative units observed on the Great Hungarian Plain, but 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, situation and method depends on the type of identity. Mainly 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 uses it. A part of artefacts that appear in the burials, such as milk jugs, copper and gold finds, presents a symbol that is widely known in the Carpathian Basin, the Balkans, moreover north of 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 was not that important or not important at all at settlements. It is presumable then that one identity appears 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 real identity groups, or are they only artificial units created by archaeologists. The answer is complex. Based on the above mentioned results it could be easily stated that the research had gone astray by delineating the Tiszapolgár and Bodrogkeresztúr cultures.

In my opinion the creation of archaeological cultures was a result of generalisation of observations in the last century of research. Cultures were sometimes based upon certain artefacts (e.g. Bell Beaker), certain decorations (e.g. *Linearbandkeramik*), in other cases settling strategies (e.g. tell-cultures), or burial customs (e.g. the people of the pit-grave kurgans). These models ignore variability and the complexity of human behaviour. In these cases units were created that were later proved to be incoherent, as it happened in the case of the Baden-complex or the *Trichterbecher*-complex.[6] The situation of the Tiszapolgár and Bodrogkeresztúr cultures is inverse, it seems that the research distinguished two units that is most likely rather coherent.

But if I would state it 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 that expresses itself with milk jugs, heavy copper tools and golden pendants. Nevertheless there appears to be another group that is characterised by such finds that are labelled as Tiszapolgár-style finds. So it *may be possible* that two identity groups existed in the second half of the 5th millennium BC of the Great Hungarian Plain that expressed themselves in a way that is known as Tiszapolgár and Bodrogkeresztúr cultures. Although these identity groups appear only in one social arena, in the isolated cemeteries.

Selected publications of the author in the same topic

Szilágyi, M. 2008: Változások az Alföldön az i.e. 5. évezred derekán. Átmenet a neolitikumból a rézkorba. *Első Század* 2008/2, 361–428.

Szilágyi, M. 2010: Kora rézkori település és árokrendszer Szolnok-Zagyvaparton. *Archaeologiai Értesítő* 135, 183–199.

6 As it is suggested by Furholt 2008 and Furholt 2014.

References

Bognár-Kutzián, I. 1963: *The Copper Age Cemetery of Tiszapolgár-Basatanya.* Budapest.

Bognár-Kutzián, I. 1973: *The Early Copper Age Tiszapolgár Culture in the Carpathian Basin.* Archaeologica Hungarica 48. Budapest, 1972.

Casella, E. C – Fowler C. (eds.) 2005: *The Archaeology of Plural and Changing Identities. Beyond Identification.* New York.

Furholt, M. 2008: Pottery, cultures, people? The European Baden material re-examined. *Antiquity. A quarterly review of archaeology* 82/317, 617–628.

Furholt, M. 2014: What is Funnel Beaker? Persistent troubles with an inconsistent concept. In: Furholt M. – Hinz, M. – Mischka, D. – Noble, G. – Olausson, D (eds.): *Landscapes, Histories and Societies in the Northern European Neolithic.* Frühe Monumentalität und soziale Differenzierung. Bonn 2014, 17–26.

Díaz-Andreu, M. – Lucy, S – Babić, S. – Edwards, D. N. 2005: *The Archaeology of Identity. Approaches to gender, age, status, ethnicity and religion.* London – New York.

Insoll, T. (ed.) 2007: *The Archaeology of Identities. A Reader.* London – New York.

Parkinson W. A. 2006: *The Social Organization of Early Copper Age Tribes on the Great Hungarian Plain.* British Archaeological Reports, BAR International Series 1573. Oxford.

Parkinson, W. A. – Gyucha, A. 2007: A késő neolitikum-kora rézkor átmeneti időszakának társadalomszerkezeti változásai az Alföldön. Rekonstrukciós kísérlet. Die Veranderungen in der Gesellschaftsstruktur der Übergangsperiode vom Spatneolithikum zur frühen Kupferzeit. *Archaeologiai Értesítő* 132, 37–81.

Patay, P. 1975: Die hochkuferzeitliche Bodrogkeresztúr-Kultur. *Bericht der Römisch-Germanischen Kommission* 55./I, 1–72.

Patay, P. 2005: *Kupferzeitliche Siedlung von Tiszalúc.* Inventaria Praehistorica Hungariae 11. Budapest.

Raczky, P. – Siklósi, Zs. 2013: Reconsideration of the Copper Age chronology of the eastern Carpathian Basin: a Bayesian approach. *Antiquity. A quarterly review of archaeology* 87/336, 555–573.

Roberts, B. W. – Vander Linden B. (eds.) 2011: *Investigating Archaeological Cultures. Material Culture, Variability, and Transmission.* New York.