In 2018 the Archaeological Institute of the Eötvös Loránd University and the Archaeological Heritage Protection Directorate of the Hungarian National Museum carried out excavations at Süttő-Sáncföldek (North Transdanubia, Hungary) within the framework of the Interreg DTP Iron Danube Project. The site is located near to the prehistoric multiperiod fortified settlement of Süttő-Nagysánctető and it has already been known of two Early Iron Age cemeteries. Recent fieldwork has unearthed an Early Bronze Age feature, among others, which provided evidence of EBA settlement on the site. Although previous research by Éva Vadász and Gábor Vékony also discovered some EBA material from the area in the 1980's, that has remained unmentioned and unpublished.

This paper presents the EBA findings of Süttő-Sáncföldek and three other contemporary sites (Süttő-Tatai úti dűlő II, Lábatal-Hosszúfüldék, Lábatal-Rózsaf. utca) in the region, which were found in the second half of the 20th century. The data provided here outline a dense network of EBA sites around Süttő, which consists of a possible fortified settlement, three open settlements and a burial ground. The findings represent the material culture of the Makó-Kosihy-Čaka complex in North Transdanubia, but connections to South Transdanubia and to the pottery traditions of the Moravian Corded Ware culture can also be detected.

Keywords: North Transdanubia, Early Bronze Age, Makó-Kosihy-Čaka culture, Corded Ware culture, settlement, burial.

INTRODUCTION

The multiperiod site complex on the loess plateau east of Süttő (North Transdanubia, Hungary) has been investigated since the late 1920's, focusing primarily on the Early Iron Age habitation of the area. The site is located on the right bank of the Danube at the foothills of the Gerecse Mountain Range, between the modern settlements of Süttő and Neszmély (Fig. 1). The site complex consists of a series of Bronze and Iron Age hilltop settlements (Nagysánac, Nagysánctető, Kissac) which overlook the river and its alluvial plain, as well as of several prehistoric sites in the inner territories of the plateau (Sáncföldek).

Broadscale topographic research was carried out in the region between 1968 and 1972 in the framework of the Hungarian Archaeological Topographic Research Project (Horváth/H. Kelemen/Torma 1979, 311–320). In 1978, Éva Vadász and Gábor Vékony started excavations at Süttő-Sáncföldek targeting an Early Iron Age tumulus grave and a contemporary flat grave cemetery, as well as at the prehistoric fortified hilltop settlement of Süttő-Nagysánctető. Their fieldwork continued until 1990 and a number of short reports testified the significance of the site, however, the unearthed material has remained unpublished (Czajlik/Novinszki-Groma/Horváth 2015; Vékony 1986a; Vékony/Vadász 1982).

The Eötvös Loránd University initiated field research at the site complex in the 2010's. In the framework of the Interreg DTP Iron Age Danube Project, they carried out excavations at the site of Süttő-Sáncföldek in 2018 in collaboration with the Archaeological Heritage Protection Directorate of the Hungarian National Museum, and under the direction of Zoltán Czajlik. Beside Late Bronze Age and Late Iron Age features, a pit of the Early Bronze Age¹ was revealed, which was thought to be the first evidence of inhabitation in the area at the end of the 3rd millennium B.C. (Czajlik et al. 2018; 2019).

This paper aims to draw an overview of the EBA settlement in the vicinity of Süttő by presenting the newly discovered finds from Süttő-Sáncföldek and several other unpublished contemporary materials from the microregion.

SÜTTŐ-SÁNCFÖLDEK

The Early Bronze Age feature excavated in 2018

The archaeological feature under discussion (feature no. 5.) was discovered as a rounded dis-
colouration with ceramic and bone fragments immediately after removing the topsoil in the first trench, ca. 25–30 cm below the recent surface. On the basis of the scattered burnt bone fragments spotted in the top layer and the proximity of the Early Iron Age cemetery, the feature was presumed to be a grave first, but its function remained uncertain until the material was processed. The nature of the finds associated with the feature suggests that it might not have been a grave but a settlement feature of the EBA (cf. Czajlik et al. 2018, 536; 2019, 201).

The shallow, heavily destroyed feature had a round-oval shape and a diameter of approximately 150 cm, although its outline was not clearly visible everywhere in the soil. A detailed archaeobotanical examination was carried out in the feature: a 50 × 50 cm grid system was established over the pit (units were named from A to L) and soil samples were taken in each unit from every artificial layer that followed each other every 5 cm (Fig. 2). From a depth of 15 cm down to the bottom of the pit, as it became smaller, only four quarters were used to separate the sampling areas. If archaeological observation required, the units were divided into smaller areas to distinguish possible different phenomena. Southeast of the feature, a 50 × 50 cm control unit was opened which provided samples from the 0–5 cm, 5–10 cm, 10–15 cm, 15–30 cm layers. All together
65 samples were collected from the pit and four control samples were taken.2

The pit contained a large amount of ceramic fragments, animal bones, some human remains, pebbles, daub and a small number of botanical finds.3 Some recent ceramic fragments that were found in the soil samples indicate that the shallow, disturbed pit had a mixed material. The finds were scattered in the soil samples that show a similar distribution. The fill of the feature was homogenous.

The archaeological material

The pit contained 1.7 kg ceramic fragments of which more than 100 fragments were analysed. Over 25 different vessels were identified in the material, none of them was intact.

1. Small, conical, slightly rounded bowl with straight rim and a flat horizontal knob below the rim, flat base. Partly preserved. Tempered with abundant coarsely crushed pebble and crushed pottery. No surface treatment, greyish brown colour with few reddish spots; dmbase 9 cm, h 3.2 cm [2019.141.78] (Pl. I: 1).
2. Round footing possibly of an interior decorated bowl, no decoration is visible. Fragment. Tempered with finely sorted sand and crushed pebble. Smoothed surface (under later deposition), brownish grey colour; dmrim 14 cm, th 0.5 cm [2019.141.81, 2019.141.27] (Pl. II: 2).
3. Several fragments of a biconical bowl with cylindrical, slightly indrawn neck, outwards thickened rim and flat bottom. Tempered with sand and crushed pebble. Inner surface is smoothed, outer surface on the neck is lightly burnished, otherwise no treatment (later deposition is visible). Grey, brownish grey colour; dmr 12 cm, dbottom 9 cm, h 9 cm, th 0.6–0.7 cm [2019.141.77, 2019.141.101, 2019.141.80, 2019.141.70, 2019.141.84, 2019.141.44, 2019.141.52, 2019.141.62] (Pl. I: 3).
4. Fragment of a small conical bowl with outwards thickened rim and a knob attached to the surface directly below the rim. Poor condition, badly preserved. Tempered with sand. Smoothed surface, brownish grey colour; dmrim 11 cm, th 0.4–0.5 cm [2019.141.22] (Pl. I: 4).
5. Neck and body fragments of a mug with tall, curved neck and conical body. Tempered with finely sorted sand and crushed pebble. Outer surface is smoothed, inside is without treatment. Greyish brown colour outside, reddish brown inside; dmbase 5 cm, dneck 6 cm, h > 10 cm, th 0.4–0.5 cm [2019.141.86, 2019.141.89, 2019.141.91, 2019.141.57, 2019.141.34] (Pl. I: 5).
7. Base and lower fragments of a pot with finely brushed (combed) surface. Tempered with sand and crushed pebble. Outer surface is roughened with combed pattern, inner surface is without treatment. Yellowish brown colour both inside and outside, the core is dark grey; dmbase 10 cm, h > 10 cm, th 0.6 cm [2019.141.74, 2019.141.98] (Pl. I: 7).
8. Fragment of a slightly indrawn neck with finger-impresed cordon. Possibly part of the previously described pot. Tempered with sand. Outer surface is smoothed, inner surface is untreated. Yellowish brown colour both inside and outside, the core is dark grey; size 4 × 5 cm, th 0.6–0.7 cm [2019.141.76] (Pl. I: 8).
9. Fragments of a mug (?) with curved neck and slightly fluted shoulder. Tempered with sand and crushed pebble. Smoothed surface, brown, yellowish-brown colour both inside and outside, the core is dark grey; dmrim 9 cm, th 0.4–0.5 cm [2019.141.82, 2019.141.69] (Pl. II: 1).
10. Fragments of a funnel shaped neck with everted, thickened rim. Possibly part of a pot or an amphora. Tempered with sand and crushed pebble. No surface treatment/smoothed, homogenous greyish brown colour; dmrim 14 cm, th 0.5 cm [2019.141.81, 2019.141.27] (Pl. II: 2).
11. Body fragments of a large vessel of unknown shape with roughened surface. Tempered with sand and coarsely crushed pebble. There are traces of rough brushing on the outside, no surface treatment inside. Homogenous grey colour; size 2 × 5–6 × 8 cm, th 0.8–0.9 cm [2019.141.67, 2019.141.54, 2019.141.49, 2019.141.73, 2019.141.97, 2019.141.53, 2019.141.32, 2019.141.64] (Pl. II: 3).
12. Body fragments of a large vessel of unknown shape with roughened surface. Tempered with sand and crushed pebble. There are traces of rough brushing on the outside, no surface treatment inside. Homogenous grey colour; size 2 × 5–6 × 8 cm, th 0.8–0.9 cm [2019.141.67, 2019.141.54, 2019.141.49, 2019.141.73, 2019.141.97, 2019.141.53, 2019.141.32, 2019.141.64] (Pl. II: 3).

2 The archaeobotanical sampling process was developed by Mária Hajnalová (Constantine the Philosopher University, Nitra) and performed on site together by her and Katalin Novinszki-Groma (Eötvös Loránd University, Budapest).
3 The excavated material is in the inventory of the Balassa Bálint Museum, Esztergom, inv. no. 2019.141.1–103.

13. Large wide strap handle attached directly to the rim of an unknown type vessel. Tempered with sand and crushed pebble. No surface treatment, grey, brownish grey colour; size 5 × 6 cm, th 0.5–0.6 cm [2019.141.79] (Pl. II: 5).

14. Fragment of the flat base of an unknown type vessel. Tempered with sand and coarsely crushed pebble. Surface is matte, no treatment, grey, brownish grey colour; dnbase 6 cm, th 0.6 cm [2019.141.63, 2019.141.99 (?) (Pl. II: 6).

15. Fragment of the flat base of an unknown type vessel. Tempered with sand and coarsely crushed pebble. Surface is matte, no treatment, yellow colour outside, brownish grey inside; dnbase 10 cm, th 0.9 cm [2019.141.83, 2019.141.28] (Pl. II: 7).

16. Body fragments of a biconical vessel. Tempered with sand and crushed pebble and possibly with grog. Outer surface is smoothened, inner surface is matte without treatment, brown colour outside with reddish brown, greyish spots, dark grey inside; size 5.5 × 4 cm, th 0.5–0.8 cm [2019.141.11, maybe 2019.141.40, 2019.141.17 fragments as well] (Pl. II: 8).

17. Curved fragment of an unknown type vessel. Tempered with sand and crushed pebble. Surface is matte without treatment, brownish grey colour outside, red inside; size 7 × 7 cm, th 1 cm [2019.141.15] (Pl. II: 9).

18. Fragment of a secondary burnt (vitrified) rim. Tempered with crushed pebble. Surface is vitrified, grey colour; size 5 × 3.5 cm, th 1 cm [2019.141.20] (Pl. II: 10).

19. Body fragment of a vessel with combed surface. Tempered with sand and crushed pebble. Outer surface is combed, inner surface is smoothened, homogenous dark grey colour; size 2 × 4 cm, th 0.8–1 cm [2019.141.75].

20. Body fragment of a vessel with combed surface. Tempered with sand and crushed pebble. Outer surface is combed, inner surface is lightly burnished, yellowish-brown colour outside, dark grey inside; size 3 × 4 cm, th 1 cm [2019.141.79].

21. Body fragments (3 pieces) of an unknown type vessel. Tempered with sand and crushed pebble. Outer surface is matte without treatment, inner surface is smoothened and lightly burnished, greyish brown colour outside, dark grey inside; size 3 × 3 cm, th 0.5–0.6 cm [2019.141.13, 18, 61].

22. Body fragment of an unknown type vessel. Tempered coarsely with sand and crushed pebble. Surface is matte without treatment, greyish yellow colour outside, dark grey inside; size 4 × 7 cm, th 0.8 cm [2019.141.16].

23. Body fragment. Tempered with sand and crushed pebble. Outer surface is matte without treatment, inner surface is lightly burnished, homogenous dark grey colour; size 2 × 4 cm, th 0.7 cm [2019.141.24].

24. Fragment of a slightly everted rim. Tempered with sand and crushed pebble. Lightly burnished surface, brown-dark grey colour; dmrim 9–11 cm, th 0.5 cm [2019.141.90] (Pl. II: 11).

25. Body fragment of an unknown type vessel with brushed surface. Tempered with sand and finely crushed pebble. Outer surface is brushed, inner surface is without treatment, brownish grey-grey colour; size 5 × 5 cm, th 0.6 cm [2019.141.54].

26. Lightly curved body fragment of an unknown type vessel. Tempered with sand and crushed pebble. No surface treatment, yellow colour outside, greish yellow inside; size 3.2 × 3.7 cm, th 0.6–0.7 cm [2019.141.65].

27. Lightly curved body fragments of an unknown type vessel. Tempered with sand and crushed pebble. Smoothed surface, greish brown colour; size 2 × 3–3 × 5 cm, th 0.6 cm [2019.141.49, 73, 55, 37].

28. Small body fragments (3 pieces) of an unknown type vessel. Tempered with finely sorted sand. Smoothed surface, greyish brown colour; size 2 × 3 cm, th 0.5 cm [2019.141.72, 14].

Animal bones were also unearthed in large quantities: 111 bone fragments (0.7 kg) were documented in the feature. The archaeozoological material has been preserved in a very poor condition. Similarly, to the ceramic findings, the bones were found heavily fragmented. Regarding the species, the material consists mostly of caprines (Ovis aries L. – Capra hircus L., 58 pieces – 52.25%), and in a smaller amount of cattle (17 pieces – 15.31%) and pig (17 pieces – 15.31%) bones. One single fragment belonged to a horse (Equus caballus L.), a dog (Canis lupus L.), as well as the Galliformes. Furthermore, three shell fragments were also deposited in the pit.

Some human remains were discovered in the feature: the non-cremated fragment of a rib, as well as of an unidentified long bone were unearthed. Some burnt bone splinters were found, too, but they were most probably not of human origin.

Despite the detailed sampling of the pitfill, very few archaeobotanical data was collected. Only three prehistoric carbonized grain were found: two seeds of wheat/barley (Triticum/Hordeum) and one millet seed (Anicum miliaceum L.). The samples from the pit contained large quantities of charcoal, but it was also present (although in smaller amount) in the control units of the sampling area.

Furthermore, the pit contained a few pebbles (sandstone, limestone), some daub fragments (320 g), and more importantly a small flint (2 × 1.5 cm).6

**Evaluation of the finds**

The ceramic material of the pit represents the EBA in Transdanubia. The characteristic features of the finds have parallels in the contemporary material culture of the Carpathian Basin. The footring which possibly belonged to an interior decorated bowl is a representative element of the EBA cultures of the region (Pl. I: 2; Burger 1980; Kalicz 1984, 96; Kulcsár 1998–1999; 2009, 121–141, 308–319; Vladár 1966, 285–292; Vollmann 2005, 33–87). The mugs with tall, curved neck and coni-

---

4 The analysis of the archaeozoological material was carried out by Péter Csippán (Eötvös Loránd University, Budapest).
5 The analysis of the archaeobotanical samples was carried out by Máté Mervel (Eötvös Loránd University, Budapest).
6 The stone material was examined by Dóra Kürthy (Eötvös Loránd University, Budapest; Kuny Domokos Museum, Tata).
cal body (Pl. i: 5, 6) are usual components of the period’s assemblages. They are frequently found in the context of the Somogyvár-Vinkovci culture, but they appear in the material of the Makó-Kosihy-Čaka culture too (Kulcsár 2009, 280–290, fig. 49: 1/12; 51: II/7, 8; Vollmann 2005, 48, type Hg5, Gefäße, 51; for analogies see e.g. Esztergom: Bóna 1963–1964, pl. XII: 8, 9; Budapest-Aranyhegyi út: Kalicz-Schreiber 1994, fig. 3: 5, 7, 8). Biconical bowls with short neck and thickened rim (Pl. I: 3) are also common finds on the Makó-Kosihy-Čaka sites (Kalicz 1984, 96, pl. XXII: 11; Kulcsár 2009, 105–120, type VII/20–29; Vollmann 2005, 42, 43, Schüsseln, GS 2; for analogies see e.g. Üllő: Kővári/Patay 2005, fig. 28: 3; 29: 2; Iža: Beljak Pažinová/Beljak 2014, pl. 5: 5). Vessel fragments with slightly thickened rim (Pl. I: 3, 6; II: 2), pots and large storage vessels with roughened, brushed (Pl. I: 3, 4) or combed surface (Pl. I: 7) and with finger impressed cords (Pl. I: 8) are all typical features of this period (Kalicz 1984, 96, 97, pl. XXII: 9–14; Kulcsár 2009, 90, 91, 141–163, types X–XIV; Vladár 1966, 279–283; Vollmann 2005, 57, pl. 15). Even the less characteristic, small conical bowls (Pl. I: 1, 4) have parallels in the contemporary material of the broader region (Kulcsár 2009, 113, type VII/14; Vollmann 2005, 41, 42, Schüsseln, GS 1, S 4; for analogies see e.g. Nové Zamky: Vladár 1966, fig. 20: 1; Üllő: Kővári/Patay 2005, fig. 29: 1; Iža: Beljak Pažinová/Beljak 2014, pl. 6: 2; or further Thunau: Ruttkay 1995, fig. 32: 11). Large open bowls which are frequently found in similar EBA contexts (Kalicz 1984, 96; Kulcsár 2009, 107–113; Vladár 1966, 278, 279, fig. 31: 1–4; Vollmann 2005, 41, 42) are missing from the pit’s repertory. The large handle (Pl. II: 5) and the funnel shaped neck (Pl. II: 2) might have belonged to handled pots and/or an amphora (Kalicz 1984, 96, pl. XXII: 10, 11, 14; Kulcsár 2009, 141–163, types X–XIV; Vollmann 2005, 45–48).

The general characteristics of the excavated pottery are in accordance with the published material of the period. The clay was tempered with sand and crushed pebble, the vessels’ surface is mostly matte and smoothed, the coarse ware was brushed or combed and they have brownish-dark greyish colour (Kalicz 1984, 96, 97; Kulcsár 2009, 90, 91; Machnik 1991, 67–74; Vladár 1966, 272–295).

Traditionally, the area around Sütő-Sáncföldek is considered to be part of the distribution area of Makó-Kosihiy-Čaka culture (Kulcsár 2009, 16–57; Machnik 1991, 58–62; Vladár 1966, 250–254). However, the cultural attribution of such small EBA assemblages like the one discussed here is problematic in northern Transdanubia, where entanglement was a usual phenomenon in the material culture of the EBA communities (for a summary see Kulcsár 2009, 38–51). The analogies of the finds, neverthe-

less, show strong links with the Makó-Kosihiy-Čaka culture.

The archaeozoological material can only be briefly evaluated in this cultural context. Since the data is limited to a single, disturbed feature, the results are not representative enough to give us a real overview about the subsistence strategies pursued on the site. In the EBA Carpathian Basin, the archaeozoological record is usually dominated by cattle finds, but sheep and goat remains also have a high proportion within the excavated material (Gál/Kulcsár 2012; Hajnalová 2012, 47; Kulcsár 2009, 67–69; in some cases results are restricted similarly to a single feature e.g. Balatonkenese–7 Kapuvári Street, Kompolt-Kistér). Although the available data is very scarce in general, some regional variations can still be observed. The dominance of caprines similar to Sütő-Sáncföldek was documented in Csongrád-Sertéstelep (Kulcsár 2009, 67, fig. 9; Vörös 2001) and in several features at Iža too (Beljak Pažinová/Beljak 2014, 120, fig. 5). Pig remains have been also found in various proportions in the settlements of the period. The appearance of dog and horse bones in the excavated feature is not an exceptional phenomenon among the contemporary finds (Csíppán 2007, 84, 86; Gál/Kulcsár 2012; Kulcsár 2009, 67–69). Since the mixed ceramic material of the excavated pit indicates recent disturbances, it cannot be ruled out that those species that are represented in the pit by only a single fragment, entered the feature recently due to agricultural activities.

The little botanical evidence from the pit cannot be considered in its wider regional context, since only very limited EBA archaeobotanical data have been published from the Carpathian Basin, and none from the discussed region. The published data indicates that the cultivated species showed great variability depending on the regional environment. Wheat and barley have been grown in the Carpathian Basin since the Neolithic and they have also been found in the EBA assemblages in large quantities (Gyulai 2010, 93–95, Archaeobotanical Database; cf. also a single seed from Vráble-Fidvár: Schlütz/Bittmann 2016, 338). Contrarily, there are much less evidence of millet from this period. Millet was found in small quantity in the EBA sites of Szigtetszentmiklós-Vizmű, Budakalász M0/12, Endrőd (Gyomaendrőd) 161 (Gyulai 2010, 416, Archaeobotanical Database). In Slovakia, the earliest remains of millet have been reported from the Middle Bronze Age (Hajnalová 2012, 161–163). The validity of the obtained botanical evidence from the EBA feature at Sütő is weakened by the possible disturbance of the pit. The grains were found in the flotation samples which originate from the upper layers of the feature and therefore they could have
been easily contaminated. The area was inhabited in the Neolithic, the Late Bronze Age, and the Early and Late Iron Age periods as well, and e.g. millet was found in very large quantity in a Late Iron Age feature excavated near the described EBA pit (Csajlik et al. 2019, 210).

The burnt bone splinters detected during the excavation are present in such a low amount, that they cannot be evaluated. The two small human bone fragments raise many questions. Although irregular burials, partial or complete human skeletons have been found quite frequently in prehistoric settlement features of the Carpathian Basin (Szeverényi et al. 2020; cf. Late Copper Age and Early Bronze Age examples), they have not been reported from the area of the MKČ culture yet. The most common burial practice of the culture is cremation, but inhumation burials also appeared during the younger phase of the culture. The archaeological material of the pit testifies against the interpretation of a burial and the find circumstances do not provide enough evidence for interpreting the human remains as proof of irregular treatment of human remains in the MKČ context. The fact that the shallow pit has been contaminated with high probability due to agricultural activity strengthen the assumption that the human bone fragments originate from a feature of a different period, perhaps from an Early Iron Age cemetery (containing both cremation and inhumation graves, cf. Novinszki-Groma 2017) which is located less than 100 m to the southeast to the excavated EBA pit.

**Further Early Bronze Age finds from Sütő-Sánceföldék**

In addition to the described EBA feature at Sütő-Sánceföldék, further important evidence is available on settlement activities in the area during this period. In the course of our systematic field surveys which were conducted at the site between 2017 and 2019, no EBA finds were discovered, notwithstanding that the area has been intensively ploughed. The only additional EBA finds which came into light during our fieldwork are some scattered sherds found in the first trench during the excavation in 2018. The most characteristic pieces are:

1. Two small (2 × 2.5 cm, 0.6 cm thick) body fragments of unknown type vessels. Tempered with crushed pebble and sand. Outer surface is combed, inside matte, yellow, greyish brown colour [BBM 2019.155.17; 2019.160.26].

2. A rim fragment of an interior decorated bowl. The top of the rim is decorated with an incised zig-zag line, while inside three parallel lines are visible under the rim. Tempered with sand and crushed pebble. Surface is matte, smoothed, yellowish-brown colour; size 3 × 3 cm, th 0.9 cm [2019.155.72] (Pl. II: 12).7

Beside the recent discoveries, further EBA finds have also been identified in the material of earlier excavations on the site. In the 1980s, research was carried out by Éva Vadász and Gábor Vékony in the territory of Sütő-Sánceföldék partly afterwards, partly parallel to the excavations on the hilltop settlement of Sütő-Nagysáncető. They discovered a large Early Iron Age flat grave cemetery on the site. However, little data was mentioned about features of other periods: some late Iron Age and Late Bronze Age material was only shortly reported (Vékony 1986b; 1987; for a summary Csajlik/Novinszki–Groma/Horváth 2015, 61, 62). Unfortunately, the excavated material has not been processed and inventoried and the documentation is almost completely missing which makes the reconstruction of the find circumstances almost impossible. Based on the available information, it can be concluded that (at least) two trenches (E30 and E34) which were opened in 1990 revealed EBA material. The position of the trenches can only be assumed. They were situated not more than 100 m, east of the 2018 excavation site (Fig. 1).8

From trench E34 various finds were collected in the depth of 0–60 cm which represent different prehistoric periods. The EBA ceramic fragments are the following:

1. Fragment of an interior decorated footed bowl. On the inside it is decorated with hatched triangles and an unhatched cross placed in a circle. The engraved lines are very thin and no traces of incrustation are visible. The vessel was constructed with coil technique: on the outer edge of the fragment the outline of a coil is visible. Tempered with sand and crushed pebble. The surface is lightly burnished both inside and outside, its colour is homogenous dark grey; size 11 × 4.5 cm, th 1 cm (Pl. III: 1).

2. Fragment of an interior decorated footed bowl. On the inside it is decorated with multiple parallel lines forming a large X shape (triangles facing each other). The engraved lines are very thin and no traces of incrustation are visible. The vessel was constructed with coil technique: on the outer edge of the fragment the outline of a coil is visible. Tempered with sand and crushed pebble. The surface is lightly burnished both inside and outside, its colour is homogenous dark grey; size 5.5 × 3 cm, th 0.9 cm (Pl. III: 2).

3. Fragment of an interior decorated footed bowl. The sherd possibly belonged to the central area of a bowl.

---

7 Its fabric is different from the one found in the pit and described above.

8 https://www.fentrol.hu/legifoto/165785?r=1&c=2050130.4530659998c065041.0137185018 [16. 5. 2022] – The location of the trench was estimated on the basis of an aerial photograph taken from the site in October 1990.
Its thickened and undecorated central part is bordered by an engraved line. Part of a hatched triangle is visible outside of this line. The engraved lines are very deep. Tempered with sand and crushed pebble. The surface is lightly burnished outside and very worn inside, its colour is dark grey inside and brownish grey outside; size 5 × 5.5 cm, th 0.8–1.3 cm (Pl. III: 3).

4. Fragment of the closed and hollow foot of an (interior decorated) footed bowl. No decoration is visible in the inside. The vessel was constructed with coil technique. Tempered with sand and crushed pebble. The surface of the foot is lightly burnished, the surface of the bowl is burnished. The outside colour of the foot is brown with grey patches, the inside of the bowl is dark grey; dm 7 cm, h 5 cm, th 1 cm (Pl. III: 4).

5. Two body fragments of an unknown type vessel with brushed surface. Tempered with sand, crushed pebble, and probably also with grog. No surface treatment inside, brushed and worn surface outside, brown-colour with grey patches both inside and outside; size 8 × 5.5 cm and 5 × 5 cm, th 0.8 cm (Pl. III: 5).

6. Fragment of a vessel with lightly indrawn neck and straight rim. The remains of a handle are visible between the rim and neck. Tempered with sand and crushed pebble. Smoothed surface both inside and outside, dark grey colour; size 6 × 4 cm, th 0.5 cm (Pl. III: 6).

Further EBA finds were unearthed in trench E30, probably from a pit. A box containing the label ‘1st pit’ included several dozens of different ceramic fragments, most of which are not diagnostic but some belong undoubtedly to the EBA:

1. Fragment of an interior decorated footed bowl. The edge of the rim is decorated with a zig-zag line, while the interior area is bordered by three concentric lines. On the left side of the fragment, the detail of a small hatched area is visible, bordered on one side by the concentric lines and on another side by three oblique lines, a row of dots and three additional oblique lines. The surface is smoothed but worn both inside and outside, it has dark grey colour; size 7 × 5 cm, dm 18–22 cm, th 1.1 cm (Pl. III: 7).

2. Fragment of a vessel with slightly indrawn neck and straight rim. Tempered with sand and crushed pebble. The surface is smoothed/lightly burnished, no treatment inside, dark grey colour with brown patches; size 6 × 4 cm, th 0.8 cm (Pl. III: 8).

3. Fragment of a vessel with straight rim. Tempered with sand, crushed pebble and probably also with grog. Outer surface is smoothed/lightly burnished, no treatment inside, dark grey colour with brown patches; size 3 × 4 cm, th 0.8 cm (Pl. III: 9).

4. Two neck and shoulder fragments of a vessel with indrawn neck and spherical body. Tempered with sand and crushed pebble. Outer surface is burnished, no treatment inside, brownish grey colour; size 3 × 4, 4 × 4 cm, th 0.4–0.5 cm (Pl. III: 10).

5. Body fragment with a large wide handle. Tempered with sand and crushed pebble. Outer surface is smoothed, no treatment inside, brown–grey patchy colour outside and reddish-brown inside; size 6 × 6 cm, th 0.7 cm (Pl. III: 11).

6. Fragment of a large wide handle. Tempered with sand and crushed pebble. Outer surface is smoothed, no treatment inside, brown-grey patchy colour outside, reddish brown inside; size 6 × 5.5 cm (Pl. III: 12).

7. Body fragment of an unknown type vessel with brushed surface. Tempered with sand and crushed pebble. Outer surface is brushed, inner surface is smoothed, brown colour outside and dark grey inside; size 6 × 4 cm, th 0.6 cm (Pl. IV: 1). Several similar fragments of at least nine different vessels were also part of the material.

8. Fragment of a vessel with slightly indrawn neck and a horizontal knob under the rim. Tempered with sand and crushed pebble. Outer surface is smoothed, no treatment inside, brown-grey patchy colour; size 5 × 3 cm, th 0.6 cm (Pl. IV: 2).

9. Fragment of a vessel with thickened out rim and slightly indrawn neck. Tempered with sand and crushed pebble. Outer surface is smoothed, no treatment inside, yellow-grey patchy colour both on the inner and outer surface and dark grey in the core; size 4.5 × 4 cm, th 0.5 cm (Pl. IV: 3).

10. Body fragment of an unknown type vessel with a flat, oval knob. Tempered with sand and crushed pebble. Outer surface is smoothed, no treatment inside, reddish brown colour outside and brown inside; size 2 × 3 cm, th 0.4–0.5 cm (Pl. IV: 4).

EARLY BRONZE AGE SITES AND ASSEMBLAGES IN THE AREA OF SÜTTŐ

The available information on EBA sites in the microregion around Süttő-Sáncföldek derives from various sources. Some short Hungarian archaeological reports and the systematic topographic research of the 1950-60’s in Northeast Transdanubia provide the basic data on EBA finds from the region (Horváth/H. Kélemen/Torma 1979), which can be supplemented with the results of several rescue excavations in Southwest Slovakia (Fig. 3; Beljak Pažinová/ Beljak 2014; Nevizánsky 2001; Novotný 1955; Vladrár 1966). The material of these reported sites has remained unpublished in the majority of cases.

Süttő-Nagysáncetőtő

The nearest site with EBA finds has been reported from the prehistoric hilltop settlement of Süttő-Nagysáncetőtő, located next to Sáncföldek (Fig. 1). It was inhabited and (re)fortified several times throughout the Neolithic, Bronze Age and Early Iron Age. Excavations were carried out on
the site by G. Vékony and É. Vadász between 1979–1986⁹ (Vadász/Vékony 1980; 1981; Vékony 1982; 1983; 1984; 1986b; 1987), but detailed publication of the campaigns was not released and the available documentation is incomplete (not including all seasons and trenches) which make it difficult to reconstruct their results properly. Furthermore, a large part of the excavated material has been mixed, missing or still waiting to be identified in the deposit of the Balassa Bálint Museum (Esztergom). The excavators claimed in various publications that several features (buildings?) of the Makó culture were recorded on the site and the settlement was probably already fortified during this period (Vékony 1986a, 260; 1988, 71; 2000, 178; Vékony/Vadász 1982). Currently, no EBA material can be identified among the finds from the site stored in the BBM.

Süttő-Tatai úti dűlő II

In the course of the fieldwork of the Hungarian Topographical Research Project in 1968, István Horváth and István Torma discovered some possible remains of EBA settlement approximately 1.5 km southeast of Süttő-Sáncföldek and Süttő-Nagysáncsézet. The site called Süttő-Tatai úti dűlő II is located on a small elevation, close to the stream Bikol (Horváth/H. Kelemen/Torma 1979, 315, site no.

---

⁹ There is not any evidence suggesting that the excavations in the hilltop area continued after these years, although the territory of Sáncföldek had been researched until 1990 (cf. Vékony 2000, 178).
The finds are inventoried and stored in the Balassa Bálint Museum, Esztergom.

11 Feature II/γ was a round pit, which had a diameter of 140 cm, almost straight sides and a flat base in a depth of 49 cm. According to the excavation report, it contained a large quantity of non-diagnostic sherd and a fragment of a grinding stone. The inventoried ceramic material from this feature is the following:

1. Fragment of an interior decorated footed bowl. The rim is rounded and undecorated. Below the rim on the interior, three parallel concentric lines have been engraved. Underneath three elongated hatched triangles are visible in a windmill-like pattern. Remains of brownish white incrustation can be observed in the lines. The concentric lines seem to be dashed due to the degradation of the surface. Tempered with sand and crushed pebble. The surface is heavily burnished both inside and outside, it has yellowish brown colour; size 6.5 × 5.5 cm, dm ca. 26 cm, th 0.9 cm [BBM 70.184.1] (Pl. IV: 5).

2. Fragment of an interior decorated footed bowl. The rim is rounded and undecorated. Below the rim on the interior, three parallel concentric lines have been engraved. Underneath three elongated hatched triangles are visible in a windmill-like pattern. Remains of brownish white incrustation can be observed in the lines. The concentric lines seem to be dashed due to the degradation of the surface. Tempered with sand and crushed pebble. The surface is heavily burnished both inside and outside, it has yellowish brown colour; size 5 × 3.5 cm, th 1 cm [BBM 70.184.1] (Pl. IV: 6).

3. Fragment of a vessel with distinctive shoulder, slightly flaring neck and thickened rim. Tempered with sand and crushed pebble. The surface of the neck is smoothed both inside and outside, below the shoulder no treatment is visible, its colour is brown, brownish grey both on the outer and inner surface and dark grey in the core; size 3.5 × 5 cm, th 0.4 cm [BBM 70.184.2] (Pl. IV: 7).

4. Fragment of a vessel with straight neck and thickened rim. Tempered with sand and crushed pebble. Outer surface is lightly burnished, inner surface is smoothed, it has dark grey colour; size 5.5 × 4 cm, dm ca. 15–17 cm, th 0.5–0.7 cm [BBM 70.184.3] (Pl. IV: 8).

5. Body fragment of an unknown type vessel with brushed surface. Tempered with sand and crushed pebble. Outer surface is burned, inner surface is smoothed, its colour is dark brown and grey outside, brown-grey patchy inside; size 4.5 × 4.5 cm, th 0.6 cm [BBM 70.184.4] (Pl. IV: 9).

6. Body fragment of an unknown type vessel with brushed surface on the lower part and with a flat horizontal knob. Tempered with sand and crushed pebble. The lower part of the outer surface is brushed, the upper part of the outer surface and the entire inner surface are smoothed, dark grey colour; size 5 × 4 cm, th 0.7 cm [BBM 70.184.4] (Pl. IV: 10).

7. Base fragment of a large vessel with roughly brushed surface. Tempered with sand and crushed pebble. Outer surface is brushed, no treatment inside, its colour is brown-grey patchy on the outside and dark grey on the inside; dm 22 cm, th 1 cm [BBM 70.184.5] (Pl. IV: 11).
the surface and dark grey in the core; size 6 × 7 cm, th 0.6–0.7 cm [BBM 71.37.60] (Pl. V: 5).

6–9. Non-diagnostic body fragments of four different vessels of unknown type with brushed surface. Tempered with sand and crushed pebble. Outer surface is brushed, inner surface is without treatment or smoothed, colour is brown, brownish grey, in one case with dark core [BBM 71.37.59].

Feature IV/α had a similar shape with rounded, straight sides and flat base. Its diameter was 138 cm, its depth was 70 cm. It had been partially destroyed by the river Danube and contained only very few EBA sherds:

1. Fragment of a vessel with indrawn neck and thickened out rim. Tempered with sand and crushed pebble. Surface is smoothed both on the inside and outside, brownish grey colour; size 4 × 4 cm, th 0.6–0.7 cm [BBM 71.37.53] (Pl. V: 6).

2. Two fragments of a vessel of an unknown type with brushed surface. Tempered with sand and crushed pebble. The outer surface is brushed, the inner surface is smoothed, its colour is reddish brown both on the inside and outside and dark grey in the core; size 7 × 4.5 cm, 5 × 3.5 cm, th 0.8–0.9 cm [BBM 71.37.53, 71.37.54].

Feature IV/β also had a rounded outline, flat base and straight sides narrowing downwards. It had a diameter of 150 cm and a depth of 42 cm. The larger part of the pit was demolished by the river. In the depth of 20–25 cm, daub pieces were unearthed which, according to N. Kalicz’s view, could have been secondarily deposited remains of an oven. The following EBA ceramic fragments were discovered in the pit:

1. Fragment of a vessel with curved, indrawn neck, everted, thickened rim and a double knob below the rim. Tempered with sand, crushed pebble, and possibly with crushed grog. Outer surface is smoothed, no treatment on the inside, reddish brown colour on the outside, dark brown on the inside; dm 18 cm, th 0.7 cm [BBM 71.37.63] (Pl. V: 7).

2. Fragment of an open bowl with straight, thickened rim. Tempered with sand, crushed pebble and grog. Outer surface is smoothed, inner surface is burnished, brown-grey patchy colour; size 3 × 4 cm, th 0.5–0.6 cm [BBM 71.37.61] (Pl. V: 8).

3. Non-diagnostic body fragment of a vessel of unknown type. Tempered with sand and crushed pebble. The outer surface is smoothed, no treatment on the inside, brown-grey patchy colour; size 7.5 × 2.5 cm, th 0.4–0.6 cm [BBM 71.37.64].

4. Non-diagnostic body fragments (four pieces) of two different vessels with brushed surface. Tempered with sand and crushed ceramics. The outer surface is brushed, no treatment inside, dark grey and brownish red-grey patchy colour; size 3 × 4–5 × 10 cm, th 0.5–0.8 cm [BBM 71.37.65].

5. Fragment of a biconical vessel (mug). Tempered with sand, crushed pebble, and probably with crushed ceramics. Outer surface is lightly burnished, inner surface is smoothed, brownish grey colour on the outside, dark grey on the inside; size 5 × 2 cm, th 0.4 cm [BBM 71.37.62] (Pl. V: 9).

7. Three fragments of a vessel with slightly indrawn neck and straight, thickened rim. Tempered with sand, crushed pebble and grog. Surface is smoothed (but mostly broken off) both on the inside and outside, brownish red colour; size 5 × 4 cm (dm > 14 cm), th 0.6 cm [BBM 71.37.66] (Pl. V: 10).

Some ceramic fragments with brushed surface were collected from the first trench as well. The following sherds can be possibly dated to the EBA:

1. Body fragment of a large vessel with brushed surface. Reused probably as a loom weight: rounded shape with a perforation in the centre. Tempered with sand, crushed pebble and grog. Outer surface is brushed but heavily worn, inner surface is heavily worn, its colour is reddish brown on the outside, and greyish brown on the inside; dm 7 cm, th 1 cm, dmperforation 1 cm [BBM 71.37.51] (Pl. V: 11).

2. Lower part of a vessel with straight, narrow bottom and widely opening base. Tempered with crushed pebble. Outer surface is roughly brushed, no treatment inside, yellowish brown colour on the outside, dark grey on the inside, and brownish yellow in the core; dm 11.5 cm, th 1.1 cm [BBM 71.37.52] (Pl. V: 12).

3–5. Three fragments of three different vessels of unknown types with brushed surface. Tempered with sand and crushed pebble. Outer surface is brushed, inner surface is smoothed, brown, red and grey colour; size 3.5 × 4–7 × 7.5 cm [BBM 71.37.52].

Lábatlan, Rózsika Ferenc utca

In 1969 Gábor Vékony collected a small prehistoric assemblage which had been found earlier by István Verbánszky in Lábatlan, Rózsika Ferenc Street, in a depth of 130 cm during sewerage constructions. Since the area was densely in-built, no rescue excavation could have been conducted (Horváth/H. Kelemen/Torma 1979, 247, site no. 10/17; Kulcsár 2009, 195, site no. 166; Vékony 1970a, 9).12 The assemblage contained a large amphora-shaped urn with cremated human remains, two mugs and two bowls:

1. Large biconical vessel (fragmented, neck is missing) with a horizontal oblong knob in the centre and with V shaped ribs connected by four button-shaped knobs on the upper part. Tempered finely with sand. The outer surface is smoothed but worn, no treatment inside, grey-brown patchy colour; h 23 cm, dmmax 9.7–10 cm, dmbase 13 cm, th ca. 0.7 cm [BBM 71.2.1] (Pl. VI).

12 The documentation is kept in the Archive of the Hungarian National Museum. The finds are in the inventory of the Balassa Bálint Museum, Esztergom, with the exception of the human remains, which are missing.
2. Biconical mug with long neck and one handle connecting the shoulder and the rim directly below the handle. Tempered with sand and crushed pebble. Outer surface is lightly burned but worn, grey, grey-brown patchy colour; h 10 cm, d_mug 5.1 cm, d_mug 3.5 cm, th ca. 0.4–0.5 cm [BBM 71.2.2] (Pl. VII: 1).

3. Biconical mug with long neck and one handle connecting the shoulder and the rim (handle missing). Tempered with sand and crushed pebble. Outer surface is lightly burned but worn, grey, grey-brown patchy colour; h 9.5 cm, d_mug 5.5 cm, d_mug 3.5 cm, th ca. 0.4–0.5 cm [BBM 71.2.3] (Pl. VII: 2).

4. Conical bowl with thickened rim and three horizontal knobs on the rim. Each knob is decorated with three vertical cuts. Tempered with sand and crushed pebble. Outer surface is lightly burned but worn, inner surface is very worn, brownish grey colour; h 5.2–5.6 cm, d_base 13–13.5 cm, d_mug 5–5.5 cm, th 0.5–0.8 cm [BBM 71.2.4] (Pl. VII: 3).

5. Fragmented conical bowl with thickened rim and three knobs on the rim. Tempered with sand and crushed pebble. Outer surface is lightly burned and worn, inner surface is smooth but very worn. Its colour is brownish red with greyish patches; h 7.1 cm, d_mug ca. 18 cm, d_base 6 cm, th 0.6–1 cm [BBM 71.2.5] (Pl. VII: 4).

**DISCUSSION**

**Material culture**

The above-described small assemblages from the Sütő microregion fill a gap in our knowledge regarding the EBA history of the area, although several further finds are still waiting to be processed. Fig. 3 represents the location of the registered EBA sites around Sütő within a radius of ca. 25 km. It clearly shows how incomplete information we still have on this subject.

These sites are quite small, ranging from some surface finds to no more than three features per site, which corresponds with the situation in other areas where most of the excavated settlements of this period yielded similar number of features (Kulcsár 2009, 61, 62, fig. 8; Machnik 1991, 62–64; Tóth 2004; Vladár 1966, 254–266) and the burials were also usually solitary (Kulcsár 2009, 71–75; Machnik 1991, 64–66; Vladár 1966, 266–271).

The finds known to us from the Sütő region consist almost entirely of pottery; neither the settlement features nor the documented burial contained other types of objects. The only exceptions are a small flint blade from Sütő-Sáncföldék and a shaft-hole axe which was reported as a stray find from Sütő. The later find, now missing, probably represents the Kömlőd type axes which could occur in MKČ contexts, and therefore it can be undoubtedly linked to the EBA (Dani 2013; Kővári/Patay 2005, 121; Kulcsár 2009, 168–169; Mozsolics 1967, 13–16). In general, metal artefacts, clay, bone and stone implements are rare in the assemblages of this period (Kulcsár 2009, 164–170; Vladár 1966, 295–298). In cases of some larger settlements, a selective deposition was suggested: e.g. at Mužla-Cenkov and Iža most of the pits contained only pottery in low amount. However, one feature had abundant finds, including different types of artefacts (Beljak Pažinová/Beljak 2014, pit no. 31; Kuzma 2011a, 82, feature no. 70).

A detailed typological analysis is hampered by the low amount and high fragmentation of the material, but the following vessel types could be identified during the typological classification of the settlement material:14

Storage jars and cooking pots were found in each mentioned assemblage, they are one of the most frequent wares in the MKČ area. This category is represented by large base or body fragments with roughened surface (Pl. I: 7; II: 4, 7; V: 3, 5–7), probably the large wide stripe handles (Pl. II: 5; III: 11, 12), the narrowing neck with thickened rim (Pl. IV: 2; cf. Beljak Pažinová/Beljak 2014, pl. VII: 6, 7; are described as flasks, however they are bigger as the category ‘flask’ determined by Kulcsár 2009, 103, 104, type IV), the funnel-shaped neck fragment with thickened rim (Pl. II: 2; cf. Kulcsár 2009, 144–154, type X/4; XIII/2) and some straight neck fragments with thickened rim belong also to such types of vessels (Pl. IV: 3, 8; V: 7; Beljak Pažinová/Beljak 2014, 97, 120, 121; Kővári/Patay 2005, 105–108; Kulcsár 2009, 141–154, types X–XIII; Vladár 1966, 279–283).

Biconical bowls are also present in the material: one almost complete vessel (Pl. I: 3) and several curved fragments (Pl. II: 8; IV: 4; V: 4) possibly represent this vessel type (Kaltc 1984, 96; Kulcsár 2009, 113–118, type VII). Conical bowls are usual element of EBA assemblages, however in this material they have only two small (Pl. I: 1, 4) and one larger (fragmented) specimen (Pl. V: 8; Kulcsár 2009, 107–113, 120, 121, type VII; VIII; Vollmann 2005, 41, 42, Schüsseln, GS 1).

Mugs can be identified in the material of only one site: two fragments represent a type with conical lower part and long, lightly curved neck (Pl.

---

13 The axe was purchased by the Hungarian National Museum from József Fejér in 1906. According to the seller, it was found in Sütő. Currently the object cannot be identified in the museum’s collection. The only visual information on the axe is a small sketch in the inventory book of the museum (HNM, inv. no. 4/1906).

14 The typological classification is based mainly on Kulcsár (2009), but additional categories of Vladár (1966) and Vollmann (2005) were also considered. Vollmann’s system cannot be properly applied to heavily fragmented materials.
I: 5, 6), while another fragment resembles a type with short neck and wider shoulders (Pl. II: 1; on the first type, see above, generally cf. Kulcsár 2009, 91–98, type I; Vollmann 2005, 45, 46, Hochgefässe; 48–50, Krüge).

Interior decorated footed bowls were discovered on each site, but only in heavily fragmented condition (Pl. I: 2; II: 12; III: 1–4, 7; IV: 5, 6; V: 1). They are widespread elements of the Late Eneolithic and EBA material culture in the Carpathian Basin. In western Slovakia and in Transdanubia they are frequently found on the settlements attributed to the MKČ culture (Burger 1980; Kulcsár 1998–1999; 2009, 124–126, 308, fig. 26; 57).

Although these bowls are very fragmented (Vollmann’s preservation categories 3–4–5; Vollmann 2005, 40), some limited typological observations can still be made. At Süttő-Sáncföldek and Lábatlan-Hosszsúföldek two fragments were unearthed, which have decoration both in the interior side and at the rim of the bowls. This placement of the decorative pattern is a less common feature in the area of the MKČ culture. Rim decoration is more frequently found on the finds connected to the Somogyvár-Vinkovci culture. However, they are reported from several sites of the MKČ culture in Eastern Hungary and from Slovakia as well (Kulcsár 2009, 129, 132, 314, 315; cf. Branč: Vladár 1966, fig. 33: 3, 4; Patince: Cheben 1998, fig. 4: 8). In our material, the rims were incised with zig-zag lines in two cases (Pl. II: 12; III: 7; for similar finds see Debrecen-Szövetkezeti szőlőtelepek: Kulcsár 2009, fig. 30: 9; Tápiószéle: Dinnyés 1973, pl. II: 8; Letenyene: Kulcsár 2009, pl. 36: 1), and with small circles in a single case (Pl. V: 1; for similar finds see Dunaszentpál-Bolgányi út: Figler 1996, pl. I: 1; Somogyvár-Kupavárhegy: Kulcsár 2009, pl. 23: 2, 3; 24: 5). The fragments from Süttő-Tatai úti dűlő were decorated only on the interior side. In case of two specimen from Süttő-Tatai úti dűlő (Pl. IV: 5) and Lábatlan-Hosszsúföldek (Pl. V: 1), flat knobs were placed below the rim on the outside, which is also a less frequent element among the culture’s pottery repertoire (Kulcsár 2009, 128; but see some exceptions e.g. from Báč: Cheben 1998, fig. 4: 5; Iza: Beljak Pažinová/Beljak 2014, pl. I: 1; Čaka: Vladár 1966, fig. 32). Foot fragments were found only at Süttő-Sáncföldek: they probably belonged to interior decorated bowls but none of them bear decoration. One of the fragments belongs to a round foot-ring (Pl. I: 2), the other is a rounded, closed, hollow foot (Pl. III: 4). The round foot-ring is generally known in this period, but the other foot shape is a unique solution (Burger 1980; Kulcsár 2009, 132–137, 315, 316; Vollmann 2005, 51, 73–75).

The interior side of the bowls were usually decorated with one to three horizontal lines under the rim and around the centre. The inner area is divided into four triangular sections, which were filled with various combination of hatched triangles or squares, leaving a star-shaped area empty (Čaka type: Burger 1980; Kulcsár 2009, 128; Vollmann 2005, 54–56, pl. 12–14). Although very few vessels have been published from Northeast Transdanubia and Southwest Slovakia, this decorative pattern seems to have been quite common in the area (e.g. Bajna-TSz major: Horváth/H. Kelemen/Torma 1979, site 147, pl. 9: 8; Tata-Tófarok: Kalicz-Schreiber 1994, fig. 13: 7; Mužla-Čenkov: Kuzma 2011a, fig. 7: 1–4, 6; Kuzma/Hanuliak 1990, fig. 4; Kamenín: Novotný 1955, fig. 2: 5; Kamenín-Kiskukoricás: Nevízánksy 2001, pl. I: 1–8; Nové Zámky: Vladár 1966, fig. 22). The horizontal lines below the rim are visible on several fragments (e.g. Pl. IV: 5), while one fragment possibly shows the central circle (Pl. III: 3). Hatched triangles can be observed on many pieces. However, the entire motif has not been preserved. Stripes with dots and small notches on the outer side of the lines (see a fragment from Süttő-Sáncföldek, Pl. III: 7) are less common elements (similar but not identical motifs are seen on some bowls from Branč: Vladár 1966, fig. 33: 4; Bajč: Vladár 1966, fig. 33: 6; Ivanka pri Nitre: Novotný 1955, fig. 8: 1). The unhatched cross inside a hatched circle from Süttő-Sáncföldek (Pl. III: 1) is not a popular pattern in the MKČ area, but it has parallels within the material of the Somogyvár-Vinkovci culture (Kulcsár 2009, 316; e.g. Somogyvár-Kupavárhegy: Kulcsár 2009, pl. 15: 8; 17: 1; 25: 1; 26: 10; Dombóvár: Kulcsár 2009, pl. 42: 2, 3).

The decorative patterns were created with various techniques: while some decorations were made with a Furchenstich-like (‘stab-and-drag’) method, others are simply incised lines. In some cases, lime-encrustation is still visible in the indentations.

Regarding the Lábatlan assemblage, the intact mugs, bowls and the amphora-like vessel from the grave are hard to be compared with the heavily fragmented settlement materials. Nevertheless, some attributes of the burial finds (fabric, surface treatment and colour) resemble the features of the above described settlement finds.

Although mugs of different size and shape have been often found in the burials of the MKČ culture (e.g. Tata-Tőfarok: Kalicz-Schreiber 1994, fig. 13: 1–4; Budapest-Aranyhegyi út: Kalicz-Schreiber 1994, fig. 3: 3, 4; cf. Kulcsár 2009, 91–98), the mugs of the Lábatlan assemblage (Pl. VII: 1, 2; handled biconical mugs with cylindrical neck) belong to an uncommon type (Kulcsár 2009, 96, 97,
type I/14; cf. the Somogyvár-type mugs: Kulcsár 2009, 276–280, type I/8; I/9; for analogies from the MKČ area see e.g. Kajárpec: Figler 1996, pl. III: 4; Budapest-Aranyhegyi út: Kulcsár-Schreiber 1994, fig. 3: 3; Esztergom-Tóváros: Bóna 1963–1964, 11, pl. XII: 10). Conical bowls with thickened rim were frequently used vessel types during the EBA period and were discovered in various contexts including burials (Kulcsár 2009, 75–86, 105–113; Vladár 1966, 278, 279, type III.1–3; Vollmann 2005, 41, 42, Schüsseln, GS 1), the best parallels to the vessels from Lábátlan (Pl. VII: 3, 4; Vollmann 2005, 41, 42, Schüsseln, GS 1, S 3, A1–A2) are known from Kál-Legelő (Kulcsár/Szabó 2000, fig. 4: 4; 5: 1), however, the three horizontal knobs on their rim have no direct analogies in the archaeological material. Some fragments with a knob at the rim are published from e.g. Táp-Borbapusza (Figler 1994, fig. 4: 2) and compare also the knobs on some bowls from Leténye-Szentkeresztdomb (Somogyvár-Vinkovci culture; Kulcsár 2009, pl. 36: 2, 3).

Similarly, amphorae or amphora-like vessels were often placed in the burials of the EBA. They were unearthed in several inurned burials of the MKČ culture (Kulcsár 2002, 448–451; 2009, fig. 13), but they are often found in their settlements as well (Kulcsár 2009, 154–160, type XIV). Similar vessel types are known from assemblages attributed to the Somogyvár-Vinkovci (Kulcsár 2009, 334–336, type XV), and other contemporary cultures in the region (Dani/Nepper 2006, 42; Kulcsár-Schreiber 1997; Vladár 1966, 283, 284).

The rib pattern and the handle strip make the Lábátlan vessel (Pl. VI) a unique specimen in the Transdanubian material culture. Plastic decoration is rather rare in the material attributed to the MKČ culture. It appears more frequently in the northern distribution areas of culture on the Great Hungarian Plain, but the arrangement of the ribs there (usually three or four vertical ribs on the shoulder) differs from the above-described pattern from Lábátlan (Kulcsár 2009, 162). Cordon attachments can also be found on large vessels in the distribution area of the Somogyvár-Vinkovci culture, however, those ribs were placed almost always horizontally (Kulcsár 2009, 334–336, fig. 67). More complex rib motifs decorating the upper part of similar vessel types are known from the territory of the Corded Ware culture (Buchvaldek 1967, 27–36; Kolář 2018, 104–112, 226, tab. 79; Kolář et al. 2011, 87, 88, 98–100; Neustupný 2013, 141; Šebela 1999). The best – although not identical – analogy of the Lábátlan cordon arrangement can be seen in Grave no. 2 of Mouchnice in Moravia (Šebela 1999, pl. 64: 2), but the vessel from grave C in Nová Ves I-Ohrada in Bohemia is also comparable (Buchvaldek 1982, fig. 9: C1).

The pair of elongated horizontal knobs on the belly is another atypical element of the vessel. Amphorae and amphora-like vessels of the period were usually produced either with strap handles which were mostly placed between the neck and the shoulder or on the widest part of the vessel, or without a handle. The horizontal knobs have only a few parallels among the contemporary finds: e.g. shorter variants are known from Šafa (Vladár 1966, 283, fig. 30: 1), Kompoltt-Kistér (Gogállant 1999, pl. 16: 11), Sárrétudvari-Órhalom (Dani/Nepper 2006, fig. 4: 1; 5: 2), and from Somogyvár in southern Transdanubia (Kulcsár 2009, fig. 67, pl. XV: 2a).

Regarding the manufacturing techniques the ceramic vessels of the settlements and the grave are quite homogeneous in the whole area. The majority of the vessels were tempered with sand and finely (sometimes coarsely) crushed pebble, and occasionally with crushed ceramics. They usually have brownish grey or grey surface. Most of the excavated fragments have a smoothed surface, although several styles of roughening (fine combing and dense or loose brushing) can be also observed. The combination of such treatments on different parts of the same pot is usual during the EBA (Kulcsár 2009, 141, 142; Vladár 1966, 294, 295) and it can be discovered on the curved body fragments of two pots/biconical bowls (Pl. IV: 10; V: 4): the upper parts (neck, shoulder) are smoothed, while the lower parts are rusticated.

Some attached ribs and knobs are also present in the material, which have many analogies in the material of the MKČ culture (e.g. Kulcsár 2009, 113, 114, 118, 144, 147, 151, type VII/12, VII/20, X/3–4, X/5, XIII/1; Vollmann 2005, 50, 51). Elongated horizontal knobs can be observed on the body of different vessel types, mostly on conical bowls and on pots/jars (Pl. I: 1, 4; IV: 4, 10; V: 1), but they can also appear right below the rim (Pl. IV: 2; for analogies see e.g. Budapest-Aranyhegyi út: Kulcsár-Schreiber 1994, fig. 4: 7; 5: 11). A crescent-shaped rib was placed on the shoulder of a pot/biconical vessel (Pl. V: 4), which is a frequent element in the contemporary EBA material (for analogies see e.g. Budáörs: Kalic 1984, pl. XXII: 7; Budapest-Aranyhegyi út: Kalic-Schreiber 1994, fig. 3: 1; Iža: Beljak Pažinová/Beljak 2014, pl. II: 1). A double knob below the rim of a pot (Pl. V: 7) is a less frequent feature, but it also has parallels among the contemporary finds (e.g. Čaka: Vladár 1966, fig. 14: 4; Esztergom-Szentgyörgyemő: Kövecses Varga 2004, pl. XII: 1; and see also in the Bell Beaker grave from Budapest-Békásmegyer: Kalic-Schreiber 1997, fig.
Fig. 4. Calibrated radiocarbon dates from Süttő-Sáncföldek feature no. 5 and other sites of the Makó-Kosihy-Čaka culture.
The same can be said about finger-impressed horizontal cordons on the shoulder of storage jars or cooking pots (Pl. I: 8; for analogies see e.g., Kalicz 1984, pl. XXII: 13; Kulcsár 2009, 144, type X/3nc; Vollmann 2005, 57).

**Settlements**

The distribution of the known sites indicates a dense settlement network in the wider region around Sütő during the EBA (Fig. 3). Several site concentrations can be observed (e.g., around Esztergom, Csolnok, Sütő), but little is known about the size and lifespan of the sites.

On the settlements at Sütő and Lábatlan (see above) only 2–3 pits have been discovered, which is the average number of features per site in this period. Preliminary reports testify that one or two pits were excavated also on the sites of Tatabánya-Bírkás rét (László 2005), Tatabánya-Réti út (Vékony 1978), Patince-Danube bank (Cheben 1987), Patince-Teplice (Cheben 1984), Gbelce-Pieskovňa (Kuzma 2001), Kamienín-Kiskukoricás (Nevízányi 2001), Kamenica nad Hronom (Vladár 1966, 257), Malé Kosihi-Törökkomb and Malé Kosihi-Papföld (Točík 1981; Vladár 1966, 257). Six pits were found at Hurbanovo-Sandmine (Paulik 1958), eight pits at Esztergom-Szentgyörgy mező (Kövecses Varga 2004) and ten pits at Iža (Belfaj Pažinová/Belfaj 2014). Some exceptionally large settlements have been reported from Mužla-Čenkov (approx. 36 pits; Hanuliak/Kuzma 1990; 1991; Kuzma 1982; 1992; 1993; Kuzma/Bátor 1981; Kuzma/Hanuliak 1990, 123; Kuzma/Ozdáni/Hanuliak 1983; Kuzma/Sálskovský 1984; 1986; cf. Kulcsár 2009, 215, site no. 346; for a summary Kuzma 2011a, 80–82) and Bajé-Vinohrady (32 pits; Vladár 1966, 254, 255).

Features other than pits have been rarely found in the settlements of the MKČ culture: at Mosonszentmiklós-Gyepföld and Mosonszentmiklós-Gyártelep (Aszt 2001, 214, 215; 2004; Kulcsár 2009, 65). Some hilltop sites have been reported from southern Transdanubia, e.g. from Oltár-Márkihegy, Galambok-Öreghegy, Pécs-Nagyárpád (for a summary see Bondár 2001, 71; Kulcsár 2009, 263–266; Tóth 2003, 73, 74) but in many cases there are not enough data to date their fortifications precisely. At Nagygörgör-Várhegy (Novák 1965) and Kaposújlak-Várhegy (Kulcsár 2012, 353, 354; Somogyi 2004) excavations confirmed that the fortifications had been erected during the EBA.

In southern Transdanubia (Baranya county), systematic research has discovered a complex network of settlements consisting of a chain of fortified hilltop settlements possibly dated to the EBA and additional open settlements nearby (Bertók/Gáti 2005–2007). A similar settlement system can be suspected around the Sütő plateau too, where a possible fortified settlement (Nagyszentető) was surrounded by smaller open sites (at least one at Sáncoľšte and a further one at Tatai úti dűlő II). However, these three sites’ exact relation to each
other and their position within the regional settlement system are still unclear, since hardly no data are available either on their relative chronological position or on their inner structure (cf. Bondár 2001, 70, 71; Kulcsár/Szeverényi 2013, 76).

Regarding the subsistence strategies of the EBA inhabitants of the area, little information is available. From North Transdanubia previous research did not provide any evidence in this regard, only the recently collected archaeozoological and archaeobotanical material can be used as a starting point. The new data provide limited evidence of crop cultivation and clearly testify to animal husbandry. The archaeobotanical finds from Sütő indicate a sedentary life-style and confirm that the subsistence of EBA communities in the Carpathian Basin was not solely based on pastoralism (Gál/Kulcsár 2012; Kulcsár 2009, 67–69; Pusztaíné Fischl et al. 2015, 515, 516).

**Burials**

The burials of the MKČ culture have been usually found alone as single graves or as parts of small burial clusters consisting of three-four but no more than ten graves. No large cemeteries have been discovered so far. In the discussed region four possible single graves were reported: the above described finds from Lábatlan, a scattered cremation grave from Tata-Tófarok (Kalicz-Schreiber 1991, 9; V. Vadász/Vékony 1969), a symbolic grave from Tatabánya-Dózsakert (Cseh/Vékony 2002; Kisné Cseh/Vékony 2002, 10), and an assemblage from Bajcs-Medzi kanáli (Cheben 1998, 149, 150).

Various patterns can be observed in terms of the spatial relation between burials and contemporary settlements. In most cases the burials were found solitary and separately from the settlements, in other cases, however, large-scale excavations yielded evidence of clear connection between settlements and graves (Dani/Kisjuhász 2013, 683, 684; Kulcsár 2009, 71–89; Vladrár 1966, 266–271). The Lábatlan assemblage was a solitary find. The nearest settlement remains in the area were documented from Lábatlan-Hosszúföldök (3.5 km) and Nyergesújfalu-Józsefpuszta (2 km).

Most of the burials are cremation burials. They contain one to five vessels but rarely any other type of grave goods. The most common types of vessels include a large amphora or storage pot which generally served as the urn, as well as one-handled mugs and bowls (Kalicz-Schreiber 1994, 39–41; Kulcsár 2009, 75–89; Vladrár 1966, 266–271).

**Absolute chronology**

The absolute chronology of the EBA in the Carpathian Basin and in Central Europe has been frequently discussed and re-evaluated in the past decade (Kiss et al. 2015; 2019; Kulcsár 2013; Kulcsár/Szeverényi 2013; Pusztaíné Fischl et al. 2015; Staník 2021; Stockhammer et al. 2015; Szabó 2017). From the recently excavated pit from Sütő-Sáncoföld one animal bone was sent for radiocarbon dating. The result (4014 ± 33 BP; 2585–2466 cal BC, 90.8% cf. Czajlik et al. 2019, fig. 19) is in line with the previously known absolute dates of the Makó-Kosihy-Čaka culture (Fig. 4).

Similar dates have been published from the site of Berettyőújfalu-Nagy Bócs dűlő, where feature 82 (str. 353) yielded 3990 ± 30 BP results, feature 824 (str. 1889) 3970 ± 40 BP, and feature 152 (str. 603) 3955 ± 35 BP dates (Dani/Kisjuhász 2013, 689, tab. 1). The published date (4020 ± 70 BP) from feature 72 at Nyiregháza-Császárszallas (Dani/Kisjuhász 2013, 689, tab. 2) is also close in time to the Sütő data. Further published radiocarbon dates from the area of the MKČ culture suggest that the site at Sütő-Sáncoföld belonged to the older phase of the culture, representing the EBA 1 transitional period according to Hungarian terminology (Kulcsár/Szeverényi 2013; Pusztaíné Fischl et al. 2015, fig. 1.a). Most of the sites from where radiocarbon dates are available represent the younger period of the culture which lasted until ca. 2300/2200 BC (cf. Fig. 4; Berettyőújfalu-Nagy Bócs dűlő: Dani/Kisjuhász 2013, 689; Foeni Gaz: Krauß/Ciebotaru 2013, 57; Szeghalom-Környe: Raczyk/Hertelendi/Horváth 1992, 43; Kismarja-Nagymarja: Dani/Kisjuhász 2013, 689; Nyiregháza-Császárszallas: Dani/Kisjuhász 2013, 689; Békés 103: Duffy et al. 2019, 71, tab. 3, HB 55, HB 62; Domony: Forenbaher 1993, 241; Úllő: Kövári/Patay 2005, 124).

Several further sites are known from the Carpathian Basin which are dated to the same period but attributed to different material cultures. Győrszemere-Tóth tag has a mixed MKČ and Somogyvár-Vinkovci material which is dated to 3995 ± 56 BP (Figler 1996, 8; Kulcsár 2013, 651, tab. 1). From the territory of the Somogyvár-Vinkovci culture, the best parallels are known from Pince pri Lendavi (3980 ± 50 BP; Kerman 2014, fig. 1.8), Krog-Za Rašičko (4020 ± 25 BP; Jereb/Sankovič/Savel 2014, fig. 7.3.18), Čepinski-Martinci Dubrava (4020 ± 40 BP; Črešnar/Teržan 2014, 666, fig. 10) and Szava (Raczyk/Hertelendi/Horváth 1992, 43, no. 10). In Vráble-Fidvár, a seed found in a core sample provided a contemporary date (4050 ± 35 BP; Schlüter/Bittmann 2016, 334, tab. 1, core A1: 11).
CONCLUSION

In the vicinity of Sütő several EBA archaeological finds have been revealed, however, the low number of the excavated sites and the unpublished status of the material strongly limit our knowledge of the settlement and society of this period.

The old and new discoveries presented here suggest a dense and stratified network of EBA settlements in the area with the existence of fortified hilltop sites on top of the settlement hierarchy. Unfortunately, the amount and condition of the finds do not allow us to establish subtle chronological differences between the sites of the network. The intra-site organization of the settlements is hardly known: the limited number of excavated sites shows dispersed layout. Little information is available also on the subsistence strategies of the communities living in this region.

The material culture of the discussed sites shows great variability. Although there is no doubt about their relative chronological position, the cultural attribution of these small EBA assemblages is not always obvious. The above discussed burial from Lábatlan indicate strong connections between the Moravian Corded Ware and the Makó-Kosihy-Čaka cultures, which network has been already described by previous studies too (Benkovsky-Pivovarová 2005; Kulcsár 2009, 46–57, 80–84, 176, 177). In contrast, some other finds, e.g. the interior decorated footed bowl with an unhatched cross motif, the mugs of the Lábatlan assemblage or from the newly discovered pit from Sütő-Sáncföld, rather suggest strong ties to the Somogyvár-Vinkovci, or in case of the pot with double knob from Lábatlan-Hosszú földek, to the Bell Beaker material (see above detailed, to the intercultural networks described Buchvaldek 2002; Kalicz-Schreiber 1991; Kalicz-Schreiber/Kalicz 1997; Kulcsár 2009, 172–178). In general, the EBA in the Carpathian Basin is characterized by strong interregional interactions which resulted in notable entanglements in the material culture of different communities – as it is testified by the sites around Sütő.

Acknowledgement

The excavation at Sütő-Sáncföld in 2018 was directed by Zoltán Czajlik as part of the DTP-1-1-248-2.2 Interreg Iron-Age-Danube Project. The research was carried out within the frameworks of the Institutional Excellence Program for the Higher Education at the Eötvös Loránd University (2019-2021, workgroup of Tivadar Vida) and the NKFIH SNN 134635 fund (2021–2024, headed by Zoltán Czajlik).

The archaeobotanical analysis was performed by Máté Mervel (ELTE), the archaeozoological analysis was carried out by Péter Csippán (ELTE). Mónika Merczi (BBM) assisted the research in Esztergom, while Zsuzsanna Tóth (HNIM) lent a hand during the background research in the archives and in the museum collections. Csaba Bodnár (Museum of Fine Arts) gave advices during data processing and on the first version of the draft. I express my warm gratitude to all of them for their assistance.
Pl. I. Süttő-Sáncföldek, feature no. 5. The ceramic material.
Pl. II. Sütő-Sáncföldek. The ceramic material. 1–11 – feature no. 5; 12 – stray find from trench no. 1.
Pl. III. Süttő-Sánceföld. The Early Bronze Age ceramic material. 1–6 – trench E34; 7–12 – trench E30, pit no. 1.
Pl. IV. The Early Bronze Age ceramic material. 1–4 – Sütő-Sáncföldék, trench E30, pit no. 1; 5–11 – Sütő-Tatai úti dűlő II.
Pl. VI. Lábatlan-Rózssa Ferenc utca. The amphora-like vessel.
Pl. VII. Lábatlan-Rózsa Ferenc utca. The mugs and bowls.
Budapest 1960, 18.


cher in Ungarn. In: B. Fritsch/M. Maute/i. Matuschik/

Die Somogyvár-vinkovci-kultur und die glockenbe

um die frühe Bronzezeit. Beiträge zur Frühbronzezeit und die kultur der frühbronzezeitlichen Makó-


Kulcsár 2012 – G. Kulcsár: Siedlungen entlang des Kaposi-


Kulcsár/Szeverényi 2013 – G. Kulcsár/V. Szeverényi: Transition to the Bronze Age: Issues of Continuity and Discontiu


Kuzma 1982 – I. Kuzma: Druhá etapa výskumu v Mužle-

Súhrn preložila Kristína Sedliaček

Súhrn


Manuscript accepted 26. 2. 2022
Sültő


Eszter Fejér, PhD.
Faculty of Humanities, Institute of Archaeological Sciences
Eötvös Loránd University
Múzeum krt. 4/B
HU – 1088 Budapest
fejer.eszter@btk.elte.hu

Súhrn

Sídlsisko zo staršej doby bronzovej v blízkosti Sütő

E s z t e r  F e j é r

SÚHRN


Nájdený keramický materiál je typický pre staršiu dobu bronzovú v Zadunajsku. Charakteristickými sú nálezy fragmentu nôžky, pravdepodobne z misky zdobenej z vnútornej strany, šálky s vysokým zakrivovaným hrdlom a kónickým telom, dvojokonické misky s krátkým hrdlom a zhrubnutým okrajom, dvoch malých kónických misiek, ale aj niekoľko ďalších fragmentov nádob so zhrubnutým okrajom a slamovaným/zrebyvaným povrchom. Ako ostrív boli do keramiky pridávané kamienky a piesok.

Region v okolí lokality Sütő-Sáncföldek sa tradične používa za súčasť oblasti rozšírenia kultúry Makó-Kosihy-Čaka, s ktorou vykazujú prezentované nálezy silné väzby. Jednoznačné kultúrne zaradenie objektu je však nespracované a nepublikované. Kultúra so šnúrovou keramikou.


Nájdený keramický materiál je typický pre staršiu dobu bronzovú v Zadunajsku. Charakteristickými sú nálezy fragmentu nôžky, pravdepodobne z misky zdobenej z vnútornej strany, šálky s vysokým zakrivovaným hrdlom a kónickým telom, dvojokonické misky s krátkým hrdlom a zhrubnutým okrajom, dvoch malých kónických misiek, ale aj niekoľko ďalších fragmentov nádob so zhrubnutým okrajom a slamovaným/zrebyvaným povrchom. Ako ostrív boli do keramiky pridávané kamienky a piesok.

Region v okolí lokality Sütő-Sáncföldek sa tradične používa za súčasť oblasti rozšírenia kultúry Makó-Kosihy-Čaka, s ktorou vykazujú prezentované nálezy silné väzby. Jednoznačné kultúrne zaradenie objektu je však nespracované a nepublikované. Kultúra so šnúrovou keramikou.
V práci prezentované staršie aj novšie objavy indikujú hustú a stratifikovanú sieť sídlisk v okolí Süttő, ktorých súčasťou boli výšinné opevnené sídliská na vrchole sídelnej hierarchie. Žiaľ, vzhľadom na množstvo a stav zachovania nálezov nie je možné určiť jemné chronologické rozdiely medzi jednotlivými lokalitami. Vo všeobecnosti je k dispozícii veľmi málo poznatkov o výšinných opevnených sídliskách, zvlášť v rámci rozšírenia kultúry Makó-Kosihy-Čaka, no v južnom Zadunajsku existujú oblasti, ktoré vykazujú podobnú sídelnú sieť v období staršej doby bronzovej. Kultúrne zaradenie malých nálezisk v okolí Süttő zo staršej doby bronzovej nie je vždy jednoznačné. Dominujú tu prvky kultúry Makó-Kosihy-Čaka, ale nájdemo aj analógie s kultúrou so šnúrovou keramikou, kultúrou Somogyvár-Vinkovci a s kultúrou zvonkovicích pohárov. Lokality v okolí Süttő svedčia o silných nadregionálnych interakciách, ktoré sú charakteristické pre staršiu dobu bronzovú v Karpatskej kotline. Dáta získané analýzou C14 z lokality Süttő–Sáncföld [4014 ± 33 BP; 2585–2466 cal BC (90, 8 %)] sú v súlade s doteraz známymi absolutnými dátami včasnej fázy kultúry Makó-Kosihy-Čaka (obr. 4).