Connected regions, shared traditions: A unique Middle Iron Age burial from the Danube-Tisza Interfluve

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This paper presents the results of various analyses on a Middle Iron Age grave excavated in the southern part of the Danube-Tisza Interfluve on the floodplain of the ancient Danube.

Even though a later pit destroyed a significant part of the feature, an exceptionally rich inventory of weapons and other artifacts were found. Typological and archaeometallurgical analyses of the artifacts indicate that in addition to characteristic objects of the Alföld group of the Scythian Period, several artifact types and ritual elements may be associated with the Eastern Hallstatt circle.

Interpretation of the burial is hindered by the fact that no other contemporaneous feature was found during the excavation of the site. Moreover, the grave is located remarkably far from the core area of the Alföld group in a region where settlement history of the period is largely uncertain. However, we argue that the burial of the high-status individual at Bátmonostor is associated with the commercial relations of the Alföld group in the major contact zone between the communities of the Great Hungarian Plain, Transdanubia and the Northern Balkans.

Keywords: Middle Iron Age, Great Hungarian Plain, burial, metallurgy, trading activities

Introduction

During the preventive excavations associated with the construction of the Croatian-Hungarian gas pipeline a unique feature was discovered at Bátmonostor-Szurdok (Site HT-47) in 2009. The site is located in the southwestern part of the Danube-Tisza Interfluve, in the northern Bácska region, ca.0,4 km north of Bátmonostor village, on the margin of the floodplain of the ancient Danube (*Fig. 1. 1*). The archaeological works were conducted by the Field Service of Cultural Heritage Protection in a 1470 m long and 5 m wide section of the site and revealed 454 features from multiple periods. In addition to Late Copper Age Baden Culture, Celtic, Sarmatian, Árpádian Age, Late Medieval Age and Early Modern Period settlement features, a few Sarmatian graves were also unearthed on a bank of a minor paleomeander that used to run onto the floodplain.

Feature 247 and its assemblage

In the northern section of the excavated part of the site a rectangular feature with rounded corners, measuring 270 cm by 260 cm, oriented on cardinal axes was unearthed (Feature 247) (*Fig. 1. 2*). The depth of the steep-walled feature ranged between 80 and 88 cm from the surface after the removal of

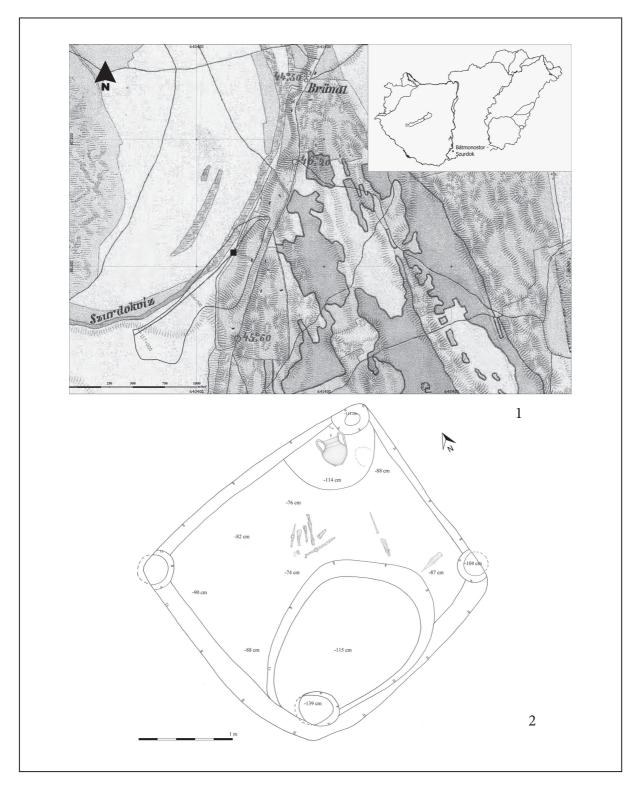


Fig. 1. 1: The location of Bátmonostor-Szurdok in Hungary. The excavated track of the pipeline at the site (grey line), the extent of the site (grey polygon) and the location of Feature 247 (black square) are marked on the map of the second military survey of the Habsburg Empire. 2: Map of Feature 247. The dashed line in the northeasten corner marks the location of the cylindrical and cone-shaped, small bronze artifacts

the plowzone, and ca. 180-188 cm from the current surface. Only the northwestern half of the feature fell into the track of the pipeline. Owing to difficulties in the excavation, the exact positions of the artifacts in this part are somewhat ambiguous. After receiving the investor's permission, the southeastern half of the feature was excavated several months later in 2010.

The fill of Feature 247 had dark brown soil mottled with sand and a small amount of daub flecks. In the northern half of the feature, a more compact soil measuring 30 by 40 cm was observed at the bottom of the feature, but traces of burning were not recognized. A pit 80 cm in diameter filled with looser sand was revealed in the northeastern corner of Feature 247.

Additionally, circular pits were unearthed in each corner of Feature 247. Their diameters range between 28 and 45 cm, typically 36-40 cm, and their depths from the bottom of the feature varied between 24 and 58 cm. Some of them were dug slightly into the walls of the feature.

An oval, intrusive pit, measuring ca. 160 by 210 cm, was found in the southwestern section. Its depth was ca. 40 cm deeper than the bottom of Feature 247. Based on Sarmatian ceramic fragments recovered from the fill, the pit likely was dug in the 3rd-4th century AD.

Artifacts found at the bottom of Feature 247 were clustered in three areas.¹

- a) The circular pit located in the northeastern corner contained the following objects:
- 1. Dark grey, sand tempered, wheel-made, burnished, slightly asymmetrical, two-handled amphoralike vessel. The neck and the shoulder are decorated with thin, horizontally placed plastic appliqué, the handle is 8-shaped in cross-section. Height: 33 cm, rim diameter: 20 cm, base diameter: 9 cm, handle width: 4,4 cm, handle thickness: 2 cm (*Fig. 2. 1*).
- 2. 87 cylindrical and cone-shaped, hollow ornaments, possibly beads, manufactured from thin bronze sheets. The artifacts were concentrated in a small area directly south of the vessel. Length: 0,4-0,8 cm, diameter: 0,16-0,26 cm (*Fig. 2. 2*).
- 3. Trilobate bronze arrowhead with flute found in the northeastern corner of the feature. A hole punctured one of the blades. Length: 2,1 cm, width: 0,8 cm (*Fig. 3. 1*).
- 4. Circular, fragmented iron object of unknown function. Diameter: 3,3 x 4 cm, thickness: 0,3 cm (Fig. 3. 2).
- b) In the mid-section of the feature the following artifacts were found (the exact positions are unknown):
- 5. Part of an undecorated, cylindrical tube made of antler. Length: 5 cm, thickness: 0,4 cm (Fig. 3. 3).
- 6. Part of a cylindrical tube made of antler. The outer surface is decorated with engraved horizontal and diagonal lines, and concentric circles between them. Length: 4,5 cm, thickness: 0,4 cm (*Fig. 3. 4*).
- 7. Iron shaft-hole axe with slightly elongated body. Length: 14,2 cm, width: 2-4,5 cm, shaft-hole diameter: 3,2 x 3,7 cm (*Fig. 3. 5*).
- 8. Iron adze-axe slender in shape, supplied with circular shaft-hole. One of the ends forms an abstract animal head. Length: 21,3 cm, width: 0,9-3 cm, shaft-hole diameter: 1,7 cm (*Fig. 4. 1*).
- 9. Iron adze-axe robust in shape, supplied with circular shaft-hole. The blade is fragmented. Length: 24,7 cm, width: 0,4-5 cm, shaft-hole diameter: 2,4 cm (*Fig. 4. 2*).
- 10. Single edged iron acinaces. The slightly curved blade is fragmented, the cross-guard is heart-shaped, and the grip is oval in cross-section. The fragmentary pommel is antenna-shaped. Length: 37 cm, blade width: 1-2,3 cm (*Fig. 4. 3*).
- 11. Sheath made of iron plate, oval in cross-section, gradually tapering, recovered SW of the vessel.

¹ Currently, the assemblage is found at the regional office of the Center for National Heritage Protection at the Hungarian Museum in Szeged, and will be permanently stored in the Katona József Museum in Kecskemét.

A cut trapezoid in shape is located at the wider end of the object. Length: 11,5 cm, width: 1,5-3,7 cm (Fig. 5. 1).

- 12. Iron spearhead with narrow, willow-leaf shaped head supplied with long, funnel-shaped socket. Fragment of a sheath is corroded to the highly fragmented head. Length: 31,2 cm, socket length: 14 cm, socket diameter: 1-2,5 cm, head width: 2-3,2 cm (*Fig. 5. 2*).
- 13. Iron spearhead with a highly fragmented head and a long, cylindrical socket. Length: 16,2 cm, socket length: 12,1 cm, socket diameter: 1,7-2 cm, head width: 3,2 cm (*Fig. 5. 3*).
- c) In the southeastern part of the feature the following artifacts were found:
- 14. Possible long axe with square cross-section made of iron. The head is flat and oval, and the tip is flattened. Length: 23,3 cm, diameter: 0,4 x 1-1,2 x 1,2 cm, head diameter: 2,6 x 2,8 cm (*Fig. 5. 4*).
- 15. Iron trunnion axe trapezoid in shape. The blade is rounded and the body is supplied with two small bosses. Wooden remains are preserved on the upper part. The blade and one of the bosses are fragmentary. Length: 17,5 cm, width: 2-3,8 cm, thickness: 0,5 cm (*Fig. 5. 5*).

In addition to prehistoric ceramic sherds, several other metal finds were found in the fill of the feature during the excavation:

- 16. Fragment of a possible iron bridle bit. Slightly curved, rectangular in cross-section, the undamaged end is hemispherical. Length: 5,4 cm, diameter: 0,6-0,8 cm (*Fig. 5. 6*).
- 17. Iron awl rectangular in cross-section. Both ends are pointed. Length: 5,4 cm, width: 0,16-0,5 cm (*Fig.* 5. 7).
- 18. Fragment of an iron artifact of unknown function. Composed of three attached layers, the tip is tapering. Length: 11 cm, width: 0,6-1,5 cm (*Fig. 5. 8*).
- 19. Fragment of an iron artifact of unknown function. Bent at a right angle, rectangular in cross-section, the undamaged end hammered into flat and wide. Length: 3,4 cm, width: 0,6-1,6 cm (*Fig. 5. 9*).

Analyses

The Feature

The recovered artifacts date Feature 247 of Bátmonostor-Szurdok to the Middle Iron Age of the Great Hungarian Plain. Although human remains were not observed in any form, the feature might be associated with mortuary ritual. Graves lacking human remains with no or few artifacts (typically ceramic artifacts) are often interpreted as symbolic burials, and are numerous in the Middle Iron Age cemeteries of the Plain and the surrounding regions (e.g., Párducz 1966, 82; Vulpe 1967, 35–36; Galántha 1981, 43; Bencze-Böröczky-Szigeti 2010, 162). It is possible that in the Bátmonostor-Szurdok feature human remains, and also very likely other grave-goods, had been located in the southwestern part of the pit, and were removed when the intrusive pit was dug resulting in the destruction of nearly one third of Feature 247 (*Fig. 1. 2*). The pit might not be associated with looting, but rather with an accidental activity of the inhabitants of the Sarmatian settlement at the site. Traces of burning on the artifacts that could be related to the funerary ritual were not observed.

The structure and size of Feature 247 are similar to other Middle Iron Age burial contexts on the Great Hungarian Plain (e.g., Galántha 1982–83, 123, Fig. 8; Bende 2003, 71, Fig. 2. 1; Kisfaludi 2004, 185, Table V. 1; Scholtz 2006, 64, Fig. 4. 2). The postholes observed at the four corners of the Bátmonostor feature might be indicative of a grave construction. Wooden burial structures have

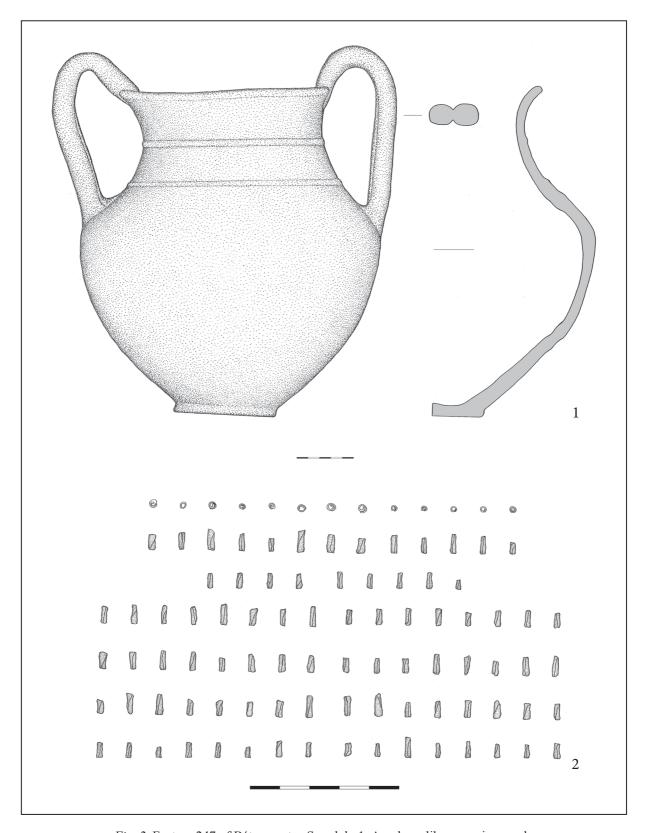


Fig. 2. Feature 247 of Bátmonostor-Szurdok. 1: Amphora-like ceramic vessel; 2: Bronze ornaments

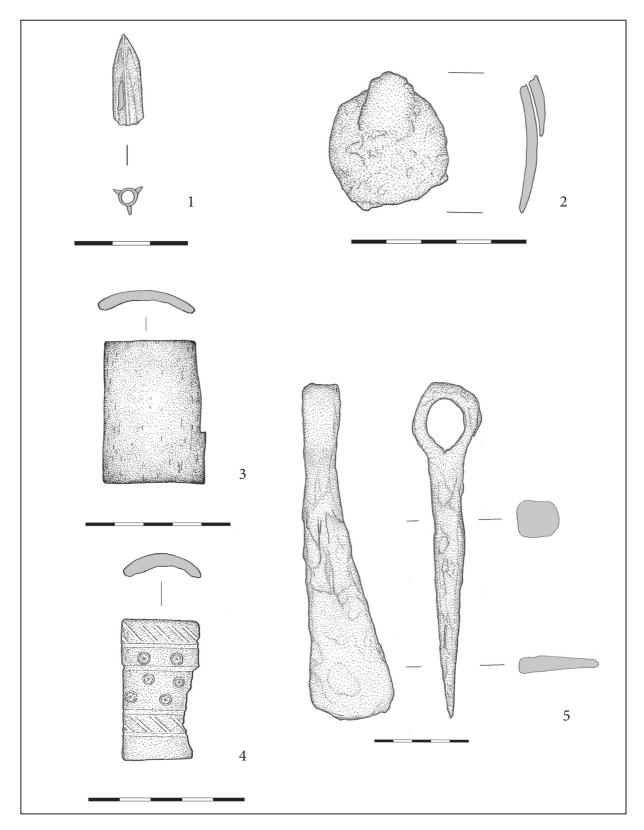


Fig. 3. Feature 247 of Bátmonostor-Szurdok. 1: Bronze arrowhead; 2: Iron artifact of unknown function; 3: Undecorated antler tube; 4: Decorated antler tube; 5: Iron shaft-hole axe

been documented in several cases in the contemporaneous cemeteries of the region (e.g., Párducz 1954, 30–31, Fig. 4–6; Dušek 1966, 17, Fig. 14; Galántha 1981, 46–47; Bende 2003, 64–65), and various forms of wooden and stone chambers under burial mounds of the elite were common features throughout Transdanubia, the Sava-Drava Interfluve, and the Northern and Central Balkans during the Iron Age to the 5th century BC (Benac-Čović 1957; Patek 1993; Jovanović 2003; Ljuština-Dmitrović 2010). Although the custom of erecting tumuli over graves was practiced in the Middle Iron Age of the Great Hungarian Plain to some extent (e.g., Fettich 1927, 1928; Galántha 1982–83, 120–121; Kemenczei 2009, 32), evidence for a mound associated with Feature 247 is lacking. Traces of an enclosing ditch, observed in multiple cases surrounding concurrent, supposedly smaller mounds on the Plain (e.g., Galántha 1982–83, 120–121; Bende 2003, 64–65; Scholtz 2008, 235–241), were not found either. Other burials or settlement features dating to the Middle Iron Age were not revealed during the excavations of the Bátmonostor site.

Artifact typology

The majority of objects unearthed in the Bátmonostor feature are renowned artifact types in the burials from the Middle Iron Age Great Hungarian Plain and Western Slovakia. Wheel-made amphora-like vessels supplied with two handles occur in small numbers in both inhumations and cremations (Párducz 1954, 84, Fig. 28. 4, 7; Párducz 1966, Table XXIX. 5) (*Fig. 2. 2*). Tubes made of antler, two fragmented specimens of which were found in the feature (*Fig. 3. 3; Fig. 3. 4*), are characteristic objects of the period occurring in both female and male burials (e.g., Dušek 1966, 140, Table XXXIV. 17; Párducz 1969, Table III. 18–22; Csalog–Kisfaludi 1985, 314, Fig. 4. 27). They are undecorated, or decorated with combinations of incised lines, cross-hatched geometric motifs, and concentric circles, and are usually interpreted as part of containers (Bottyán 1955, 53–54; Kisfaludi 1983, 72).

The metal artifacts represent nearly the full spectrum of weaponry of the Middle Iron Age for the region. Researchers have long shared the view that single-edged acinaceses might have been developed in the eastern Carpathian Basin, occurring later than their double-edged counterparts (GINTERS 1928, 28; Bottyán 1955, 44; Kemenczei 2009, 36-37). The antenna-shaped pommel of the Bátmonostor specimen has no analogies on the Great Hungarian Plain (Fig. 4. 3), but the design occurs on acinaceses in the coeval assemblages of Transylvania and the eastern Carpathians (e.g., Roska 1942, 13, Fig. 3, 14, Fig. 4; 159, Fig. 186. 1; VULPE 1967, Table XV. 4, Table XVI. 2). Swords with this type of pommels were manufactured for the first time in the Late Urnfield phase in Central Europe (MÜLLER-KARPE 1959, 214), and their use on weapons persisted into the Early Iron Age in the Eastern Hallstatt Culture and in Italy (Bianco Peroni 1970, 112; Sievers 1982, 18-24; Krämer 1985, 34). Antenna-shaped pommels also emerged on daggers, acinaceses, and swords in the Scythian and Sauromatian territories, and also during the early Sarmatian period of the East European steppe and beyond from the 7th to the 2nd centuries BC (e.g., Kozenkova 1982, 156, Table XV. 5-11; Dvornichenko 1995, 106; Petrenko 1995, 14; DVORNICHENKO-PLAKHOV-OTCHIR-GORYAEVA 1997, 130, Fig. 5. 1; SPÂNU 2000, 149, 161, Fig. 6; DYACHENKO ET AL. 2000, 50, Fig. 3. 3; OTCHIR-GORYAEVA 2000, 206, Fig. 8). In many cases the arched parts of the pommels shape animals facing on another. Consequently, in contrast to previous views emphasizing a mixed Central European and steppe character of the acinaceses with antenna-shaped pommels (VULPE 1967, 61), these decorative motifs might be attributed to the Scythian-type elements of the Middle Iron Age material culture of the eastern Carpathian Basin. Similarly to their counterparts in the Eurasian steppe belt, the non-figurative antenna pommels might symbolize highly stylized representations of animals.

Trilobate bronze arrowheads are common grave-goods on the Great Hungarian Plain during the Middle Iron Age (*Fig. 3. 1*). Although in most cases the arrowheads are found in male burials, it appears

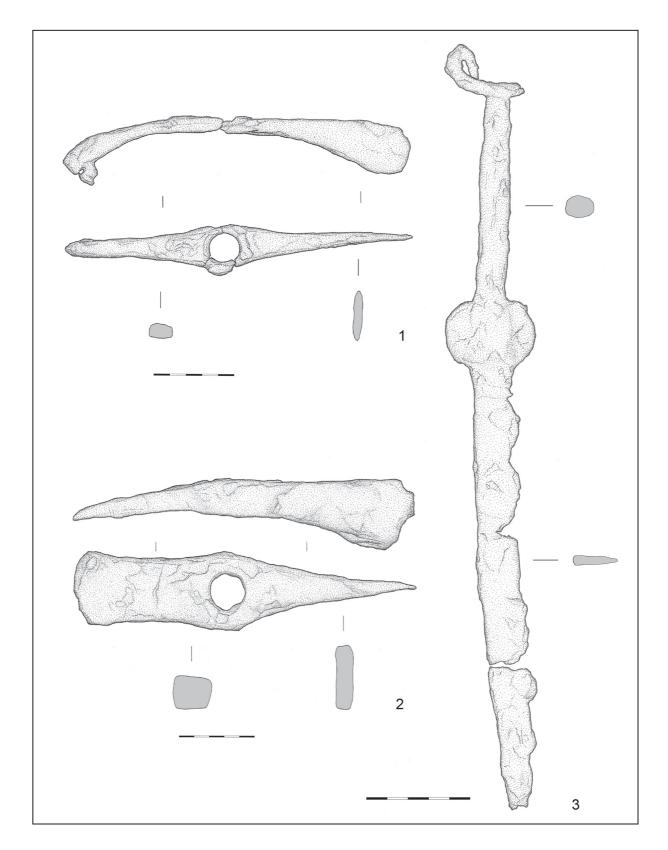


Fig. 4. Feature 247 of Bátmonostor-Szurdok. 1: Iron adze-axe; 2: Iron adze-axe; 3: Iron acinaces

that they may occasionally have been included in female graves as well (e.g., Párducz 1954, 31; Párducz 1969, 223). The object type is also present in the contemporary assemblages of neighboring and more remote regions from Inner Asia to Western Europe (Párducz 1965b, 291; Kemenczei 2009, 45–46). Their occurrence in various areas has been associated with trade, local production centers, raids and invasions, and lately also with the introduction of a pre-monetary system (Babić 2004, 133–134; Ljuština–Dmitrović 2010).

Iron adze-axes were produced in numerous forms on the Great Hungarian Plain during the Middle Iron Age, and significant variation in typology tends to occur even in the same cemeteries. The Bátmonostor specimens represent different types, of which the more robust object is less frequent in the period (e.g., Csalog-Kisfaludi 1985, 312, Fig. 3. 3; Kemenczei 2005, 180, Fig. 2. 4) (*Fig. 4. 2*). One of the ends of the slender artifact forms a stylized animal head (*Fig. 4. 1*). This motif occurs on adze-axes very scarcely in the period (Párducz 1952, Table LXVI. 5–6, LXVII. 1–2; Kemenczei 2009, 314, Table 92. 4; 404, Table 182. 1).

Spearheads were also common artifacts and had multiple forms in the Middle Iron Age cemeteries of the region. Similarly to adze-axes (GAZDAPUSZTAI 1964–65, 59, Fig. 2. 3), the initial occurrence of these weapons is dated to the Early Iron Age in the Carpathian Basin. In the Bátmonostor feature two specimens were unearthed, both of which might have belonged to the most prevailing, willow-leaf shaped, long-socketed type (*Fig. 5. 2-3*). An iron sheath was corroded to one of the spearheads (*Fig. 5. 2*), while another sheath was found separately in the feature (*Fig. 5. 1*). These objects, occasionally associated with acinaceses and daggers, also frequently occurred in various shapes in the eastern Carpathian Basin and Western Slovakia during the Middle Iron Age (Vulpe 1967, 65; Kemenczei 2009, 38–39).

In contrast to the objects above, several artifacts revealed from the Bátmonostor feature are rarely or never present in the Middle Iron Age assemblages from the Great Hungarian Plain. A similar shafthole axe (Fig. 3. 5) is known only from Szentes-Vekerzug in the region (PÁRDUCZ-CSALLÁNY 1944-45, Table XLVI. 3). Trunnion axes, similar to the Bátmonostor specimen (Fig. 5. 5), were manufactured throughout a vast territory from the Caucasus through the steppe region to the Balkans and Central Europe (e.g., Vulpe 1967, Table XIX. 16; Kilian 1975, Table 75. 12; Kozenkova 1982, 149, Table I. 22–24; Kossack 1986, 377, Table 7. 27; Kemenczei 2009, 43), and occur in the Carpathian Basin rather commonly in cemeteries dating to the various phases of the Hallstatt Culture in Transdanubia (e.g., LÁZÁR 1951, Table XXIX. e; HORVÁTH 1969, 112, Fig. 6. 8; 115, Fig. 10. 1; 124, Fig. 23. 1; MITHAY 1980, 62, Fig. 9. 4; Figler 2010, 43, Table 11. 1). This artifact type has been unearthed in remarkably small numbers from Middle Iron Age contexts in the eastern Carpathian Basin – almost exclusively in Northern Hungary (Márton 1908, 47, Table II. 1; Gallus-Horváth 1939, Table 67. 15; Párducz 1952, Table LXVI. 7; Kemenczei 2009, 317, Table 95. 9). The iron object found in the Bátmonostor feature and tentatively defined as long axe (Fig. 5. 4) is an unknown artifact type, not only for the Middle Iron Age Great Hungarian Plain, but also for the contemporaneous assemblages in adjacent regions. The most comparable specimen, an iron artifact identified as a chisel, was revealed from the Hallstatt C period cemetery of Vaszar in Transdanubia (Horváth 1969, 124, Fig. 23. 5). The small, hollow, cylindrical and cone-shaped objects made of thin bronze plates were found in a concentrated area in the Bátmonostor feature (Fig. 1. 2; Fig. 2. 2) and are unrecognized on the Great Hungarian Plain and in the neighboring territories. They are interpreted as ornaments, possibly beads, and may have been strung on to a fine textile before being placed in the burial.

Since the Sarmatian Period intrusive pit destroyed a significant part of the Middle Iron Age feature, it is uncertain if the other, highly fragmented metal artifacts revealed from the feature fill belonged to

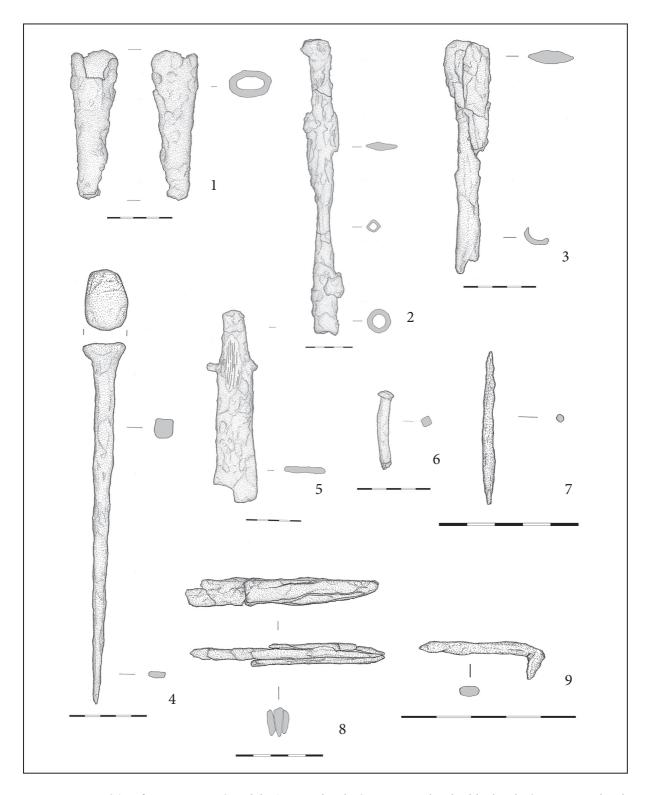


Fig. 5. Feature 247 of Bátmonostor-Szurdok. 1: Iron sheath; 2: Iron spearhead with sheath; 3: Iron spearhead;4: Possible iron long axe; 5: Iron trunnion axe; 6: Fragment of a possible iron bridle bit ;7: Iron awl; 8: Fragment of an iron artifact of unknown function;9: Fragment of an iron artifact of unknown function

the assemblage (*Fig. 5. 6-9*). The functions of most of these objects are unclear, however, one of them might have been the tip of a Vekerzug-type bridle bit (*Fig. 5. 6*). This artifact type was distributed, and also might have been produced, throughout a large geographic area in Eastern and Central Europe (see Kemenczei 1985; Werner 1988).

Chronology

The typochronological analysis allows us to date the Bátmonostor assemblage to a fairly wide chronological framework from the second half of the 6th to the turn of the 5th and 4th centuries BC, which corresponds to Ha D2-3–LTA in the Carpathian Basin (FRIEDRICH 1999; TRACHSEL 2004). In order to define the absolute chronology more precisely, two C¹⁴ samples were taken from the feature: one from a sheep metatarsus recovered from the primary feature fill, and another one from the undecorated antler tube (*Table 1*). AMS analysis was conducted in the Poznań Radiocarbon Laboratory. The results indicate that the first sample represents the Late Copper Age Baden settlement component of the site (3091–2909 cal BC at 2 sigma). The radiocarbon dating of the tube sample, however, was impeded by a large plateau on the calibration curve (e.g., Alekseev et al. 2002; van der Plicht 2005). Although the so-called Hallstatt gap (ca. 800–400 cal BC) resulted in a significantly broad calendar age for the Bátmonostor sample ranging between 753 and 408 cal BC (2 sigma), it is important to note that the assemblage is unlikely to be younger than the 5th century cal BC.

Table 1. AMS radiocarbon dates from Feature 247 of Bátmonostor-Szurdok. Dates were calibrated with OxCal v.4.1.5 software (Bronk Ramsey 2010). Atmospheric data are from Reimer et al. (2009).

No.	Lab No.	Dated material	Context	14C Age (BP)	Calibrated intervals (cal BC)	
					1 sigma	2 sigma
1	Poz-42512	antler tube	bottom of feature	$2445 \pm 30 \text{ BP}$	734-416	753-408
2	Poz-42513	sheep metatarsus	feature fill	$4375 \pm 35 \text{ BP}$	3021-2922	3091-2909

Metallurgy

A variety of archaeometallurgical analyses were performed on the iron objects of the assemblage. The Archaeometallurgical Research Group of University of Miskolc utilized computer-operated optical microscopy, scanning electron microscopy energy dispersive x-ray spectrometry (SEM-EDX), and micro-hardness testing (HV1) at the Complex Laboratory of Image and Structure Analysis at the Institute of Materials Science at the University of Miskolc to study similarities and differences in raw materials and manufacturing techniques. Six artifacts proved to be suitable for the analyses, namely the robust adze-axe, the probable long axe, the shaft-hole axe, the trunnion axe, the larger spearhead with sheath, and the sheath. The rest of iron artifacts were too corroded to be examined. These investigations are unprecedented on Middle Iron Age metal assemblages from the Carpathian Basin (Török et al. 2013).

Studies on material structure and composition of inclusions – with special regard to their different P-content – indicated two clearly distinct groups of artifacts in the sample: the spearhead, the sheath and the adze-axe constituting one group, and the trunnion axe, the shaft-hole axe, and the possible long axe making up the other group. The artifacts of earlier group were made from a piece of single bloom object by object. The blades of adze-axe may be considered to be the hardest material among the relatively

soft perlite-ferrite structure of the examined samples. Layers of different amounts of carbon suggest that the latter group of materials were manufactured through forging and the application of numerous reheating. The fact that both the raw materials and the manufacturing techniques varied suggests different technological choices possibly stemming from different metallurgical and forging practices.

Discussion

The majority of findings recovered at Bátmonostor-Szurdok are well-known artifact types of the Alföld group (see Bottyán 1955), also called Vekerzug Culture (see Chochorowski 1985), of the Middle Iron Age Scythian Period of the eastern Carpathian Basin and Western Slovakia characterized by material culture, particularly metal objects, following the Scythian traditions of the steppe region of today Southern Ukraine and Russia. There has been a long-lasting scholarly debate on the origins of these findings on the Plain. According to some researchers, the Scythian type metal objects arrived in the region as commercial and prestige goods to the local elite with no migration from the steppe region involved (Gazdapusztai 1965; Dušek 1966), while others believe that these artifacts are associated with a large-scale or subsequent movements of people from Scythia and its adjacent areas to the Carpathian Basin (Bottyán 1955; Harmatta 1966; Párducz 1973; Kemenczei 2000).

Bátmonostor is the western- and southernmost known site that displays the characteristics of the Alföld group in Hungary. Although stray finds from the Middle Iron Age are mentioned in the literature at locations a minimum of 50 km away (Kiskunhalas: Fettich 1931, 512; Kecel: Kisfaludi 1997, 88, Fig. 2. 3; Kiskőrös: Kemenczei 2009, 124), the nearest site in Eastern Hungary that surely can be assigned to the Scythian Period is Szabadszállás-Józan, ca. 90 km to the north (Horváth 2001). To the east, the cemeteries excavated at Sándorfalva-Eperjes and Algyő-Bartók Béla street are situated ca. 100 km away as the crow flies (Galántha 1982–83; Bende 2003). The cemetery at Doroslovo in the Serbian Bácska region is located ca. 60 km from Bátmonostor-Szurdok and contains several inhumation burials with Scythian-type artifacts (Trajković 1977; Trajković 2008). This cemetery has been considered to be the southernmost site of the Alföld group (Kemenczei 2009, 21), however, others have associated some of these graves with the Srem group (see Ljustina 2010, 61–62). Lastly, across the Danube in southeastern Transdanubia, ca. 40 km northwest of Bátmonostor, an inhumation burial was found at Bonyhád containing Scythian-type weapons (Mészáros 1975–76). In the current Hungarian site registry Scythian Age settlements are unknown in these areas.

At Bátmonostor-Szurdok a single burial was found during the excavations. The layout of the Alföld group cemeteries is characterized by burials clustered in groups with smaller or larger empty spaces between them, however, remarkable distance happens to occur also between individual graves within the groups (e.g., Párducz 1966; Galántha 1981; Kisfaludi 2004; Polgár 2007). Single burials with Scythian-type objects are known in moderate quantity on the Great Hungarian Plain and in the surrounding regions, and their archaeological context is uncertain in each case (Mészáros 1975–76; Kisfaludi 1983; Veres 2007, 43–44). It is possible that the Bátmonostor grave belonged to a cemetery, and the excavated track of 5 meter in width did not hit more burials, but currently we cannot exclude that it was a single grave either.

During the Ha D and the beginning of the LTA period, the southern part of the Danube-Tisza Interfluve, including the Bátmonostor microregion, was a frontier zone between various cultural units. Transdanubia and the Sava-Drava Interfluve belonged to the Eastern Hallstatt circle. South of the Lake Balaton, along with Hallstatt characteristics, a stronger continuity to the Late Bronze Age Urnfield

traditions is detectable in the archaeological record. From the 5th century BC on, in the southernmost part of Transdanubia the presence of Illyrian Pannonians and Venetics can be recognized in the material culture (Jerem 1968; Harmatta 1985–86; Patek 1993). South of the Alföld group, from ca. the 6th century BC onwards, following the disintegration of the Basarabi complex, multiple, more or less distinct cultural units evolved, including the Bosut III, the Zlot, the Srem, and the long-lasting Dalj group (Vasić 1973; Medović 1990; Tasić 1999; Tasić 2004; Ljustina 2010).

The artifacts found in the Bátmonostor-Szurdok burial feature represent nearly the full spectrum of weaponry for the Scythian Age Alföld group. Although the typological analysis suggests that several objects, namely the shaft-hole axe, the probable long axe and the trunnion axe, are rare or unknown types during the Middle Iron Age of the Plain, they are found in cemeteries of neighboring areas, particularly in the Transdanubian Hallstatt Culture. The archaeometallurgical analyses also demonstrated compositional and technological differences between these artifacts and the further examined iron findings of the assemblage indicating that the materials were crafted using different technological approaches. Although metallurgical investigations have yet to be performed on iron artifacts excavated from other Ha D-LTA contexts in various parts of the Carpathian Basin to carefully investigate this matter, but considering the archaeometallurgical results in conjunction with the outcome of the typological analysis, it may be assumed that the shaft-hole axe, the probable long axe and the trunnion axe were manufactured in the Eastern Hallstatt territory, and the other analyzed objects were the products of a workshop located on the Great Hungarian Plain. Based on the large amount and heterogeneous characteristics of the metal findings, multiple production centers might be presumed in the eastern Carpathian Basin during the period, however, data on metallurgical activities in the territory of the Alföld group is very scarce (Mirossayová 1994, 61; Vaday 2001; Czajlik 2002; Czajlik et al. 2003).

In addition to the marginal geographical location with respect on the distribution area of the Alföld group, and the mixed composition of grave goods in both typological and technological terms, the amount of weapons found in the Bátmonostor feature, even in the very possibly fragmentary condition of the assemblage, is also unusual in the context of the Middle Iron Age Great Hungarian Plain. Excluding arrowheads, in the cemeteries of the Alföld group that are characterized by large number of weapons, including Csanytelek-Újhalastó, Chotín and Alsótelekes (PATAY 1961; Dušek 1966; GALÁNTHA 1981; PATAY—KISS 2001—2002), typically one to three weapons (most frequently an adze-axe, a spearhead and/or a knife) are found in the graves. Exceptions include the chiefly burial from Ártánd-Zomlinpuszta that contained an adze-axe, a spearhead, armor pieces and a shield boss (PÁRDUCZ 1965a, 145), and a grave from Tiszalök-Börtön that had several arrowheads, three iron knifes, an iron adze-axe, as well as three possible sling stones (SCHOLTZ 2006, 65, Fig. 5). In respect to the high number of offensive weapons, the Bátmonostor-Szurdok feature bears more resemblance to the funerary assemblages of the burials of the warrior elite of Transdanubia, the Sava-Drava Interfluve, as well as the Northern and Central Balkans during the Ha C and D periods (Popović 1956; Benac-Čović 1957; Horváth 1969; Kemenczei 1974; Vejvoda-Mirnik 1991).

Extensive interactions between the Scythian Age communities of the eastern Carpathian Basin and those of the neighboring and more remote regions are evidenced by the occurrence of particularly bronze trilobate arrowheads, horse trappings and seals in the Eastern Hallstatt circle and the Balkans (Foltiny 1963; Párducz 1965b; Jerem 1981; Chochorowski 1985; Gál-Molnár 2004; Parović-Pešikan 1994; Teržan 1998), and the occurrence of primarily Eastern Alps-Mid-Danube Hallstatt type artifacts, including jewelry, fibulae, and vessels in the cemeteries and settlements of the Alföld group (e.g., Párducz 1965a, Table IV, V; Párducz 1966, Table LXII. 3; Galántha 1981, 54; Bende 2003, 72,

Fig. 3. 10; Horváth 2001, 100; Kreiter et al. 2013, 480). In addition to trade and exchange, various other forms of interactions can also be supposed between these communities including intermarriage, technological adaptation, and diffusion. In fact, some researchers believe that people of the Alföld group to some extent invaded Transdanubia (e.g., Párducz 1965b, 289–290; Vékony 1986, 264; Kristiansen 1998, 284; Vasić 2008, 352–353). Based on the concentration of Scythian-type artifacts and tarpan horses in Transdanubia and Slovenia, Párducz argues for "small units of «Alföld Scythian age culture»" that insured control over long-distance trade routes through those regions (Bökönyi 1964; Párducz 1965b, 300).

Both written and archaeological records indicate that the communities of the Alföld group participated in long-distance horse-trading activities. Herodotus wrote in 'The Histories' about the Syginnae, an Iranian tribe that migrated to the Great Hungarian Plain from possibly the Caucasus. This group traded horses to their Venetic neighbors, who then sold them to Greece for cart racing (HARMATTA 1966, 112). The tarpan horse burials and the various horse trappings found in Slovenian Hallstatt cemeteries identical to the Alföld group specimens (KROMER 1959; PÁRDUCZ 1965b, 293–296; KMEŤOVÁ 2013), as well as the bronze hydria of Spartan origin from Ártánd might be associated with this complex network (PÁRDUCZ 1965a, Table I–III).

Bátmonostor-Szurdok was located in a major interaction zone during the Middle Iron Age between the Great Hungarian Plain, Transdanubia and the Northern Balkans that had already existed during the preceding periods (Maráz 1978; Patek 1993; Metzner-Nebelsick 1996; Metzner-Nebelsick 1997). A tentative commercial route from the direction of the Körös or Maros rivers might have reached the Danube river near Bátmonostor (Párducz 1965b, 300),² then went towards the Sava river valley that played a key role in the long-distance trade and the communication network between the Carpathian Basin, the Balkans, and the Alpine region during the Bronze and Iron Ages (Frey 1966, 50; Potrebica 2008, 196). In this context, it may be assumed that the grave found at Bátmonostor-Szurdok was the burial of a high-status member of the warrior elite of the Alföld group that controlled this important route at the Danube. In addition to horses, raw materials including copper and gold from Translyvania might have been traded from the eastern Carpathian Basin to the west.

Currently, hardly anything is known about the settlement history of the area south of the Szabadszállás-Kiskunfélegyháza line of the Danube-Tisza Interfluve during the Middle Iron Age. Results from future research will help understand whether this territory belonged to the Alföld group, or if it served as a more or less unoccupied buffer zone. Moreover, continued research will also help to clarify the lack of settlements in the territory and whether this fits the model of fundamental shifts in subsistence practices towards pastoralism during the period (see Chapman et al. 2009). These investigations will also contribute to answering the question if the burial revealed at Bátmonostor can be interpreted in the context of a remote trading outpost or as an organic part of the Alföld group of the Great Hungarian Plain.

Conclusions

The structural characteristics and the artifact assemblage of Feature 247 at Bátmonostor-Szurdok imply a mortuary phenomenon associated with an individual belonging to the community of the Scythian Age Alföld group of the eastern Carpathian Basin.

² During the Roman Age the road from Pannonia to Dacia province may have crossed the Danube nearby as well (Patay 2005, 401).

However, a lack of contextual information at both local and regional scales (i.e. no other contemporary feature was found at the site and it is located ca. 100 km far from the currently known edge of the core Alföld group territory) makes the interpretation of the feature challenging.

The various analyses conducted on the Bátmonostor artifacts imply that the burial assemblage may reflect shared cultural traditions between different regions during the 6th-5th centuries BC. While the grave construction and the vast majority of findings, including the ceramic vessel, the antler tubes, the bronze arrowhead and most of the iron artifacts, fit well in the Scythian Period of the Great Hungarian Plain, the quantity of grave-goods and several weapon types bear resemblance to the Transdanubian Hallstatt Culture. The archaeometallurgical investigations clearly indicate technological choices that might also have derived from different traditions. However, based on the burial assemblage, the individual likely was affiliated with the Alföld group.

Although the social organization of the Middle Iron Age communities of the Great Hungarian has not been investigated, our current knowledge based primarily on burial data suggests a highly stratified society dominated by warrior ideology. The individual with whom the Bátmonostor-Szurdok feature is associated might be regarded as a high-ranked person with significant economic and political power. The isolated position of the burial in the context of the Alföld group might be related to commercial activities of the communities of the Plain, and may be associated with a trading outpost that controlled the flow of commodities across the Danube during the 6th and 5th centuries BC.

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