



AKADÉMIAI KIADÓ

Unique accessories and connection network of a Gepid Period child burial. New data on the distribution of early medieval ivory artefacts

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ABSTRACT

The Gepid Period row cemetery at Tiszaug-Országúti bevágás was unearthed in 2018–2019. Grave 301 was one of the outstanding burials amongst the 194 graves unearthed thus far. It kept the remains of a 9–11-year old boy, who was laid to rest in a scale-down burial created according to the funerary customs of the area and era but dressed in a mortuary costume and provided with goods befitting adult men. He had a purse hanging from his belt, containing an iron knife, and some pieces of flint. A double-row antler comb was placed beside his head. A cast copper alloy belt buckle with a shield-shaped pin base and punch-mark decoration fastened his clothing on the front. While buckles of this type were widely used at that time, the closest analogies to the punch-mark decoration could be collected from the Carpathian Basin. Based on those, the burial could be dated to the mid or late 6th century AD. Another outstanding feature of the cemetery was the four burials (including Grave 301) where the deceased were laid to rest in coffins made from or imitating log boats.

Grave 301 also contained a rounded conical ivory object. The optical microscope and vibration spectroscopy analyses confirmed the initial hypotheses of the finders about the raw material of the artefact. Despite carrying out a comprehensive survey for analogies and an analysis of production and use-related marks, we could not determine what the object could have been used for; it may be a semi-finished product, but it could also be a toy or amulet. At any rate, it was made from a raw material which was extremely rare in the eastern part of the Carpathian Basin in the period in question. Grave 301 was positioned in a cluster comprising more child burials, with the graves of two adult women at the fringes; the ongoing archaeogenetical investigations may shed light on the connections between them.

KEYWORDS

Gepid Period row cemetery, child burial, ivory object, log boat coffin or imitation, buckle with a shield-shaped pin base and punch-mark decoration, antler combs, purse and contents, persisting Gepid communities in the Tisza Region, archaeogenetical investigations

A team of the Katona József Museum, led by Gábor Wilhelm, unearthed a Gepid Period cemetery at Tiszaug-Országúti-bevágás in 2018–2019. The site lies northeast of the village of Tiszaug (Bács-Kiskun County, Hungary), stretching on top of a double hill near Road 44. The slight elevation emerges from the flood area of the Tisza, engirded by a meander of the river from the north and west and closed off by an oxbow in the south. Thus, the Gepid Period settlement and cemetery are positioned in the approximate centre of a natural peninsula-like area of 7.5 km².¹

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¹A part of the site was mined away for clay during the flood protection works in 2000. The extraction affected the Gepid Period settlement the most, destroying about 90% of the related features. A probing excavation in 2017 has revealed a 4th–5th-century Sarmatian and an 8th–9th-century Avar settlement on the site.

The two excavation campaigns brought to light 194 burials altogether. However, some more probably had become destroyed earlier, during the construction of the farmstead buildings in the excavation area and Road 44, and even more are waiting to be excavated north and south of the area affected by the current road development project.² In summary, the total number of graves in the cemetery could be well above 200, which makes it one of the largest burial grounds of the Gepid Period.³

The unearthened cemetery is a typical Gepid Period row cemetery. The burials form two large clusters: the southern one, excavated in the 2018 campaign, is stretched in a north–south directed elongated patch, while the northern one is more or less round and denser than the first. Albeit the oldest burials were found in the southern, while the youngest in the northern cluster, the two cemetery parts were in use roughly contemporaneously.⁴

The ivory artefact in the title was found in Grave 301 in the southern cluster in 2018 (Fig. 1).

DESCRIPTION OF THE BURIAL AND THE GRAVE FINDS

As the soil stain of the grave pit was barely discernible, initially, it was missed during unearthing; however, at a larger depth, it became easier to follow. The grave pit was 1.75 by 0.70 m large and 1.06 m deep (measured from the artificial excavation surface). Orientation: SW–NE 250–70° (Fig. 2).

The foot end of the log coffin narrowed down and had a round ending. It was covered with a large plank; even the traces of the joints could be detected at points. The coffin was 1.70 by 20/25–50 cm. Neither the coffin nor the grave bore any trace of having been disturbed.

The deceased was placed in the grave stretched on the back, with the head tilted downwards, with unfolded arms close to the body, stretched legs, and feet *en pointé*. The length of the skeleton in the grave was 1.27 m.

Based on the results of the morphological analysis, the child was about 9–11 years old (*Inf. II*) when died.⁵

Grave accessories

1. Double-row antler comb on the left side of the skull. Only a few fragments, including seven undecorated side and

comb plate fragments and an iron rivet, could be recovered from the heavily worn specimen (Fig. 3).⁶

2. Hemispherical ivory object right of the skull, a couple of centimetres above the slightly ‘pulled-up’ right shoulder. The item lay on its flat side; the layers of its material are well visible, and the top is damaged. Diam.: 49 mm, height: 45 mm, weight: 64.5 g (Fig. 4).⁷
3. Straight-back iron knife with a tapered tang in the main axis of the blade and an iron band with a semicircular profile, slightly bent at one end, both lying crossways under the right lower arm. Knife length: 92 mm, width: 18 mm; iron band length: 39 mm, width: 12–13 mm (Figs 5–6).⁸
4. Two flint blades, a green-grey and a brick-red one, near the backbone. Length: 21 and 23 mm (Fig. 7).⁹
5. Copper alloy buckle with an oval frame and a shield-shaped pin base, found upside down between the left pelvic bone and the caput of the left thighbone. The right-facing pin is bent on the frame; the bar was cast in one piece with the frame. The frame is flat, while the pin has a ridged triangular profile. The outer edges of the frame and the pin base are decorated with punched double U motifs; sometimes, the double U punch marks touch or even interlap. Height: 24 mm, width: 15 mm (Fig. 8).¹⁰

While most of these finds represent types that usually appear in child burials, one is peculiar: the ivory artefact discovered by the right shoulder of the deceased. It was described on the field as a ‘bone gallipot’; the idea that it would be worth identifying its material via archaeometric analyses emerged only after cleaning, upon inventorying the item. This analysis was the first step in the evaluation of this find, and the results provided us with a starting point for this study, raising the need to clarify the origin and the function of the object in question and also how it got into Gepid territory and what its role in the burial may have been. Besides, the dating of the grave is crucial for the evaluation of this find assemblage; in that, we have to (and can) rely on the other findings in the assemblage, especially the copper alloy buckle.

This was not one of the graves unearthened in the cemetery to contain grave goods and clothing accessories in abundance; however, keeping in mind the age at death of the deceased (a 9–11-year-old child, perhaps a boy), one can tell that it was neither amongst the poorest. The antler comb, the belt with the metal buckle, and the purse and its content indicate that he was no longer considered a small child, as almost only adult men were fitted with such belts and purses in the grave.

The **double-row antler comb** was found left of the skull. This object type has been known for long to be the perhaps most frequent grave find in Gepid Period burials, one which

²The farmstead buildings were built probably sometime between the two World Wars.

³Gepid Period cemeteries of similar size have also been discovered at Szentcsanak (306 graves), Szolnok-Szanda (222 graves and stray finds), Berettyóújfalú–Somota-dűlő (ca. 200 graves), and Magyarfenes/Vlaha-Pad, Romania (308 graves).

⁴For a summary, see B. Tóth and Wilhelm (2022) 64–65.

⁵The sheet summarising all data on the age at death, biological sex, and pathologic lesions of the individuals interred in the Gepid Period cemetery at Tiszaug is the work of Ágota Madai, Tamás Szeniczey, and Tamás Hajdu; we are grateful for the possibility to work with their results. For a comprehensive anthropological analysis of the mortuary community of the Tiszaug cemetery, see Szeniczey et al. (2022).

⁶Inv. no. 2020.9.213.

⁷Inv. no. 2020.9.214. B. Tóth et al. (2022) 181, Cat. 191.

⁸Inv. no. 2020.9.215.

⁹Inv. no. 2020.9.216.

¹⁰Inv. no. 2020.9.217. B. Tóth et al. (2022) 181, Cat. 192.



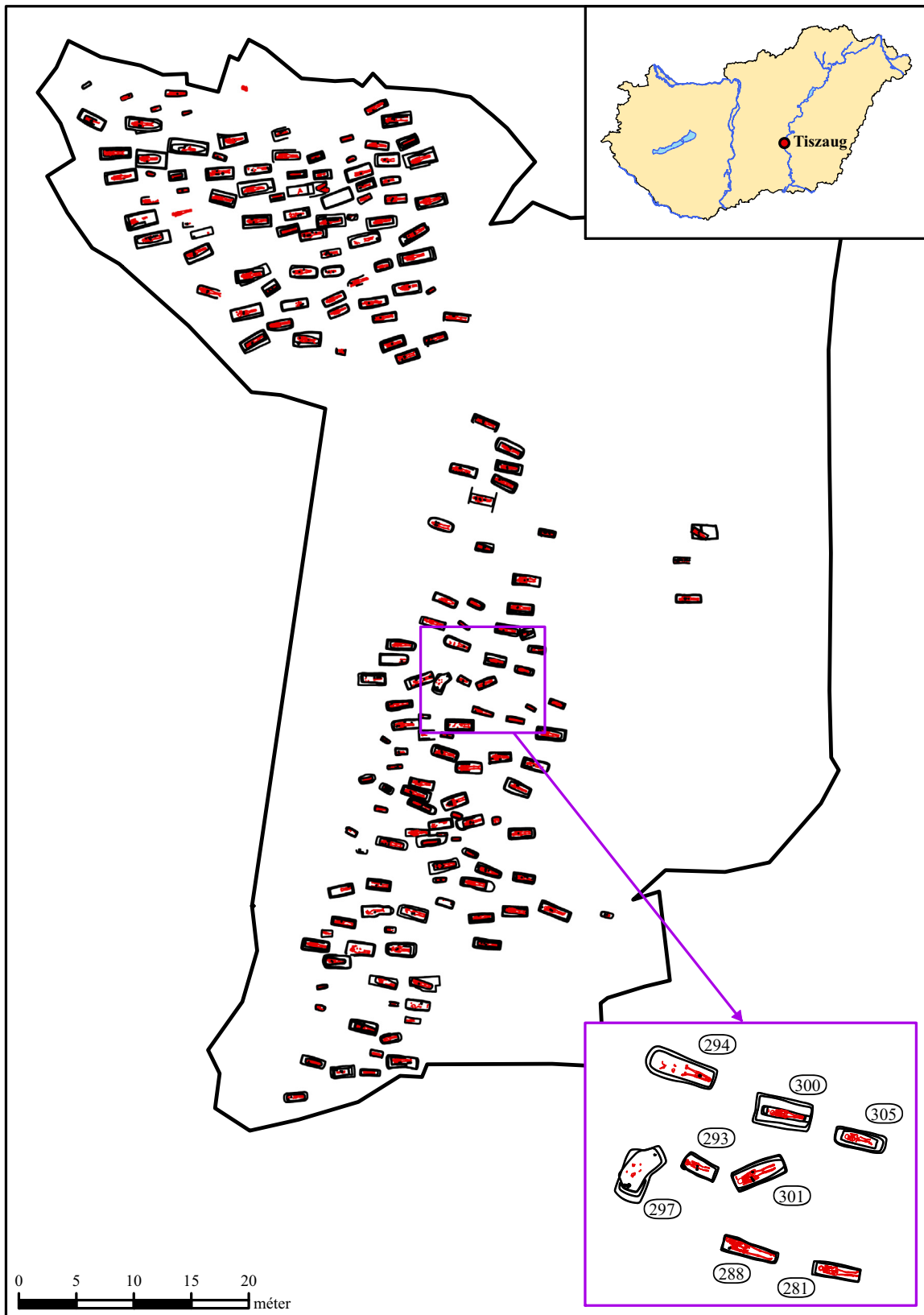


Fig. 1. Survey map of the cemetery with Grave 301 and its close area (by András Kamarási)

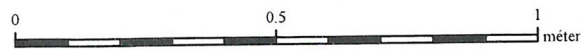
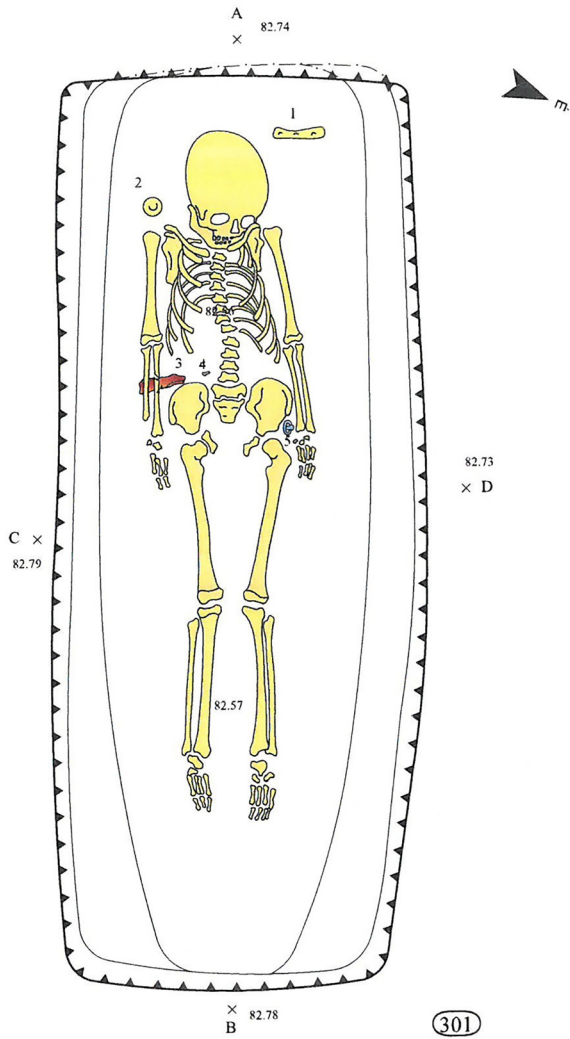


Fig. 2. Survey drawing of Grave 301 (by Kornél Kulcsár)



Fig. 3. Comb fragments (photo by Béla Kiss)



Fig. 4. Ivory artefact (photo by Szabolcs Dankó)



Fig. 5. Iron knife (photo by Béla Kiss)



Fig. 6. Iron band (photo by Béla Kiss)

many deceased were provided with regardless of sex and age at death. About two-thirds of the graves in Tiszaug contained one (133 of 194 or 67%), which is one of the highest ratios amongst the cemeteries of the era. Apparently, the





Fig. 7. Flint blades (photo by Béla Kiss)



Fig. 8. Belt buckle (photo by Szabolcs Dankó)

proper place of the comb in Tiszaug was thought to be in the head area, as such items were found there in 81% of the cases.¹¹ Burials of very young children and even newborns having also been fitted with a comb suggests that these objects were placed in the graves for reasons other than ones related to hairdo, not only because wearing such a comb requires long and strong hair but also because the combs recovered from children's burials are of the same types and sizes than those given to adults, despite children's heads being considerably smaller. Besides, double-row combs come in one size; they are also flat and rigid, of a design that could hardly be worn stuck in the hairdo. They could rather be items of personal hygiene in the case of both adults and children, as also indicated by the fine and dense teeth.¹² The comb recovered from Grave 301 was heavily worn and fragmented; if its side plates were once

¹¹Sometimes the comb was placed beside either thighbone or between the two or, rarely, somewhere on or beside the upper body. B. Tóth (2022) 12–13.

¹²The density of the teeth of the comb found in Grave 301 could not be determined due to its highly fragmentary state. However, based on ethnographic analogies, it was probably a nitpicker comb. B. Tóth (2022) 22.

decorated, it could not be discerned anymore. Most combs recovered from the cemetery were decorated with patterns made with a twin flank chisel, which created double rows of small incisions arranged into lines, zigzag patterns, and garlands. The other frequent decoration type comprised lines cut into the surface with a knife. At this point, no connection was outlined between comb patterns and the sex or age at death of the deceased. While the comb in Grave 301 probably fell into pieces upon removal and cleaning, it was apparently in bad shape already upon discovery: the *in situ* photo shows that only the side plate could be properly unearthed, and no teeth are visible on its sides. Based on this image, the side plate was about 10 cm long, corresponding with the type's average. The condition of the comb makes it likely that a long-used, heavily worn specimen was placed beside the boy in the grave.¹³ In Tiszaug, 41 of the 81 burials of children (identified as such by morphological analysis of their remains) contained combs; this proportion (50.62%) is somewhat lower than the average of the cemetery.¹⁴ Most of them (39) were of the double-row type; only the boy in Grave 313 had a single-row comb, the side plates of which terminalled in bird's heads, while the 3–4-year-old girl in Grave 556 was provided with a smaller single-row specimen. Double-row combs are unsuitable for specifying dating as the type was in fashion for a long time.¹⁵ The first specimens appeared in the Great Hungarian Plain in the second half of the 4th century AD; later, from around the mid-5th century AD, combs became frequent additions to burials, and even some Early Avar Period graves contained some. As the shape, size, and decoration of combs barely changed during the two centuries while they were in fashion, their morphological characteristics are no help in dating.¹⁶

Edit Király analysed children's burials from ten Gepid Period cemeteries based on various criteria.¹⁷ Of the 184 graves, 96 or 52% contained combs. The proportion varied highly by site, ranging between 0% and 85%.¹⁸ In most cases,

¹³Combs probably played a major part in children's burials, too – that the most outstanding piece from the Tiszaug cemetery, a single-row specimen with side plates terminalled in bird's heads, was added to the burial of a 5–6-year-old (*Inf. I*) boy (Grave 313) cannot be a simple coincidence. B. Tóth (2022) 14–21.

¹⁴This proportion matches the ones observed in some Gepid Period cemeteries, e.g., Szolnok-Szanda: 57.1%, Szentes-Kökényzug: 50%, and Kiszombor: 54.8%. The relatively highest number of combs were found in the cemetery of Malomfalva/Morești, where 88.9% of the graves contained one (data from Nagy, 2004, table 3).

¹⁵Masek (2016) fig. 17.

¹⁶In Zs. Masek's opinion, it is possible to outline workshops and their distribution areas in the Tisza Region based on technological aspects of production and decoration, which may contribute to understanding the commercial activities and connection network of the communities living in that area. Masek and F. Kovács (2022) 42.

¹⁷Király (2009). The cemeteries are Biharkeresztes-Kisfarkasdomb, Hódmezővásárhely-Gorzsa, Hódmezővásárhely-Kishomok, Kiszombor B, Magyarcsanak Mezőkeresztes-Cethalom, Szentes-Kökényzug, Szentes-Nagyhegy, Szolnok-Szanda, and Szőreg-Téglagyár.

¹⁸The highest proportion is in Magyarcsanak-Bökény. Király (2009) 31.

the combs were placed in the head area, right or left of the skull, but some were found above or under it. The size and type of the combs in children's graves did not differ from those found in adults' burials.¹⁹ In another analysis – of the child burials from ten coeval row cemeteries from Transylvania – Edit Király found that children were provided with combs on only five sites and in lesser numbers (21 cases in total). Practising the custom of fitting the burial with a comb also varied highly by site in that region.²⁰ In Transylvanian child graves, combs were placed exclusively in the head area. Considering her results, it can be stated that the proportion of children buried with combs in Tiszaug was higher than the average of the era and also that the presence of a double-row antler comb in the head area in Grave 301 corresponds with the norms in the cemetery.

Akin to other row cemeteries of the era, Gepid men in Tiszaug were buried with the **purses** they wore in life on their belts. Most of these purses were found in a wearing position, while sometimes, they were placed beside the deceased. Based on their content – usually appearing as a corroded bunch of diverse tools and other items – these purses were rectangular, sometimes braced with small wooden sheets (the imprints of which are occasionally visible on the surface of the rust).²¹ Originally, they were worn hanging from the belt on either side, mainly in the front but occasionally on the back, akin to western Merovingian parallels. They contained useful accessories of daily life: a knife, an awl, tweezers, and a fire-making set with fire irons and pieces of flint. Most purses had for a lock a small, silver, copper alloy or iron buckle with an angular or oval frame.

The purse in Grave 301 was found in a wearing position, above the right pelvic bone but under the bones of the right lower arm. Its remains included a knife and another fragmented iron object with slightly bent ends corroded to them (perhaps the brace of the purse)²² and two pieces of flint left of these. This purse had no metal buckle. The purse's brace was a semicircular-profile iron bar with a slightly bent end; only a part of it persisted. Albeit the iron knife was also fragmentary (its tip broke off), based on the remaining part, it was akin in size and shape to other knives recovered from graves of both women and men (the persisting part of the blade is 9.2 cm long and 1.8 cm wide). Six more children's graves in Tiszaug contained iron knives; the occurrence of such tools was, obviously, way lower in child graves than in adults' burials.²³ Based on the bead jewellery recovered from two of these graves, they were probably the final resting

places of girls; in two other cases, the deceased could be identified archaeologically as probably boys, while in two cases, the grave accessories did not hint at their gender.²⁴ The single-row comb adorned with bird figurines mentioned above was found left of the head of one of the boys, a 5–6-year-old child resting in Grave 313. This burial is also exceptional in other respect, as the young child was interred in a coffin closed with iron coffin clasps. He probably had a belt with an iron buckle, while the other, smaller buckle and some hardly identifiable rusty iron remains, perhaps of tools, indicate that a purse was part of his mortuary costume. The burial of the other, 12–14-year-old (*Inf. II*) boy in Grave 269 was more similar to adults': he was given a knife, a purse with a bone awl, an iron awl, and a flint blade; besides, a comb was placed right of his head, and a vessel, probably food offering, in the head-side right corner of the grave pit. In summary, iron knives were added to burials of even very young children and older ones of both sexes, but in considerably lower proportions than observed in adults' graves. It must also be kept in mind that while obviously, a 1–2, but even a 5–6-year-old child, either a boy or a girl, did not actually use the iron knife appearing in their graves, the presence of one in the grave of an *Inf. II* (9–11- or 12–14-year-old) child can be interpreted as fitting the deceased with their own personal tools for the afterlife.

Based on the available record of Gepid Period cemeteries in the Tisza Region, fitting children's burials with **iron knives** was a custom practised by only some communities.²⁵ Moreover, most children with a knife whose age at death could be determined were *Inf. II*.²⁶ As for the relative position of the knife in the grave, they have been found mainly in a wearing position in the area of the pelvis or the thighbones (worn originally hanging from the belt). The pieces of flint, the small buckles, and the occasional iron knives may also refer to the one-time presence of purses in other coeval cemeteries. However, they seem to have been rare: only eight of the examined 184 Gepid Period child

¹⁹Király (2009) 32.

²⁰The sites involved in her study were Baráthely/Bratei, Beszterce/Bistrița, Galacfalva/Galații Bistriței, Malomfalva/Morești, Mezőbánd/Band, Marosveresmart/Unirea-Veresmort, Mezőkerked/Archiud, Nagykároly/Carei, Szászfenes/Florești-Polus Center, and Szászfűzős/Fântânele-Dealul Popii. The highest proportion of graves to contain a comb was found in Malomfalva/Morești (15). Király (2012) 47–48.

²¹For a reconstruction of the purses, see Hecceg (2022) 82.

²²For similar purses but with buckle lock, see Straub (2001).

²³Altogether 42 burials of males contained knives (26 of these also comprised purses), while only 12 graves of females.

²⁴The 5–6-year-old (*Inf. I*) girl in Grave 232 had an unusually lavish burial: she was provided for the afterlife with a small vessel, a double-row comb, a bone gallipot, a spindle whorl, and a number of beads: B. Tóth et al. (2022) 171–172, Cat. 157–160. The only 2–3-year-old (*Inf. I*) child in Grave 544 was perhaps also a girl; she had a silver-plated bronze buckle and a double-row bone comb left of her head: B. Tóth et al. (2022) 218, Cat. 301–302. Grave 329, of a 10–11-year-old (*Inf. II*) child, contained a unique buckle made from the foot part of a gilded silver brooch, together with a comb, a vessel, and the rim fragment of a glass beaker: B. Tóth et al. (2022) 187–188, 211–213. The biological sex of the 1–1.5-year-old infant in Grave 304 could not be determined either; besides the human remains, the small burial contained a double-row comb on the left side of the head and a copper alloy belt buckle: B. Tóth et al. (2022) 182, Cat. 194.

²⁵The four known cemeteries where the custom appears are Hódmezővásárhely-Kishomok, Kiszombor B, Szolnok-Szanda, and Szőreg-Téglagyár: Király (2009) 37. The gender of the deceased could not be determined in every case based on the accompanying finds; it is certain, however, that in Szőreg-Téglagyár three boys, while in Hódmezővásárhely-Kishomok a girl was provided with a knife for the afterlife.

²⁶Király (2009) 37.



burials in the Tisza Region contained one.²⁷ As for Transylvania, iron knives are the second most frequent additions (after pottery vessels) to child burials in the row cemeteries of the era.²⁸ The available body of data suggests that more *Inf. II* children were given an iron knife for the afterlife than younger ones, while, interestingly, boys and girls seem to be equal in this respect.

Based on its relative position within the grave, the **copper alloy buckle** found between the left pelvic bone and the caput of the thighbone in Grave 301 probably fastened a belt. As it is a finding with numerous analogies, it can be dated quite precisely. Akin to most buckles of the period, it has an oval frame and a characteristic pin with a shield-shaped base. Similar buckles were cast not only from copper alloy but also silver; that variant appears almost exclusively in the burials of men in the cemetery of Tiszaug.²⁹ Most of these men were adults or matures at death; Grave 269, of a 12–14-year-old (*Inf. II*) boy, is an exception. This burial was already mentioned multiple times; it contained, besides the cast silver buckle, a comb, and a purse, too,³⁰ meaning that the boy was interred in a way or at least in a mortuary costume befitting adults. That even ‘rich’ burials of women (with brooches) only contained iron belt buckles in this cemetery makes the identification of the gender of the young, 2–3-year-old child interred in Grave 544 somewhat uncertain: the small burial included a silver belt-buckle with a shield-shaped pin base, a comb, and iron knife, and two carnelian beads.³¹

The size of the belt buckles recovered from the graves of the Tiszaug cemetery is about 2.7–3.5 by 1.8–2.8 cm; however, the boy in Grave 301 had a smaller one (2.4 by 1.5 cm), probably because a narrower belt with a smaller buckle fitted better to his tiny body. While the shape of this belt buckle is similar to the rest of such buckles in the cemetery, its decoration is unique: both the outer side of the frame and the pin base are covered in punch mark patterns. The basic motif consists of two concentric circle segments (or ‘U’ punch mark pattern); it was repeated so many times on the relatively limited surface that in many cases, the outlines of the marks match or overlap. Therefore, craft-wise, the artefact cannot be considered one of the highest-quality specimens.

Buckles with a shield-shaped pin base are a well-known element of Gepid Period attire; Margit Nagy even considered them ‘the most frequent buckle type of the Tisza Region’, despite such items not appearing in the record of several major sites of the era.³² In her opinion, the type was in

fashion between the end of the 5th and the mid-6th century AD ‘throughout the Germanic world’. There are cemeteries – e.g., Hódmezővásárhely-Kishomok – where such buckles were part of the mortuary costume of women, too. Csaba Kiss collected all known buckles with a shield-shaped pin base from the dwelling area of Gepids and classified them into three variants based on the shape and proportions of the shield part. In his system, the buckle found in Grave 301 in Tiszaug is a B-type, with a base wider than the pin, concave segments on the sides, and a round bottom. In Kiss’ opinion, buckles with a shield-shaped pin base were in use throughout the Great Hungarian Plain; the variant described as Type B emerged after about AD 500 (according to the typo-chronological system developed for western Merovingian territories) and remained in fashion until the arrival of the Avars.³³ His collection presents 74 such buckles from 16 sites, of which only a single specimen was found in Transylvania (Malomfalva/Morești), while the rest in sites in the Great Hungarian Plain. His survey has revealed that, for an unknown reason, the type was more frequent in some sites than others, even within the same period or region. For example, the cemeteries of Kiszombor and Szolnok-Szanda contained such finds in outstandingly high quantities (19 and 18 pieces, respectively).³⁴

In a study about the Transylvanian row cemeteries of the period, Alpár Dobos presents ten buckles with a shield-shaped pin base from seven sites altogether; besides, a couple of such finds are known from preliminary reports from two further sites.³⁵ Dobos believes that ‘no distinct type variants can be determined within buckles with a shield-shaped pin base but the type’s evolution can be characterised by general tendencies instead’. In his opinion, the oldest buckles with a shield-shaped pin base are the ones found in Malomfalva/Morești; he dates these findings to the first half of the 6th century AD. Moreover, he assigns the rest of the buckles to the group of late row cemeteries (but describes them as belonging to the oldest horizon of these cemeteries) from the mid or late 6th century AD.³⁶ In lack of any information about the rest of the finds of the grave assemblage, the buckle from Magyarfenes/Vlaha-Pad, which, based on the published image, may also be classified into Cs. Kiss’ Type B, cannot be dated more precisely. The case is similar with the buckles unearthed at Szászfenes/Florești-Polus Center; the published photos show three undecorated pieces bearing the characteristics of Type C1 or C2 by Kiss. That buckles with a shield-based pin were not favoured to the same extent

²⁷Király (2009) 39.

²⁸Király (2012) 45–46.

²⁹Graves 265, 275, 309, 339, 345, 370, 514, and 527.

³⁰The grave contained two buckles: a copper alloy piece with a shield-shaped pin base and a gilded silver one with a crosswise ribbed base. Besides, a pottery vessel was recovered from it (B. Tóth et al. (2022) 177–178, Cat. 178–180).

³¹Moreover, the belt buckle, with a frame of 3 × 2.8 cm, was more fit for an adult man.

³²Bóna and Nagy (2002) 105 mentions five pieces from Szentes-Nagyhegy, seven from Szentes-Berekhát, sixteen from Kiszombor, and three from Szőreg.

³³Kiss (2015) 11–12.

³⁴See the sheets published in Kiss (2015) 19–31 for detailed data.

³⁵The sites include Galac-La Hurbe Grave 5, Malomfalva/Morești-Hula Grave 50, Marosnagylak/Noșlac Graves 24, 86, and 115, Marosveresmart/Unirea-Vereșmort Graves 14 and 17, Mezőbánd/Band Grave 144, Mezőkerked/Archiud Grave 76, and Nagylak/Nádlac Cx Grave 33: Dobos (2017) 1088, note 1049. The other two sites mentioned are Magyarfenes/Vlaha-Pad Grave 0096: Gepizii (2011) 120, 136, and Szászfenes/Florești-Polus Center Graves 156 and 160 Polus (2008) 11–12.

³⁶Dobos (2017) 189–190. I am grateful to the author for the opportunity to work with the manuscript of his dissertation.



throughout the Carpathian Basin at the time is well-reflected by the relative scarcity of such items in the archaeological record of the Lombards, a people with significant western Merovingian connections who inhabited western Transdanubia in the 6th century AD. Rita Rácz classified the pieces without a strap fastener into Type 2a; she only mentions seven such findings from seven burials altogether.³⁷

The typo-chronological systems developed for Merovingian cemeteries often prove useful upon classifying buckles recovered from Gepid Period row cemeteries. In a study evaluating the archaeological record of the Franks in the Tier Region, Kurt Böhner determined several chronological phases and placed buckles with a shield-shaped pin base to the end of Phase II and (mainly) Phase III or AD 525–600.³⁸ Max Martin dedicated several studies to specifying this classification, dating the earliest appearance of such buckles to AD 500. In his refined typo-chronological system, he set the emergence of the more robust variant with a faceted pin and rivets (*Gürtelhaft*) to the middle third of the 6th century AD, together with the punch mark decoration.³⁹ Hans Losert carried out a detailed analysis of buckles with a shield-shaped pin base as part of the evaluation of the cemetery of Altenerding, distinguishing between eight variants of the type. The Gepid Period finds from the Great Hungarian Plain (and, thus, Tiszaug) match his Variants 4 and 5 the best.⁴⁰ The distribution of the type was rather heterogenous in Merovingian territories, too: only 25 of the 1360 graves of the Altenerding cemetery contained one. Moreover, while Kurt Böhner notes that in the Frank cemeteries around Trier, only graves of men contained such items, in Altenerding, the burials to contain one included the graves of 13 men and 11 women, indicating that the preference, use pattern, and social context (including gender) of the buckles with a shield-shaped pin base varied by community and/or region.⁴¹ Only 11 of the 25 buckles recovered from Altenerding were decorated; usually, the shield part was adorned with punched motifs, ribs, or channelling. In Losert's opinion, this buckle type was widespread and, thus, bears no information on ethnicity: its specimens can be equally found in sites of Francs, Alemanni, Bavarians, Burgundians, Lombards, Thuringii, and Visigoths.

Based on the above, it may seem that – based on their morphological characteristics – the buckles with a shield-shaped pin base recovered from Gepid Period graves in the Great Hungarian Plain cannot be dated more precisely than between the turn of the 5th and 6th centuries and the end of the 6th century AD. The evaluation of some recent find

assemblages, however, might allow for refining the chronological position of these finds. Several specimens were discovered in graves of the cemetery unearthed at Tiszapüspöki-Fehér-tó-part. Grave 51/52 was the final resting place of a 25–29-year-old man.⁴² The small bronze buckle with a shield-shaped pin base probably locked the case of the unique single-row comb, decorated with stylised animal heads, that was placed beside his head in the grave. The other elements of this grave find assemblage were also outstanding: the mortuary costume included a belt buckle with a rectangular frame adorned with garnet inlays, while his weaponry consisted of a double-edged sword and an arrow quiver. The man wore a purse on his belt, and a small biconical cup was placed beside his right shoulder. Based on these finds, the burial could be dated to the turn of the 5th and 6th centuries AD or the first three decades of the 6th century AD, meaning that bronze buckles with a shield-shaped pin base were in use in the related community already in this relatively early period. An outstanding, excellent-quality silver belt buckle with a shield-shaped pin base and carved-channelled decoration was part of another burial in the same cemetery (Grave 126/128).⁴³ That grave, of another young, only 25–34-year-old adult man, who, apparently, was part of the local elite, contained, besides said belt buckle, a double-edged sword, the bone plates of a reflex bow, arrowheads, iron shears, an iron buckle, an ornate bronze purse buckle, and a single-row antler comb. This burial was one of the latest in the cemetery; it could be dated to the mid or late 6th century AD. Yet another grave contained a cast bronze specimen of the type (Grave 117/119); while the accompanying finds did not allow for a more precise dating of the assemblage, it must be noted that this burial also contained a weapon (a spear) and belonged to an adult man.⁴⁴ Conclusively, cast bronze and iron buckles with a shield-shaped pin base in Tiszapüspöki were worn by adult men (warriors) of the community between the turn of the 5th and 6th centuries AD and the second half of the 6th century AD. No significant morphological difference exists between the older and the younger cast bronze specimens (e.g., from Graves 51/52 and 117/119).

The accompanying finds enabled us to specify the dating of only some buckles with a shield-shaped pin base recovered from the cemetery of Tiszaug. The multi-lobed frame of the buckle found in Grave 265 is actually a stylised depiction of a pair of animal heads.⁴⁵ Its best analogy is known from Grave 84 at Szentes-Nagyhegy, a woman's burial, whose

³⁷Representing only 6.6% of all buckles; see Rácz (2023). I am grateful to her for the data.

³⁸Böhner (1958) 182–183.

³⁹Martin (1989) 132–135; Martin (2000) 166–169.

⁴⁰Losert (2003) 207–208. Variant 4: the pin base is elongated, hourglass-shaped; Variant 5: the pin base is wide, shield-shaped, with two concave segments on the sides.

⁴¹Losert (2003) 207–209, 315.

⁴²Masek et al. (2022) 38–39, Cat. 18, 119.

⁴³Having a frame of 4.3 × 4 cm, the buckle is an outstanding specimen of the type due not only its material but also the frame; see Masek et al. (2022) 39, Cat. 125, 159.

⁴⁴Masek et al. (2022) Cat. 108. The grave also contained an iron tool, perhaps an axe or a prod (Cat. 103, 152).

⁴⁵B. Tóth et al. (2022) 176, Cat. 174–177. The find assemblage of the man's grave also included a shield boss (*umbo*), a *seax*, a purse, a harpoon, a double-row comb, and a small pot. For more information on this burial, see B. Tóth (2021) 129.



mortuary costume included a large belt buckle with a pair of stylised animal heads and two small buckles.⁴⁶ One of the minor buckles was cast in silver and has a rectangular frame, but the outer side of the frame by the two sides of the pin is similar to the buckle from Tiszaug (albeit slightly less stylised: it is perhaps more obvious in that case that the lobes are part of a pattern representing two facing bird heads).⁴⁷ The analogy is also important because the rectangular flat buckle frame was decorated with a punch mark pattern that included not only dots and small circles but also concentric circles. The third buckle of the belt from Grave 84 from Szentes-Nagyhegy was a small cast silver specimen with a shield-shaped pin base but no mount plate; its best analogies in terms of shape and proportions appear in the greatest numbers in Gepid Period cemeteries in the Great Hungarian Plain. In conclusion, Grave 84 from Szentes-Nagyhegy and, thus, the buckle in Grave 301 at Tiszaug can be dated to the mid or even late 6th century AD.⁴⁸ Another analogy, a buckle of exceptional quality from Grave A of the cemetery in Kesztye-Fenekpuszta-Pusztaszentegyházi-dűlő must also be mentioned here. That buckle had a frame in a shape of a pair of stylised animal heads at the two sides of the pin, covered in a lavish punch mark decoration comprising double U-shaped motifs and an inscription in Greek. Based on the accompanying finds, Róbert Müller dated the assemblage as late as the early 7th century AD.⁴⁹

In his typo-chronological system developed for the western Merovingian archaeological record, Max Martin put the earliest appearance of the buckle variant with a shield-shaped pin base and rivets (*Gürtelhaft*) to the turn of the 5th and 6th centuries AD based on the find assemblages of graves that also contained gold or silver coins.⁵⁰ However, most such graves could be dated to the first half of the 6th century AD (Phases 1b and 1c). The buckle recovered from Grave 269 in Tiszaug resembles the specimens of these sub-phases the most: the almond-shaped mount plate with a pair of facing concave segments on the sides was probably part of a belt.⁵¹ Probably a pair of round-headed rivets fastened the buckle found in Grave 514, the weapon burial of

an adult man, to the belt strap. This type is well-known from coeval graves in the region, as several burials contained such finds, some even together with buckles of various types, including those with a shield-shaped pin base.⁵² The assemblages of two graves in Tiszaug (Graves 309 and 527) contained buckles with a shield-shaped pin base and long (longer than 20 cm) single-row antler combs.⁵³ Such ‘Lombard’-type combs are rare finds in the area, probably made elsewhere; they can be dated to the second third of the 6th century AD. Both graves were weapon burials of adult men; one was fitted with a *seax*, the other with a sword. Based on the combs, these features can perhaps be dated as early as the mid-6th century AD. Besides, the silver sheet end mount of the sword’s scabbard in Grave 309 is decorated with a dense punched pattern, which points to the mid-6th century AD or later. Not having accompanying finds to enable their precise dating, the rest of the buckles with a shield-shaped pin base recovered from, e.g., Graves 275, 339, 345, and 544 could only be dated to the first two-thirds of the 6th century AD.

The **punch mark decoration** of the buckle with a shield-shaped pin base in Grave 301 is a characteristic feature of the artefact that may be useful in determining its precise chronological position and place of production.⁵⁴ The decoration was probably planned before casting as the upper part of the frame was made flat, while this part usually has a convex profile when the item remains undecorated. In this case, the punched decoration was the only ornamental addition to the object. Upon analysing similar finds from Gepid Period row cemeteries in Transylvania, Alpár Dobos described the chaîne opératoire of producing this kind of decoration. The objects were decorated after casting with an iron punch tool and a hammer.⁵⁵ The motifs were punched on the surface one by one. The punch mark-decorated buckle from Tiszaug was probably also made this way, as the markings are clear and firm. Alpár Dobos collected all find types with a punch mark-decorated variant from the record of the late Gepid Period row cemeteries in Transylvania. As such a survey is yet to be made for the coeval cemeteries in the Great Hungarian Plain, one may only use his data to tell more about the buckle found in Tiszaug. Besides other artefact types, Dobos mentions buckles, including type variants with

⁴⁶Csallány (1961) 59–64, Taf. XXXIX.7, XL.12–13. The specimen recovered from Grave 145 at Szentes-Berekhat was probably also of the type, the frame of which is in the shape of a pair of stylised animal heads, but the base of its pin was not shield-shaped, decorated with a cross.

⁴⁷Alpár Dobos believes this lesser buckle was also part of a belt pendant. He dated the grave find assemblage to the mid-6th century AD: Dobos (2012) 36, Fig. 4.

⁴⁸Vida (2019) 502, Fig. 6.1.

⁴⁹Müller (2002) 29, Taf. 7.1a–1b. The grave also contained a *spatha* ornament, a belt pendant, some rivets, a finger ring, the metal mounts of a probably wooden beaker, a single-row comb, iron shears, and animal bones. It was the final resting place of a 40–60-year-old man.

⁵⁰Martin (2008) 155, Abb. 9. He only surveys western Merovingian sites: Martin (2008) 170.

⁵¹B. Tóth et al. (2022) 178, Cat. 180. The grave also contained a gilded silver buckle with a thick pin base decorated with crosswise grooves (*Kolbendornschnalle*), a double-row comb, a biconical beaker, an iron knife, a purse, and a small suspension loop.

⁵²B. Tóth et al. (2022) 212, Cat. 280. The man laid to rest in Grave 514 in Tiszaug also had a *seax*, a spear, and a biconical vessel. The buckles with a shield-shaped pin base in Grave 6 in Szolnok-Szanda were fastened to the straps with one or two pairs of round-headed rivets (Graves 22, 73, 96, 97, 109, and 205; Bóna (2002) Taf. 32.22.2, Taf. 38.73.4, Taf. 41.96.2, Taf. 42.97.1–2, Taf. 43.109.1, Taf. 53.205.5.

⁵³B. Tóth et al. (2022) 182–184, Cat. 195–199, 215–216, 288–292.

⁵⁴For more information on the punched ring dot pattern – appearing mainly on artefacts of Transdanubian origin – see Koncz and Ódor (2016). This simple motif (not identical to the double U motif!) appears on objects dated to the second half of the 6th and early 7th centuries AD.

⁵⁵Dobos (2015) 107. Sometimes, the pattern was punched in the wax positive before casting. The two methods are easily distinguished based on the character of the markings, as the ones applied to the wax model result in patterns with more blurred outlines on the end product; see Csibi (2019) 41.



a shield-shaped pin base.⁵⁶ This group is relatively small, comprising only five specimens and the pin of a sixth from altogether two sites.⁵⁷ Of these, the buckles found in Marosnagylak/Noşlac and Graves 14 and 17 in Marosveresmart/Unirea-Vereşmort can be classified as Type A6 in Böhner's system (buckles without a mount plate), which, according to the current typo-chronological system developed for Merovingian territories, belongs to the early Merovingian Period in the first half of the 6th century AD. Albeit these finds did not have accompanying finds with a good chronological value, based on their form and size, Dobos does not exclude that these specimens are somewhat younger, dating to the second third or late 6th century AD.⁵⁸ Based on the published images, the closest analogy to the buckle found in Grave 301 in Tiszaug is the one from Grave 115 in Marosveresmart/Unirea-Vereşmort; both the frame and the pin of the latter are decorated with punched rows of double-U-shaped markings, but the buckle itself is more profiled, faceted, and the pin base is also considerably larger. Dobos describes the U motif as the most popular one and notes that it seems to be linked with types of Merovingian origin in the first place, albeit rarely occurring on those territories. He concludes that the motif emerged in the Tisza Region in the Gepid Period, but relatively late, around the second third of the 6th century AD. In conclusion, it is probable that the artefacts bearing such markings were made by local craftspeople in the Tisza Region.⁵⁹

While the number of buckles with a shield-shaped pin base and punch mark decoration is not high in the Tisza Region either, one may find there a couple of good analogies to the specimen from Grave 301 in Tiszaug. For example, the outline and proportions of a cast bronze buckle found in Grave 41 in Szentes-Nagyhegy, the burial of an adult man, bear a very close resemblance to the specimen from Tiszaug.⁶⁰ The published images and the description outline a buckle with the frame and the shield-shaped pin base decorated with punched moon crescent-shaped marks in

two facing rows. It was found on the right pelvic bone; this position and the object's size (3.3 × 2.4 cm) suggest it was part of the belt. Besides, the grave contained only a few finds: a 14 cm long iron knife was found laying crosswise under the lumbar spine, with a small rectangular bronze sheet underneath – perhaps the contents of a purse. These average finds do not provide help with the dating of the find assemblage.

From a typological point of view, the buckle found in Grave 23 in Hódmezővásárhely-Kishomok is another category. It has a B-shaped frame, a strong base, and a rectangular mount plate; the frame, the pin base, and the mount plate are covered in a pattern consisting of punched half ring-dots and fine dot rows, connecting the piece with the buckle from Tiszaug. The half-ring-dot motif is similar to the one appearing on the Tiszaug buckle but not identical (based on the published image of the object). Margit Nagy believes the punch mark decoration of these artefacts to be a substitution for niello.⁶¹ In her opinion, this buckle and the brooch found in the same grave were produced by a Byzantine workshop in the middle third of the 6th century AD. However, the brooch may be younger than that: based on analogies, Éva Garam dated it to the second half of the 6th century AD.⁶²

The motifs and the characteristics of execution link the punch mark decoration of the Tiszaug buckle with another find from the Great Hungarian Plain, from Grave 75 in Gyula-Nagy-Szőlő III.⁶³ The mortuary costume of the adult woman buried there comprised three belt pendants, each adorned with a punch mark-decorated rectangular silver mount. While the surface, in this case, is a plate fastened with rivets onto a belt with pendants instead of a buckle, the pattern is very similar to the one observed on the Tiszaug buckle, consisting of punch marks in the shape of a pair of concentric circles and straight rows of another motif, a circle in a half-circle, along the edge and in the centre of the plates.⁶⁴ In delineating the origin of this artefact, it is important to note that the pattern is not regular, i.e., the piece cannot be considered an example of highest quality workmanship. The shape of the isosceles cross, the pattern structure, and the motifs link this find with the reliquary from Grave 84 in Szentes-Nagyhegy and its circle. The woman in Grave 75 in Gyula-Nagy-Szőlő III was provided with a *solidus* issued by I Justinian and minted between 1.9.542 and 4.11. 565; she had a precious Byzantine so-called architectural ring (the head of which resembles a built structure); perhaps her shoes were fastened with silver

⁵⁶The types decorated with punch marks include silver hairbands, hairpins, necklaces with diamond-shaped pendants, brooches, buckles of Byzantine origin, belt sets, purse buckles and strap ends, belt pendants, wooden boxes, shoe mounts, and horse harness mounts; see Dobos (2015) 108–128.

⁵⁷Dobos (2015) 109–110; Marosnagylak/Noşlac Grave 115, Marosveresmart/Unirea-Vereşmort Graves 11, 13, 14, and 17.

⁵⁸The pin base of the buckle recovered from Grave 17 in Marosveresmart/Unirea-Vereşmort bears an incised cross and, therefore, can be dated to the mid or late 6th century AD based on the typo-chronological system by W. Leitz (Dobos (2015) 110).

⁵⁹In Dobos (2015) 114, footnote 81, the author lists artefacts with similar decoration known to him from the Tisza Region: belt pendant mounts from Grave 75 in Szentes-Nagyhegy; a hairpin, a rectangular amulet, strap ends, and a small buckle from Grave 84 in Szentes-Nagyhegy; a strap end from Grave 7 in Szentes-Berekhá; a strap divider from Grave 23 in Hódmezővásárhely-Kishomok; a buckle from Grave 23 in Hódmezővásárhely-Kishomok; a strap end from Grave 190 in Szolnok-Szanda; and a buckle and mount in Grave 68 in Szöreg-Téglagyár.

⁶⁰Csallány (1961) 52, Taf. XXXIV.5; for the rest of the grave find assemblage, see Taf. XXXIV.6 and 7. The grave was NE–SW oriented; measured body length in the grave: 1.73 m.

⁶¹Bóna and Nagy (2002) 125, 151, Taf. 11.23.3, Abb. 63.4. Three-part belt sets with similar decorations are known from Grave 63 in Szöreg-Téglagyár and Grave 135 in Szolnok-Szanda: Nagy (2004) 225, Fig. 25.4. The pattern on the strap end from Grave 42 in Kisköre-Pap-tanya is somewhat different: Bóna (2002) 192, Taf. 29.42.2; see also Kiss (2015) 229–230.

⁶²Garam (2003) 101–103, Abb. 5.

⁶³Bencsik-Vári and Liska (2019).

⁶⁴The belt with the articulated pendant mounts can be classified into Type 2 in Dobos' system: Dobos (2012) 30.



buckles, and she was also given a single-row comb that was placed beside her head in the grave. She was buried in the mid-6th century or later; the younger dating is supported by the analogy of the mounts and the strap end found in a grave in the Avar Period cemetery in Budakalász. A belt with belt pendants was part of the mortuary costume of the deceased interred in that grave, and the punch mark decoration of the mount and the strap end closely resembles the buckle from Tiszaug.⁶⁵

Most punch mark-decorated artefacts dated to the transitional phase between the Gepid and Avar periods have been found in graves of women and girls; due to a volume limit, only the ones featuring punched concentric double circle segment patterns are included in this study. Recently, Tivadar Vida collected and evaluated these finds.⁶⁶ He mentions, among others, a strap end adorned with rows of double-circle punch marks from Tiszaderzs. The find assemblages of Graves 1 and 2 from Tiszaderzs can be characterised as a mixture of Merovingian and Early Avar steppe traits; the strap end can be connected with the former.⁶⁷ As an exception, an object decorated with a row of such punch marks can be mentioned from a grave of an adult man: the lonely burial of a warrior in Tiszagyenda contained a shield boss with round-headed gilded bronze rivets featuring this pattern.⁶⁸ Based on the *solidus* issued by Emperor Maurice (AD 582–602) recovered from the grave, it could be dated to the turn of the 6th and 7th centuries or the early 7th century at the latest.⁶⁹ In summary, the double-circle punch mark decoration first appeared in the late phase of Gepid row cemeteries in the middle third or second half of the 6th century AD (e.g., Grave 84 in Szentés-Nagyhegy and Grave 301 in Tiszaug), while objects decorated this way are also known from lonely burials in the Middle Tisza Region and small Early Avar Period grave groups, dated to the last decades of the 6th and early 7th centuries AD (e.g., Grave 65 in Gyula-Nagy szőlő III, Graves 1 and 2 in Tiszaderzs, Grave 1660 in Tiszagyenda). Tivadar Vida believes the finds from late Gepid row cemeteries in the Middle Tisza Region to be forerunners to the Early Avar Period of the area, characterised by a persistence of local traditions in terms of both cognitive aspects and material culture. The presence of burials created following western Merovingian traditions indicates persisting Gepid communities in the region. Importantly, he also notes that – save for the record of Egerlövő – all finds dated to the turn of the 6th and 7th centuries AD came from burials of the local elite. This observation makes the find assemblage from Grave 301 in Tiszaug especially interesting because, based on the items

buried with him, the boy interred in the Gepid Period cemetery could not be a member of the local elite. While further (microscope) analysis would undoubtedly be helpful in linking these items with workshops, regrettably, it is not a possibility we could consider now. Previous provenance analyses of some findings outlined Byzantine contacts with the Lower Danube Region, suggesting that they were perhaps produced by a workshop operating in that area; however, the distribution and relative frequency do not exclude the possibility that they were made in the Tisza Region.

Besides the ivory item and the quite rare punch mark decorated belt buckle with a shield-shaped base, Grave 301 in Tiszaug was also outstanding because of its **coffin**. Log coffins were not unfrequent in this cemetery; the soil preserved not only their shape but, in some cases, also the pattern of the wood. However, Grave 301 and three other burials contained coffins of a different type, with a ‘usual’, straight head end and a narrower foot end that terminalled in a pointed arch. This shape clearly imitates log boats; it has remained a question whether the coffins were only made in the form of boats or actual boats were reused for the funerals⁷⁰ – neither of these graves contained anything decisive in this regard. In contrast to Grave 301, the other three burials were the final resting places of adults: Grave 570 contained the remains of a mature man (39–45 years old at death), Grave 522 a perhaps a mature woman, and Grave 563 also a mature woman (40–50 years old at death). The find assemblage of Grave 522 cannot be evaluated properly as the burial was disturbed extensively.⁷¹ The man interred in Grave 570 and the woman in Grave 563 were provided quite modestly with goods and accessories befitting their age and gender.⁷² The log boat coffins of the adults were about 2.10–2.90 m long and 0.65–0.70 m wide. The size was probably decided considering the height of the deceased: the coffin of the only 1.27 m tall boy in Grave 301 was only 1.70 m long and 0.5 m wide.

Regardless of interpreting these unique coffins as actual log boats reused or imitations, they have no known analogy either in the Gepid Period record or in any coeval site in the Carpathian Basin. While the soil in Tiszaug preserved the imprint of organic items in many cases, such lucky discoveries – of ‘regular’ log or box coffins – had also been made in other coeval cemeteries before. However, neither included a log-boat-shaped specimen. Expanding our scope in time and space, distant analogies may be mentioned from Slusegård

⁶⁵The edges of both items from Grave 1532 are decorated with rows of double U-shaped punch marks: Vida (2000) 368, Abb. 2.2a.

⁶⁶Vida (2019).

⁶⁷Tiszaderzs-Szentimrei út, grave of probably an adult woman: Vida (2019) 498–503, fig. 3.7.

⁶⁸Kocsis and Molnár (2021) Figs 28.2–9.

⁶⁹The *solidus* was issued between August AD 582 and August AD 583; see Somogyi (2019) 614–615, 618, Abb. 10.13.

⁷⁰In another grave (Grave 563), the deceased was not placed in the log boat coffin but covered with it.

⁷¹Only the right pelvic bone and the bones of the left foot have remained in place, and the persisting grave finds did not include more than two bronze rivets, a bronze loop, and the side plate fragment of an antler comb. B. Tóth et al. (2022) 214, Cat. 286.

⁷²Grave 570 contained a double-row antler comb (placed right of the head of the deceased), an iron belt buckle with bronze pin, found at the inner side of the left arm), a bronze buckle (under the right pelvic bone and the ribs), and two openwork mounts that once decorated a purse: B. Tóth et al. (2022) 225, Cat. 323. Grave 563 only contained a double-row antler comb.



on the island of Bornholm in Denmark and, more importantly, Wekllice, a Roman Period site of the Wielbark culture in Poland.⁷³ But why did the community decide to bury some of their dead in a log boat coffin? The arising possibilities include emergency, i.e. there was no available alternative at the time of the funeral; in this case, the coffins can only be interpreted as actual log boats reused. We know from ethnographic sources that in times of flooding, the dead were transported to the cemetery that was usually situated on high grounds in boats; were that the case in Tiszaug, too, perhaps that contributed to forming this funerary custom. One might also think that in the case of adult men, the log boat coffin is a reference to their profession (fisher, ferryman, or simply someone who travelled a lot on water). Obviously, the possibilities include a reference to the mythology; the belief system of Gepids, however, is something about which we have almost no knowledge. The boat burials known from England and Scandinavia are much younger and involve much bigger, complex boats; furthermore, the individuals interred in them were undoubtedly members of the high elite, not to be compared with a 5th–6th-century AD rural community of Gepids.⁷⁴ In summary, the deceased interred in log boat coffins in Tiszaug included an adult woman and a man who can be considered average in the community in terms of wealth, an adult woman who was probably a bit more affluent (as her grave was thoroughly disturbed and plundered), and a small boy who was provided with modest accessories and buried in a mortuary costume akin to adults'. We have no answer as to what trait they shared that influenced the unusual choice of coffin. The graves of the three adults were positioned near each other in the northern part of the cemetery, suggesting a possible connection between them; Grave 301, however, was found in the centre of the southern grave cluster, separate from them.

The **concentration of graves** around Grave 301 was less intense than in other parts of the cemetery, i.e., the structure of this cluster was looser (Fig. 1). It is conspicuous that almost all grave pits around Grave 301 had similar orientations but differed from said grave's: while the main axis of Grave 301 declined from the west-east axis towards the south (250°–70°), the deviation in the case of rest of the grave pits pointed towards the north instead (save for Grave 297, the orientation of which probably matched Grave 301).⁷⁵ The high number of child burials in this cemetery part was also conspicuous: not only was Grave 301 the burial of a 9–11-year-old child, but most graves were the final resting places of children. A 2.5–3.5-year-old child was interred in Grave 293, the nearest one to Grave 301, while somewhat further north, Grave 300 contained the remains of a

5–6-year-old, Grave 305 a 4–5-year-old, while Grave 281 a 12–14-year-old child. The child interred in Grave 297 was probably somewhat younger, around 6–8 years old at death, than the deceased in Grave 301. The grave having been reopened and disturbed (plundered?), only two pottery vessels and a copper alloy brooch persisted from the original assemblage, the latter indicating perhaps that the deceased was a girl.⁷⁶ Two women's burials were also part of this grave cluster: Grave 294 at the northern fringe of the grave group contained the remains of a 25–39-year-old, while Grave 288, at the southern perimeters, a 20–25-year-old woman. In summary, this part of the cemetery seems to have been dedicated to children and adolescents in the first place, while the two women interred here perhaps also had some kind of connection with them – maybe archaeogenetical investigations could clarify that. The skull of the young adult woman in Grave 288 was mildly deformed artificially; she was the only one in this close cemetery part to have her skull modified. She was put to rest in a plank box coffin; the double-row comb and the iron ring found next to her head are of no use in specifying the dating of her grave. As for the child burials in the grave cluster, some had no grave accessories at all (Graves 281 and 305), while others only contained a modest find assemblage (Graves 293 and 300).⁷⁷ The child in Grave 300 was also interred in a plank box coffin; however, the two graves were not positioned near each other.

As it was mentioned above, the **ivory artefact** recovered from Grave 301 was subjected to archaeometric analysis (using an optical microscope) to learn about the raw material, the body part of the animal it came from, the condition of the artefact, its taphonomic characteristics, and the appearing production marks and use wear traces.⁷⁸ Albeit previous macroscopic observations confirmed the supposition of the finders that the artefact was made from ivory, they did not provide conclusive evidence of whether the material is genuine ivory, a piece of fossil mammoth tusk, or – considering the Scandinavian connections of the region – some kind of 'sea ivory', i.e., walrus or narwhal tusk. The bone structure could be studied on the optical microscope image of the surface, and, as a result, the sea origin could be excluded. While the surface is eroded, it features the so-called Schreger lines (Fig. 9) characteristic of *Elephantidae*. Based on the fine grid discernible in small patches on the cross-section of the tusk, the possibility of the artefact having been carved from fossil mammoth ivory could also be eliminated, as the angles are characteristic of today's

⁷³For a summary, see B. Tóth (2021) 125–129 and Natuniewicz-Sekuła and Rein Seehusen (2010).

⁷⁴The usual interpretations of boat burials include the boat or ship having been a means of transportation for the dead to the afterworld, a symbol of their elite status, and a reference to the journey to the afterworld.

⁷⁵Graves 281, 288, and 300: 280°–100°; Grave 293: 285°–105°; Grave 305: 275°–95°. Grave 297 was too disturbed for its orientation to be determined; perhaps it was also 250°–70°.

⁷⁶B. Tóth et al. (2022) 180–181, Cat. 188–189.

⁷⁷Grave 293 contained a small pottery bowl, a double-row antler comb, and two fragmentary iron buckles: B. Tóth et al. (2022) 180, Cat. 187. Grave 300 also contained a double-row antler comb and iron buckle fragments.

⁷⁸Zsuzsanna Tóth: *Expert report on the analysis of a finding from Grave 301 in Tiszaug-Országúti bevégés* (Inv. no. 2020.9.214). The analysis was carried out in the Archaeometry Laboratory of the Institute of Archaeological Sciences of the ELTE using a Zeiss Stereo Discovery V.8 stereo microscope with a 6.3–80x zoom range, a 5-MP Zeiss AxioCam MRC5 camera, running on Zeiss AxioVision 4.9.1 software on 22.02.2022. The following evaluation is cited from the report.



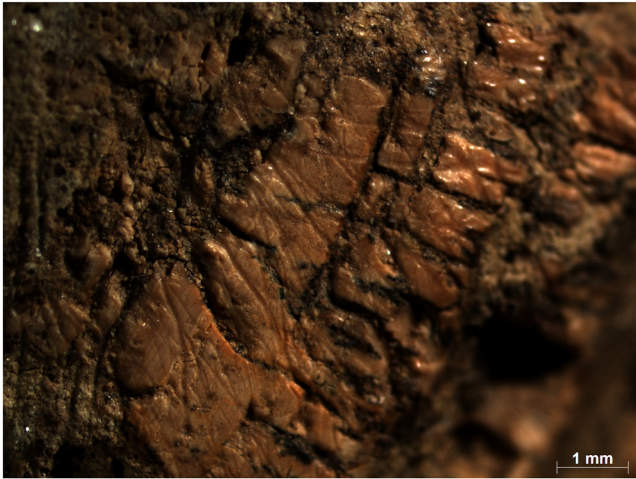


Fig. 9. The pattern of the Schreger lines (photo by Zsuzsanna Tóth)

elephant species. It is impossible to specify optically whether the animal was an African, a forest, or an Asian elephant, as the structure of their tusks does not differ. The artefact was carved from a part close to the tip of the tusk (Fig. 10); upon discovery, it was in average, stable condition. Its exterior was almost completely eroded, the original surface only persisting in small patches. In terms of taphonomy, the object is damaged extensively: the surface is heavily degraded, featuring characteristic circular and prismatic cracks (Fig. 11) and small flanked-off parts on the base. Cracking is a characteristic phase in the decay process of tusks; it is caused by the vanishing of the organic parts and the dehydration of the material due to having been removed from its original environment. The top of the artefact also bears recent damage.⁷⁹ It features no trace indicating



Fig. 10. The object was carved from a tip-end part of the tusk (photo by Zsuzsanna Tóth)

⁷⁹Caused perhaps during the excavation of the grave.

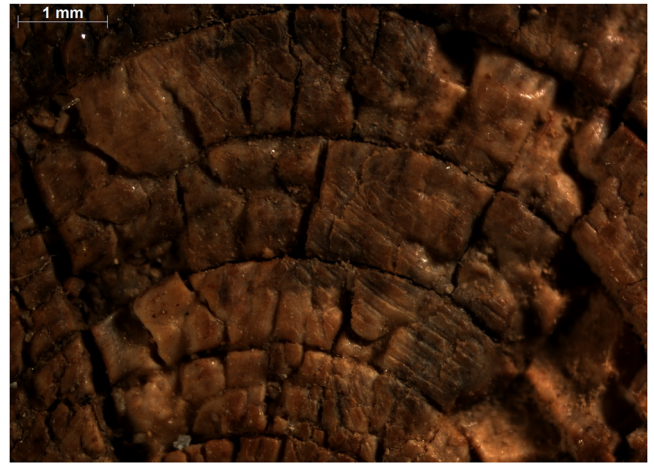


Fig. 11. Circular and quadrangular cracking patterns are characteristic of tusks (photo by Zsuzsanna Tóth)

anything applied during conservation that could influence the analysis or alter its results.⁸⁰ Production marks were barely discernible on the heavily eroded surface; the ones observed on the few persisting patches of the original surface on the flat bottom indicate that the chunk of ivory had been cut off from the tusk first, perhaps with a saw (as the related marks are straight and even), and the whole surface was polished later, mainly with parallel but sometimes with oblique strokes (Fig. 12). The observed higher-than-average use gloss and rounded surface prove that the object was used (Fig. 13) but in a way that did not involve too much friction as the polishing strokes, i.e., the marks related to the last phase of production, have remained clearly visible. These characteristics indicate contact with some soft material that did not contain dirt or hard grains which would have



Fig. 12. Production-related polishing marks (photo by Zsuzsanna Tóth)

⁸⁰The conservation of the artefact only involved mild cleaning in keeping it suitable for future analyses.



Fig. 13. A spot featuring use-wear Polish and a smoothed surface (photo by Zsuzsanna Tóth)

polished more or carved into the surface. The item had not suffered significant damage before being put in the grave, meaning it was still useable when interred.

The result of the vibrational spectroscopy confirmed the identification of the raw material as ivory.⁸¹ That Bajnóczi had examined other ivory finds from coeval sites in the Carpathian Basin certainly helped, as she could compare the spectrum of the artefact from Tiszaug with some tokens of a game set from Mosonszentjános, a disc from Grave 539 in Cemetery A at Kölked-Feketekapu, and a purse lock ring from Grave 38 in Szólád-Kertek-mögött. She noted that the spectrum of the find from Tiszaug matches these and formed an opinion that the artefact was possibly made from a raw material of African origin, but its provenance cannot be determined with certainty.⁸²

We have almost no information about the original function of the ivory artefact. It has no close analogy in the published 6th-century AD record of the Gepid Kingdom. Recently, István Koncz and Ádám Bollók collected and evaluated 6th- and 7th-century AD ivory finds from the Carpathian Basin.⁸³ Their catalogue includes finds from the area of the former Lombard Kingdom in the 6th century AD (Transdanubia, Lower Austria, and Moravia), as well as one from the Early Avar Period but presumably from Germanic context (Grave 127 in Makó-Mikócsa-halom). In summary, the single known ivory object from the Great Hungarian Plain is an Avar Period find and, being a dumbbell-shaped purse lock with punched ring-dot decoration,⁸⁴ its morphological characteristics and function are also

dissimilar to the artefact from Tiszaug. The function of the four artefacts recovered from Lombard context – found in all cases next to the legs of the deceased – could also be determined: these rings were used to lock purses.⁸⁵ The remaining two known ivory finds had special functions: the small discs discovered in a grave in Mosonszentjános (today part of Jánossomorja) were tokens in a game set, while the fragments obtained from Grave II in Žuřan (Czech Republic) were once part of a *pyxis*.⁸⁶

The object of undetermined purpose from Kölked can be mentioned as the closest formal analogy to the find from Tiszaug.⁸⁷ That piece is incomplete; its top is conical, and unlike the object from Tiszaug, it has a hole in the middle. It was found in the area of the thighbone in the grave of an adult woman; Zsuzsanna Hajnal classified the feature into Phase 5 of the cemetery, representing the mid-7th century AD.⁸⁸ István Koncz and Ádám Bollók suggested that the piece was an archaic object obtained from older, perhaps Roman context. As for its original function, the arising possibilities include a token for a game and a spindle whorl.⁸⁹ While its rounded conical or irregular hemispherical shape is similar to the object discovered in Tiszaug, based on the published image, it was clearly made from a chunk cut in a different way from a different part of the tusk (as its layers are not circular but oblique). Furthermore, as the piece from Tiszaug was not drilled through, and it was found in a different relative position within the grave, near the right shoulder of the deceased – probably a young boy – it is highly unlikely that it was a spindle whorl. However, one cannot decline so decidedly the other possible function, game tokens, albeit the piece from Kölked was significantly smaller (of a diameter of only 3.5 cm and a height of 1.8 cm) than the one from Tiszaug. Is it possible that the object from Kölked was a Roman Period token drilled through by its owners and reused as a spindle whorl?

An overview of the shape and raw material of known 6th–7th-century tokens reveals that none of them can be considered a close enough analogy to the Tiszaug find. While the small set from Mosonszentjános was also made

⁸⁵Hauskirchen Grave 8, Szólád-Kertek mögött Grave 38, Lužice Graves 94 and 119; see Koncz and Bollók (2020) 263–265; Koncz and Bollók (2021) 19–25.

⁸⁶The *pyxis* can be an archaic object from the late 4th or early 5th centuries AD, which was buried much later. Another such find (fragments of a *pyxis* from a much younger find context) are known from Čierne Kl'ačany/Feketekelcsény (Slovakia): Koncz and Bollók (2021) 25. Based on the buckles in the find assemblage, Grave II from Mosonszentjános was dated to the second half of the 6th century AD, i.e., the Early Avar Period: Koncz and Tóth (2016) 169.

⁸⁷Kiss (1996) 142–143, Taf. 95.11. The piece recovered from Grave 539 in cemetery A in Kölked-Feketekapu 'has a shape (...) similar to hemispherical tokens appearing between the Mediterranean and Scandinavia': Koncz and Bollók (2020) 269.

⁸⁸Hajnal (2012) 630.

⁸⁹A. Kiss believed it to be a piece from a board game set: Kiss (1996) 142–143. Upon a proposal by A. Vaday, I. Koncz and Á. Bollók raised the possibility of interpreting the find as a spindle whorl: Koncz and Bollók (2021) 21.

⁸¹The analysis and the results are published in a separate study in this volume; see Bajnóczi et al. (2023).

⁸²Some scholars suppose that the ivory appearing in the Mediterranean in this period came from African elephants; see Drauschke (2007) 67; Drauschke (2008) 412.

⁸³Koncz and Bollók (2020); Koncz and Bollók (2021).

⁸⁴From the burial of an elderly man, dated to the first decades of the 7th century AD.



from ivory, the pieces are much more elaborate, shaped on a lathe, painted, and repaired during manufacturing or use; in summary, they were definitely prestige goods. The rest of the finds of the related grave assemblage outlined a member of the elite who was provided with a full board game set (or the imitation of one) for the afterlife. Not only the workmanship quality but also the shape of these tokens is different from the piece found in Tiszaug: they are round and flat, with a carved circular groove on the top. They are also smaller, their diameters ranging between 1.8 and 2.8 cm, height around 1.2–1.4 cm, and weight around 10.5–21.9 g.

The form of the tokens in two board game sets from two burials in the cemetery of Cividale (Grave 24 in Cividale Santo Stefano in Pertica and Grave A in Cividale Gallo) bears the closest resemblance to the Tiszaug find. Besides flatter pieces, these sets comprise higher cylindrical ones with rounded tops, almost like the piece from Tiszaug (the side of which is but also curved instead of cylindrical). While the tokens of the set from Grave 24 were made from deer antlers, the pieces in the set from Grave A are ivory and were shaped on the lathe like the finds from Mosonszentjános, albeit their overall workmanship quality is poorer.⁹⁰ The lack of lathing in the case of the Tiszaug piece is an important technical difference indicating that it was most probably not made by the workshops that manufactured the game sets mentioned above (either in antler or ivory), and also suggests that its function was different.

The fact that only a single piece and not a more-or-less complete set of 'tokens' was interred in Grave 301 must also be kept in mind. Considering that the burial belonged to a young member of the society (who, based on its knife and the absence of beads, was probably a boy), the phenomenon can perhaps be interpreted as a *pars pro toto* offering when only a part of a (not-so-high-quality) game set was placed in the grave. The mild use wear marks may be explained by the piece having lasting contact with some soft material, i.e., kept in a small leather or textile sack (and perhaps also buried in it). Theoretically, it cannot be excluded that the find was part of a larger, more complex artefact, albeit it bears no features, or production or use-related marks indicating that. It was placed very close to the body, above the shoulder, seemingly set upright, on its own, without any accompanying finds in its micro-area. Had it been interred in a leather or textile sack or purse together with finds made from organic materials, it cannot be proven anymore, as no related trace persisted.

Upon studying this unique item, some more questions arise. What could be the value of such an ivory object in the 6th century AD? Did the ivory as raw material have symbolic connotations and functions? Wherefrom and how this ivory artefact got into the possession of a small boy from the Tiszaug area?

Obviously, the value cannot be estimated precisely (and even less can be expressed in terms of money), but it

certainly adds up from several components, including the quantity of raw material, the character and function of the artefact, and workmanship quality. Ivory fits in the general picture of the centuries of Late Antiquity and the Early Middle Ages as raw material; its value fluctuated throughout the centuries but was never exceptionally high, making ivory objects also available for others than the members of the elite. The relatively low price of ivory did not represent an obstacle in the spread of such objects, which, therefore, got into distant lands.⁹¹ As mentioned before, several (but not too many) ivory objects of diverse functions are known from Lombard territory from the 6th century AD. These could be direct imports from the Mediterranean or were obtained by Lombards via their western Merovingian connections. The area of the Gepid Kingdom in the eastern part of the Carpathian Basin not maintaining such connections might explain the relative lack of ivory finds there.⁹² Besides, the people inhabiting these lands – first the Gepids, later the Avars – were perhaps not interested in eastern Mediterranean or Italian ivory carvings, had no eye for their artistic quality, and did not find ivory and ivory items a suitable medium for accumulating wealth.⁹³

We have no information about whether the mourning community was aware of the symbolic connotations of ivory. Elephants appeared in the literature of Antiquity and the Middle Ages endowed with good qualities,⁹⁴ of which the members of a rural Gepid community were, obviously, not necessarily aware. We do not know whether it was considered to have a healing capacity akin to diverse plants, spices, stones and other materials, e.g., amber.⁹⁵ Besides, the possibility that arose in connection with other 6th–7th-century AD ivory finds from the Carpathian Basin (Grave II in Žuřan, Grave 539 in cemetery A in Kölked-Feketekapu), namely that they were archaic Roman objects preserved for a long time and placed in a grave only much later,⁹⁶ cannot be excluded in this case either.

Being a unique finding in the region and the period, it is extremely problematic to reconstruct the path on which the ivory item got to Tiszaug. The ivory purse lock rings found

⁹¹Ivory was available in abundance in the central and eastern part of the Mediterranean from the 4th century to the first half of the 6th century AD, and it was a relatively cheap product: Koncz and Bollók (2020) 271–272; Koncz and Bollók (2021) 34.

⁹²For an overview of the problem, see Bollók and Koncz (2020) 60 and Koncz and Bollók (2020) 262–272.

⁹³Bollók and Koncz (2020) 60; the authors believe the grave finds point to that.

⁹⁴Nagy (2010) 162–163. The attributed good qualities included wisdom, quickness to learn, tameness, meekness, helpfulness, and caution. In medieval times, elephants were considered virgin animals, and ivory was a symbol of pureness.

⁹⁵It must be noted for comparison that, e.g., amber was placed in graves in this period as raw material: the small heap of amber pieces discovered by the left lower leg of the woman in Grave 74 in Hódmezővásárhely-Kishomok equally comprised finished beads, semi-finished products, and raw material chunks: Bóna and Nagy (2002) 64, Taf. 20. 743. 4–8.

⁹⁶Koncz and Bollók (2020) 263, 265.

⁹⁰For an overview of the details and images, see Koncz and Tóth (2016) Figs 6–7.



on Lombard territory west of the Great Hungarian Plain got there from the west, and they occur much more rarely there than in the area where they were produced. While ivory items found in Merovingian territory are considered local products from raw materials imported from the Mediterranean,⁹⁷ the ones appearing on coeval sites in the Carpathian Basin are to be interpreted as marking personal contacts with the Merovingian world instead. Board game sets, especially the basic ones, could also be merchandise in Transdanubia (see Mosonszentjános and Grave 539 in Cemetery A in Kölked-Feketekapu), gifts from diplomatic missions from Byzantine and Merovingian territories, or booty obtained by Lombard soldiers who served in the Byzantine army.⁹⁸

SUMMARY

Grave 301 in the Gepid Period row cemetery in Tiszaug is outstanding for the ivory artefact it contained. The grave was the final resting place of a 9–11-year-old child, buried with modest accessories in a mortuary costume akin to adult men's. Previously, ivory as a raw material did not occur in the archaeological record of Gepids. The optical microscope and oscillation spectrometry analyses unequivocally identified the raw material of the item as ivory, i.e., the tusk of a non-fossil elephant. The number of ivory items in the record of Lombard Pannonia and the following Early Avar Period is infinitesimal. The lack of analogies has hindered us in determining the original function of this finding. The observed production-related traces (cutting, perhaps by sawing, and polishing) and the mild use-wear marks suggest that it was more than a chunk of raw material. It was found placed upright on the grave bottom right above the right shoulder of the child; it was alone, without any discernible connection with any other object or phenomenon. Far analogies from Transdanubia and Italy suggest that it could be a token, a piece from a board game set; however, those were usually more elaborate, usually lathed, and different in shape. Compared to them, the piece from Tiszaug looks like a semi-finished product. It is also possible that the piece was an archaic object kept in a soft leather or textile bag for a long time; also, the young age of the deceased raises the possibility of it having been a toy or a protective amulet. Perhaps it was only valued for its raw material, which was unique in this region. Based on the rest of the known coeval ivory findings, it was probably produced in the territory of Italy, the Byzantine Empire, or the western Merovingian world, while its appearance in the Tisza Region marks trade or personal connections with distant lands.

A heavily worn double-row antler comb was also found left of the child's head. Most combs (81%) in this cemetery were placed in the head area; save for a few examples, they all belong to the double-row type. While relatively fewer children (50.62%) were provided with a comb for the afterlife than adults (67%), these proportions are high

compared to other coeval cemeteries. No pattern was discernible on the heavily eroded side plate, but that would not help with specifying the dating of the object anyway. The double-row comb in the grave was rather a tool of personal hygiene than part of the mortuary costume.

Like most adult men in the cemetery of Tiszaug, the child in Grave 301 wore a purse hanging from his belt; this element of the burial expresses a right linked with age or social position. The remains of the purse were found in a wearing position above the right pelvic bone, crosswise under the right lower arm bones. As it had no metal buckle for locking, only the curved brace corroded to the average iron knife and the two pieces of flint discovered in the same batch indicated its one-time presence. Altogether six children in the Tiszaug cemetery, including girls and infants, were provided with knives for the afterlife; while in the case of very young ones, the offering was probably symbolic, the knife buried with the boy in Grave 301 could be an actual personal tool.

Based on the copper alloy buckle discovered between the left pelvic bone and the caput of the left thighbone, the child in Grave 301 wore a belt. Similar buckles, with an oval frame and a shield-shaped pin, were recovered mainly from graves of adult men in this cemetery. Compared to these, the boy's belt buckle is considerably smaller, indicating a narrower and altogether smaller belt fitting to his body. While buckles with a shield-shaped pin base are types characteristic of Gepid Period attire, their occurrence in the cemeteries of the era in the eastern part of the Carpathian Basin shows huge differences. Such buckles were recovered from the burials of eight adult men in Tiszaug. Based on Merovingian analogies, the type was in fashion between the turn of the 5th and 6th centuries AD and the end of the 6th century AD, and they appear in Gepid context in the same period, too. The decoration, rows of double-U-shaped punch marks along the edge of the frame and the shield-shaped pin base, may be of help in specifying the dating of this item: diverse artefacts (e.g., elements of women's attire, amulet case, rivet heads in a shield boss) with similar punch mark decoration are known from Late Gepid (middle third and late 6th century AD) and Early Avar Period (turn of the 6th and 7th centuries and early 7th century) contexts. Their distribution even raises the possibility of a workshop in the Tisza Region. Based on the above, the buckle and, thus, Grave 301 could be dated to the mid or late 6th century AD.

Grave 301 was also exceptional due to the log-boat-shaped coffin with a regular head end and a narrower, pointed arch-shaped foot end. Three more similar coffins were observed in this cemetery; the graves of the adult man and the two adult women were positioned close to each other in the northern grave cluster, far from the child's burial. This phenomenon has very few known and distant analogies, e.g., from Slusegård in Denmark and Weklice in Poland from Roman context; it is unlikely that a 6th-century AD mortuary community in Tiszaug can be directly linked with either. It has remained a question why four individuals were buried in log boats or coffins imitating one. The possible reasons include practical and symbolic ones, the latter being not entirely unrelated to the beliefs of the community.

⁹⁷Drauschke (2008) 414.

⁹⁸For more about the possibilities, see Koncz and Bollók (2020) 274.



Grave 301 was positioned in a less dense part of the cemetery. It was surrounded mainly by child burials; some contained no accessories at all, while others were furnished abundantly. This grave group also included the burials of two adult women positioned at the fringes of the cluster; only archaeogenetical investigations may provide information about their connection with the children.⁹⁹

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⁹⁹The samples taken from the anthropological record of the cemetery will be analysed and evaluated in the near future within the frame of the project *Integrating genetic, archaeological and historical perspectives on Eastern Central Europe AD 400–900*. HistoGenes. European Research Council (ERC) under the European Union’s Horizon 2020 research and innovation programme. <https://cordis.europa.eu/project/id/856453>.



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