NEW DATA ON THE BURIAL CUSTOMS IN THE EARLY IRON AGE ON THE BASIS OF EXAMPLES FROM NORTHEAST-TRANSDANUBIA¹

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NOVINSZKI-GROMA, Katalin. Nové dáta o spôsoboch pochovávania v staršej dobe železnej na príkladoch zo severovýchodného Zadunajska. Dobre známa mohyla zo Süttő spolu s plochými pohrebiskami v Süttő, Tatabánya-Dózsakert a Tatabánya-Alsó Vasútállomás sú dôležitým zdrojom informácií o spôsoboch pochovávania v staršej dobe železnej v severovýchodnom Zadunajsku. Podobne ako v mojich predchádzajúcich prácach aj v predloženom príspevku predstavujú, spolu s ďalšími pohrebiskami východohalštatského kultúrneho okruhu zo Zadunajska, pramennú základňu pre analýzu. V živote komunít staršej doby železnej bol pohreb komplexným procesom, ktorý pozostával zo spálenia mŕtveho tela, uloženia ľudských pozostatkov do hrobu a pravdepodobne ďalších úkonov v mieste pochovania. Zložky pohrebnej výbavy môžu odrážať rôzne kroky pohrebného rítu. V tomto príspevku sa zameriavam na problematiku miest spaľ ovania ("ustrina"). Tiež študujem keramické prídavky, najmä či nesú znaky sekundárneho prepálenia, alebo iné deformácie povrchu, ktoré mohli byť spôsobené žiarom. To môže indikovať, či bola nádoba uložená na pohrebnú hranicu, alebo či bola špeciálne vyrobená pre uloženie do hrobu. Ďalej sa zameriavam na analýzu zvyškov rastlín a zvierat z mohýl a plochých pohrebísk a na otázku, či môžu prispieť k interpretácii procesu pochovávania.

Keywords: Hallstatt-period, burial custom, pyre, ceramic grave goods, plant and animal remains;

Kľúčové slová: doba halštatská, spôsob pochovávania, pohrebná hranica, keramické hrobové prídavky, rastlinné a živočíšne zvyšky;

INTRODUCTION

The archaeological research is divided into two different types of the Early Iron Age burials in Transdanubia, in the most eastern periphery of the East-Hallstatt Cultural Unit in the first phase of the Early Iron Age (Ha C - Ha D1). These are the burial mounds and the flat cemeteries. Tumuli high up from their environment visually, and as outstanding elements of the landscape their appearance suggests that they are resting places of a prominent member of a community who used the lands in the past. Observations of the excavations of the burial mounds indicated that the burial process was a complex and multistage procedure. The reconstruction of the events is known in the case of some tumuli (*Egg/Kramer 2005, 34; Fekete 1981, 156, 157; Vadász 1983, 44, 45*). It is also highly probable that the members of the community after the burial process also used the mounds in some ways (*Bräuning/Löhlein/Plouin 2012, 90*).² Presumably they also opened the tumuli after the burial process and did some manipulation with the remains and the objects placed into them previously – sometimes they

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We can mention as an example the tumulus of Villingen-Magdalenenberg from the nowadays Germany where a huge amount of pottery sherds from the second phase of the Early Iron Age was excavated around the mound. It can prove that the local Early Iron Age community regularly visited the tumulus and it probably had a function of a sanctuary.

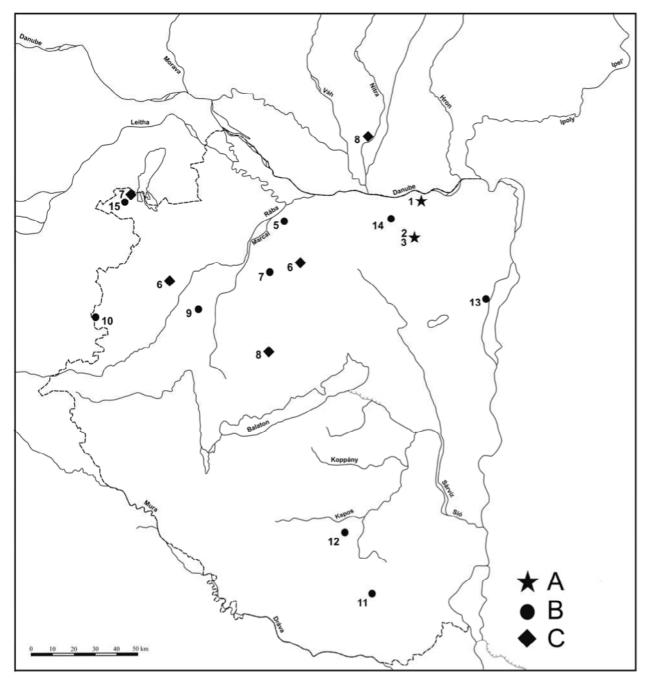


Figure 1. Distribution map with the researched archaeological sites and other important tumulus and flat cemeteries. A – sites of the research; B – burial mounds; C – flat cemetery; 1 – Süttő; 2 – Tatabánya-Alsó Vasútállomás; 3 – Tatabánya-Dózsakert; 4 – Halimba-Cseres; 5 – Nagydém-Középrépáspuszta; 6 – Hegyfalu; 7 – Fertőrákos - Kőhidai dülő; 8 – Nové Zámky; 9 – tumuli of Sághegy (Mesteri, Sándorháza, Csönge); 10 – Vaskeresztes; 11 – Pécs-Jakabhegy; 12 – Szalacska; 13 – Százhalombatta; 14 – Tata; 15 – Sopron. Author: K. Novinszki-Groma

may even have removed them from the context or they might have robbed the grave (*Baitinger 1992, 336*). New reports with the help of natural sciences could focus on further details, e.g. how much time after the death the burial happened in accordance with the entomological data; in which season of the year the human remains were placed into the grave on the basis of the pollen-samples; what kind of food was probably given to the deceased on the basis of the proteins and plant macroremain (*Šálková et al. 2015, 118-121*).

We cannot share similar results based on the analysis of natural sciences in that study. But in the last years there was an opportunity to observe the material of some Early Iron Age cemeteries from Northeast-Transdanubia. Among them we can mention two flat cemeteries from the surrounding of the modern settlement Tatabánya: Tatabánya-Alsó Vasútállomás (16 graves; *Groma 2015*) and Tatabánya-Dózsakert (43 graves). The flat cemetery with 82 excavated burials in the vicinity of the modern Süttő settlement and the material of the famous tumulus researched by Éva Vadász between 1978 and 1982 and also published as a preliminary report also belong to the topic of this paper (*Vadász 1983*).³

In the following, we will observe some aspects of the burial custom on the basis of the grave contexts and the findings of the above mentioned cemeteries. It will complete our knowledge about other examples from Transdanubia or even from the territory of the East-Hallstatt cultural unit and may prove the appearance of a habit in a wider area or on the contrary, it may highlight the variability of the burial rite in the cemeteries of the Hallstatt-culture (Figure 1).

THE PROBLEM OF THE FUNERAL PYRES

Although one of the most typical characteristics of the Early Iron Age burials of Transdanubia is cremation, the evidence of that are mostly only the burnt human bones collected from the pyre and deposited into a pot or scattered on the floor of the grave. Excavation of the cemeteries reaches only the burials which in most of the cases do not coincide with the places of cremation. Although there are many possibilities in the research of the pyres, it is still an unexplored part of the Early Iron Age studies (*Egg/Kramer 2005*, 34).

A rare exception is the burial mound of Süttő excavated by Éva Vadász. Through the excavation works a 1 × 9.15 meter wide, oval, strongly burnt, reddish-brown, ashy surface appeared. The humus-layer was levelling under the burnt surface and in the ashy part little postholes were noticeable which can suggest the wooden structure of the burial pyre. The remains of the pyre contained 17 kg of burnt human and animal bones, pottery sherds, bronze-and iron objects (Figure 2: A; *Vadász 1983*, 35; 1986, 252, 253).

We also know evidences of the burial pyre from some mounds around the Sághegy (*Lázár 1955*, 208). In Sándorháza there was a burnt part of the surface eastward to the stone structure with circular layout but still under the cover of the mound (*Lázár 1951*, 40), while in Csönge, in tumulus 1 clues of a pyre also came to light next to the inner structure (*Lázár 1955*, 205). The best parallel to the context of the Süttő burial mound is known from the tumulus in the vicinity of Mesteri. Here inside the tumulus a stone structure existed which was open in the north side. A 5 meter wide and 30 cm thick surface with lots of charcoal, burnt bronze jewelleries and pottery sherds were located north from the entrance (Figure 2: C; *Lázár 1951*, 38).

Another good parallel is Vaskeresztes, where (similarly to the particular one at Süttő) remains of the burial pyre with dromos-art inner structure were found. Mária Fekete observed a burnt part of the surface in the northwest corner of tumulus 1 which had a triangular layout. It contained burnt human and animal bones and plant remains (*Fekete 1981*, 135). In tumulus 2 the place of the cremation located in the southeast corner from where also human, animal and plant remains came to light (*Fekete 1981*, 149).

The mound cemetery at Pécs-Jakabhegy, where 10 tumuli were excavated in the mid-

I could observe the material of the Tatabánya cemeteries in the framework of my final thesis. The process of Tatabánya-Alsó Vasútállomás made possible for us by Tibor Kemenczei who led the archaeological work there for which we would like to thank him again in this paper. Excavations in Tatabánya-Dózsakert were led by Gábor Vékony and Éva Vadász. I got the opportunity for the work with the material from the Kuny Domokos Museum of Tata for which I am also grateful. The modern field studies of the Süttő archaeological sites are also connected with the names of Gábor Vékony and Éva Vadász, and the material stored by the Balassa Bálint Museum of Esztergom. I must thank them for their contribution to my doctoral studies with permitting the analysis of the Süttő cemeteries. The inventory numbers of these materials are 65.1.1. – 65.1.106.(Tatabánya-Alsó Vasútállomás, Kuny Domokos Museum, Tata), 82.7.1. – 82.39.6. and 83.1.1. – 83.13.5. (Tatabánya-Dózsakert, Kuny Domokos Museum, Tata); 90.1.1. – 90.26.11., 98.56.1. – 98.67.1., 2000.1.1. – 2000.50.6. (Süttő, flat cemetery, Balassa Bálint Museum, Esztergom) and 80.18.1. – 80.18.72., 81.1.1. – 81.1.35. és 87.47.1 – 87.47.58 (Süttő, burial mound, Balassa Bálint Museum, Esztergom).

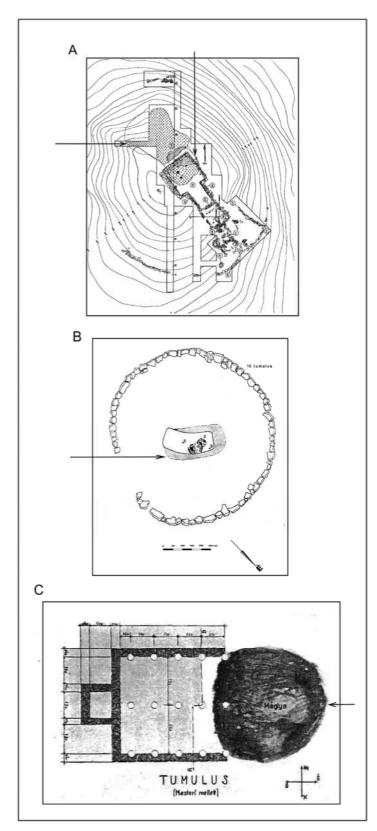


Figure 2. Remains of the pyre under the coat of the tumulus. A – Süttő (after Vadász 1983, 22, Abb. 4); B – Pécs-Jakabhegy, tumulus 10 (after Maráz 1979, 37, Abb. 13); C – Mesteri (Surrounding of Sághegy, after Lázár 1951, Pl. XXI: 2)

dle of the 20th century, presents further parallels. Gyula Török reported wooden chambers with stone walls inside the mounds and in tumulus 2 and 24 he identified burnt remains of the pyre with a huge amount of charcoal as well (*Török 1950*, 5). Borbála Maráz accounted similar results in the case of tumulus 4 and 10 at Pécs-Jakabhegy which were excavated in 1976 – 1977. Burnt surface inside a stone circle existed inside the tumuli and these features we may interpret again as the remains of the pyre (Figure 2: B; *Maráz 1979*, 85, 86).

Another middle-size burial mound from Tihany is also worth mentioning. András Uzsoki excavated a limestone structure under the cover of the mound here. Beneath the stones a burnt part of the surface with the remains of the pyre appeared together with burnt pottery sherds, human bones, bronze pieces and cereal (*Uzsoki 1986*, 248).

Another type of the tumuli is the one where only previously collected remains of the pyre deposited into the mound appear. Tibor Kemenczei reported on this in the case of four burial mounds excavated at Nagyberki-Szalacska in the south part of Transdanubia (Kemenczei 1974, 4-11). Ágnes Holport reports about similar observations in case of the remains of the pyre in Százhalombatta (tumulus 114., Holport 1986, 94; tumulus 117.; Holport 1986, 95). In her opinion burial mound 75 might have been a central place of cremation because of the huge amount of human remains the excavations revealed here (Holport 1993, 24). But we also need to raise the question why they covered a feature with the function of burning in the same way like the burials. It is important to add here that new geophysical surveys in the Százhalombatta cemetery suggested a feature among the tumuli which might have been a central place for burning the deceased (Czajlik et al. 2016, 56, fig. 8).

In Kleinklein, in the cemetery of the

Sulm-basin there are also tumuli where the place of the cremation was identified under the coat of the mound. Tumuli of the Höchschusterwald-group located in a north-south orientated emerge table. Radimskỳ and Szombathy who led the archaeological works there in the beginning of the 20th century excavated a building-like feature walled in three sides in the north part of this table. The burnt soil which was noticeable inside can indicate the function of this structure. Unfortunately this feature has already been demolished, and thus we only have some data about it from the early reports. It is also interesting that this group of tumuli expands from the north (from the direction of this probable cremation place) to the south, as the new excavations from 1977 proved the existence of tumuli in a smaller number in the south part of the table. These tiny mounds may erode easily which can mean that they may have already had no visible appearance on the surface in the 20th century (*Dobiat 1980*, 53, 54).⁴

The above mentioned tinier burial mounds of the Höchschusterwald-group cannot differ from the burials of the flat cemeteries in any ways. From the cemeteries which are in the main focus of this paper we only have one example where a clue suggests that the later grave is on the place of cremation. Burial 3 at Tatabánya-Alsó Vasútállomás had a heavily burnt floor and the soil of the grave was mixed with a significant amount of charcoal. Therefore, according to Tibor Kemenczei's interpretation of the situation, the grave is on the same location where the burning of the body took place (Groma 2015, 154). We have no data for the same behaviour from Tatabánya-Dózsakert or from the Süttő flat cemetery and archaeological reports did not prove the existence of any central, common place of cremation. We only have ambiguous information about pyres in connection with the flat cemeteries from Transdanubia. Around the above mentioned Sághegy, there existed a cemetery of this type. Jenő Lázár mentions that 20 burials were excavated on the SE slopes of the mount in 1943. In these graves there was no graphite painted ceramic but Jenő Lázár identified the pottery as Lausitz-style. Through the excavation they did not notice clues of burning but local wine-growers reported about features in the surrounding which we can interpret as remains of pyres. Unfortunately they had already disappeared by the time of researches there (*Lázár 1951, 37*).

Features which we may interpret as central places of the cremation are published from the nowadays Austria and Slovakia. In a letter from 1906, J. Bayer reported some dubious information about a "burning pit" from the cemetery of Statzendorf, from Austria. According to his notes, the rounded pit was 2.40 meter deep and the graves appeared densely around it. On the floor and on the walls of the pit the clues of intensive burning were identifiable (Rebay 2006, 43). A heavily burnt, ashy part of the surface with a 3×2.5 meter extension is also known from the cemetery of Franzhausen, from Austria. This feature dates back to the transition of the Urnfield-, and Hallstatt-periods of the site (Neugebauer 1996, 382). There were 7 circular, heavily burnt patches with an approximately 2.2 meter diameter in Chotín (Hetény) Ia cemetery in Slovakia. These features scattered consistently among the graves the infill of which contained just some cremated bones (*Dušek 1966*, 13, 14). It is also worth mentioning here, that there is another rounded pit in the middle of the Hohenau//March cemetery from Austria. This had a bigger extension with 30 meter diameter and the ashy, burnt layer had thickness of 2.2 meter. The infill contained ceramic sherds – among others fragments with black and red paintings (Neugebauer 1972, 5, 6). This feature differs a lot in its size from the above mentioned ones. The excavators interpreted it as a burnt building. But it is also possible that the common cremations took place here in a building which may have probably been destroyed in a fire.

On the basis of the examples mentioned in this part of the paper, it seems to have been a behaviour in a wider area that people buried under a mound could get their own pyre, while supposedly central places of cremation were used despite of the few data – in case of

⁴ Other burials where the grave is probably on the previous place of the pyre: graves 33, 36, 43, 48 of the Offenmacherwald-group and graves 14, 21, 30, 38, 42 and 49 of the Grellwald-group.

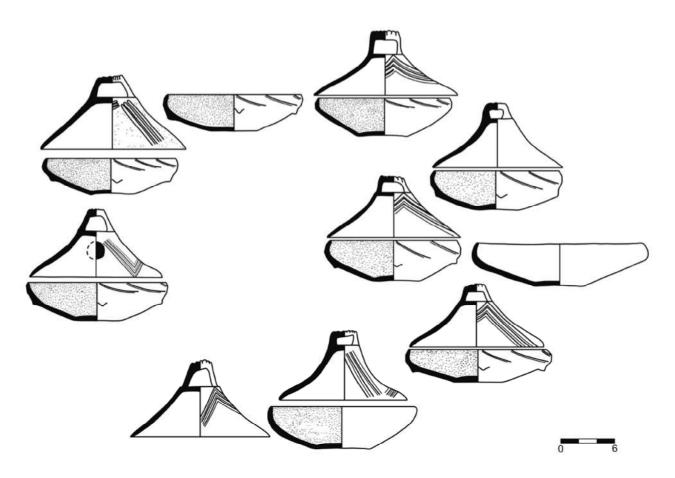


Figure 3. Set of bowls with lids from the Süttő tumulus (position after Vadász 1983, 30, Abb. 9)

the flat cemeteries. We can also say in general, that building a pyre required a huge amount of resources from the mourner community (wood, needs for the cremation process). It may also have been the reason why only some prominent people (probably only members of the local elite) could afford to have their own pyre (*Eles 1995*, 22; *Freudenberg 2007*, 58, 59; *Thompson 2015*, 10, 11).

SETS AND FRAGMENTS OF CERAMIC

The most typical grave goods of the Early Iron Age burial mounds (*Teržan 1986*, 227) and flat cemeteries (*Groma 2015*, 156; *Nagy 1939*, 50, Abb. 5) are those ceramics which come to light most often in a well reconstructable form despite the conditions of the grave and which are usually ornated with statuesque or painted decorations. The ceramic forms which were placed next to the deceased may be different between the closer regions, but we can presume sets of pottery which were returning accessories of the graves (for instance to the Soprongroup see *Teržan 1986*, 228).

In the Süttő burial mound one middle size and two big, deep bowls with handle along with two big pots with conical necks stood next to the wall in the SW part of the chamber on a platform which was a plastered timber (*Vadász 1983, 27, Abb. 9*). We only have little information about bigger pots next to the chamber wall in the case of the burial mounds of Transdanubia. Nearby the wall of the corridor and the eastern chamber wall of tumulus 2 in Vaskeresztes, Mária Fekete identified wooden shelves which held a big amount of pottery – especially bowls in the corridor (*Fekete 1981, 143*).

Nevertheless there are more examples from the flat cemeteries of the Kalenderberg-group or the Sopron-group of the Hallstatt-culture where big pots with a conical neck – which /160/

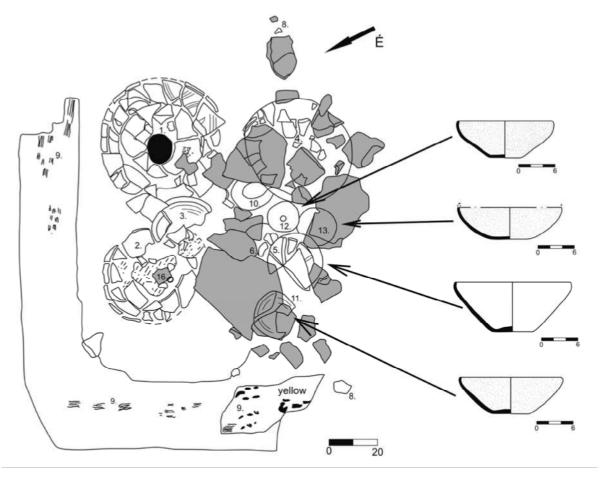


Figure 4. Set of bowls from the Süttő flat cemetery, grave 4. Author: É. V. Vadász, K. Novinszki-Groma

probably contained some liquid for the deceased – stood in a line next to the western edge of the grave pit. Éva Ďurkovič reported about a similar context in 7 cases from the 13 burials of Fertőrákos cemetery (graves 1, 2, 6, 9-11, 13; *Ďurkovič 2009*, 65, Abb. 3, 4, 9, 13, 14, 16, 18). E. Ďurkovič also called the attention to similar positions of the big pots in some graves from the cemetery of Loretto, from the nowadays Austria (*Nebelsick et al. 1997*, Abb. 11; 13).

Another set of the ceramic grave goods from the Süttő tumulus is also worth mentioning. Nine deep bowls with inverted rim stand in a circle position southward from the above mentioned big pots but also on the plastered timber platform. Eight of them were covered with a lid (Figure 3; *Vadász 1983*, 27, Abb. 9). We have another example from the Northeast-Transdanubian Hallstatt-group where a set of deep bowls with inverted rim were positioned in a circle and covered by lids. This is the lonely tumulus from Tata where 4 vessels were placed into the mound in this order in accordance with the observations of Károly Kincses who found the burial mound (*Vadász 2003*, 98, Abb. 1; Taf. IV: 1-9).⁵ Further parallels lead us again into the cemeteries of the Kalenderberg-group. In Nové Košariská, in tumulus 6 there was a blockhause-style wooden chamber with a nearly square layout covered by the coat of the mound. In the western corner of the chamber a vessel-set with six miniature pots with a conical neck and six tiny bowls placed in a circle were found. This collection probably belonged to a children's burial (*Pichlerová 1969*, Abb. 57; *Teržan 1990*, 176).

Vessel sets with more bowls are also common in the Early Iron Age flat cemeteries of Northeast-Transdanubia. Among them we can mention grave 4 from the Süttő graveyard. This burial was unique because of the wooden remains in the north and west side of the

⁵ Éva Vadász already called the attention to the bowl-set of Tata as a parallel to the Süttő collection. In Süttő some lids were perforated which may mean that the bowls contained some steaming or fuming material.

grave pit which we can interpret as an inner structure. Under the stone cover a deep bowl stood on the south corner of the burial. Around this bowl in the west there was a mug and 4 further bowls with inverted rim which had a graphite coating and were polished in the inner and outer surfaces as well – so they were similar to the bowls from the tumulus except for the knobs on the shoulders and the leaning cannelures on the rims (Figure 4).

Bowls with inverted or straight rims are the most usual accessories of the flat graves in other flat cemeteries of North-Transdanubia as well as the big pots with a conical neck, the deep bowls with or without handle and the rough pots or mugs. The shape of the bowls – or sometimes even little cups – is a hemispherical or truncated cone (*Groma 2015*, 156, Abb. 9; *Lengyel 1959*, 163; *Nagy 1939*, 50, Abb. 5). In most of the cases sets of 2-4 pieces of these bowls or cups come to light from the graves of the flat cemeteries and these vessels are either placed next to each other or one pot is placed into another. Good example for that is the grave "D" from Tatabánya-Dózsakert where in the SW part of the burial 3 almost identical bowls stand next to each other while a fourth bowl with a truncated cone shape body was found a bit farther.

In connection with another group of ceramic findings of the Süttő burial mound we would like to refer to a special type of the pottery that comes to light sometimes from the Early Iron Age tumuli. Vessels belonging to this group are usually fragmented, and sometimes it is difficult to reconstruct the whole, original form. These pots might have a different role in

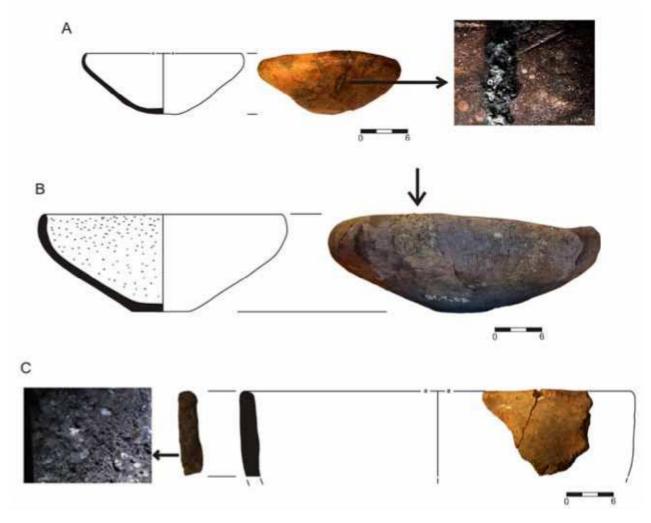


Figure 5. Ceramic from the Süttő tumulus with different clues of secondary burning (microscopic background: SteREO Discovery V8 microscop, PlanApo S 1.0X Zeiss objective, AxioCam MRc 5 camera, purchase of the microscope supported by KMOP-4-2-1/B-10-2011-0002 Program)

the burial process than other vessels which we showed above and are usually parts of sets. It is highly probable that the fragmented shreds were on the pyre next to the body through the cremation (Egg/Kramer 2013, 381; Vadász 1983, 35; 1986, 255).

We know more shreds from the excavated tumulus of Süttő which show traces of a burning or a bigger heat-effect. The surface of a bowl with inverted rim (inv. nr. 81.1.28., Figure 5: B) is grey, light brown and orange-reddish in different parts which might have been caused by a secondary burning. We can also see that the outer surface of the rim is bubbly, glass-art which may be the result of a similar effect. More interesting is a deep bowl (inv. nr. 81.1.34., Figure 5: C) in case of which there was a remarkable blistered surface on the brea-

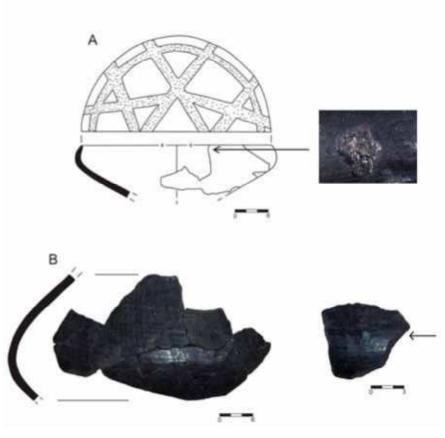


Figure 6. Secondary burnt ceramic from the Süttő tumulus with regard to the forms and decorations (microscopic background: Ste-REO Discovery V8 microscop, PlanApo S 1.0X Zeiss objective, AxioCam MRc 5 camera, purchase of the microscope supported by KMOP-4-2-1/B-10-2011-0002 Program)

kage of the rim. It may mean that this pottery broke because of the heat-effect or it was already a sherd when the burning reached its surface.

Another interesting phenomenon in case of the fragmented ceramics from the Süttő burial mound are the little bronze – sometimes probably even iron – pieces burnt into the surface of the ceramics. A good example for this could be the deep bowl with inverted rim (inv. nr. 81.1.26., Figure 5: A). These notifications indirectly show that the therm-degree of the pyre might have been very high.⁶

In connection with the class of the secondary burnt and fragmented ceramic from the Süttő burial mound, it is also important to underline that the forms of the vessels did not differ from those shapes which are represented in the grave-sets. Among the group of ceramic which probably got up to the pyre we find big pots with conical necks, deep bowls with or without handle, bowls with inverted rim or with a truncated conical body – which are the typical ceramic forms of the graves and settlements of the Hallstatt-culture in Transdanubia and in the surrounding area. It is also worth mentioning that pieces of this second group are not decorated in a different way like the vessels which were probably made especially for the burials, as we can see on further examples from the Süttő tumulus with graphite-painted inner motifs (deep bowl with inverted rim, inv. nr. 81.1.29., Figure 6: A) or polished surfaces with graphite-coatings (pot with conical neck or a deep bowl, inv. nr. 81.1.8., Figure 6: B) which also appear among these ceramics.

Sherds which show clues we noticed in the second group of the Süttő burial mound are

⁶ Examinations in modern crematory showed that 500-600 degrees need for the complete cremation of a body. The human remains get a white colour to the end in that conditions (*Depierre 2008*, 18).



Figure 7. Little bowl from Tatabánya-Dózsakert, grave 12 with a multicoloured piece of this vessel.

Drawing and photo by: K. Novinszki-Groma

quite rare in the flat cemeteries. Grave 12 of Tatabánya-Dózsakert was a deep pit where fragments of different vessels were laying in an unsettled position. Among there them were shreds which had a multicolour surface - probably caused by a secondary burning (Figure 7). Attila Molnár mentioned some graves of the Hegyfalu cemetery where secondary burnt frag-

ments were unearthed from the infill of the burial. He interpreted them as pieces from the place of cremation which were later placed in the grave (*Molnár* 2006, 207).

It is also important to mention that it is not the first work which recognized the existence of the diversification of vessel garnitures and secondary burnt sherds in Early Iron Age graves (*Egg/Kramer 2013, 379-381; Miroššayová 2015, 89; Nebelsick et al. 1997, 32*). Louis D. Nebelsick focuses on this problem in one of his last studies. He showed through several examples that the habit of secondary burnt ceramic sherds and pottery garnitures depositions were placed into the graves existed from the dawn of the Urnfield-period (13th century BC, Rei BD-Ha A period). This practice survived as a long tradition till the end of the Early Iron Age, where it can be observed in case of the ostentatious graves, like the Süttő burial mound (*Nebelsick 2016, 17-28*).

PLANT AND ANIMAL REMAINS IN THE EARLY IRON AGE GRAVES

Like the above analysed vessel-sets and fragments, the plant and animal remains can also appear around or in the remains of the pyre and they can come separately from them in the vicinity of the pottery sets. Based on the position in the grave-context we must interpret these remains in different ways, and they also might have a different role in the burial rite.

There is no data about grains or remains of any fruits from the pyre of the burial mound in Süttő, but 17 kg of burnt human and animal bones is known from the tumulus. Among them remains of horses are dominant while dog and pig also appeared (identification of István Vörös; *Vadász 1983*, 35; 1986, 255). Plant and animal remains were in a huge amount from the remains of the pyre in the two excavated tumuli of Vaskeresztes. We have information about seeds of wheat, barley, wild cherry and hazelnut as plant remains and burnt bones of horse, beef, sheep and goat from tumulus 1. Next to cereal grains, "nut", hazelnut and seeds of apple, and burnt animal bones without identification of species were found in tumulus 2 (identification of István Vörös; *Fekete 1981*, 135, 149). There are more examples of hazelnut remains from Early Iron Age tumuli. The reports of Radimskỳ from the beginning of the 20th century called the attention to hard-shells of these nuts in the graves of the Forstwald-group and among the burnt remains of the Kürbischhansl-tumulus (*Dobiat 1980*, 151).

Another group of the animal remains from the Süttő burial mound laid around the vessels near the SW wall of the chamber on the plastered platform. There were remains of pig with a split skull next to one of the big pots with conical neck. Postcranial bones of the pig were covered by a deep bowl. A skull of a calf with unburnt bones of dog, sheep, cattle and pig were also placed in the plastered platform (identification of István Vörös; *Vadász 1983*, 27, 32). It is possible to interpret these findings as the remains of food offering or the grave good which were placed to the grave next to the deceased. However, it is also possible that

there were different offerings, for example ones burned on the pyre or elsewhere. Bones of domestic animals appear often in the tumuli of Transdanubia in similar context. Remnants of at least two pigs with traces of skinning on their legs with a skull of a sheep and remains of two rabbits came to light from tumulus 114 at Százhalombatta (identification István Vörös; *Holport 1986*, 94). Jenő Lázár reported about bones of at least one horse, cattle and two pigs from the tumulus of Mesteri in the vicinity of Sághegy which we mentioned already above (*Lázár 1951*, 38).

Plant remains appear rarely in the flat graves of Northeast-Transdanubia. We only have some ambiguous data from the Süttő flat cemetery, where grain identified as millet was present in grave 11 in the field documentation, but the reports mention also other cereal species from grave 12. We have no information about plant remains from the burials of the cemeteries around Tatabánya or from the surrounding area in the Early Iron Age.

Unburnt animal bones appear in different scale in the flat graves of the research area. In Süttő 15 graves out of 82, in Tatabánya-Dózsakert 22 graves out of 43, Tatabánya-Alsó Vasútállomás 5 graves out of 16 contained this kind of findings. Animal bones came to light in a smaller amount from the graves of Halimba-Cseres, only from 2 burials of the 34 excavated graves. In burial 6 bones of a horse were found (*Lengyel 1959*, 159-161). From Nagydém-Középrépáspuszta most of the bones are from pig, while the horse remains were only present in one grave while animal bones from another burial were identified as deer (*Nagy 1939*, 50).

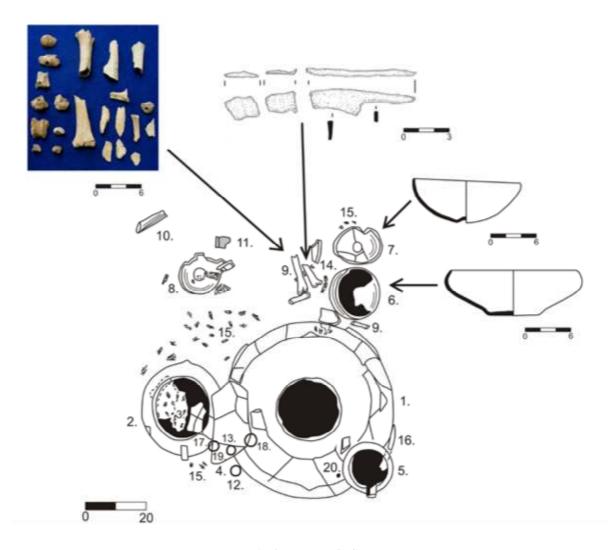


Figure 8. Grave goods from Süttő, flat cemetery, grave 80. Photo by: M. Merczi, Balassa Bálint Museum, Esztergom; Drawing by É. V. Vadász and K. Novinszki-Groma

From the farther surrounding we can mention the Fertőrákos-Kőhidai dűlő cemetery which belongs to the Sopron-group. There only one grave contained unidentified bones as we know from the work of \acute{E} . $\check{D}urkovič$ (2009, 79). In Nové Zámky 29 out of the excavated 38 graves dated to the Hallstatt-period. Unburnt animal bones were found in 6 of the Early Iron Age burials (Stegmann-Rajtár 2009, 111, 112).

It is a farther example, but still important to mention that animal bones were studied in more detail and are published from the cemetery of Vrádiste in Western Slovakia (*Ambros 1960, 175; Pichlerová 1960, 168*). Most common are the bones of goat and sheep, but remains of pig and cattle also appeared. The analysis indicates that the fleshy parts of the skeletons are not very frequent in the burials (*Ambros 1960, 175*). There are different ways to interpret this phenomenon. For example the animal bones in graves might represent the residues of meaty foods given to the deceased or the bones had a symbolic meaning as a "viaticum" for the afterlife. However, it is also possible, that only a small part from the meal of the burial feast was placed next to the deceased.

In the graves of the flat cemeteries, animal bones without any traces of burning were often found around bowls and/or cups with straight or inverted rim and truncated cone or hemispherical body. These vessels belong to the types which we could define as parts of sets in these graves. As a good example for this context we can mention the prominent rich grave 80 of the Süttő flat cemetery. Here the animal remains were unearthed from the northeast corner of the grave just next to 2 little bowls with inverted rim and an iron knife (Figure 8).

To summarize the results of the evaluation of the plant and animal remains from the Early Iron Age burials from Northeast-Transdanubia we come to the same result as already mentioned in the archaeological literature for the wider East-Hallstatt cultural unit. These graves contain mostly remains of different domestic animals, while bones of wild species are rare. The animal bones may be interpreted as residues of the food offerings or grave goods (*Teržan 1986*, 234). It is also interesting to note that bones of pig, goat and sheep are dominant in our research area just like in the cemeteries of the Western area of the Hallstatt-culture (*Stadler 2010*, 53, 54, Abb. 17). The widespread occurrence of remains of pig suggests that this animal had a special role in the burial rite. This fact is also interesting because in the Greek-Roman world pork was rated as an impure animal but it was also one of the prime sacrificial offerings. In the Late Iron Age pig remains are very common part of the grave inventory and written sources also report Celtic feasts where the most prominent male guest could have the first and nicest slice from the roasted pork (*Méniel 2012*, 232; *Stadler 2010*, 116, 117).

CONCLUSION

The paper focused on the Early Iron Age cemeteries from Northeast-Transdanubia. Some research results have already been published, especially concerning the burial mound and flat cemetery of Süttő and the flat cemeteries of Tatabánya-Dózsakert and Tatabánya-Alsó Vasútállomás. I observed some typical features of the burial customs in these sites and also compared the results with those from the narrower area of Transdanubia and with some cemeteries of the East-Hallstatt cultural unit. The main aim – besides publishing the data – was to highlight the similarities between the burial customs of the two main types of the Early Iron Age burials, the tumuli and the flat cemeteries and also to call the attention to the differences between the elements of the rite.

The most general characteristics of the Early Iron Age burial customs – such as the cremation of the deceased in clothing or placing of the human remains into the grave pit – did not get a special attention in this work but in the first part we focused on the unattended question of the burial pyres and in general on the places where the cremation of the bodies took place. Based on the burial mound of Süttő we managed to collect more examples from Transdanubia where the remains of the burial pyre were still present within the tumulus (Tumuli of Mesteri, Sándorháza and Csönge nr 1 around the Sághegy, the two excavated burial /166/

mounds at Vaskeresztes, tumuli of Pécs-Jakabhegy and Tihany). However, in case of the flat cemeteries we almost never have traces of pyres in the grave areas. The only exception is grave number 3 from Tatabánya-Alsó Vasútállomás. In the same time examples from Early Iron Age cemeteries of nowadays Austria and Slovakia suggest that in the flat cemeteries central places of cremation were in use.

The second part of our work focuses on the ceramic grave goods from the Early Iron Age burials. First, we observed the group of vessels which might have been made especially for the graves. The pottery vessels are highly ornamented and in most cases can be fully reconstructed. In this group we can find 2-3 pieced sets of bowls or cups with straight or inverted rim. Animal bones without any signs of burning and iron knives are also often laid around these vessels.

Examples of the second group of ceramic grave goods come from the burial mound of Süttő. Visual mutations like the signs of a secondary burning, bubbly, glass-art appearances or melted remains of a bronze piece were frequent on the surface of the fragments in that group. We can determine these vessels as they were on the pyre while the deceased body was burning. These observations prove indirectly that the temperature of the pyre might have been higher than 600-700 °C which is necessary for the burning of human bones proved by experimental archaeological studies. Ceramic sherds with traces of secondary burning are known in a smaller amount from the graves of the flat cemeteries. Here belong examples from burial 12 of Tatabánya-Dózsakert and we also find some data about secondary burnt ceramic fragments in the infill of some graves from Hegyfalu.

In case of the plant and animal remains from the Early Iron Age burials in the research area we can say that the noted examples suggest that charred plant remains (grains, fruit seeds) appear among the remains of the pyre left within the burial mounds (Süttő, Vaskeresztes, and probably some in Kleinklein). Burned animal bones are also known from the same context of the pyre remains while unburned animal remains came to light mostly in the surrounding of the vessel sets. There are no published data about charred or uncharred plant remains and burnt animal bones from flat cemeteries in the researched area. But unburnt bones of pig, ovicaprids (goat and/or sheep), sometimes also horse and domestic cattle were recovered from flat cemeteries which we mostly interpret as symbolic "viaticum" or leftovers from the burial feast.

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RESUMÉ

Nové dáta o spôsoboch pochovávania v staršej dobe železnej na príkladoch zo severovýchodného Zadunajska

Materiál, ktorý je v práci hodnotený, t. j. nálezy z mohyly v Süttő a plochých pohrebísk v Süttő, Tatabánya-Dózsakert a Tatabánya-Alsó Vasútállomás, už bol publikovaný, v predloženom príspevku sa naň ale pozeráme z iného zorného uhla. Na menovaných lokalitách boli zaznamenané určité elementy pohrebného rítu, ktoré sú konfrontované s nálezmi v užšom priestore Zadunajska aj v širšom kontexte pohrebísk rozsiahlejšieho východohalštatského kultúrneho okruhu. Okrem publikovania nových zistení, je hlavným zámerom ozrejmiť podobnosti u dvoch hlavných typov hrobov staršej doby železnej, t. j.

mohýl a hrobov na plochých pohrebiskách, a zároveň upriamiť pozornosť na rozdiely v pohrebných zvykoch.

V centre záujmu prvej časti tejto práce stoja doteraz opomínané otázky problematiky pohrebnej hranice, resp. miest, kde došlo k spaľovaniu mŕtvych. Väčšinou najvšeobecnejšia charakteristika pohrebných zvykov staršej doby železnej – ako spaľovanie mŕtvych v odeve či ukladanie ľudských pozostatkov do hrobovej jamy – ostáva na okraji pozornosti. Vychádzajúc z nálezu v Süttő, kde sa pod plášťom mohyly našli zvyšky pohrebnej hranice, bola podobná situácia odhalená aj u mohyly v Mesteri, Sándorháze, v mohyle č. 1 v Csönge pri Sághegyi, v dvoch mohylách vo Vaskeresztesi, ako aj v mohylách v Pécs-Jakabhegyi a Tihanyi. Na plochých pohrebiskách nemáme takmer žiadne indície o tom, žeby sa hroby nachádzali na miestach, kde sa predtým uskutočnilo spaľovanie. Jedinou výnimkou je hrob č. 3 z Tatabánya-Alsó Vasútállomás. Na základe evidencií z plochých pohrebísk z územia dnešného Slovenska a Rakúska je pravdepodobné, že tu sa využívali spoločné centrálne situované hranice.

V druhej časti príspevku je záujem sústredený na keramické prílohy v hroboch zo staršej doby železnej. Najprv sú analyzované nádoby, ktoré mohli byť vyrobené špeciálne pre účely pohrebu. Sú dobre rekonštruovateľné a najčastejšie sú zdobené. V tejto skupine sú 2-3 kusové sady misiek alebo šálok s rovným alebo zatiahnutým okrajom. V blízkosti týchto nádob spravidla ležia zvieracie kosti, ktoré nenesú stopy spaľovania, a železné nože.

Príklady ďalšej skupiny keramických prídavkov pochádzajú z mohyly v Süttő. Sú pre ňu typické viditeľné zmeny (mutácie) ako bublinovitý, sklovitý vzhľad či na povrchu nádob pripečené zlomky rozpustených bronzových predmetov, ktoré sú dokladom ich sekundárneho prepálenia. Môžeme predpokladať, že tieto nádoby boli na hranici v čase, keď tam horelo telo zosnulého a tiež dokladajú, že teplota hranice bola veľmi vysoká. Na základe archeologických experimentov, pravdepodobne prekračovala teplotu 600-700 °C potrebnú na spálenie ľudského tela. Keramické predmety so stopami sekundárneho prepálenia sa na plochých pohrebiskách vyskytujú iba sporadicky. Príklady poznáme z dvanástich hrobov na pohrebisku v Tatabánya-Dózsakerte a niekoľkých hrobov z Hegyfalu.

V prípade rastlinných zvyškov a zvieracích kostí z hrobov zo staršej doby železnej sa zdá, že zuhoľnatené zvyšky (obilné zrná, časti plodov) sa objavujú medzi pozostatkami hranice v mohylách zo Süttő, Vaskeresztes a Kleinklein. Obhorené kosti zvierat sú známe z rovnakého kontextu, pričom žiarom nepoškodené kosti zvierat sa objavujú prevažne v okolí keramických setov. Neobhorené zvyšky kostí ošípanej, ovce/kozy, niekedy aj koňa a hovädzieho dobytka pochádzajú častejšie z hrobov na plochých pohrebiskách. Interpretujeme ich ako symbolické "viaticum" alebo ako zvyšky jedla z pohrebnej hostiny.

Zoznam obrázkov

- Obr. 1. Mapa hodnotených archeologických lokalít a ďalších dôležitých mohýl a plochých pohrebísk. A skúmané lokality; B mohyly; C ploché pohrebiská; 1 Süttő; 2 Tatabánya-Alsó Vasútállomás; 3 Tatabánya-Dózsakert; 4 Halimba-Cseres; 5 Nagydém-Középrépáspuszta; 6 Hegyfalu; 7 Fertotákos Kőhidai dülő; 8 Nové Zámky; 9 tumuli of Sághegy (Mesteri, Sándorháza, Csönge); 10 Vaskeresztes; 11 Pécs-Jakabhegy; 12 Szalacska; 13 Százhalombatta; 14 Tata; 15 Sopron. Autor: K. Novinszki-Groma
- Obr. 2. Zvyšky pohrebnej hranice pod plášťom mohyly. A: Süttő (podľa *Vadász 1983, 22,* Abb. 4); B: Pécs-Jakabhegy, mohyla 10 (podľa *Maráz 1979, 37,* Abb. 13); C: Mesteri (okolie Sághegy, podľa *Lázár 1951,* Pl. XXI: 2)
- Obr. 3. Súprava misiek s pokrievkou z mohyly v Süttő (rozmiestnenie podľa *Vadász 1983,* 30, Abb. 9)
- Obr. 4. Súprava misiek z plochého pohrebiska v Süttő, hrob 4. Kresba: É. V. Vadász, K. Novinszki-Groma
- Obr. 5. Keramika z mohyly v Süttő s rôznymi stopami sekundárneho prepálenia (mik-/170/

roskopická snímka: microskop Zeiss SteREO Discovery V8, objektív Zeiss PlanApo S 1.0X, kamera AxioCam MRc 5, zakúpenie mikroskopu s finančnou podporou programu KMOP-4-2-1/B-10-2011-0002)

Obr. 6. Druhotne prepálená keramika z mohyly v Süttő. Detail na tvary a výzdobu (mikroskopická snímka: microskop Zeiss SteREO Discovery V8, objektív Zeiss PlanApo S 1.0X, kamera AxioCam MRc 5, zakúpenie mikroskopu s finančnou podporou programu KMOP-4-2-1/B-10-2011-0002)

Obr. 7. Tatabánya-Dózsakert, hrob 12. Malá viacfarebná miska. Kresba a foto: K. Novin-szki-Groma

Obr. 8. Ploché pohrebisko v Süttő, hrob 80, rozmiestnenie nálezov. Foto: M. Merczi, Balassa Bálint Museum, Esztergom; kresba: É. V. Vadász, K. Novinszki-Groma

Translated by Katalin Novinszki-Groma & Szilvia Vad

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