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#### RECENSIONES

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#### SZALACSKA AND HALLSTATT PERIOD METAL VESSELS FROM WESTERN HUNGARY

Bence Soós\* 🝺 – Balázs Lukács\*\* 🕩

Conventionally, Nagyberki-Szalacska is thought to be one of the most significant Early Iron Age (EIA) sites in Western Hungary. Its importance is underlined by a few metal sheet fragments unearthed in 1941 during the looting of a tumulus of the Szalacska cemetery. Their rich decoration and manufacturing marks, and other traces suggest that the metal sheet was used as a cover for a vessel made from some organic material. The decoration of the metal sheet provides new information regarding the cultural contacts between Nagyberki-Szalacska and the EIA centres of power in Southeast Austria. In addition to the metal sheet fragments from Szalacska, a hitherto unpublished ensemble of bronze vessel fragments kept in the Hungarian National Museum (HNM) highlights the need to revise the information about the EIA toreutics in Western Hungary.

Nagyberki-Szalacskát a kora vaskor egyik legfontosabb dunántúli lelőhelykomplexumaként tartja számon a kutatás. A lelőhely jelentőségét támasztják alá azok a bronzlemeztöredékek, amelyek 1941-ben, az egyik halom kifosztásakor kerültek elő. A gazdagon díszített lemez szerkezete, valamint a rajta megfigyelhető készítéstechnikai jellegzetességek és egyéb nyomok arra utalnak, hogy valamilyen szerves anyagból készült edény díszborításaként használhatták. A lemez díszítése a szalacskai kora vaskori közösség és a délkelet-ausztriai Hallstatt-kori hatalmi központok közötti kapcsolatokhoz szolgál új adalékként. A dunántúli Hallstatt-kor fémedényművességére vonatkozó ismeretek átértékelését a szalacskai lemez mellett egy a Magyar Nemzeti Múzeum gyűjteményében őrzött, eddig publikálatlan lelet is szükségessé teszi.

Keywords: metal vessels, Nagyberki-Szalacska, Early Iron Age, tumulus burials

Kulcsszavak: fémedények, Nagyberki-Szalacska, kora vaskor, halmos temetkezések

#### Introduction

The Rippl-Rónai Museum of Kaposvár holds an assemblage of several metal sheet fragments of various sizes (inv. no. 1955.27.1–4). In 1954, Károly Sági was asked to investigate pieces of a Roman Period gold jewellery assemblage found, allegedly, near the prehistoric hilltop settlement Nagyberki-Szalacska (Somogy County, Hungary) a few decades earlier. When he contacted the family of the person who had found the items, he learned that parts of the find had been previously handed over to József Fekete, a local teacher and collector of antiquities. Károly Sági visited Fekete, who, after some argument, was ready to hand over the gold pieces. Interestingly, however, Sági also managed to obtain fragments of what he described as an Early Iron Age *situla*. The metal sheet fragments were inventoried the following year. Although his reports remain silent about the provenience of the vessel fragments, these came to light, according to the inventory book of the museum, from one of the mounds of the well-known tumulus cemetery lying north and west of the prehistoric settlement of Szalacska. Apparently, a local resident looted one of the mounds in 1941, and found the metal sheet fragments in a ceramic pot that also con-

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*Fig. 1* 1: The site Nagyberki-Szalacska on the maps of the 1941 Military Survey of the Hungarian Kingdom (source: https://maps.arcanum.com/hu/map/hungary1941/ accessed on 26. 10. 2022); 2: satellite image of the site Nagyberki-Szalacska; 3: the possible findspot of the bronze sheet fragments. Blue circles highlight mounds marked by the surveyors in 1941 and red squares the wells near Szalacska farm *1. kép* 1: Nagyberki-Szalacska lelőhely Magyarország Katonai Felmérésének (1941) térképlapjain (forrás: https://maps.arcanum.com/hu/map/hungary1941/ hozzáférés: 2022. 10. 26.); 2: Nagyberki-Szalacska lelőhely műholdfelvételen; 3: a bronzlemez előkerülésének lehetséges zónája. A kék körök az 1941-es felmérésen jelölt halmokat,

a piros négyzetek a szalacskai major kútjait jelzik

tained ashes. Unfortunately, information about the number of metal sheet fragments in the grave and the overall composition of the grave goods is entirely absent.

It is important to note that the location of the looted mound can only be estimated with certain limitations. According to the notes in the inventory book, the mound was situated next to the 'ruins' of the farm at Szalacska, i.e., the abandoned farm buildings north of the well-known prehistoric hilltop site. In addition, the record of the vessel fragments in the card catalogue of the museum reads that the metal sheet pieces came to light from a mound near a well adjacent to the farm at Szalacska. The map of the 1941 Military Survey of the Kingdom of Hungary (carried out in the year of the discovery of the metal sheet fragments) shows two wells south of the farm buildings. Hence, the tumulus belonged to the same group of mounds where Ernő Kammerer and Antal Hencz (in 1876), Sándor Gallus (Kabay 1960) and Tibor Kemenczei (Kemenczei 1974b) conducted excavations in 1943 and 1974, respectively. Furthermore, it seems reasonable to assume that the burial mound from which the metal sheet fragments came to light could have been situated among the southern tumuli of the northern tumulus group (Fig. 1).

#### Description of the pieces

The metal sheet fragments discovered in 1941 are currently held in the Rippl-Rónai Museum of Kaposvár collection. The find assemblage comprises four larger and six small pieces:

*Fragment 1.* It is the largest piece that could be reconstructed. The metal sheet bears a punched and embossed decoration; it has six preserved and one missing flaps along its intact horizontal edge. These flaps are bent to the reverse of the sheet. Each preserved flap has a single perforation in the middle, possibly related to a rivet or peg. The weight of the piece is 25.53 g. The thickness of the metal sheet is 0.37 mm (*Fig. 2, 1*).

*Fragment 2/a.* The metal sheet bears a punched and embossed decoration. This piece features the longest continuous detail of the decoration comprising two sets of concentric meanders and large embossed lentils with punched lines around and between them. The flaps have broken off along its horizontal edge, and now only small vertical incisions allude to their former presence. The weight of the piece is 17.41 g (*Fig. 2, 2/a*).

*Fragment 2/b.* The metal sheet fragment bears a punched and embossed decoration. This is the only fragment

which shows how the vertical edge of the sheet could have looked like. Apparently, there are at least two perforations along this vertical edge; these seem to be rivet holes. Fragment 4 fits *Fragment 2*. The weight of the piece is 6.75 g (*Fig. 2, 2/b*).

*Fragment 3/a.* The metal sheet fragment bears a punched and embossed decoration. The structure and motifs of the decoration match those seen in Fragments 1 and 2. There are five flaps along its horizontal edge. Akin to Fragment 1, these flaps are bent to the reverse of the sheet. However, contrary to that, the flaps on Fragment 3 are considerably shorter, suggesting that these two fragments belong to different – possibly opposite – edges of the vessel. The weight of the piece is 9.7 g (*Fig. 2, 3/a*).

*Fragment 3/b.* This fragment also belongs to one of the horizontal edges of the metal sheet, as it fits *Fragment 3*. In addition, Fragment 5 also has a flap bent to the reverse of the sheet. The weight of the piece is 0.55 g (*Fig. 2, 3/b*).

*Fragment 4*. The metal sheet fragment bears a detail of the punched and embossed decoration. The weight of the piece is 0.36 g (*Fig. 2, 4*).

*Fragment 5*. The metal sheet fragment bears a detail of the punched and embossed decoration. The weight of the piece is 0.28 g (*Fig. 2, 5*).

*Fragment 6.* The metal sheet fragment bears no decoration. The weight of the piece is 0.28 g (*Fig. 2, 6*).

*Fragment 7*. The metal sheet fragment bears a detail of the punched decoration. The weight of the piece is 0.19 g (*Fig. 2, 7*).

*Fragment 8.* The smallest piece of the metal sheet. The weight of the piece is 0.08 g (*Fig. 2, 8*).

The fragments have been cleaned and restored at some point in the past. Due to the heavy corrosion and the restoration process, the pieces are heavily damaged, fragmented, and in poor condition, thinned and often worn through. Two large joining fragments present a corner of the decorated metal sheet (Fragments 2/a and 2/b). Since the two other large pieces cannot be fitted to the joining fragments, the decorated metal sheet can only be reconstructed using decoration structure and analogies. Based on the structure of the decoration, the metal sheet could have either been approximately 28 or 15-16 cm wide. Although they had been inventoried in 1955 (inv. no. 55.27.1-4), the metal sheet fragments do not appear among the Hallstatt Period bronze vessels from Hungary in Pál Patay's 1990 monograph.







*Fig. 2* Decorated bronze sheet fragments from Szalacska *2. kép* Díszített bronzlemeztöredékek Szalacskáról



*Fig. 3* Microscope images of the bronze sheets from Szalacska *3. kép* Mikroszkópos felvételek a szalacskai bronzlemeztöredékekről

#### Technological observations

Presumably, after casting, the ingot of the metal sheet was shaped by hammering. Due to subsequent surface treatments, traces of this process, however, are not visible on the fragments. The traces suggest that the tool the manufacturer used to refine the surface of the metal sheet was a coarse rasp; the next step was probably the finishing of the surface. This part of the manufacturing process must have preceded the designing and making of the decoration because the traces left by the tool used during surface treatment do not evade the embossed decoration but go onto the pattern (*Fig. 3, 3*).

Next, the decoration was outlined with thin incisions on the reverse of the sheet. At some points, due to mistakes, the guiding lines were renewed (*Fig. 3, 1*). The tool used to create the guiding lines was pointy or very sharp because the traces it left resemble chiselling. We assume the tool had a narrow, sharp edge because the edges of the lines are not curved, and their cross-section is V-shaped. However, it cannot be ruled out that the craftsman used an etching needle. Unfortunately, corrosion seems to have removed all traces that could help us make such a delicate distinction.

Following the outlining of the pattern, the elements of the embossed decoration were created using different embossing tools on the reverse of the sheet. In the case of the small punches, the pattern simply follows the guiding lines (*Fig. 3, 1*). In contrast, the large lentil-shaped motifs were not outlined beforehand, as no marks made by a compass or traces of engraving can be seen on the front or the reverse of the sheet. The regular circle motif likely developed from the small points surrounding the large lentil-shaped ones. However, one cannot rule out the possibility that the large embossed lentils had been made before outlining the decoration.

The edges of the medium-sized bosses are very sharp and, in several cases, broken through (Fig. 3, 3-4). These rips were not caused by corrosion, as such rips arise when the tool has very sharp edges and/or depresses too deep for the sheet to stretch. In our view, these traces and marks suggest that the pattern was created by hammering the sheet into a deep negative model. That being the case, this pattern must have been made first to avoid damaging other decoration elements. Another possibility is that after embossing the motifs, the craftsperson used a sharp punch-like tool to make the shapes more precise. Importantly, we suggest that the maker used a special tool set of models and punches of different sizes. Medium-sized bosses come in two sizes: ones filling the meanders and the horizontal lines and those filling the vertical lines along the vertical edges of the sheet. These were created with the same technique but different models.

In the last step, the flaps along the edge of the sheet were made (Fig. 3, 5). These were used to fasten the sheet to some other material, possibly a wooden object, with the help of pegs or rivets. Importantly, the backside of the metal sheet features some elongated and somewhat wavy lines that are possibly impressions of wood that once stuck to the metal (Fig. 3, 6). The present bent shape of the flaps is presumably caused by secondary manipulation, possibly the removal of the metal sheet from the organic material. Since the flaps do not have a sharp edge, it is highly unlikely that they would show how they were originally attached to the organic material (in our view, they must have been bent orthogonally). In addition, the fact that the maker chose to make these flaps with incisions along the edge of the metal sheet suggests that it was meant to be applied onto a bent rather than a straight surface. The incisions allowed the orthogonally bent flaps to overlap when the metal sheet was bent into a cylinder around the



5 cm — — —

*Fig. 4* Reconstruction of the bronze sheet *4. kép* A szalacskai lemez rekonstrukciója

wooden object. Unfortunately, all fragments are completely flat now, but this could very well be the result of forced restoration. Besides, the possibility of the finder manipulating the fragments cannot be ruled out either. One also has to bear in mind that the sheet fragments are supposed to have been deposited in a ceramic vessel, i.e., they likely had been deprived of their original function. The original shape and diameter of the presumed organic vessel cannot be reconstructed. However, the two rivet holes on Fragment 4 seem to provide persuasive evidence that the metal sheet was originally bent into a cylinder (*Fig. 3, 2*). As numerous examples of EIA metal vessels indicate, these vertical rivets held together the two edges of the bent metal sheet.

It is worth noting that this is not the first example when the assumption arises that a metal sheet with embossed decoration originating from the Hallstatt Period context might have covered a wooden vessel of some kind. The burial chamber of the Gamulica tumulus near Martijanec (Varaždin County, Croatia) yielded several metal sheet fragments with embossed decoration. Relatively large amounts of wooden remains were collected from among the metal sheet fragments, some even attached to pieces of metal sheet. Based on these, K. Vinski-Gasparini reconstructed a metal situla with a wooden core (Vinski-Gasparini 1961, 41).

The so-called henkellose Zisten of the monumental tumuli near Kleinklein (Styria, Austria) deserve distinguished attention. Contrary to the well-known Rippenziste (and similar to the metal sheet from Szalacska), these cylindrical vessels have no horizontal ribs that would help reinforce the walls. Hence some authors proposed that these metal cylinders had a core made from organic material (Prüssing 1991, 87; Egg, Munir 2013, 205). However, contrary to the metal sheet fragments from Szalacska, these cylindrical vessels showed no traces or impressions of organic material (Egg, Munir 2013, 205). Among the fragments found in the Pommerkogel, only one piece bore impressions of organic material (Egg, Kramer 2016, 113). Furthermore, there is no obvious way how the metal cylinder was fixed to the supposed wooden core (Egg, Munir 2013, 205; Egg, Kramer 2016, 113).

Importantly, elements of rich embossed and punched decoration can be recognised on the metal sheet from Szalacska. This and the height of the known specimens of the type suggest that *henkellose Zisten* may be the best analogies to the find from Szalacska. As mentioned earlier, based on the structure of the decoration, the original width of the metal sheet can be estimated to have been around 15 cm. If we are not mistaken to believe that these metal sheet fragments might once have decorated a wooden vessel, the width of the metal sheet should correspond to the height of the vessel. The (reconstructed) height of the cists from the Pommerkogel varies between 22 and 24.8 cm (Egg, Kramer 2016, 113–122). The heights of vessels of the same type range from 24.1 to 26.3 cm (Egg, Munir 2013, 204–222).

There is no indication that handles were once attached to the metal sheet, which is another similarity between the cylindrical metal vessels from Kleinklein and the metal sheet fragments from Szalacska.

While without exact information about the circumstances of discovery and the entire funerary assemblage, this all might seem hypothetical, other possibilities, in our view, are even less reasonable.

#### Decoration

In the following part, we focus on the decoration of the metal sheet fragments in some detail (Fig. 4). Based on the largest fragments, it appears that the decorative patterns of the sheet were framed by a band comprising two parallel rows of small punched dots with a line of large embossed lentils in-between. Along the upper and lower edge, concentric meanders of the same dot-and-boss ornamentation are linked to the frame. These two rows of meanders are symmetrical horizontally. The distance between each two neighbouring meanders varies between 3.5 and 4 cm. The space between the four meanders is decorated with three large embossed lentils aligned vertically. The diameter of these large bosses is around 1.9 cm; they are surrounded by small punches and connected by a line of similar small points running diagonally.

It is worth highlighting that while the latter pattern, the so-called *Tangentenbuckelzier*, does not appear on any currently known metal vessel in Transdanubia, it is, in fact, a fairly common element of the decoration of Hallstatt Period metal vessels (*Fig. 5*). For instance, the decoration of broad-rimmed bowls (*Breitrandschüssel*) often features this pattern. Examples are known from the cemetery of Hallstatt (Prüssing 1991, Taf. 73, 273–274, Taf. 75, 276, Taf. 79, 280, Taf. 91, 298), and the princely tumulus at Strettweg (Styria, Austria) (Egg 1996, Abb. 63–64, Abb. 66–67). The vessels from Hallstatt (Upper Austria, Austria) suggest that this pattern, made us-



*Fig. 5* The so-called Tangentenbuckelzier on various Hallstatt Age metal vessels. 1: metal lid from the Pommerkogel (after Egg, Kramer 2016, Abb. 52, 2); 2: broad-rimmed bowl from the Pommerkogel (after Egg, Kramer 2016, Abb. 58);
3: broad-rimmed bowl from the so-called princely grave found near Strettweg (after Egg 1996, Abb. 63); 4: Broad-rimmed bowl from Grave 271 of the Hallstatt cemetery (after Kromer 1959, Taf. 50, 15)

5. kép Az ún. Tangentenbuckelzier különböző Hallstatt-kori fémedényeken. 1: bronzfedő a Pommerkogel halomsírból (Egg, Kramer 2016, Abb. 52, 2 alapján); 2: széles peremű tál a Pommerkogel halomsírból (Egg, Kramer 2016, Abb. 58 alapján); 3: széles peremű tál a strettwegi fejedelmi sírból (Egg 1996, Abb. 63 alapján); 4: széles peremű tál a hallstatti temető 271. sírjából (Kromer 1959, Taf. 50, 15 alapján)

ing the same techniques, was already in use during the Ha C period (Prüssing 1991, 81). At the same time, Markus Egg dated the Strettweg burial to the Stična-Novo mesto 2 period according to the relative chronological framework of the Dolenjsko cultural group (Egg 1996, 244). It is important to note that, based on the distribution area of the pattern, Markus Egg argued that it is linked to a manufacturing tradition in the south-eastern parts of the Hallstatt Culture (Egg 1996, 127). Of course, the pattern in question appears not only on broad-rimmed bowls but various vessel types, decorating, for instance, the neck of the *situla* found in Grave 647 of the Most na Soči (Slovenia) cemetery (Jereb 2016, Taf. 79, 131).

Although the cylindrical metal vessels from the tumuli near Kleinklein can be perceived as the best analogies to the metal sheet from Szalacska, the *Tangentenbuckelzier* pattern does not play a similarly central part in their decorative concept. Among the cists of the Kröllkogel, dated to the Phase of the Serpentine Brooches within the Slovenian relative chronological framework, i.e., the younger Ha D1 period (Egg 2013, 392), there is only one the decoration of which features this pattern. In the com-



Fig. 6 The concentric meander motif on pottery fragments recovered from tumuli of the Szalacska cemetery.
1: bowl fragment found in Tumulus D in 1876;
2: large pot fragment from Tumulus 1973/4
6. kép A koncentrikus meandermotívum szalacskai halomsírokból származó edénytöredékeken.
1: S profilú tál töredéke az 1876-ban feltárt D halomból;
2: az 1973/4. halomból származó nagy méretű edény vállának töredéke

plex figural narrative decoration of the so-called Cist XIII, the *Tangentenbuckelzier* is used to fill the outlines of the animal and human figurines. On the other hand, the main narrative panel on the cist is bordered by two continuous lines of *Tangentenbuckelzier* (Egg, Munir 2013, Abb. 87). The somewhat chaotic decorative concept of Cist XIII only appears on one of the several metal lids recovered from the Kröllkogel. Hence, arguing that this lid could have belonged to Cist XIII seems reasonable (Egg, Munir 2013, 232). Like the cist, the decorative pattern appears on the lid as a fill motif of the stylised figural depictions (Egg, Munir 2013, Abb. 93).

While the *Tangentenbuckelzier* is a rarely occurring motif on metal vessels discovered in the Kröllkogel, it is completely missing from the decorative designs of the cylindrical metal vessels found in the Pommerkogel, dated between 660 and 620 BC (Egg, Kramer 2016, 204). In contrast, the decoration of one of the conical metal lids of the same tumulus is dominated by this *Tangentenbuckelzier* pattern (*Fig. 5, 1*). In addition, in accordance with the fact mentioned earlier, namely that this pattern often appears on broad-rimmed bowls, two vessels of the type among the grave goods of the Pommerkogel indeed bear a decoration featuring this pattern (Egg, Kramer 2016, Abb. 58–59). It is worth pointing out, however, that the pattern on the second bowl of the Pommerkogel is dissimilar to the one on the Szalacska fragments because in this case – instead of simple lentil-shaped bosses – the diagonal punches link and embrace small bosses encircled by an embossed ring (Egg, Kramer 2016, Abb. 59).

Now, we would like to turn to the other main component of the decoration of the metal sheet from Szalacska. Concentric meanders are a characteristic and widespread motif in the eastern Hallstatt zone, appearing chiefly on ceramic vessels (Brosseder 2004, Abb. 192). Roberto Tarpini has recently pointed out that concentric meanders are a typical decorative element in the Kalenderberg group (Tarpini 2021, 147), where concentric meanders, applied to the ceramic vessels using different techniques (Teržan 2021, 443), appear in diverse compositions. The most similar to the decoration concept on the metal sheet in the focus of this paper can be found among these so-called straight concentric meanders (Brosseder 2004, 300; Tarpini 2021, 148). Importantly, this type of meander ornamentation is known from several ceramic vessels from Nagyberki-Szalacska. On the one hand, meanders painted with black on red painted surfaces are well-known from Szalacska (Fig. 6); on the other hand, concentric meanders also appear among applied decorations on vessels (Kemenczei 1974a, Fig. 7, 3). As far as the evidence from the hitherto excavated tumuli is concerned, concentric meanders appear on vessels from tumuli in different parts of the cemetery (Fig. 7).

As for the chronological position of the tumuli at Szalacska, Tibor Kemenczei argues that none of the burial mounds in the cemetery dates earlier than the Ha C2 period (Kemenczei 1974a, 14; Kemenczei 1976, 208). Unfortunately, metal objects that would allow relatively precise dating of the burials are seldom among the grave goods discovered during Kemenczei's excavations.

While concentric meanders are fairly common elements of decoration on Hallstatt Period ceramic vessels in Transdanubia, they are, much like the *Tangentenbuckelzier* pattern, completely absent from metal vessels in the same region. However, one cannot rule out the possibility that among the heavily fragmented metal vessels with dot-and-boss-deco-



Fig. 7 Location of the tumuli which provided pottery decorated with concentric meanders (Kemenczei's excavation). We are indebted to Balázs Holl and Zoltán Czajlik for the topographical data of the Szalacska cemetery (Holl, Czajlik 2013)

7. kép A koncentrikus meanderekkel díszített kerámiák lelőhelyei a szalacskai temetőn belül (a Kemenczei-féle ásatás). A szalacskai temetőre vontakozó topográfiai adatokért Holl Balázsnak és Czajlik Zoltánnak tartozunk köszönettel (Holl, Czajlik 2013)

ration recovered from the tumulus near Lengyeltóti (Somogy County), some may bear similar meandric motifs (Metzner-Nebelsick 2017, Fig. 15).

Contrary to the situation in Transdanubia, the monumental tumuli in Styria yielded some metal vessels with such decoration. Among the metal vessels of the Pommerkogel tumulus, two fragmented cylindrical vessels are decorated with similar meanders and executed with the dot-and-boss-decoration technique. Cist II of the Pommerkogel has two horizontal rows of meander motifs (*Fig. 9, 3*). Since these two rows are horizontally symmetrical (Egg, Kramer 2016, 116), the decoration structure of this vessel represents a good analogy to the metal sheet fragments from Szalacska. However, the meanders

on the cylindrical vessel from the Pommerkogel are smaller and more compact than those on the metal fragments from Szalacska.

From the so-called Cist V, only two pieces persisted that are distinguished by decoration (Egg, Kramer 2016, 122). The concentric meander on this piece is considerably larger than the ones seen on Cist II (*Fig. 9, 2*); thus, its size makes it more comparable to the motifs on the metal sheet from Szalacska.

It is worth highlighting that contrary to the Pommerkogel, dot-and-boss concentric meanders do not appear on the metal vessels recovered from the burial chamber of the Kröllkogel. However, drawing conclusions about the chronological position of the metal sheet from Szalacska based on this fact





is hardly reasonable because a pedestalled ceramic bowl among the grave goods of the tumulus has painted concentric, yet oblique, meanders integrated into a painted pattern on the neck of the vessel. In addition, a ceramic vessel with a conical neck among the grave goods of the Tschoneggerfranzltumulus 2 is decorated with tin foils of concentric meander arranged in straight rows (Dobiat 1980, 227; Hansen 2007, 199). From a relative chronological point of view, the latter tumulus is between the Pommerkogel and the Kröllkogel (Hansen 2007, 209).

## *Metal cist fragments in the collection of the Hungarian National Museum*

Before discussing the chronological position of the metal sheet from Szalacska, we would like to introduce another metal sheet object. The Prehistoric Collection of the Hungarian National Museum holds five metal vessel fragments (inv. no. 26/1970.1). According to the inventory book, the museum acquired the fragments at some distant and undeterminable point in the past, but they were not inventoried until 1970. The employees of the museum gave a proposition about the provenience of the fragments, but without firm evidence, the remark 'Szalacska (?)' is nothing more than an educated guess. Data about the circumstances of the discovery of the vessel fragments are completely missing, and so far, nothing is known about when the pieces arrived at the museum. The assemblage comprises five pieces that, considering their technical characteristics and decoration, are closely related (*Fig. 10*). Hence it is reasonable to assume that the pieces originally belonged to one or a maximum of two vessels.

#### Description of pieces

*Fragment 1.* Probably the upper part of a cylindrical vessel made from a hammered metal sheet. It has a slightly inverted rim, folded outwards cylindrically around a thin tube core made from a bent metal sheet. The wall of the vessel is decorated with seven horizontal rows of punched dots and five lines of larger embossed lentils connected and encircled by small dots running obliquely in between. The weight of the piece is 46.99 g. The thickness of the sheet varies between 0.33 and 0.5 mm (*Fig. 10, 1*).

*Fragment 2*. Fragment of a cylindrical vessel made from a hammered metal sheet. It has a slightly inverted rim, folded outwards cylindrically around a thin tube core made from a bent metal sheet. The wall of the vessel is decorated with horizontal rows of punched dots and lines of larger embossed lentils connected and encircled by small dots running horizontally in between. The weight of the piece is 21.98 g. The thickness of the sheet varies between 0.31 and 0.4 mm (*Fig. 10, 2*).

*Fragment 3.* Probably the upper part of a cylindrical vessel made from a hammered metal sheet. It has a slightly inverted rim, folded outwards cylindrically around a thin tube core made from a bent metal sheet. The wall of the vessel is decorated with horizontal rows of punched dots and lines of larger embossed lentils connected and encircled by small dots running obliquely in between. The weight of the piece is 19.47 g. The thickness of the sheet varies between 0.37 and 0.42 mm (*Fig. 10, 3*).

*Fragment 4*. Probably the upper part of a cylindrical vessel made from two hammered metal sheets riveted together. It has a slightly inverted rim, folded outwards cylindrically around a thin tube core made from a bent metal sheet. The wall of the vessel is decorated with horizontal rows of punched dots and lines of larger embossed lentils connected and encircled by small points running obliquely in between. The weight of the piece is 12.75 g. The thickness of the sheet varies between 0.37 and 0.42 mm (*Fig. 10, 4*).

*Fragment 5*. Fragment of the wall of a vessel made from a hammered metal sheet, decorated with horizontal rows of punched dots and lines of larger embossed lentils connected and encircled by small dots running obliquely inbetween. The weight of the piece is 4.16 g. The thickness of the sheet varies between 0.31 and 0.4 mm (*Fig.10, 5*).

#### Technical observations

Four of the five pieces include rim parts of the vessel, all showing identical technical characteristics of the rim. First, just below the rim, the sheet, as seen in Fragment 4, was bent inwards, thus, the manufacturer



*Fig.* 9 Concentric meander motif on metal vessels. 1: metal sheet fragment from Szalacska; 2: fragment of one of the bronze cists (Cist V) recovered from the Pommerkogel (after Egg, Kramer 2016, Abb. 49, 2); 3: bronze cist recovered from the Pommerkogel (after Egg, Kramer 2016, Abb. 48)

9. kép A koncentrikus meandermotívum fémedényeken. 1: a szalacskai fémlemeztöredékek egyik darabja;
2: a Pommerkogel halomsírból előkerült egyik hengeres bronzedény töredéke (az ún. 5. ciszta) (Egg, Kramer 2016, Abb. 49, 2 alapján); 3: a Pommerkogel halomsírból előkerült egyik hengeres bronzedény (az ún. 2. ciszta)

(Egg, Kramer 2016, Abb. 48 alapján)



*Fig. 10* Bronze vessel fragments from the Prehistoric Collection of the Hungarian National Museum *10. kép* Bronzedénytöredékek a Magyar Nemzeti Múzeum Őskori Gyűjteményéből

created a small but distinctive shoulder for the vessel (*Fig. 11, 1*). After creating this shoulder, the craftsman rolled the edge of the metal sheet around a thin metal tube that gave the rim extra strength (*Fig. 11, 1*). The material of the thin tube is essentially the same as the metal sheet making up the wall of the vessel.

Looking at EIA ribbed cists in Transdanubia, vessels with outward-folded rims are in the minority, yet not unprecedented. Only one of the vessels of the Kurd hoard has this kind of rim (Patay 1990, Taf. 62, 139).<sup>1</sup> In addition, the ribbed cist of the Vaskeresztes hoard was also made with an outward-folded rim (Patay 1990, 75). Furthermore, the fragmented ribbed cist from the recently excavated Regöly tumulus also has an outward-folded rim (Fekete, Szabó 2017b, 510). This typological characteristic bears some significance given that B. Stjernquist highlighted that the two distinct designs of the rims cover well-distinguishable distribution areas (Stjernquist 1967, 64–65).

The vessel fragments in the Prehistoric Collection of the HNM have no ribs. In addition, their barrel-shaped form also differs from the cylindrical or slightly narrowing shape of ribbed cists. Again, the unhandled cists of the tumuli in the Kleinklein cemetery serve as analogies based on shape this time. The comparison seems even more compelling if we consider that the vessel fragments discussed here have no handles nor signs of handle supports.

It is a common notion that the ribs on metal cists are meant to give extra rigidity to the vessels. As Markus Egg and Jasmin Munir emphasised, without ribs and handles, thin-walled metal vessels are prone to deformation when wielding, especially if the vessel contains several litres of liquid. In addition, the distance between the rivets holding together the overlapping edges of the metal sheet is relatively large, and there are no traces of soldering or overlap joints. As a result, the vessel could hardly contain liquid on its own. This led us to assume that this metal vessel also had a wooden core. However, there are no traces of fixing the metal sheet to an inner core (Egg, Munir 2013, 205).

It is worth looking at the technological characteristics of the handleless cists of the Pommerkogel and the Kröllkogel. There are six fragmented cists among the remaining grave goods of the Pommerkogel (ca. 660–620 BC). Although their decoration is largely homogeneous in terms of technique and style, they are not uniform when looking at the design of the rims. In two cases, the rim of the vessel is outward-folded, but three vessels have rims where the metal sheet is rolled over the bracing wire inwards. The rim of the sixth cist cannot be studied since only a tiny fragment of the wall of the vessel has persisted. The thin tube rolled from a metal sheet bracing the rim of the vessel fragments discussed here has no analogy amongst the cylindrical bronze vessels of the Pommerkogel, the rims of which have been stiffened by either a thin wooden stick (Egg, Kramer 2016, 117) or a piece of metal wire (Egg, Kramer 2016, 122). In addition, rims without a brace also appear among the handleless cists of the Pommerkogel (Egg, Kramer 2016, 115).

A similar heterogeneity appears in the case of the handleless cists of the Kröllkogel. While most cists have outward-folded rims, one has an inverted rim and another truncated edge. Similarly, the costs are not homogeneous regarding how their rim is supported. Three have metal wires as braces in their rims, while the rest have nothing extra to stiffen them (Egg, Munir 2013, 204–223).

Unfortunately, we cannot be sure whether the metal fragments under study belong to the same vessel or separate ones. In addition, the question has to remain open whether the walls of these fragmented metal vessels were created from a single sheet or more. The cylindrical cist of the Kleinklein cemetery has been made either of a single metal sheet or by riveting together two pieces (Egg, Munir 2013, 204; Egg, Kramer 2016, 113). Such joining of metal sheet edges can be observed on only a single vessel fragment in the HNM assemblage. In this case, the edges have an 18.8 mm broad overlap (Fig. 11, 5). The vertical row of rivets begins just below the rim of the vessel. The rivets are hammered flat on the outside but have a spherical head on the inside (Fig. 11, 5). In fact, the diameter of the peg head on the outer side seems too large to have been hammered flat when already keeping together the edges of the metal sheets. Hence, arguably on one end, the peg had already been hammered before it was driven through the layers of metal sheets. At the rim, the horizontal edge of the metal sheet comprising the wall of the vessel is folded in a way that the rim partially covers the top peg.

As for the punches on the wall of the vessel, these come in two different sizes: the ones in the top two lines are smaller, while those in the lower lines are larger. It is important to note, however, that – unlike medium-sized bosses – these differences do not necessarily stem from the use of different tools but the force applied to the bronze sheet when punched. Unfortunately, due to the extensive patina layer, the microscopic marks left by the tools cannot be inves-





*Fig. 11* Details of the fragmented bronze vessel held in the Prehistoric Collection of the Hungarian National Museum *11. kép* Részletfotók a Magyar Nemzeti Múzeumban őrzött bronzedénytöredékekről

tigated. These would show us whether the craftsperson used the same tools when creating the punches of different sizes. Still, apparently, the vessel fragments in the collection of HNM and the bronze sheet from Szalacska were created using different techniques.

Based on this and the overall technological characteristics, we argue that the closest analogies to the vessel fragments in the collection of HNM are the cists found in the princely graves of the Kleinklein cemetery.

#### Decoration

Although the decoration of the fragmented metal vessel from Szalacska is more complex than that of

the vessel fragments in the collection of HNM, the main motifs and the technical solutions applied show similarities.

There are two main components of the embossed and punched decoration. All fragments of the cylindrical vessels show details of horizontal rows of tightly punched dots. Based on the largest fragment, the vessel in the collection of the HNM was decorated with at least eight such lines (*Fig. 10, 1*). The field bordered by the rim, the first line, and the field bordered by the first and the second lines are left empty. Besides, a thin tube rolled from a metal sheet bracing the rim is a common feature of all rim fragments. The other main component of the decoration, the so-called *Tangentenbuckelzier* discussed above, appears below the second row of small punched dots.

As mentioned previously, this decorative pattern does not appear on metal vessels recovered from EIA context in Transdanubia; however, the decoration of the rim of the broad-rimmed bowl (Fekete 1985, Abb. 11, 3) from the burial chamber of Tumulus 1 of Vaskeresztes differs from that of the vessel fragments under discussion as the diagonally running punched dots between the embossed lentils are missing from its decoration, and the surface of the rim is divided by double rows of small punched dots instead of the single lines on the fragments in the HNM collection.

Although in terms of shape and technique, the cists from the princely tumuli near Kleinklein are the closest analogies to the vessel(s) in the HNM collection, their complex decoration, including figural and geometric elements, is even more dissimilar than those of the EIA broad-rimmed bowls from Transdanubia. Moreover, the so-called *Tangentenbuckelzier* appears on only one of the cists from Kleinklein. In the case of this cist, of the Kröllkogel, however, the pattern under discussion plays a minor role as far as the composition of the decoration is concerned because it is used as a fill pattern (Egg, Munir 2013, Abb. 87).

As previously discussed in detail, the Tangentenbuckelzier is not frequent on the metal sheet lids for the so-called cists of the princely tumuli near Kleinklein, either. Both the Pommerkogel and the Kröllkogel have one such lid to feature this pattern (Egg, Munir 2013, Abb. 93; Egg, Kramer 2013, Abb. 52). Similar to the cist mentioned before, the Tangentenbuckelzier pattern serves as a filler on the lid from the Kröllkogel, suggesting that the cist and the lid could have belonged together. In contrast, the lid from the Pommerkogel features the pattern under discussion as a main component of its decoration (Egg, Kramer 2016, Abb. 52). In fact, the structure of its decoration comprising concentric circles of small punched dots and lines of Tangentenbuckelzier shows a distinct similarity to the decoration seen on the majority of the vessel fragments held in the collection of HNM. Hence, the Pommerkogel might arguably be a better reference for dating the fragments under study than the Kröllkogel.

#### Remarks on the chronological position of the vessels

Although there is some information about the provenience of the fragmented metal vessel held in the Museum of Kaposvár, detailed descriptions of the circumstances of recovery and associated finds are missing. We face an even worse situation in the case of the vessel fragments kept in HNM. Available evidence suggests that the vessel fragments found near Szalacska were parts of a burial assemblage in a tumulus; thus, Károly Sági's proposal of an EIA dating of the items seems reasonable.<sup>2</sup>

However, we have to rely on comparable artefacts and the stylistic evaluation of the fragments to determine a more precise chronological position of the finds. As previously mentioned, the closest analogies to the vessel fragments kept in HNM are the cylindrical metal cists found in the so-called princely tumuli near Kleinklein. Based on the comparable vessels from the Pommerkogel and the Kröllkogel (Egg 2013; Egg, Kramer 2016, 204), a relatively broad interval including the Ha C2 and Ha D1 periods can be proposed. The stylistic properties of the decoration on the vessel fragments can substantiate this timeframe. The so-called Tangentenbuckelzier, the dominant motif in the decoration, is a frequently employed pattern on the metal vessels of both aforementioned princely tumuli. Furthermore, this motif appears on several metal vessels and decorative elements recovered from the famous tumulus burial with the so-called cult wagon near Strettweg. In chronological terms, the latter burial is supposed to occupy a position in-between the Pommerkogel and the Kröllkogel (Egg 2013, 210).

Regarding the dating of the metal sheet fragments from Szalacska, relying on the two tumuli mentioned above near Kleinklein seems beneficial, too. In addition, however, it is worth highlighting the importance of the concentric meanders. Such motifs appear in Eastern Hallstatt Period contexts from the Ha C2 period (Brosseder 2004, 305; Kramer 2013, 368). Because - contrary to the metal vessels from the Pommerkogel - the metal vessels from the Kröllkogel do not feature such concentric meanders, one might consider dating the metal sheet fragments to the time of the Pommerkogel. However, the fact that concentric meanders were used to decorate some ceramic vessels among those recovered from the Kröllkogel weakens the plausibility of narrowing down the chronological span proposed for dating the metal sheet fragments from Szalacska.

## *Discussion – Metal vessels from the Hallstatt Period in Transdanubia*

Compared to the EIA archaeological record of Slovenia and south-eastern Austria, the Hallstatt Period of Transdanubia has yielded relatively few metal

vessels. This situation might explain why analogies to the vessels discussed in this paper are unknown in the archaeological record of Transdanubia. In his volume of the Prähistorische Bronzefunde series, published in 1990, Pál Patay collected 26 EIA metal vessels from Transdanubia, including fifteen vessels, a large situla, and fourteen ribbed cists of the largest EIA metal vessel hoard in Transdanubia, found near Kurd in Tolna County (Wosinsky 1885; Patay 1990, 74, 76–77). There is another ribbed cist belonging to a hoard. Among various metal jewellery items and a metal axe, the so-called Magyarkeresztes (today: Vaskeresztes, Vas County) hoard contained a ribbed cist quite similar to those of the Kurd hoard (Mozsolics 1942; Patay 1990, 75-76). Since the publication of Patay's monograph, a further EIA metal hoard has come to light. The Ikervár (Vas County) hoard also contained metal vessels, namely a sieve and a rosette-ornamented vessel (Nagy et al. 2012, 35); however, as the detailed description of the hoard is yet to be published, the technological characteristics of the vessels cannot be discussed at this point.

Due to its geographical proximity to Szalacska and its composition, the Kurd hoard deserves special attention (Fig. 12). According to Mór Wosinsky's report, the vessels were recovered from an ancient bed of the Kapos River at some 2.4 m depth (Wosinsky 1885, 73-74). Based on the finders' account, he believed the ribbed cists were packed into the large situla. It is important to note, as recently C. Metzner-Nebelsick and L. Nebelsick also emphasised, that the hoard came to light from the foreground of the socalled Lengyel hillfort (officially known as Mucsi-Sáncok) (Metzner-Nebelsick, Nebelsick 2021, 412). Importantly, several scholars echo Markus Egg's opinion that such vessel sets composed of one large situla and several cists can be traced back to prototypes in Northern Italy (Dehn et al. 2005, 245; Naso 2019, 127). In addition, since similar vessel sets appear among the grave goods of the Kröllkogel, the Pommerkogel, and probably the Hartnermichelkogel 1, one might argue that the appearance of such a find assemblage near Kurd suggests an indirect link between the EIA communities of the Kapos Valley (e.g., the communities associated with Nagyberki-Szalacska, Lengyel, and Regöly) and the Kleinklein cemetery - a link also corroborated by the metal sheet fragments from Szalacska.

The second group of EIA metal vessels in Transdanubia come from funerary contexts. It is worth noting that while the large majority of the EIA metal vessels in hoards in Transdanubia are ribbed cists, those recovered from graves show a more varied picture in terms of typology.

The prehistoric fortification near Regoly is located along the Kapos River, not far from Kurd. One of the most important archaeological discoveries of EIA in Transdanubia took place here, though the name Regöly had already sounded familiar to most researchers of the Hallstatt Period in Central Europe before. First, in 1901, HNM bought a large set of ornate metal rings allegedly found near Regöly. In Mária Fekete's view, this hoard of either armlets or anklets could be dated to the second half of the 7<sup>th</sup> century or around 600 BC (Fekete 1995, 46). In addition, in her monography about the Urnfield Period in Transdanubia, Erzsébet Patek presented compelling evidence that the loess plateau at the confluence of the Koppány Creek and the Kapos River was populated during the Hallstatt Period (Patek 1968, 64-65). Furthermore, the late Hallstatt burial found near Szárazd-Gerenyáspuszta is supposed to have been located only a few hundred metres from the prehistoric fortifications, just on the opposite bank of the Kapos River (Soós 2020, Fig. 5).

However, the surroundings of Regöly have yielded a find somewhat more relevant for the present paper than the previously enumerated discoveries. In 1907, the museum in Szekszárd (Tolna County) bought a relatively intact Type C metal kettle. Unfortunately, the circumstances of its discovery are completely unknown. Nevertheless, based on typological characteristics and its resemblance to the kettle found on the Somló Hill (see below), dating the vessel to the EIA seems reasonable (Patay 1990, 31).

Regarding the Hallstatt Period, the most important discovery near Regöly was the tumulus excavated by Géza Szabó and his colleagues. Small fragments of different metal vessels are among the finds recovered from the eroded monumental burial mound. Several belong to ribbed cists, while others can be identified as parts of kettles similar to the one bought in 1907 (Fekete, Szabó 2017a, 111). Based on the assemblage found in the tumulus, the burial was dated to the second half of the 7<sup>th</sup> century BC (Fekete, Szabó 2017b, 507), although some finds may suggest a later dating.

Not long before the discovery of the Kurd vessel hoard, Ádám Iván had published the first documented Hallstatt Period finds of the Somló Hill (Somlóhegy, Veszprém County). An EIA grave came to light on the western slopes of the hill near the Séd Spring. A metal kettle was found among the grave goods associated with the burial, similar to the one found near Regöly. According to von Merhart's typological system, both kettles belong to Type C (von Merhart 1952, 64–65; Patay 1990, 31). The primary distribution area of this type spreads across the Caput Adriae region, and Markus Egg suggests a probable production centre of these vessels there (Egg, Munir 2013, 252; Egg 2021, 30–31). Most metal kettles of Type C originate from the Ha D period. Based on the battle axe, also from the grave, the assemblage probably originates from the Ha D1 phase (Kozubová 2019, 72).

Further evidence backs the assumption that Somló Hill was an important centre of power in the Hallstatt Period. A large burial mound was investigated some 2.5 km north of the Somló in the 1880s; the so-called Doba II tumulus yielded a grave with exceptional finds. Based on the Mindelheim-type iron sword and the sheath of a decorative pin, the grave was dated to the Ha C2 phase (Egg, Munir 2013, 257). The grave also contained the remains of at least three metal vessels: two ladles, one with a long handle made of twisted metal wire and another with possibly a curved handle (missing; Darnay et al. 1895, 322; Nebelsick 1994, 341), and a fragmented broad-rimmed bowl (Darnay et al. 1895, Pl. 3, 1; Patay 1990, 79). Unfortunately, as the detailed field documentation of the excavation is completely missing, it cannot be decided whether the fragmentary state of the metal vessels results from the incomplete excavation of the tumulus or the intentional destruction of certain grave goods during the funerary ritual. In addition, since no ceramic vessel of the grave has been preserved, comparing the metal vessels and the funerary pottery vessel set of the burial is impossible.

The metal sheet fragments rescued after destroying one of the burial mounds near Lengyeltóti include several pieces featuring the so-called dot-andboss ornamentation. In C. Metzner-Nebelsick's view, the metal vessel set among the grave goods of the tumulus had at least three functionally different parts; as a result, she assumes that there were at least three metal vessels among the grave goods. Based on the fragments of a reinforced rim, the author assumes that there were one or two cists; the thin, rounded pieces suggest the presence of a spherical bowl or ladle, while, finally, the assemblage could also include a larger vessel with moveable handles, likely a cauldron (Metzner-Nebelsick 2017, 453). Unfortunately, due to the fragmentary state of the metal sheets, it cannot be decided anymore whether the decoration of the vessels featured concentric meanders similar to those seen on the metal sheet fragments from Szalacska. It is worth highlighting, however, that the reconstruction of the vessel set from the Lengyeltóti tumulus is impossible, given the large-scale destruction of the mound and the undocumented excavation of archaeological features (Metzner-Nebelsick 2017, 443). Based on a Navicella-type brooch, she dates the grave to the Ha C2 phase; however, she also emphasises the difficulty of distinguishing between the Ha C2 and D1 phases in Transdanubia (Metzner-Nebelsick 2017, 458–459).

Available evidence suggests the contemporaneity of the mounds of Lengyeltóti and Vaskeresztes. Mária Fekete dated the Vaskeresztes tumuli on the one hand to the Ha C2 phase and to the end of the phase on the other hand (Fekete 1985, 76). Only one of the two tumuli excavated at Vaskeresztes, Diófásdűlő contained metal vessels. Tumulus 1, the older of the two, yielded a fairly reconstructable situla with a moveable handle, some fragments of a ribbed cist, pieces of a metal cup or cups, and fragments of a broad-rimmed bowl. All vessels were in a strongly fragmented state. Importantly, the distribution of grave goods within the grave chamber suggests that the metal and pottery vessels were not separated into different vessel sets (Fekete 1985, Fig. 4). However, contrary to the metal vessels, ceramic vessels could be reconstructed entirely in several cases (Fekete 1988, 143-144).

The examples above might lead to the suggestion that, in contrast to the metal vessels in hoards, those in EIA funerary context in Transdanubia are usually in a fragmentary state. However, since Hallstatt Period metal vessels in graves are currently a rare phenomenon in Transdanubia, and their proper documentation and use-wear analysis are lacking in most cases, drawing firm conclusions about the intentionality of this fragmentation seems impossible. Also, a noteworthy counterexample may be mentioned from the grave goods of Tumulus 26 of the Pécs-Jakabhegy necropolis. The Ha C Period grave contained a few ceramic vessels and a metal jug; besides, it yielded approximately 2000 metal buttons, gold beads, and fragments of metal bracelets (Maráz 1996, 256-257). Note that metal vessels are exceedingly rare within this cemetery, and, in B. Maráz's opinion, the metal jug in Tumulus 26 was an import (Maráz 1996, 263). The exceptional character of this burial is also reflected by C. Metzner-Nebelsick's proposition that the metal jug is a *pars-pro-toto* deposition of a vessel set (Metzner-Nebelsick 2001, 142). The contrast is conspicuous: while the funerary vessel set of Tumulus II near Doba includes multiple yet fragmented metal vessels (Nebelsick 1994, 341), only a single but intact vessel of a presumed larger set was placed into the grave in Tumulus 26 of the Pécs-Jakabhegy cemetery.

Finally, we would like to focus on the archaeological record of the tumulus burial ground and hilltop settlement near Szalacska. The prehistoric fortified settlement on top of the Szalacska Hill is located in southern Transdanubia, in the central part of the catchment area of the Kapos River (*Fig. 12*). In fact, the prehistoric site is situated along the southeastern border of a small valley linked directly to the Kapos River. In terms of sheer numbers, the hilltop settlement is only some 3 km from the river at 239 asl. As a result, it has often been seen as a central place exercising control over the Kapos Valley along the middle course of the river, at least in later prehistory (Patek 1968, 19; Patek 1993, 132). Although also occupied in earlier periods, the hilltop near Szalacska only became a settlement of exceptional significance in the Urnfield Period (Patek 1968, 60). Its significance was also retained during the Hallstatt and, later, late La Tène periods. In addition, several large hoards were hidden at the hilltop in the Roman Imperial Period. Even though the site was well-known for over a hundred years, the first excavations motivated by scientific questions were conducted during the 1980s. Szilvia Honti and her colleagues opened trenches at various places on the hilltop and brought to light settlement material from the Middle Bronze Age to the Medieval Ages (Németh 2010, 28).

Although little is known so far about the Hallstatt Period settlement on the hilltop, the extensive tumulus cemetery north of it makes the site complex near Szalacska one of the most important EIA centres of power in western Hungary (Metzner-Nebelsick 2017, 444).

Since (to our best knowledge) the metal sheet fragments came to light from a tumulus, it is worth outlining in some detail the results of the archaeological research of the tumulus cemetery.



*Fig. 12* Hallstatt Period sites in the Kapos Valley mentioned in the text *12. kép* A szövegben említett Kapos-menti Hallstatt-kori lelőhelyek

Owing to the works of Zoltán Czajlik and Balázs Holl, we now have a fairly clear picture of the extent and inner structure of the tumulus cemetery, which, due to agricultural activities, endures continuous destruction (Holl, Czajlik 2013). The burial mounds form uncertainly separable groups in the small north-south valley. Most mounds are situated north of the hilltop settlement, their positions marking a possible route connecting the hilltop and the Kapos River (*Fig. 13*).

The research history of the Szalacska site spans well over a century. First, Ernő Kammerer and Antal Hencz, commissioned by Flóris Rómer, investigated nine mounds there in the 1870s. Their results appeared in Rómer's multi-volume publication, in which he summarised the efforts and successes of Hungarian archaeology for the international guests attending the 8th International Congress of Anthropology and Archaeology (Rómer 1878, 115–121). In 1943, Sándor Gallus, on behalf of HNM, conducted excavations in the tumulus cemetery. His campaign involved the investigation of five burial mounds. Importantly, both the excavations of the 1870s and those of 1943 took place in the same tumulus group, the one next to the farmstead Szalacska (Fig. 13). Unfortunately, a large part of the recovered material went missing during WWII, and the field documentation is problematic to interpret (Kabay 1960). Finally, in the 1970s, Tibor Kemenczei, also on behalf of HNM, excavated nine more burial mounds in different parts of the cemetery. Although Kemenczei has not published all of his results, the detailed documentation of his excavations provides invaluable insight into the funerary customs of the EIA community behind the Szalacska cemetery (Kemenczei 1974a; Kemenczei 1974b; Kemenczei 1976).

When attempting to provide an overview of the funerary customs and funerary architecture associ-



*Fig. 13* Excavations in the Szalacska tumulus cemetery. Blue rectangle: excavations in the 1870s, red rectangle: excavations in 1943, white circles: tumuli investigated by Tibor Kemenczei in the 1970s. We are indebted to Balázs Holl and Zoltán Czajlik for the topographical data of the Szalacska cemetery (Holl, Czajlik 2013)

13. kép Ásatások a szalacskai halomsíros temetőben. Kék téglalap: az 1870-es években végzett feltárások zónája; piros téglalap: az 1943-ban végzett feltárás zónája; fehér körök: a Kemenczei Tibor által feltárt halomsírok. A szalacskai temetőre vontakozó topográfiai adatokért Holl Balázsnak és Czajlik Zoltánnak tartozunk köszönettel (Holl, Czajlik 2013) ated with the Szalacska cemetery, one has to rely on Kemenczei's publications. According to his observations, the construction of the burial mounds began with digging a 20–30 cm-deep oval or rectangular grave pit. Subsequently, the remains of the funeral pyre, including the calcined bones of the deceased, along with usually a relatively large number of ceramic sherds, were placed into this pit. Although metal and bone items were in the find material recovered from the nine tumuli Kemenczei excavated, they represent a small minority compared to the amount of pottery finds (Kemenczei 1976, 203–204). Moreover, they are usually in poor condition.

Tumulus 1, excavated by Kemenczei, is definitely an exception and certainly in more than one sense. This is, so far, the only tumulus to contain an actual burial chamber with stone construction. Although the funerary ritual practised in the burial chamber is similar to those seen in the other tumuli excavated by Kemenczei, contrary to the latter, Tumulus 1 contained a larger number of metal finds (Kemenczei 1974, 4).

Regarding the funerary customs seen in the Szalacska mounds, Sándor Gallus' observations do not contradict those made by Tibor Kemenczei. Unfortunately, the finds unearthed in 1943 - the part that did not go missing in WWII - are almost without exception made of metal, while the survey drawings of the graves show large numbers of ceramic vessels and potsherds. In addition, considering that the drawings show either oval or rectangular and shallow grave pits within the tumuli, Gallus' excavation corroborates the results of Kemenczei's investigations as far as the structure of the graves is concerned. Among the burial mounds excavated by Sándor Gallus, Tumulus 3 is the only exception. Based on the survey drawing of the grave, Gallus's team found a rectangular chamber during the excavation of the tumulus. However, contrary to the one found in 1971, this one is supposed to have been built of wooden beams with stones only supporting the posts at the corners of the chamber (Kabay 1960, 51).

Although little is known about the results of the excavations conducted on the settlement, it seems pretty certain that the archaeological investigations have not returned metal vessels or fragments of such from the area of the Szalacska hilltop. The tumulus cemetery, however, yielded some fragments that convincingly prove that metal vessels played some



*Fig. 14* 1: broken angular handle of presumably a broad-rimmed bowl (Tumulus 1943/2 of the Szalacska cemetery);
2: fragment of a bronze wire with a flat-hammered end with a peg running through it (Tumulus 1943/6 of the Szalacska cemetery);
3: fragments of bronze sheet with hammered pegs (Tumulus 1971/1 of the Szalacska cemetery)
14. kép 1: szögletesen megtörő bronzedényfül töredéke, valószínűleg egy széles peremű tálhoz tartozott (az 1943/2. halomsírból);
2: a végén laposra kalapált és szegecselt bronzdrót töredéke (az 1943/6. halomsírból);
3: laposra kalapált szegecsekkel összetartott bronzlemeztöredékek a szalacskai 1971/1. halomsírból

role in the life of the EIA community behind the Szalacska cemetery. Most notably, Sándor Gallus' excavations in 1943 brought to light a broken angular handle of presumably a broad-rimmed bowl (Fig. 14, 1; Kabay 1960, Fig. 15; Patay 1990, 83). According to the documentation, the handle fragment was part of the grave goods of a tumulus of 10-11 m in diameter and 2.15 m high (Tumulus 2). According to Gallus' notes, the grave goods and some calcined remains of the deceased were laid in a simple shallow grave pit with no signs of any grave architecture (Kabay 1960, 50-51). In addition, the excavations in 1943 unearthed a large amount of embossed and punched metal sheet fragments which likely came from metal vessels whose typological classification is, unfortunately, impossible. Similarly, identifying an approximately 3 mm-thick metal wire with a flat-hammered end and a peg running through it as a handle fragment of a metal vessel also seems reasonable (Fig. 14, 2). According to the inventory books, this fragment comes from Tumulus 6; however, Gallus's documentation does not mention that he had opened more than five tumuli (Kabay 1960, 54). Unfortunately, such uncertainties abound around the archaeological record and the documentation of the 1943 excavations. Due mainly to the damages HNM endured during WWII and Gallus's emigration, there is a huge loss of artefacts and information, prohibiting us from drawing a clear picture about the EIA burials excavated in 1943.

Somewhat intriguingly, Kemenczei's excavations in the northern tumulus group, i.e. the same area where Gallus had excavated, did not recover any metal vessels or metal pieces easily identifiable as fragments of such. Moreover, metal finds in the tumuli excavated by Tibor Kemenczei are generally rare (Kemenczei 1976, 203). Tumulus 1 is the only notable exception. Among the metal finds recovered from the tumulus in 1971, pegs hold together eleven pieces of metal sheet fragments. The pegs are hammered flat on the outside but kept intact on the inside. As far as their shape and dimensions are concerned, they are very similar to the ones holding together the large situla found near Kurd in 1884. Although we would not dare suggest that a similar metal vessel could have played some role in the funerary ritual associated with Tumulus 1971/1, identifying them as fragments of a metal container does not seem far-fetched.

There are, however, a few circumstances worth considering. Although uncertainties surround the

discovery of the metal sheet fragments found in 1941, their fragmentation would suggest a similarity with the metal vessels recovered from other EIA tumulus burials in Transdanubia. Given Tibor Kemenczei's opinion of the interment of sherds of intentionally broken ceramic vessels under the tumuli of the Szalacska cemetery (Kemenczei 1974a, 11; Kemenczei 1976, 204), the fact that the tumulus opened in 1941 yielded a highly fragmented metal sheet is of significance. However, it must be highlighted that no signs of intentional breakage or damage were administered to the metal sheet found in 1941. Even though clues suggesting the intentional cutting or breaking of the metal sheet are lacking, its intentional manipulation during or before the funeral seems feasible. In our view, the original metal sheet could have been folded, which subsequently led to its fragmentation. Reportedly, the fragments were found inside a ceramic pot. All this strongly indicates that the metal sheet - similarly to ceramic vessels - had been deprived of its original function before internment.

Summing up, seemingly neither the ceramic nor the metal vessels retained their primary function as containers in funerary context in the Szalacska cemetery. It appears that the ornate metal sheet cover of a wooden bucket followed suit.

Although questions about the provenience of the metal vessel fragments in the HNM collection have to remain open at this point, the fragmentary state of the findings suggests that they were part of a funerary assemblage.

#### Conclusions

Two sets of fragments of Hallstatt Period metal vessels were discussed in this paper. One of them, currently held in the Rippl-Rónai Múzeum of Kaposvár, was unearthed in 1941 by a local resident searching for treasures in one of the tumuli near Szalacska. The prehistoric hilltop settlement and tumulus cemetery near Szalacska is one of the most important EIA sites in Transdanubia and probably served as a ritual and political centre within the valley of the Kapos River. Despite excavating several burial mounds in the cemetery, the metal sheet fragments found by the looter are the largest and most intact pieces of EIA toreutics associated with the prehistoric centre near Szalacska. Importantly, there are several factors suggesting that the fragmented metal sheet was, in fact, not a vessel on its own but could have served as an ornate cover of a vessel made from some organic material, most probably wood. Although a few authors have already suggested that Hallstatt Period funerary assemblages could have included wooden vessels with metal sheet covers, the fragments from Szalacska provide the firmest evidence of such today. Based on analogies to the embossed and punched decoration of the metal sheet, featuring concentric meanders and the so-called *Tangentenbuckelzier*, dating the metal sheet to the Ha C2 and Ha D1 periods seems reasonable.

The other set of metal vessel fragments is held in the collection of the Hungarian National Museum. Unfortunately, no information is available about its provenience and circumstances of discovery. However, dating it to the Ha C2 and D1 periods seems compelling based on technological characteristics and analogies of its decoration. Despite the akin technological characteristics of the fragments, dissimilarities in the decoration do not allow us to rule out the possibility that the fragments belong to more than one vessel of the same type. Importantly, in terms of structure and decoration, the closest analogies to this vessel type are found among the finds recovered from the so-called princely tumuli near Kleinklein in southeast Austria.

We would like to argue that the decorated metal sheet fragments found in one of the tumuli in the Szalacska necropolis represent another evidence of the importance of the tumulus cemetery and the hilltop settlement in EIA, calling our attention, at the same time, to how limited, in spite of a century and a half of research history, our understanding is of the exact spectrum of the archaeological material of the cemetery.

In 1980, upon introducing his concept of the socalled Sulmtal group, Claus Dobiat argued that the eastern border of the distribution area of this cultural group is marked by the tumulus cemetery near Szalacska (Dobiat 1980, 174–176). Even if fully exploring the relationship between the EIA community associated with the Szalacska cemetery and hilltop settlement and the central places in southeast Austria has to remain an unfulfilled wish, the artefacts presented in this paper provide new information about how the Hallstatt Period in Transdanubia is connected to the EIA communities of southeast Austria.

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#### Notes

 Although the depiction of the vessel (inv. no. 11/1930) correctly presents an everted rim, the description provided by Pál Patay reads that all cists of the hoard have KM 1 type rim according to the typological system by B. Stjernquist.

2 MNM Central Archives, Call no. 110.N.2.

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#### HALLSTATT-KORI FÉMEDÉNYEK NYUGAT-MAGYARORSZÁGRÓL

#### Összefoglalás

A tanulmány két kora vaskori fémleletet mutat be. Az egyik 1941-ben, Nagyberki-Szalacska lelőhelyen, egy halomsír kifosztásakor került elő. A gazdagon díszített, töredékes, vékony bronzlemezt a vízszintes peremei mentén kialakított fülek és az azokon átvezetett szegecsek segítségével rögzíthették valamilyen szerves anyagból készült edényre, aminek lenyomata talán azonosítható a lemeztöredékeken több helyen is látható hullámvonalas mintázatokban. Hasonló, szerves anyagból készült edényre rögzített fémborítás töredékeit találták meg a horvátországi Martijanec közelében feltárt halomsírban. Az itt előkerült lemeztöredékek nagyon hasonló, kis méretű poncolásokból és trébelt lencsékből álló díszítést viselnek, mint a szalacskai lemezek. Ugyanakkor a vízszintesen futó koncentrikus meanderekből és az ún. Tangentenbuckelzier-mintákból álló díszítés legpontosabb párhuzamai elsősorban Délkelet-Ausztria területéről ismertek. Bár a koncentrikus meanderek gyakran felbukkanó díszítőelemek a szalacskai kerámiákon, a lemeztöredékeken látható minta legpontosabb párhuzamai a kleinkleini temető Pommerkogel nevű halomsírjából előkerült hengeres bronzedényeken találhatók meg. Mivel vékony falú és merevítőelemek, illetve edényfenék nélkül kialakított edényekről van szó, a Pommerkogel és

Kröllkogel hengeres bronzedényeivel kapcsolatban is felvetette már a szakirodalom, hogy valamilyen szerves anyagból készült edény borításai lehettek, azonban nem látszik egyértelmű rögzítésmód. A meanderekkel ellentétben a *Tangentenbuckelzier*minta ezeken a hengeres edényeken nem jellemző, viszont az ausztriai széles peremű bronztálak peremének gazdag díszítésében komoly szerepet kaptak.

A kialakítás technikai jellemzőire és a szerkezetre való tekintettel a kleinkleini hengeres edények pontosabb párhuzamaként azonosíthatók azok az edénytöredékek, amelyeket a Magyar Nemzeti Múzeum Őskori Gyűjteménye őriz. Sajnos az 1970-ben leltárazott edénytöredékek előkerülésére vonatkozó információk teljesen hiányoznak, így sem a lelőhely, sem a kontextus nem ismert. Bár a múzeum munkatársai felvetették annak lehetőségét, hogy az edénytöredékek Szalacskáról származhatnak, ezt bizonyítékokkal nem lehet alátámasztani. Az edénytöredékeken megfigyelhető díszítés meghatározó eleme a Tangentenbuckelzier, ami ugyan nem jellemző a kleinkleini hengeres bronzedényeken, de a Pommerkogel halomból előkerült bronz edényfedők egyikén felismerhető díszítés szerkezeti értelemben jó párhuzama a Magyar Nemzeti Múzeumban őrzött edénytöredékeknek.

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