

Gábor V. Szabó

BRONZE AGE TREASURES IN HUNGARY
THE QUEST FOR BURIED WEAPONS, TOOLS AND JEWELLERY

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I dedicate this book to the memory of the men and women who concealed these treasures

Gábor V. Szabó

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The Quest for Buried Weapons, Tools and Jewellery



Budapest 2019

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INTRODUCTION

Lost histories

This book is devoted to the Hungarian relics of a distinctive, exclusively European archaeological phenomenon, namely the Late Bronze Age hoards made up of gold and bronze artefacts dating from the fourteenth to tenth centuries BC. The deposition of the assemblages containing valuable weapons, tools, implements and vessels selected according to specific patterns over several hundred years was a unique practice that can only be observed during the European Bronze Age - no similar practice has been documented during any other historical period either on the European continent or elsewhere. The accumulation and concealment of each and every hoard has a different story to tell, which we can only hope to reconstruct and recount if we know even the most minute details of the hoard's composition, its exact findspot, its context and its mode of deposition, and if we are able to examine the use-wear traces on the artefacts themselves.

Some one and a half decades ago I became aware of the extent to which assemblages of this type are irrevocably destroyed, how they disappear together with the stories they could tell, because nighthawkers - illicit metal detectorists - have sold dozens of bronze hoards to private collectors and foreign auction houses. The provenances provided in auction catalogues are generally false, as are the specifications of the hoard compositions. Together with my team of university students and my enthusiastic metal detectorist friends with a deep commitment to preserving the Hungarian archaeological heritage, we began a research project for rescuing these assemblages, as a result of which we have located and saved thirty-nine bronze and gold hoards. During and after the excavation of each new hoard, I always used to ponder whether it might be better to leave untouched the sites where the discovery of further hoards can be expected. Seeing the incredible advances in archaeology, it seems more than likely that - compared to us - future generations of archaeologists will be able to assemble incomparably more comprehensive and far more accurate narratives about these treasures. However, my doubts were dispelled with time. On the one hand, I continuously had to resign myself to the fact that nighthawkers beat us to virtually each and every site we chose to investigate, while on the other, I witnessed a continuous growth in the number of bronze hoards originating from Hungary that surfaced in foreign auction houses through the operation of an illicit antiquities market.

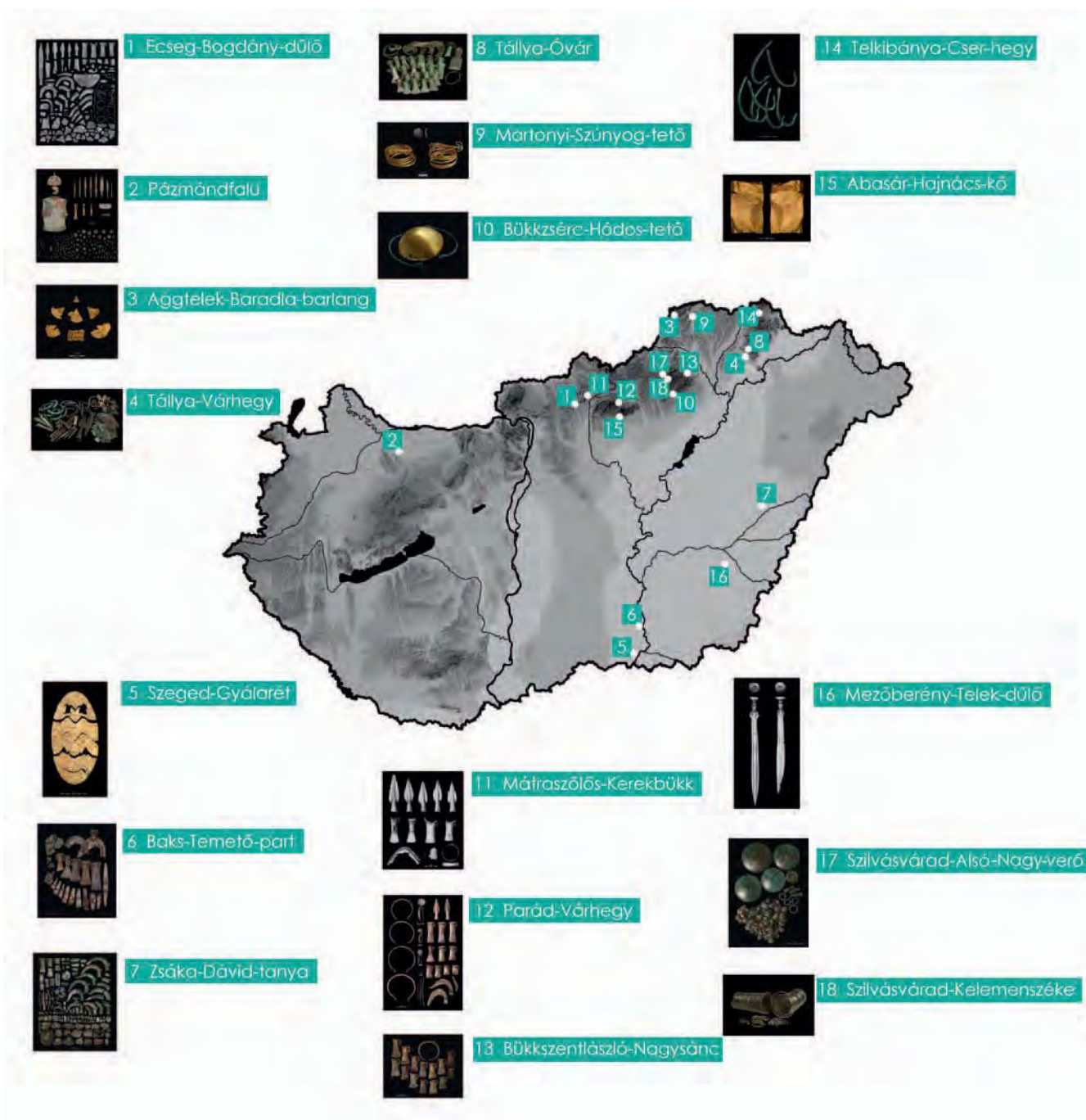


Figure 1. Findspots of the hoards presented in the book

Structure of the book

Chapter 1 covers previous research: who were the scholars who began studying these bronze assemblages and what piqued their interest in these finds, alongside an insight into the main research methods and main research agendas regarding these assemblages. This is followed by a detailed discussion, with various approaches, of eighteen bronze hoards that we uncovered (*Fig. 1*), to illustrate the different types of bronze hoards and the many diverse motivations underlying the deposition of hoards. Chapter 2 covers the many varieties of sacrificial and votive hoards, Chapter 3 takes a look at the hoards accumulated in the households of the wealthy, either to be gifted or to be used for practical purposes, while Chapter 4 evokes the colourful diversity of one particular site type of the Late Bronze Age in Hungary, namely the period's hillforts. Chapter 5 illustrates the significance ascribed to boundaries and territories through three hoards of diverse nature recovered from three different sites. Chapter 6 evokes the one-time ritual landscape through the excavated hoards, setting the practice of Bronze Age hoard deposition into a wider cultural context. Finally, Chapter 7 reviews how the practice of hoard deposition is interpreted in Hungarian and international archaeological scholarship.

The hoards are presented in the same format: a brief introduction to the site and the hoard is followed by a discussion of the find circumstances. Next, the finds and the findspot's broader area and environment are discussed, while the concluding section offers one potential interpretation of the reason underlying the deposition based on the evidence of what we know about the hoard.

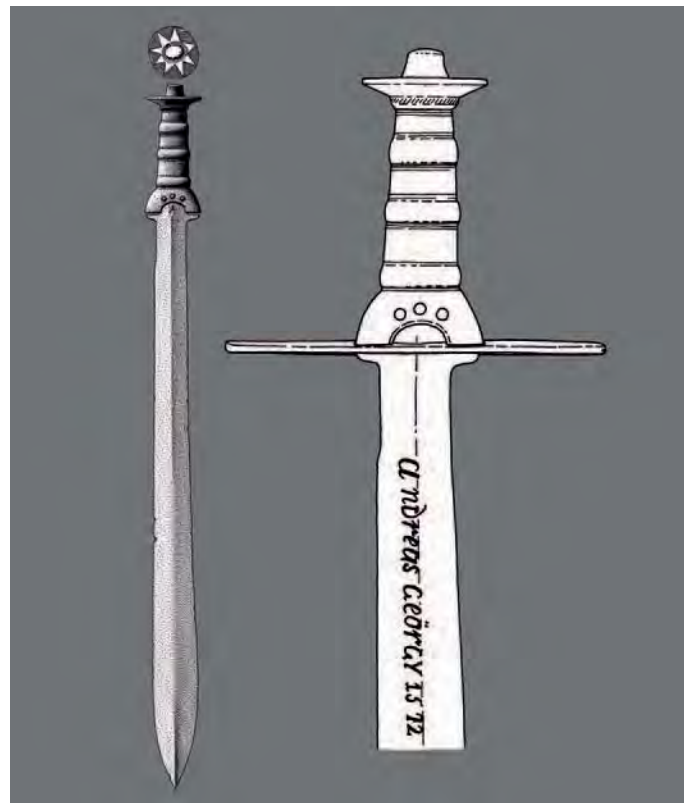
The research on which this book is based was generously funded by a research grant for the project "Locating, salvaging and interpreting Late Bronze Age hoards" (NKFI-OTKA, Grant 112427).

1 TREASURE HUNTERS

Hoards and their finders: From the beginnings to the turn of the millennium

The search for Late Bronze Age hoards and their subsequent publication looks back on over 150 years in Hungarian archaeology. While the regular publication of bronze hoards began from the late 1860s onward, there are several documents recounting the discovery of Bronze Age hoards, often under truly astounding circumstances, in various regions of Hungary from the first decades of the 1800s. The river regulations and railway constructions after the Austrian-Hungarian Compromise of 1867 as well as the improvement of agricultural techniques led to the discovery of hundreds of such assemblages, which either reached a museum collection or were sold on the antiquities market. Regrettably, very little information has survived about the exact findspots, the circumstances of discovery, the find contexts and the deposition mode. Thus, the efforts of scholars who patiently sift through archival records and conduct field surveys and excavations to retrieve as much information as possible about one or another hoard and how they were buried is all the more invaluable and admirable.

Figure 2. A Late Bronze Age sword used again in the sixteenth century in the collection of the Hungarian National Museum. The cross-guard was added later



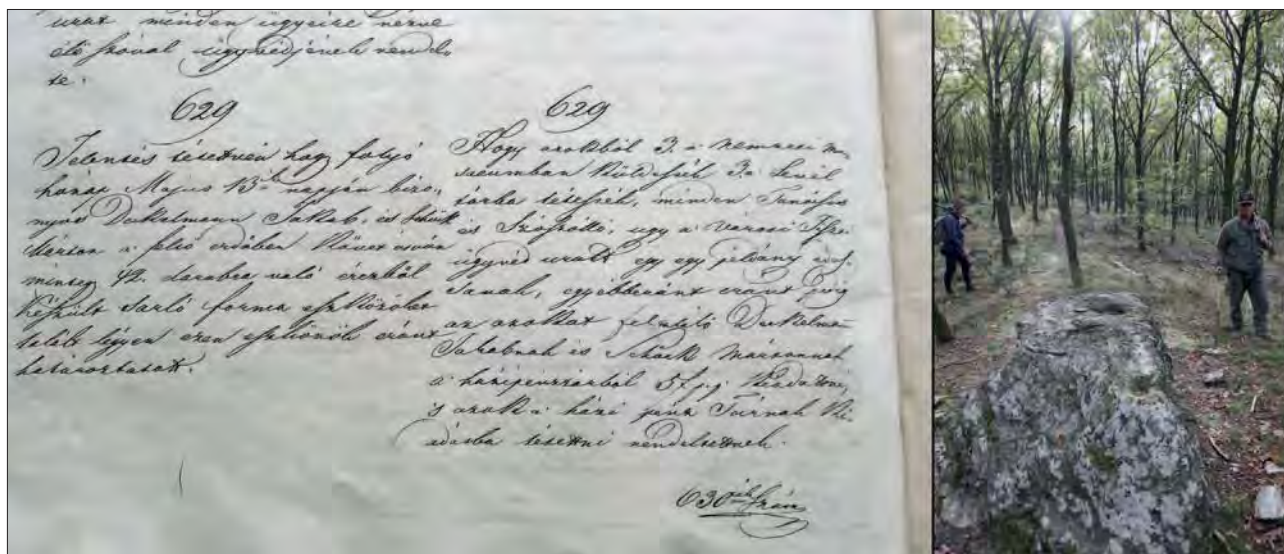


Figure 3. Entry describing the sickle hoard found at Kőszeg-Ördögaszta in 1841 in the minutes of the municipal council, and the assumed findspot

The most fascinating chapter in the research on Bronze Age hoards is undoubtedly the initial period from the later nineteenth century to the end of World War 1. The very first Bronze Age object that became part of a Hungarian museum collection is a remarkable sword (Fig. 2).¹ The sword dating from the twelfth–eleventh centuries BC reached the Hungarian National Museum from a private weapon collection. The inscription on its blade, “andreas geörgy 1572”, clearly indicates that the sword had been found in the sixteenth century or earlier.

The discovery of a Bronze Age artefact in Hungary is first reported in a study published in 1825, which mentions a disc-butted bronze axe recovered from the River Kraszna.² The very first hoard whose findspot was investigated in the field is the assemblage of six swords discovered in 1832 at Egereske (Ofchovica, Ukraine). The assemblage was washed out by the rain on the slope of Mt. Somos (Derenova) and we also know that the hoard’s objects lay in a “two steps wide” area.³

Another hoard discovered at an early date is the hoard of forty-four sickles found in the Kőszeg Mountains in 1841. Found by two townspeople from Kőszeg during quarrying, the sickles laid carefully beside each other came to light on the town’s outskirts, in one of the crevices of a rock outcrop known as Ördögaszta (*Teufeltisch*) in an area known as the Felső-erdei field (Fig. 3).⁴

One of the hoards with a truly intriguing context is the renowned Hajdúböszörmény hoard found by two day-labourers while digging a shallow pit for a hearth in May 1858 on the town’s outskirts. Two bronze

helmets came to light first; underneath them lay two ornate bronze situlas, two bronze cauldrons and two bronze cups, which had been placed over some thirty swords arranged in a regular pattern. A part of the hoard was acquired by the priest of the town's Reformed church, another part by a local landowner, while the remaining pieces, mainly the swords, were purchased by Emmanuel von Graffenried, a passionate collector of antiquities living in Vienna (*Fig. 4*).⁵

One typical example of the early reports on Hungarian bronze hoards is Ferenc Kubinyi's study published in 1861 about the Bronze Age artefacts from Mt. Hársas at Kisterenye (*Fig. 5*). In the early 1820s, Kubinyi noticed that the area's lads wore gold wires wound around their hats, which according to their account originated from Mt. Hársas. In 1822, he saw a lad sporting a Late Bronze Age phalera from the same site on his woollen coat, which prompted him to purchase all the artefacts that had been found on the site. Beginning in 1832, he systematically excavated an extensive area, as a result of which he acquired several hundred bronze artefacts.⁶

From the 1870s, there was a dynamic growth in the number of bronze hoards that were published from various collections in the wake of the large-scale human activities that led to the irrevocable transformation of the landscape in the Carpathian Basin. There was little chance of the observation of find contexts

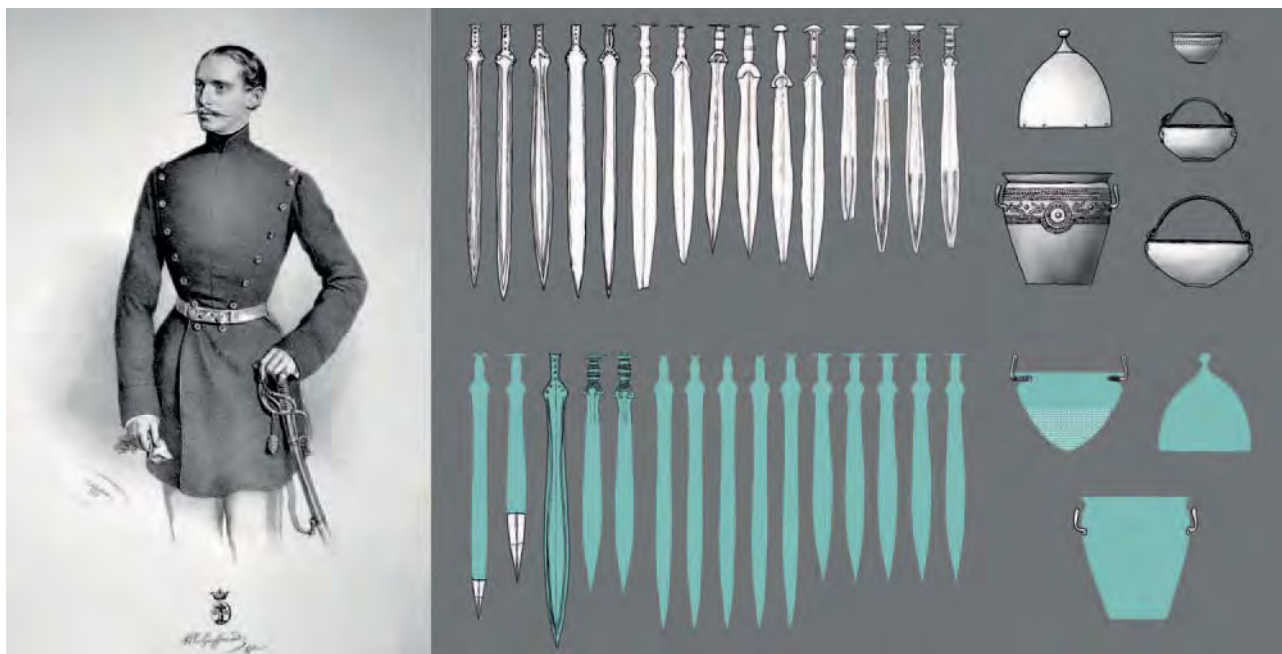


Figure 4. Lithograph portraying Emanuel von Graffenried (1857) and the reconstruction of the composition of the Hajdúböszörmény hoard found in 1858



Figure 5. Ornate Late Bronze Age pendants (phaleras) from Kisterenye-Hársashegy

or even the salvaging of archaeological finds during the extensive earth-moving operations, often conducted at a forced pace, associated with river regulations and railway constructions as well as the emergence of a new type of intensive agriculture, and most of the artefacts brought to light in the course of these works either perished or were acquired by antiquities dealers.⁷

The antiquities market, which boomed during this period, represented yet another distinctive variant of the threats imperilling Late Bronze Age hoards. In the final years of the nineteenth century, the Hungarian National Museum regularly purchased bronze finds and hoards from Hungarian and Austrian antiquities dealers that had come to light in Hungary; however, some dealers preferred to sell these assemblages to Hungarian and foreign collectors, whereby a number of major Late Bronze Age artefacts made their way into Western European and North American museums and private collections. The lowermost tier in the trade of archaeological objects was when the finders sold the bronzes to be remelted: many instances have been recorded when heavy, massive bronze artefacts were bought up by village smiths, bell foundries and goldsmiths for re-melting and re-use.⁸ The dynamic market for Bronze Age antiquities is amply reflected by the appearance of workshops producing forgeries of varying quality.⁹

By the late 1870, we witness the emergence of a cultural milieu that subscribed to and regularly published articles in the major archaeological journals, which was largely made up of amateur enthusiasts, whose mainstay was the network of regional museums founded in the last third of the nineteenth century, the membership of archaeological societies and collectors committed to saving the country's archaeological

heritage. They wrote the most important reports on new finds, describing, among others, the bronze hoards that had come to light in various parts of Hungary.

The comprehensive monographs written in the 1890s wrought a profound transformation in the overall perception of Hungarian bronze hoards. The most exhaustive among these was József Hampel's three-volume monograph, which in addition to publishing the finds themselves, also categorised and dated the finds based on analogies drawn from the Western European archaeological literature.

The number of published Late Bronze Age hoards declined in the interwar period. The main reason for this was that the regions where most of the hoards had previously been discovered were lost to Hungary and annexed to the neighbouring countries following the peace treaties of 1918 (principally Upper Hungary and Subcarpathia).

One typical representative of the generation of archaeologists active in the interwar period was Kálmán Miske, who was a quintessential child of the nineteenth century, whose activity was characterised by immense enthusiasm and a deep personal commitment to collecting relics, but a minimal taste for field documentation. His investigations of Late Bronze Age sites focused first and foremost on the Velem-Szent-Vid hillfort. The renowned Velem gold hoard came to light during the 1929 excavation season, his last one on that site, but he made every effort to conceal the exact findspot of the treasure even from his fellow archaeologists.¹⁰

One of the most important hoards found at this time was Hoard 2 of Budapest-Angyalföld, containing four golden vessels dating from the Early Iron Age and sixteen gold and gilt bronze small objects, that was discovered in a sand quarry in March 1925, whose exact location could be reconstructed through painstaking archaeological detective work.¹¹

Some of the bronze hoards discovered during this period such as the assemblage from Baradla Cave at Aggtelek and Hoard 3 of Bodrogkeresztúr came to light in the course of excavations;¹² however, regrettably enough, the exact arrangement of their objects was not recorded either by photographs, nor drawn.

The earlier practice regarding the discovery and documentation of hoards changed but slowly after World War 2. The researchers engaged in the study of Late Bronze Age hoards continued to have little interest in the arrangement of a hoard's artefacts or their exact contexts and find circumstances.¹³ The first hoard whose find context was documented in the field had been concealed in a clay vessel that was unearthed in 1960 during Amália Mozsolics's excavation of the Nagykálló-Telekoldal settlement (*Fig. 6*).¹⁴

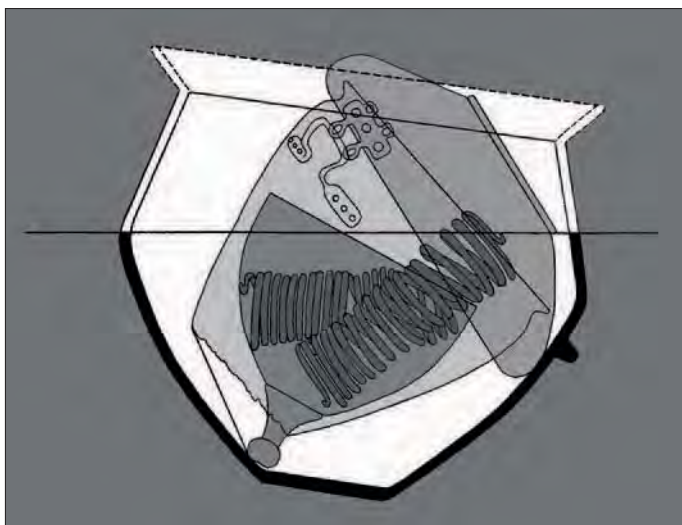
Gyula Mészáros can be credited with another methodologically important advance during his excavation of the Nagyvejke hoard in 1969. He opened a trench to determine the core of the hoard that had been disturbed by ploughing, but had nevertheless retained its original arrangement. Using metal detectors, he collected the pieces that had been spread by the machine and documented the undisturbed core of the hoard with photos and drawings.

Compared to the earlier practice, another headway was made by Pál Patay's publication of the Mezőkövesd bronze hoard and the reconstruction of the original arrangement of the hoard's artefacts. Based on the finder's account and the data of the test excavation, he reconstructed the deposition mode and the arrangement of the hoard's artefacts on an accurately made section drawing (Fig. 7).¹⁵

An exemplary publication in terms of the meticulous reconstruction of the find context is the report of the Pötréte hoard that came to light during peat mining. The various objects that had made up the hoard were collected by Róbert Müller, who also directed the test excavation (Fig. 8). He argued that the area had



Figure 6. Arrangement of the bronze objects of the Nagykálló hoard in the clay vessel



been a marshland covered with water plants in prehistory and that peat formation had begun well after the concealment of the hoard. During the examination of the finds, he noted textile remains on several objects, from which he concluded that the metal artefacts and the amber beads had once adorned an ornate garment.¹⁶

The number of hoards reaching museums that were eventually published increased from the 1960s onward, which can in part be explained by the increasing mechanisation of crop cultivation as well as by the house building boom in rural areas, which brought to light many new assemblages. The sale of these bronze hoards for a good price ran into difficulties during the Kádár era - only after the softening of this political system from the 1980s could transactions of this type be conducted with greater ease - and thus a considerable number of these hoards were presented to museums during this twenty-year period.

Figure 7. Reconstruction of the arrangement of the objects of the Mezőkövesd bronze hoard found in 1959



Figure 8. The Pötréte hoard, discovered during peat mining

Endangered hoards: Nighthawkers and the antiquities market

Late Bronze Age hoards are among the most endangered elements of Hungary's cultural heritage. Before the 1990s, dredging operations in rivers, forestry and intensive crop cultivation represented the greatest threats to these hoards - by the turn of the millennium, these were eclipsed by the activity of nighthawkers, which became the gravest danger to these assemblages.

The large amount of Bronze Age metalwork, their location close to the modern ground surface, their larger size and their relatively well identifiable presence make them easy prey to plundering by nighthawkers. Their remarkable form and good state of preservation make them popular items among collectors and they therefore rank among the finds that can be successfully sold on the antiquities market. Given that nighthawking has acquired immense proportions, it is to be feared that the still extant, undisturbed closed hoards will soon disappear from our sites.

In Hungary, the use of metal detectors began to spread on an unprecedented scale from the mid-1990s. According to the estimates of the dealers of these instruments, some 15-20,000 metal detectors are owned by private individuals.

In our experience, metal detectorists can be divided into two main groups. One is made up of good-intentioned enthusiasts with an interest in local history, often from the ranks of amateur antiquarians and coin collectors driven by a passion for collecting, and

of people interested in the locations of the battles of World War 2 and in shipwrecks. They often make efforts to establish contact with local museums and heritage protection institutions, and over time, they provide indispensable assistance to local heritage protection specialists and archaeologists owing to their knowledge of local lore and the area's topography, and they often report sites and finds.

Unfortunately, aside from amateurs driven by their passion for collecting, a group of detectorists with good expertise has appeared on the scene during the past one and a half decades, who regard metal detecting as a primary or secondary source of income. Professional looters tend to "specialise" in a particular period and they comb the archaeological literature in order to select the best possible archaeological sites for their activity (Figs 9-10).



Figure 9. Hoard from eastern Hungary found by nighthawkers



Figure 10. Typical Middle Bronze Age hoard dating from the seventeenth–sixteenth centuries BC from Transdanubia found by nighthawkers



Figure 11. Late Bronze Age arm spirals and a passementerie brooch probably originating from Hungary offered for sale by a Western European auction house

Since the 2010s, metal detecting appears to have become a kind of mass recreational activity. Many people pursue it as a weekend pastime, believing it is a legal hobby, and they visit archaeological sites with their family and friends as part of a weekend outing.

We have made every effort to keep track of the bronze hoards and bronze artefacts found in the course of illicit metal detecting since 2006. The current record suggests that a part of the hoards found in Hungary makes its way westwards, with Austria, Germany and Switzerland being the primary markets, al-

though the antiquities dealers of Belgium and The Netherlands also appear among the purchasers (Fig. 11). We know of bronze artefacts that reached the United States and a more recent development is the emergence of a few Ukrainian and Russian businessmen with large private collections as major purchasers and perhaps commissioners. There is growing evidence for the presence of a wealthy circle of collectors in Hungary too, who in addition to the relics of other periods, also “specialise” in the collection of Bronze Age artefacts.



Figure 12. A hoard of Late Bronze Age swords from an unknown site in Hungary found by nighthawkers (bottom). One of the swords of the hoard offered for sale in 2018 by a Western European auction house (top)

In the case of the Bronze Age objects appearing among the lots offered for sale by auction houses, the genuine provenance, findspot and find contexts of the artefacts are rarely specified. Yet, the typological traits of the artefacts enable the identification of the pieces that have quite certainly been found in Hungary or the Carpathian Basin, even if their exact findspot can hardly be pinpointed or proven. The provenance of these artefacts is broadly given as South-East or Central Europe, while their origin is described as part of

an estate or a nineteenth- or twentieth-century private collector. Very often, a hoard is sold in several parts, with its artefacts offered for sale separately and with false findspots (*Fig. 12*). One typical example of manipulating the findspot is an assemblage of metal vessels that had in all likelihood been discovered by illicit metal detectorists on the Abos hillfort (Obišovce, Slovakia) in the 1990s, which surfaced in an auction held by the Dorotheum in Vienna with an exact provenance and then appeared in an auction organised by a German antiquities dealer, this time as an assemblage found in 1899 in the Altenfließ area of Branderburg that had been part of a family's private collection (*Fig. 13*).



Figure 13. Bronze Age vessels probably found by nighthawkers on the Abos hillfort (Obišovce, Slovakia)

Saving hoards: A research project for recovering and studying bronze hoards

After the realisation of the dangers threatening Late Bronze Age hoards, the Institute of Archaeological Sciences of the Eötvös Loránd University launched a project in autumn 2006 with the goal of locating Late Bronze Age and Early Iron Age hoards that could still be recovered from their original context. As a result of this work, we succeeded in locating and saving thirty-nine hoards until 2017. During the twelve years of the research project, we investigated fifty-two sites, of which twenty-five yielded closed assemblages containing metal artefacts.

In addition to hoards, some four thousand Late Bronze Age and 350 metal objects from other archaeological periods were uncovered and documented during the metal detector surveys of the sites. As part of this salvage operation, we were also able to gather information about several hoards that had come to light in the course of illicit activities (*Fig. 14*).

There were three main considerations in our choice of sites selected for the project. The first group of sites included the hillforts tentatively assigned to the Late Bronze Age known from the archaeological literature, which aside from topographic field surveys had not been archaeologically investigated and neither could their exact date be securely determined in the lack of finds with a dating value (e.g. Abasár-Hajnács-kő, Abasár-Rónya-bérc and Martonyi-Szűnyog-tető) (*Fig. 15*).

Another priority was the extent of danger to a site. When informed about traces of looting, we strove to visit the site as swiftly as possible in the hope of finding closed assemblages or stray finds before it would be completely plundered



Figure 14. Logo of the Hoard Hunter Project of the Eötvös Loránd University



Figure 15.
Hand excavation of the Parád-Várhegy hoard



Figure 16. Collection of the items of the hoard spread by the plough using metal detectors on the outskirts of Pázmándfalu

and to salvage what information we could about the site doomed to destruction (e.g. Mátraszentimre-Óvár, Szilvásvár-Kelemenszéke, Tállya-Óvár).

The third group comprises the sites from which single bronze finds were known, possibly an indication that a bronze hoard had been ploughed up or otherwise disturbed in the area, as at Pázmándfalu (*Fig. 16*) and Zsáka-Dávid-tanya, or that the site represented an intensely occupied settlement with a high number of stray, unstratified bronze finds such as Baks-Temetőpart.

We usually opened a 1 m by 1 m test trench for excavating the bronze hoards we discovered during the project. This small sounding usually offered very little information about the overall context in which the



Figure 17. Trench opened in the area of the bronze hoard found at Tállya-Óvár



Figure 18. Findspots of the bronze hoards at Baks-Temető-part

hoard had been deposited, or how it related to the settlement or the landscape chosen for the deposition. In order to link the hoards with as many strands as possible to the landscape where they had been buried, we systematically collected the surface finds and conducted a metal detector survey of the area.

We had the opportunity to conduct an excavation for investigating the broader area of the hoards on eight sites, where we opened trenches ranging from 50 to 200 m² in size: Bükkzsérc-Hódos-tető, Pázmándfalu, Tállya-Óvár (Fig. 17), Zsáka-Dávid-tanya, Parád-Várhegy, Martonyi-Szúnyog-tető, Baks-Temető-part (Fig. 18) and Szilvásvár-Kelemenszéke.

During the research project, we learnt about several hoards that had been discovered by night-hawkers and had then been sold in Hungary or abroad. Of these, only a single one has returned to Hungary (Situla 2 of Hajdúböszörmény; Fig. 19),¹⁷ while the others ended up in private collections or in the hands of antiquities dealers (Figs 20–21).¹⁵

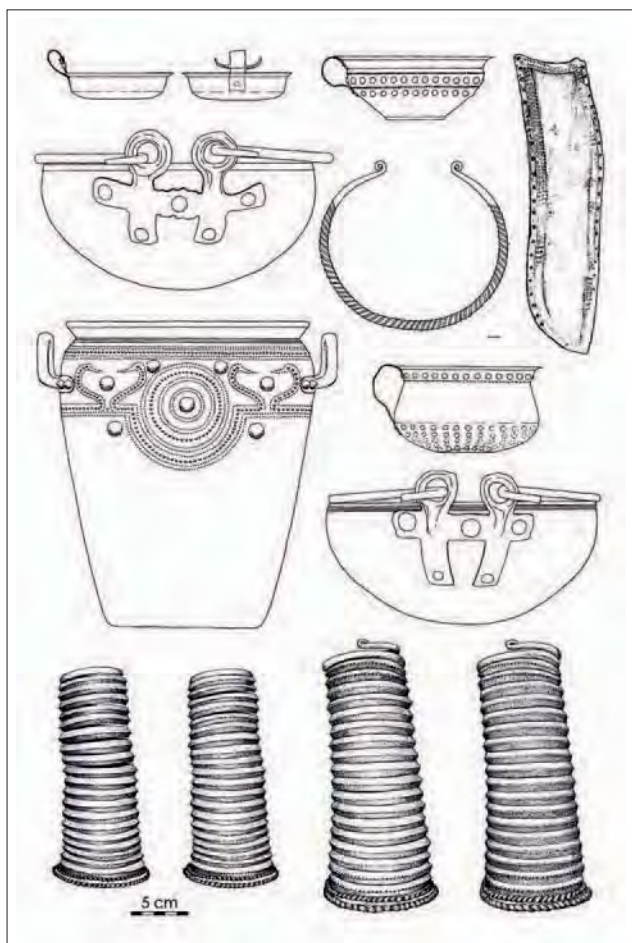


Figure 20. Late Bronze Age hoard from north-eastern Hungary, perhaps originating from Tolcsva-Várhegy



Figure 19. The bronze situla found on the outskirts of Hajdúböszörmény in the early 2000s. Hajdúság Museum, Hajdúböszörmény

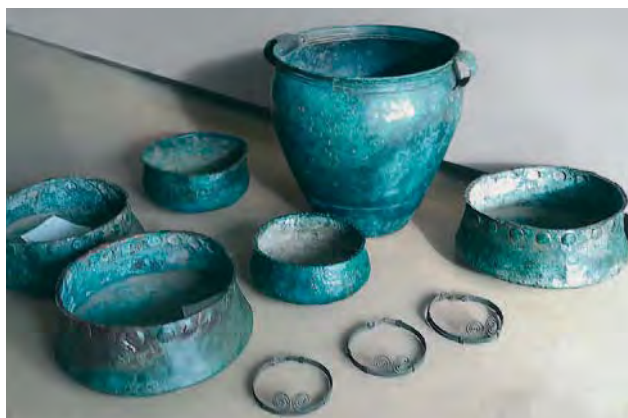


Figure 21. Assemblage of Late Bronze Age bronze vessels and bracelets, possibly from eastern Hungary. Nothing is known about the fate of the objects

2 SACRIFICES AND VOTIVE DEPOSITS

Ritual codes: Ecseg-Bogdány-dűlő

The hoard discovered on the south-western side of the Cserhát Mountains was memorable for our Hoard Hunter team because the hoard had been found by two locals from Ecseg, who had collected the finds, even though without any documentation. Luckily for us, the two finders immediately reported the finds and we were able to inspect the site two days later, where the assemblage of bronze objects had been concealed in a bronze cauldron.

Based on the finders' account, we were able to reconstruct the original arrangement of the hoard's artefacts and the mode of deposition. It seems likely that we can assume an elaborate deposition ritual involving at least four phases, in the course of which specific artefacts were placed underneath and over the cauldron, and a remarkable spear was thrust into the ground above the assemblage as the concluding act of the ritual.

The find circumstances

The Ecseg hoard (Fig. 22) was discovered and excavated by two locals with a deep commitment to heritage protection, who contacted the Hoard Hunter team of the Eötvös Loránd University the very same day, as a result of which we were able to inspect the site within a day in order to survey the area and to document the find context.

While surveying the area, the amateur metal detectorists received a stronger signal. They began digging and found a longish spearhead pointing downward at a depth of 20–25 cm. Two socketed axes, a smaller spearhead and a spiral bracelet lay in line with the spearhead's lower third. While uncovering the armring, they noticed that the rim of a bronze cauldron was outlined around it at a depth of 30–35 cm (Fig. 23). After establishing that the cauldron was filled to the brim with various objects, they decided to lift the cauldron as it was and take it to their home, where they would be able to remove the objects at their ease. After lifting the cauldron, they discovered two spearheads and a socketed axe placed next to each other some 2–3 cm deeper.

The cauldron's wire handle, broken in two, lay on top of the objects in the cauldron. Immediately under it were two brooches corroded to each other and a part of a spearhead's blade wedged in-between. The other



Figure 22. The artefacts of the Ecseg-Bogdány-dűlő hoard, without the cauldron



Figure 23. The cauldron concealing the hoard from Ecseg-Bogdány-dűlő

handle and the cauldron hanger, which had broken off, lay by the inner side of cauldron's mouth. Intact, broken and twisted pins were laid in line with them. Underneath these objects was a mix of intact and broken sickles, broken socketed axes, intact socketed chisels and fragments of bronze cakes. Various objects such as the fragment of a sickle blade were corroded to the lumps of bronze and a palm-sized bronze plaque adhered to the cauldron's side. Broken sickles, a saw blade and two knives were found at the bottom.

The deposited objects

The composition of the hoard and its artefact types correlates well with the so-called Kurd-type hoards of the thirteenth-twelfth centuries BC.¹⁹ This period saw the deposition of the highest number of hoards with highly diverse compositions. The period's colourful deposition practices, varying from one region to the next, are reflected in hoard compositions ranging from assemblages made up of unique jewellery or weapons

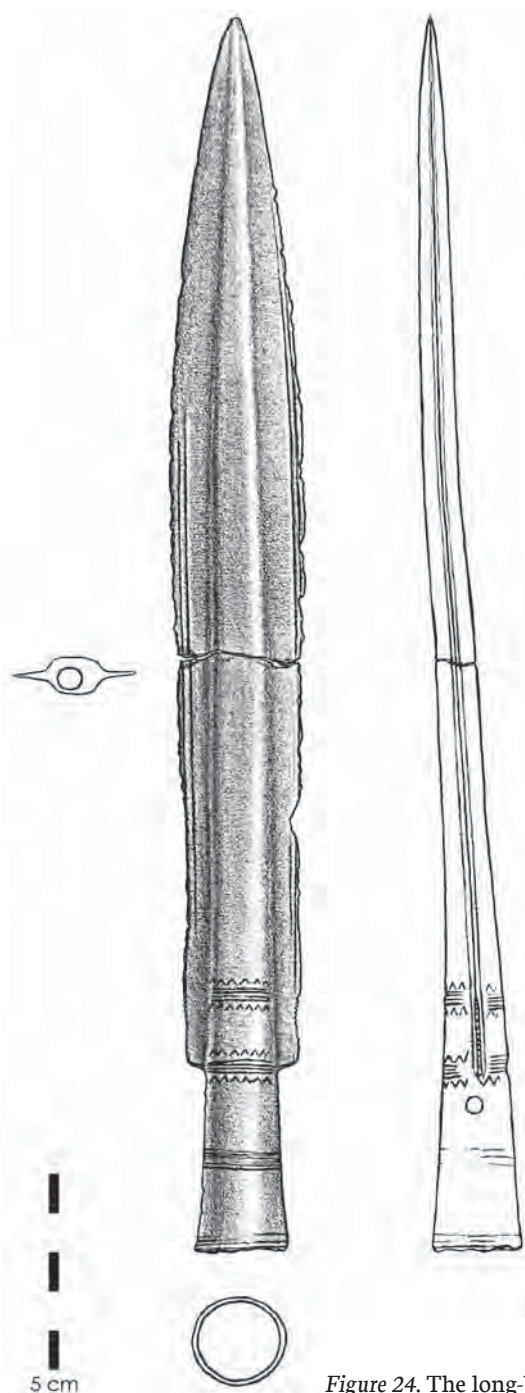


Figure 24. The long-bladed spearhead of the Ecseg-Bogdány-dúló hoard

to small assemblages comprising mainly tools and implements, and to hoards containing objects that together weigh as much as 25 to 50 kg. The Ecseg hoard represents the latter type, often composed of several hundred objects such as offensive and defensive weapons, tools and implements, and jewellery such as brooches and bracelets. This composition is the most frequently observed pattern among the hoards from Transdanubia and north-eastern Hungary.

The hoard weighing 8.5 kg contained a total of 106 objects: a bronze cauldron, six spearheads, a winged axe, eleven socketed axes, a socketed hammer, three socketed chisels, seventeen sickles, two knives, three saw blades, four pins, two brooches, a heart-shaped pendant, a spiral bracelet, an awl, bronze rings, the fragments of a cuirass and of what was probably a helmet, the bronze bucket mounts, thirty-one intact and broken bronze cakes and an assortment of fragments of unidentifiable sheet bronze and cast bronze objects.

One of the most interesting items of the hoard is the 34 cm long spearhead that came to light first (*Fig. 24*). The spear had quite certainly been used as shown by the wood remains in its socket and the carefully sharpened cutting edge. Spears fitted with similar spearheads that were longer than the usual types became widespread from the thirteenth-twelfth centuries BC; by the eleventh-tenth centuries BC, we witness the appearance of extraordinarily long varieties with a length of 40–50 cm, weighing half a kilogram.²⁰ Long-bladed spearheads were used in Late Bronze Age Crete and the Mycenaean civilisation. Given that weapons of this type appear in the south already in the fifteenth-fourteenth centuries BC, it is possible that their variants had spread northward from that region.²¹



Figure 25. Repair on the inner side of the bronze cauldron from Ecseg-Bogdány-dűlő

The most distinctive trait of the Ecseg spearhead is its long blade and the 2 cm long blunt section, the so-called ricasso on the blade's lower part. One of the best parallels to the Ecseg exemplar comes from the stone burial chamber uncovered near Gau Algesheim in south-western Germany.²² The burial was looted and no more than a 31.2 cm long spearhead and an unusual clay vessel set on fenestrated feet remained of the grave goods. Nevertheless, the unusual grave form and the special weapon indicate that the deceased had been a prominent member of his community.

Spearheads resembling the piece from Ecseg are relatively rare in Western and Central Europe - no more than a dozen similar spearheads are known.²³ It seems likely that spears fitted with long spearheads with

ricasso had their own style of spearsmanship.²⁴ Similarly to swords, the blades could be used for both cutting and delivering blows, and these warriors fought like the medieval Japanese warriors with their *yari* and *naginata* spears,²⁵ or as with the European halberds of the fifteenth–sixteenth centuries.

The other distinctive piece of this hoard is the bronze cauldron into which the deposited objects had been placed, an oft-repaired, strongly worn vessel. Its long use is indicated by its extremely worn handle, its body with its many cracks that were patched with rivets and small plates, and the slipshod repair of its base (*Fig. 25*).

While cauldrons were relatively common parts of hoards in the later periods of the Bronze Age, pieces resembling the vessel from Ecseg are extremely rare: no more than three close and three more distant parallels are known from the Carpathian Basin, while only two comparable bronze vessels have been found in Europe.²⁶ The cauldron of the Ecseg hoard is unique in that it is one of the earliest representatives of this vessel type, which is assigned to Type A2 in cauldron typologies in view of its curved side and handle cast in two. These vessels were used in the thirteenth–twelfth centuries BC.²⁷

The brooches represent relatively rare types with a good dating value. They can best be compared to Röhsschitz-type brooches with sheet bow and Unter-Radl-type brooches with wire bow that appeared in the 1200s BC and they can be seen as the earliest representatives of this brooch type in the region.²⁸ Their size suggests that they were used for fastening garments of thicker textiles such as cloaks. The hoard's dating to the thirteenth–twelfth centuries BC is bolstered by the pins, the crescentic pendant, the socketed axes and the sickles.

The findspot and its environment

We did not find any other archaeological finds in the immediate area of the deposition, a clear indication that it had been unoccupied during prehistory (*Fig. 26*).

An extensive archaeological site lies some 300 metres north of the hoard's findspot on the other side of a gully. The surface material collected at this site is made up of the finds of various periods, which include an hourglass-shaped pendant of the Late Bronze Age as well as pottery fragments from the same period, suggesting the presence of a substantial settlement at the time the hoard was deposited. There is a good view of the Bronze Age settlement from the hoard's findspot.

The hoard discovered on the outskirts of Ecseg in 2016 is not the single Late Bronze Age hoard from the area: in 1898, an assemblage of thirty bronze objects was found in a clay vessel on the slope of Mt. Kozárdi lying at a distance of a few kilometres.²⁹ The hoard of mostly intact socketed axes, sickles, five spearheads, two bronze rods and the base of a bronze vessel (*Fig. 27*) was deposited some 50–100 years after Hoard 2 described in the foregoing.



Figure 26. Findspot of the Ecseg-Bogdány-dűlő hoard and the finders

Interpretation of the hoard deposition

As mentioned in the description of the hoard, it seems likely that similarly to the period's many other hoards, Hoard 2 of Ecseg was assembled according to a specific pattern and norm by one individual or the community.³⁰ If this was indeed the case, we may also assume that the old, time-worn cauldron bore a specific meaning for the participants of the deposition ritual, as did the intact and broken weapons, the brooch pair that can be seen as a personal adornment and the heavy lumps of bronze that represented substantial wealth.

In the case of the Ecseg hoard, however, the observation of a specific deposition pattern is indicated not only by its composition, but also by the deposition mode. A glance at what we know about the deposition mode strongly points towards a purposeful, carefully orchestrated sequence of actions,³¹ in which the location selected for the deposition was also of prime significance. The hoard was deposited in an unoccupied

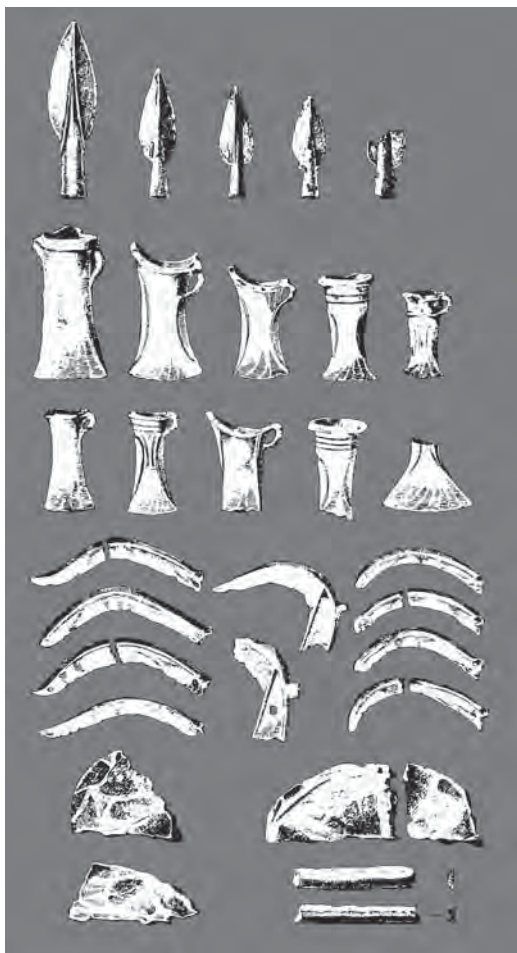


Figure 27. The bronze hoard discovered at Ecseg-Kozárdi-hegy in 1898

location that lay beyond the sphere of daily life, but was nevertheless close to the one-time settlement, lying at a distance of 350 metres, although separated from it by a gully. A roughly 50 cm deep pit was dug for the hoard: first, a socketed axe and two spearheads were laid on the pit's floor, onto which the worn bronze cauldron filled with bronze artefacts was placed. The object deposited in the cauldron were carefully arranged: the two knives, pieces of a saw blade and broken sickles were laid at the bottom, the less spectacular large lumps of bronze, the sickle and socketed axe fragments were heaped on top of them, followed by the plate fragments and the intact sickles and socketed axes. The fragments of a hacked bracelet, a bundle of bronze pins, two brooches and a large spiral bracelet were placed on the very top. A large spiral bracelet was laid across the cauldron filled to the brim, after which some earth was thrown over it and the assemblage was closed with two socketed axes and a spearhead. Finally, the long spear was thrust into the floor of the pit, which was then infilled with earth (Fig. 28).

In this interpretation, the deposition of the hoard can be conceptualised as a performance-like elaborate ritual that was performed in front of an audience, in which each artefact, movement and gesture had a specific meaning for the participants.³² The composition of Hoard F from the hillfort on Bullenheimer Berg in Germany (Fig. 29) furnishes convincing proof that depositions were on occasions accompanied by spectacular “performances”. Found in 1991, the hoard was made up of two units: bronze axes, ring jewellery tied together with

cord that had corroded to each other, sickles and two bronze cakes placed in a bronze amphora and additional axes and bracelets laid immediately beside the vessel. The bronze axe plunged into the body of the amphora is an eloquent example that the act of deposition was part of an elaborate sequence of actions. A sophisticated ritual is suggested by the large amounts of poppy seeds as well as mushroom, blackberry, red sorrel, dead-nettle, violet, birch leaf and bark remains found at the bottom of the amphora. It would appear that the participants had drunk a narcotic potion prepared from these plants before the deposition of the hoard.³³



Figure 28. Reconstruction of the arrangement of the objects of the Ecseg-Bogdány-dűlő hoard



Figure 29. The bronze vessel containing the artefacts of Hoard F from Bullenheimer Berg and the winged axe thrust into it during the deposition ritual

Unfortunately, no soil samples could be taken from the Ecseg cauldron; nevertheless, we cannot exclude the possibility that similarly to the amphora from Bullenheimer Berg, the valuable bronze vessel had been part of the ritual paraphernalia. Its patched base quite certainly indicates that it had repeatedly been in contact with direct heat and it is quite possible that it had been used for cooking potions consumed during various rituals.

There is other evidence, too, that the deposition of bronze artefacts was on occasion part of a sophisticated ritual. In 2009, a hoard of 150 jewellery items came to light at Oberwünschen in central Germany, above which lay the head and hands of a 40–60-year-old man.³⁴ Whilst the interpretation of this hoard is still a matter of debate, it nevertheless seems quite certain that the head and the hands had been placed over the carefully wrapped bronze artefacts as part of the deposition ritual. A similar ritual is suggested by the context of the bronze hoard discovered on the outskirts of Mérk in County Szabolcs-Szatmár in 1930. The hoard of winged and socketed axes, sickles and ring jewellery found by shovelmen had been placed in a large clay vessel beside which lay human hand and leg bones.³⁵

A funerary ritual: Pázmándfalu

We uncovered three hoards (Fig. 30) made up of the typical artefacts of the warrior aristocracy of the thirteenth–twelfth centuries BC on a small floodplain islet on the outskirts of Pázmándfalu in County Győr-Sopron. Hoards 1 and 2 lay some three meters apart and contained the full weaponry and personal belongings of a single individual, most likely an outstanding military leader. Hoard 3 was an independent smaller assemblage comprising the weapons and personal articles of a less prominent warrior, which had probably been deposited at a later date.

In terms of their composition, the three hoards share countless similarities with the grave goods of the elite warriors of the Central European and Alpine region, suggesting that their deposition can be linked to a mortuary ritual related to a hero's cult.

The find circumstances

In 2011, our team was notified by local hunters that bronze artefacts had been found in a freshly ploughed field on the outskirts of Pázmándfalu. We surveyed the area with metal detectors and found various other artefacts, around which we opened a trial trench. Deepening this trench, we reached the undisturbed core of the hoard (Hoard 1), which comprised several hundred intact and broken objects. The bronze artefacts surviving in their original position formed a closed oval heap – luckily for us, the deeper ploughing of the previous years had only dislodged the uppermost pieces (Fig. 31).

After a careful examination of the area around the hoard, we found another assemblage of carefully arranged artefacts (Hoard 2; Fig. 32). The undisturbed assemblage was made up of a folded grip-tongue sword, a knife with an ornate blade, a socketed chisel and a short sword. The fragment of a riveted bronze cuirass was placed on top of the heap (Fig. 33).

A few days later, we discovered yet another hoard that had been completely ploughed up (Hoard 3), lying some 8–10 meters away from Hoards 1 and 2. The pieces of the assemblage were fragments of a grip-tongue sword, a brooch, pendants and knives scattered along a roughly 15 m long oval area. In this case, ploughing had reached the deposited assemblage at some earlier date and thus we did not find any objects in their original position.

We undertook an excavation over a roughly 500 m² large area in August 2013 in order to determine the context of the three hoards. We found various other objects such as sword blade fragments, conical pendants, knife fragments and brooch spirals. However, neither in this trench, nor in the test trench opened earlier did we find any archaeological features that could be associated with the three hoards.



Figure 30. The excavated hoards at Pázmándfalu



Figure 31. The Pázmándfalu 1 hoard after its excavation



Figure 32. The Pázmándfalu 2 hoard after its excavation



Figure 33. Successive phases in the hand excavation of the Pázmándfalu 2 hoard

The deposited objects

Of the three hoards deposited at this site, Hoards 1 and 2 are strongly associated for they represent the metal equipment of a prominent warrior of the Late Bronze Age (*Fig. 34*).

Hoard 1 comprised offensive and defensive weapons, drinking vessels and costume adornments as well as horse gear and wagon fittings. Offensive weapons are represented by a smaller and larger winged axe and a bronze dagger, defensive weaponry by the fragment of a helmet with ear guards and the fragments of the breastplate and the lower part of the cuirass that had been cut to pieces.³⁶ The drinking set was made up of the fragments of a Gussen-type bronze cup and a thick bronze wire, the handle of a strainer vessel. A wire belt clasp fragment was probably part of the personal belongings. The sixty-six tubes of sheet bronze, the twenty-nine bronze mounts with a small attachment loop on the reverse, the six round flat buttons with a pair of attachment loops on the reverse, the six large bronze rivets, the bronze ring pendant with a projecting triangular loop and the six small sheet metal mounts were presumably the fittings of horse gear and a wagon. Most of the deposited objects bore traces of burning and melting.

The mass of burnt objects fragmented into tiny pieces had most likely been placed in a bag before their deposition. The winged axes turned up by the plough had probably lain on top, while the cuirass fragments, the bronze dagger and the helmet's ear guard had remained in their original position. The other fragments of the helmet and the majority of the round openwork mounts also lay in the hoard's lower part.



Figure 34. The Pázmándfalu 1 and 2 hoards



Figure 35. The Pázmándfalu 3 hoard

Hoard 2 contained a folded, remarkably good quality Reutlingen/Cetona/Naue II-type sword, four elongated leaf-shaped spearheads, a knife with decorated blade, a socketed chisel and a short sword as well as two folded fragments of the cuirass with the curved section of the armholes. Most of the artefacts were intact, save for the cuirass fragments and the short sword. The breakages occurred after the objects had been lifted. The tip of the short sword broke off before its deposition - it was found among the objects in Hoard 1, meaning that it had been added to the hoard as part of the deposition ritual. The short sword was placed at the very bottom; the larger bronze sword folded in a U shape was placed on top of it, the spearheads with their tip pointing in the same direction, the knife and the socketed chisel were tucked into the folded sword. The assemblage was covered with the two folded cuirass fragments.

Hoards 1 and 2 had no doubt been deposited simultaneously, as indicated by the occurrence of the bronze cuirass fragments in both hoards and the presence of the tip of the short sword of Hoard 2 in the undisturbed part of Hoard 1.

The third hoard was made up of a sword broken in five, two broken knives, the fragments of a knife with decorated blade, a bronze awl, four conical pendants of sheet bronze, four spiral discs of a passementerie brooch, two willow leaf-shaped pendants, the fragment of a sickle blade, the fragments of a round-sectioned wire bracelet broken into at least three pieces, fragments of a broken and molten pin and the fragments of two sheet metal objects (Fig. 35).

The findspot and its environment

The three hoards from Pázmándfalu were found on a low, roundish, islet-like elevation with a diameter of roughly 100 metres that can still be made out with the naked eye. We did not find any traces of prehistoric occupation in the area, indicating that the area had not been occupied at the time of the hoard's deposition. The elevation had probably been a small islet rising above the marshland in the valley of the Pázmándi Stream flowing nearby; the three hoards had been deposited in an area with a diameter of roughly 20 metres in the islet's central area.

The nearest Late Bronze Age settlement yielding pottery and metalwork dating from the thirteenth-twelfth centuries BC, the same period as the hoards, lies some 1500 metres southward. The deposition of the hoards in an area that appears to lack any particularly special features, at least to the modern eye, nevertheless indicates that the location where the mass of bronze objects was concealed had some special meaning and significance for the community performing the deposition ritual, and that this special meaning was reinforced by the very act of deposition, the value of the deposited articles and the meanings ascribed to them.³⁷

Interpretation of the hoard deposition

Were we unaware of the find context of the Pázmándfalu hoards, we would be highly inclined to regard the assemblages as the grave goods of a wealthy warrior in view of their objects. Becoming more widespread in Central and Western Europe during the thirteenth and twelfth centuries, the burials with a grave inventory of comparable articles attest to the emergence of a new elite in whose ideology warriorhood and combat played a prominent role. Outstanding warriors were interred with their sword, although spearheads and quivers filled with arrows were often placed into the grave as well. The grave goods frequently include personal articles and objects signalling social status such as bronze razors, bronze drinking cups and bronze knives with lavishly ornamented hilt and blade. The graves of the wealthiest warriors often yield the burnt fittings of ceremonial wagons, perhaps an indication that the deceased had been laid in state on them before undertaking their last great journey.³⁸

The relics of the period's new warrior elite are known from the broader area of the Pázmándfalu site, from north-eastern Transdanubia.³⁹ The undoubtedly most spectacular assemblage came to light in the Bakony Mountains. Almost every tumulus burial ground hidden in the forests of the mountain region includes a few mounds with the internments of a particular community's leading warriors, as, for example, Tumulus VIII of the Bakonyszűcs-Százhalom cemetery, which yielded a weapon assemblage made up of a sword resembling the specimen from Pázmándfalu, a dagger, two spearheads, a winged axe and a socketed chisel (*Fig. 36*).



Figure 36. The grave goods of Tumulus 160 at Bakonyszűcs-Százhalom

The perhaps best-documented warrior's grave came to light at Balatonfűzfő on the south-eastern fringes of the Bakony Mountains. The man interred in one of the burials of the excavated cemetery section with six cremation burials was laid to rest with his sword and sword belt studded with buttons, an arrow tipped with a bronze arrowhead, his winged axe and a remarkable knife with a duck head-shaped hilt.⁴⁰

The weapon combinations noted in the Pázmándfalu hoards and the burials described in the foregoing are attested in other hoards too. Three hoards are known from within a range of 15 km of the Pázmándfalu site that were composed of similar weapons: an assemblage made up of a sword, a dagger, a winged axe and a spearhead was found on the Late Bronze Age settlement at Koroncó (Fig. 37, top),⁴¹ a spearhead and a sword at Gic (Fig. 37, bottom), and an assemblage comprising a winged axe and two spearheads at Tényő.⁴²

Although the weapons in the warrior burials and the hoards briefly reviewed in the above share numerous similarities with Hoards 1 and 2 of Pázmándfalu, there is also a striking difference: none contained a helmet or a cuirass, nor any other elements of defensive weaponry. These were seldom deposited in burials as grave goods during the Late Bronze Age. The helmets, cuirasses and greaves from the Carpathian Basin were all parts of hoards, suggesting that defensive arms had an outstanding symbolic and ritual significance and that they were treated differently than the other arms after their owner's death. One well-documented, spectacular example of this differential treatment is the assemblage of seventeen bronze shields deposited as part of a ceremony in a marshland at Fröslunda in southern Sweden.⁴³

Most of the currently known defensive weaponry is known from a special hoard type characterised by a high

number of highly diverse, but intentionally damaged artefacts. This hoard type⁴⁴ is represented by the Pázmánd,⁴⁵ the Lengyeltóti⁴⁶ and the Rinya-Szentkirály hoards.⁴⁷ Similarly to the Pázmándfalu hoards, these assemblages contained offensive and defensive weapons, bronze vessels, horse gear fittings and costume adornments, but the number of artefacts is incomparably higher and they often included tools and implements such as socketed axes and sickles as well as jewellery, most of which was broken into tiny pieces or folded. In contrast to the previously discussed hoards, these assemblages do not represent a personal set of artefacts, but rather the “treasury” of a larger chiefly household (for a detailed discussion, see the section on the Tállya-Óvár hoard).

One of the assemblages – probably found by night-hawkers – among the contemporaneous hoards should certainly be mentioned because it shares countless similarities with the Pázmándfalu hoards. The unprovenanced assemblage housed in the collection of the Museum of Military History, most likely a set of objects once in the possession of a single individual, comprised a molten sword broken into several fragments, the fittings of the sword sheath, three knives, two pairs of greaves, a conical helmet, a bronze cup and wagon fittings, each of which had been intentionally damaged and broken before its deposition.⁴⁸ The sets of objects in the Pázmándfalu hoards are linked by many strands to the emblematic assemblage of the period’s elite uncovered in Grave 2 of the burial mound at Cseke (Čaka) in western Slovakia.⁴⁹ Grave 2, located south of the burial mound’s robbed central grave, was a cremation burial that lay above the remains of a funerary pyre. In addition to the pottery that was used during the funerary feast (*symposium*), the grave goods comprised a weapon set made up of the burnt fragments of a cuirass broken

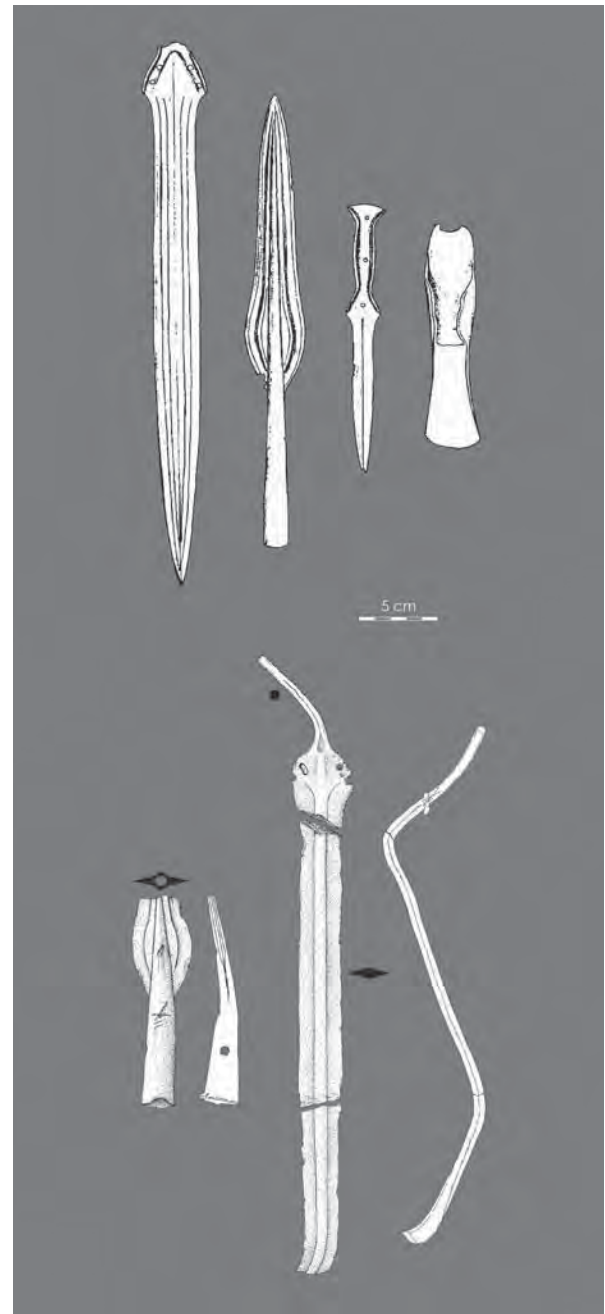


Figure 37. Weapon hoards found within a 15 km range of Pázmándfalu: Koroncó (top) and Gic (bottom)

into tiny pieces, two winged axes, two spearheads, a socketed chisel and a sword, alongside a razor, a brooch, fragments of a bronze belt, bronze pins, bronze studs and mounts used as costume adornments as well as bronze phaleras and bronze sheet ornaments from a wagon and its harnessing equipment (*Fig. 38*).⁵⁰

In the light of the above, the Pázmándfalu hoards can be fitted into a group of Transdanubian assemblages containing similar weapons and sets of various objects that are known from both hoards and burials, which embody the equipment expressing the identity of the period's military peak elite (*Fig. 39*). The core of this "funerary set" was offensive weaponry comprising a sword, a dagger, a winged axe and a socketed chisel, and defensive weaponry made up of a cuirass and a helmet. Among the personal belongings of elite warriors, socketed axes, presumably used for fine woodworking, apparently played a prominent role, perhaps an indication that carving and woodworking played a prominent role in men's world. A similar symbolic meaning was ascribed to knives with an ornate hilt and decorated blade which, in addition to being versa-

tile weapons in close combat, had their significance in the all-important ritual of carving up and distributing meat during feasts and sacrificial rituals.⁵¹ The bronze cups found in these sets are another indication of the immense importance of feasting and ceremonial drinking. These articles were complemented by the bronze fittings of a wagon and the horse gear of the animals harnessed to it.

Given that there were no traces of any archaeological features in the area of the Pázmándfalu hoards, we can confidently claim that the finds uncovered here were not the grave goods of one of the period's burials. Nevertheless, the composition of the hoards, the deliberate damage to their objects to make them unfit for further use shares many similarities with the funerary sets known from the burials of the period's high-status warriors. It therefore seems likely that the deposition can be linked to a ritual associated with death and funerary rites, in the course of which the artefacts expressing the deceased's identity were interred separately from the body. Some of the hoards containing

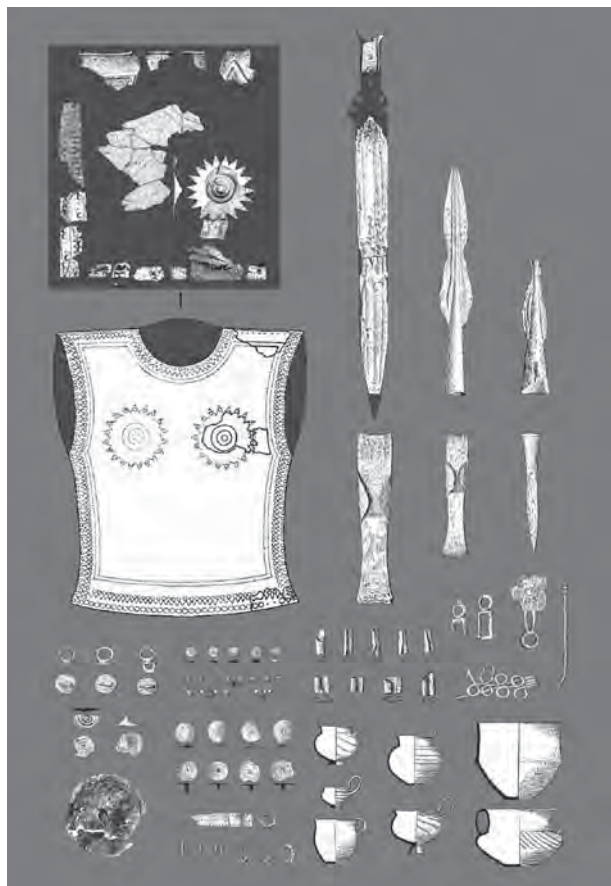


Figure 38. Grave goods of Grave 2 of the Cseke tumulus (Čaka, Slovakia)

personal sets of objects deposited separately from the interment of the body were previously almost automatically interpreted as funerary deposits, as the sacrifice of the personal belongings of the deceased that had not been placed in the grave.⁵²

Irrespective of whether the deposition ritual performed at Pázmándfalu was associated with a burial or some other rite, it is quite obvious that the ritual was conducted according to strictly regulated norms. Certain pieces of the set were thrown onto the funerary pyre and the burnt, molten artefacts were collected, broken into smaller pieces and then placed in a bag or wrapped up in some other textile or garment before their deposition.⁵³ The objects that were not burnt on the pyre, mostly intact weapons and various tools and implements, were tucked into the folded sword and covered with two fragments of the cuirass, and then buried immediately beside the other assemblage.⁵⁴

Hoard 3, made up of a broken sword, knives, a passementerie brooch and various jewellery items, is quite certainly a separate hoard representing the equipment of a less prominent warrior. It seems likely that it had been deposited on the islet as part of a separate ritual, independently of the other two hoards.

The deposition of the sets appearing in Hoards 1 and 2 and the elaborate burials with similar sets can probably be regarded as reflections of the efforts by the families at the peak of the warrior hierarchy to establish a firm foundation for their ambitious strive for power through the creation of a hero's cult. A spectacular ritual, in the course of which the objects embodying the deceased's identity were dramatically sacrificed, bolstered the respect for the deceased, which indirectly benefited his descendants and family too. The elevation of warriors to heroes and the myths woven around them no doubt played an important role in the cohesion of the warrior clans and military retinues emerging at this time. Therefore, we cannot exclude the possibility that the Pázmándfalu hoards reflect the existence of a Late Bronze Age hero cult.⁵⁵

This interpretation is supported by the deposition of Hoard 3, concealed at a later date. In this case, it is possible that the funerary set of another prominent member of the community was deposited near the virtual "monument" of an outstanding warrior.



Figure 39. Conjectural reconstruction of the Pázmándfalu warrior and his equipment

A feast in the cavern: Baradla Cave

Baradla Cave at Aggtelek is one of the best-known and since long investigated archaeological sites in Hungary. In addition to a gold and a bronze hoard dating from the Late Bronze Age, several other bronze artefacts were recovered from the cave between the mid-1800s and the early 2000s; however, virtually nothing is known about their find circumstances or contexts. When we planned our research for investigating the possible contexts of the hoards previously found in the cave, we were aware that there was little hope of finding new significant artefacts at such an oft-visited and much-disturbed site.

Much to our surprise, we first discovered a spearhead, followed by other artefacts and a small gold hoard some time later. The earlier and the newly found assemblages suggest that the cave had been a ritual centre during the Late Bronze Age and that its chambers served as settings for burials, sacrifices and feasts.

The find circumstances

The chambers and passages of Baradla Cave were investigated in the course of eight major excavation campaigns and a series of smaller rescue excavations during the past hundred and fifty years. Countless finds also came to light when the visitors' paths were created and lighting was installed. The artefacts reaching various museum collections indicate that the cave's spaces were most intensely exploited during the Middle Neolithic and the Late Bronze Age. The Late Bronze Age material is dominated by pottery and metalwork: a bronze and a gold hoard as well as dozens of bronze artefacts from this site can now be found in various museum collections.

The main goal of our investigation was to determine for what purpose the cave had been used during the Late Bronze Age and to establish the contexts of the hoards deposited here. We began the metal detector survey of the cave in September 2015 (*Fig. 40*). Our first finds, a Late Bronze Age bronze spearhead broken in two and two lumps of bronze came to light in the Kémény [Chimney] Chamber, the chamber immediately behind the former narrow, debris-filled entrance that had been repeatedly disturbed by robber pits and construction work. We then surveyed the next chamber, known as Pitvar [Courtyard] Chamber, where we first found a small bronze ring, followed by a golden lock-ring that lay in a niche-like part of the chamber, some 20–25 cm from the wall, among the lamp sockets and iron screws.

In 2016, we again surveyed the small niche where the golden lock-ring had lain with more sensitive instruments and we again struck gold. About 15–20 cm from the findspot of the lock-ring, some 20 cm deep in the niche, we found six conical mounts of sheet gold. These tiny mounts lay near one another, but not adjacent to each other, covering an area with a diameter of 25 cm. They had probably been part of the same assemblage as the lock-ring, and had been dislodged from their original position by former looting activity or construction work (*Fig. 41*).

The deposited objects

Weighing no more than 25 g, the hoard was made up of seven objects (Fig. 42).⁵⁶ The largest among them was gold spiral ring of double wire with sixteen coils and twisted terminals. This type was widely popular in the Late Bronze Age: similar rings were worn from the eastern half of the Carpathian Basin to Germany between the thirteenth and tenth centuries BC.⁵⁷ They could equally have been worn as finger-rings or as adornments braided into the hair.

The other six objects were conical mounts made from delicate semicircular sheet gold decorated with repoussé lines and dots along the edges. The bronze and gold variants of these widespread ornaments were probably used for trimming garments, cloaks or caps.⁵⁸

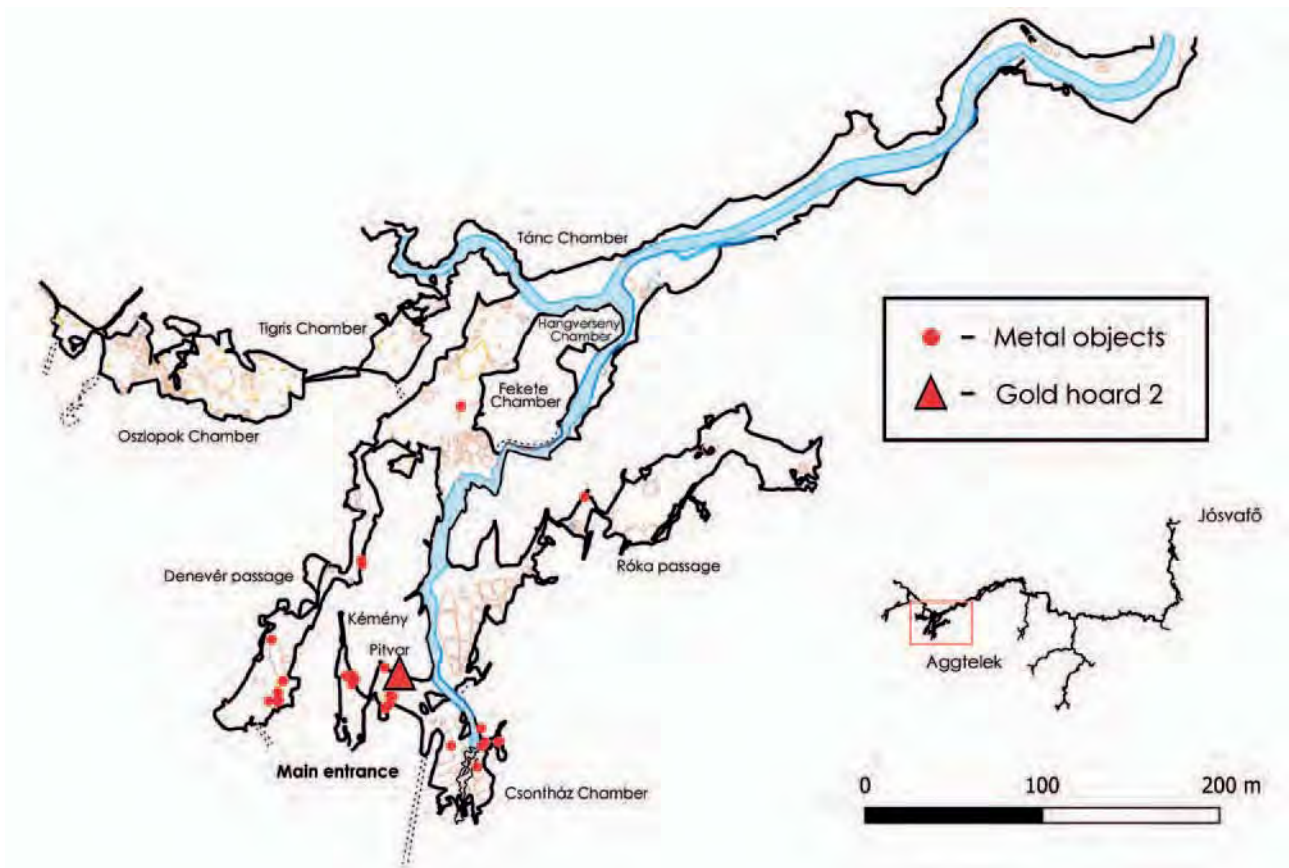


Figure 40. Findspots of the bronze and gold objects found by our research team in Baradla Cave by Aggtelek

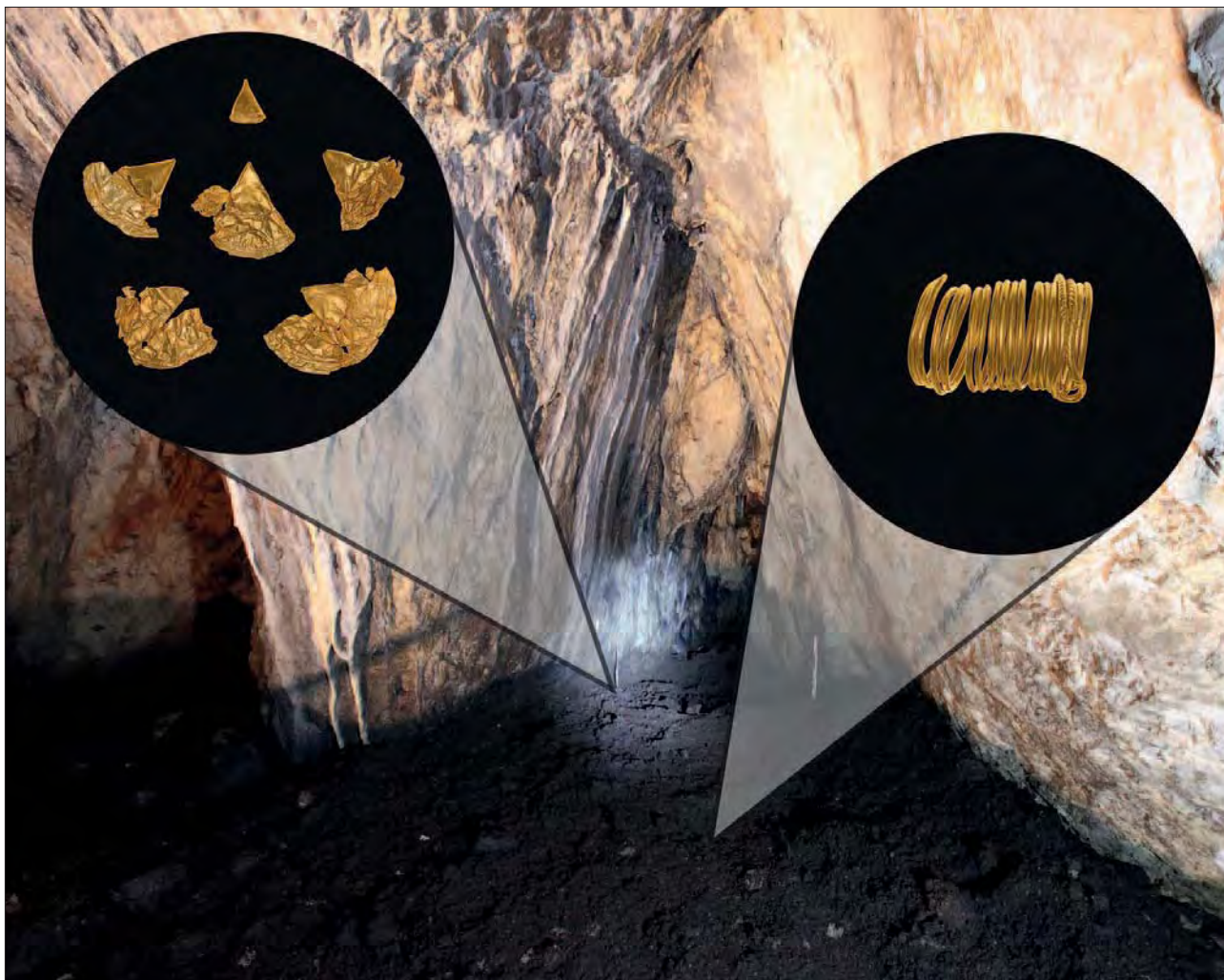


Figure 41. Findspot of Hoard 2 in Baradla Cave by Aggtelek

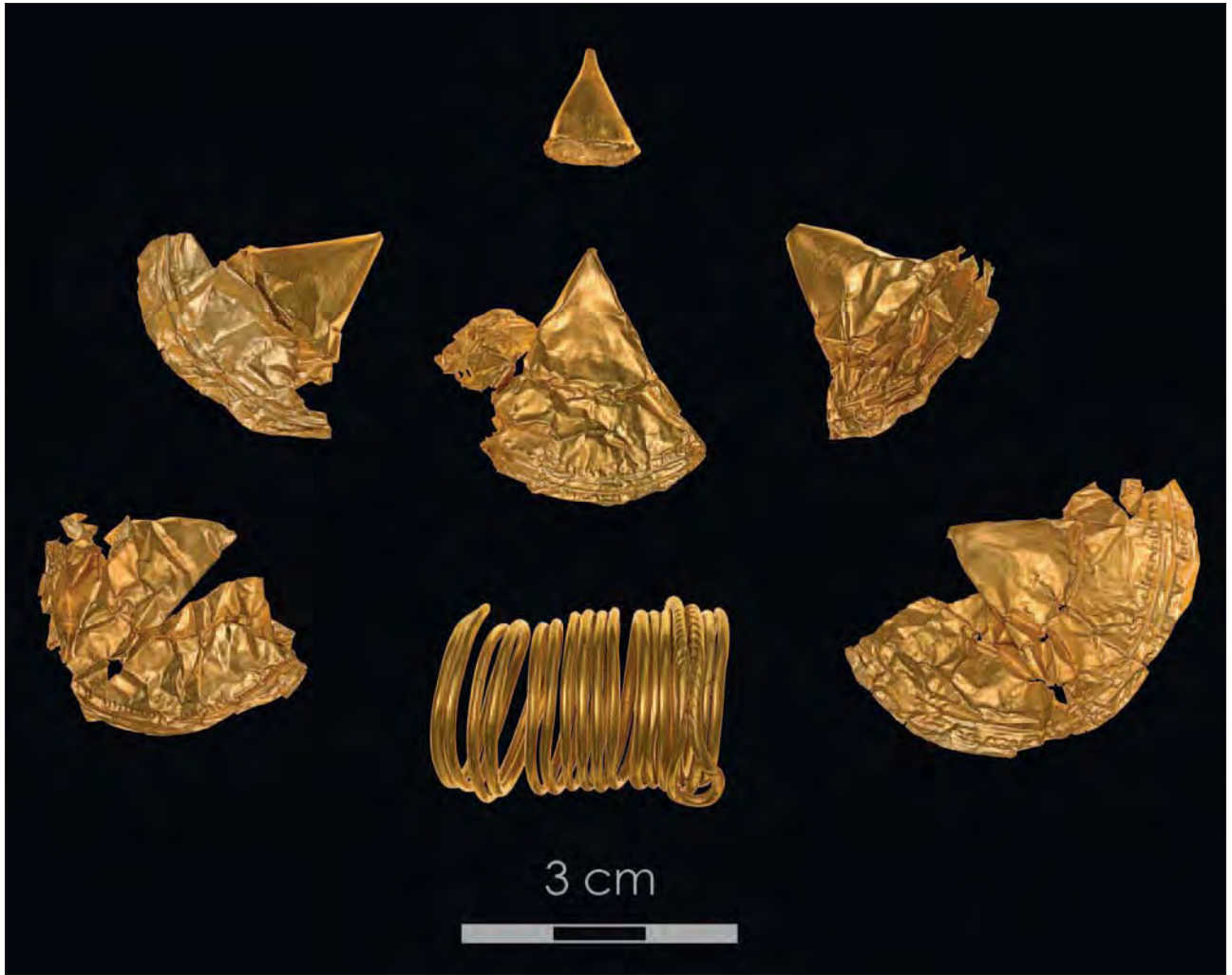


Figure 42. Hoard 2 found by our research team in Baradla Cave

The findspot and its environment

The gold hoard came to light in the second chamber from the cave's entrance, known as Pitvar Chamber. The easily accessible area was archaeologically investigated at least five times since 1876;⁵⁹ however, the cut features visible on the floor are a clear indication that it had been disturbed earlier by treasure hunters. Although the chamber cannot be ranked among the cave's monumental, spectacular halls, it had been intensely used during prehistory as indicated by the Neolithic and Bronze Age pottery found near its walls and the remains of a hearth and various occupation layers uncovered in the 1920s.

The surface of the niche where the gold hoard was concealed had been repeatedly disturbed when constructing the visitors' paths and during the former excavations, and we noted that stones and clayey earth had been dumped here during construction work. While surveying the chamber, we found a bronze razor

some 1.5 m away from the hoard and a bronze ring of three coils 5–6 m away, towards the entrance, by the side of another niche.

The next larger chamber is the Csontház [Ossuary] Chamber, the area with the highest density of finds in the cave, where a few calcite-encrusted Neolithic vessels are still visible on the floor. A few human burials were also found in this chamber. A Late Bronze Age hoard of twenty-eight gold artefacts was brought to light by Ferenc Tompa during his investigations in 1929 (*Fig. 43*).⁶⁰ The assemblage of ring jewellery and spiral tubes used as costume adornments was discovered between two large rocks that had crashed down from the ceiling and lay tilted against each other. The gold articles had been concealed in a small crevice no larger than a fist, which had subsequently been filled with clay. The exact findspot of the hoard was not recorded and the two rocks in question can no longer be identified. Another hoard made up of bronze artefacts was discovered in the same chamber during the cave's investigation the same year, but the exact findspot of this assemblage similarly remains unknown.⁶¹ The bronze hoard contained brooches, bracelets, pins,



Figure 43. The gold hoard discovered in Baradla Cave in 1929



Figure 44. Bronze artefacts discovered by our research team in various parts of Baradla Cave



Figure 45. Socketed axes found earlier in the Denevér Passage of Baradla Cave

bronze mounts and a spearhead. A human phalanx still wearing a bronze finger-ring found nearby earlier suggests the one-time presence of a Bronze Age inhumation burial. During our own investigation in 2015–2016, we found a bronze ring of three coils, a broken bronze socketed axe, two bronze pins and a bronze mount (Fig. 44).

Aside from these chambers, impressive amounts of Late Bronze Age metalwork were recovered from the Denevér [Bat] Passage, an area abounding in archaeological finds.⁶² This passage had probably been the other entrance to the cave in prehistoric times, whose opening had been blocked by debris before the Middle Ages. A steep debris slope starts from the one-time entrance, on whose upper part a socketed chisel and two socketed axes were discovered (Fig. 45). The passage widens into a large chamber and then narrows into a roughly 150 metres long passage dotted with spectacular stalagmite and stalactite formations. A socketed



Figure 46. The bronze bracelet found in the Denevér Passage of Baradla Cave

axe was recovered from the debris along the passage wall in 2004,⁶³ while we found an ornamented bronze armring in the immediate vicinity of its findspot (*Fig. 46*).⁶⁴ Another find from this area is a Gusen-type bronze cup brought to light during construction work in the 1960s, whose exact findspot remains unknown.⁶⁵

Aside from the finds described in the foregoing, several other bronze artefacts without an exact provenance originate from the cave: two socketed chisels, a socketed axe, a razor, a bronze knife, two bronze bracelets, ten bronze dress fastening pins, an assortment of mounts, ornamented plate fragments, finger-rings and rings.⁶⁶

Interpretation of the hoard deposition

Although the archaeological exploration of Baradla Cave only began in 1856,⁶⁷ the archaeological finds in the easily accessible chambers and other areas of the cave had been disturbed by the locals and travellers arriving from distant lands during the previous centuries too (*Fig. 47*). Regrettably, we have no idea of what early visitors and explorers had found while exploring the cave's chambers,⁶⁸ but it seems more than likely that the cave had held considerably more archaeological finds prior to the nineteenth century than what can be known from the archaeological literature. The very fact that one bronze and two gold hoards as well as over thirty bronze artefacts reached museum collections since the 1920s despite the activity of successive generations of treasure hunters and disturbances by construction work is ample testimony to the former abundance of finds in the cave.



Figure 47. The interior of Baradla Cave in the 1820s, on a painting by Károly Markó the Elder (“The organ of Pest”)



Figure 48. Late Bronze Age pottery from Baradla Cave

Late Bronze Age finds have been recovered from twenty-four caves in the north-eastern Hungarian mountain region, but all are eclipsed by far by the richness of the material from Baradla Cave. Metalwork has been brought to light in three caves: a socketed axe, a spearhead, a pin and a small pendant from Ördög-gát-lyuk Cave at Varbóc, two bronze phaleras from Szeleta Cave near Lillafüred and an assemblage of fifteen golden ring adornments from Hosszú-tető Cave at Szögliget. It is thus quite obvious that Baradla Cave played a prominent role during the centuries of the Late Bronze Age, although the exact function of its chambers continues to elude us. Most studies written before the 2000s argued that various groups had settled in the

cave during the Neolithic and the Bronze Age and had erected various structures in its chambers, an argument that was seemingly supported by the high number of Late Bronze Age pottery and metalwork as well as the post-holes and hearths found in various locations. Research during the past decades has demonstrated that no buildings had been constructed inside the cave and that the timber structures indicated by the post-holes can more likely be related to various rituals or that their purpose had been to ease the navigation of the cave. Another argument challenging the use of the cave as a permanent residential space is that the dark spaces with their high humidity and an average temperature of 12 °C were unsuitable for a permanent occupation, even if they could offer shelter for brief intervals to groups seeking refuge. Despite being inconvenient for permanent habitation, a surprisingly high number of vessel fragments of the Late Bronze Age Kyjatice culture have been found in the cave.⁶⁹ The distribution of the ceramic finds indicates that the cave's more easily accessible areas close to the entrance were used.⁷⁰ The composition of the collected pottery vessels differs substantially from the one noted on settlements: larger storage jars are lacking and the lavishly decorated fine wares, probably used during the feasts held in the cave, can be found in higher proportion (Fig. 48).

The same holds true for the Late Bronze Age metalwork. As mentioned in the above, the bronze and gold artefacts came to light in the cave's easily accessible areas, in well-navigable sections, suggesting that they were not deposited with the intention of concealment or accumulation and safe storage. It is also quite telling that most of the metal articles in question were intact or intentionally broken - damaged, useless artefacts and the casting waste and bronze scrap found on settlements is lacking.

The number of human remains from Baradla Cave surpasses by far that from other Hungarian caves. During his investigation of the cave in the 1870s, Baron Jenő Nyári found countless human bones scattered in the cave and he uncovered forty-one burials in the areas near the entrance, in the Pitvar and Csontház Chambers as well as in the Temetkezés [Burial] Passage. Several human bones came to light during the excavations in 1910 and 1929, and human bones were encountered in the cave's still undisturbed areas too. The date of most of these skeletal remains uncertain; however, on the testimony of the bronze finger-ring on a human phalanx and the radiocarbon measurement of a skull from one of Nyári's excavations yielding a date between 1190 and 1030 BC, some can quite certainly be assigned to the Late Bronze Age.⁷¹

The immense number of human remains, the Late Bronze Age ceramic inventory made up mostly of tableware, the impressive amount of intact bronze artefacts and the hoards all point in the same direction, namely that the chambers and passages of Baradla Cave had been used for ritual purposes during the Late Bronze Age.

In the world of prehistoric communities, caves were a transitional space between this world and the next. Baradla Cave is a particularly spectacular embodiment of this liminal position: the small entrances opening at the base of the monumental rock wall widen into huge chambers crammed with awe-inspiring dripstone formations, whose long, eerie line is crossed by a mysterious stream flowing from the depths and then vanishing into nothingness (*Fig. 49*).

There is compelling evidence for the ritual use of cave spaces.⁷² Some caves were used for burial and structures associated with mortuary rites were erected in them. One of the most interesting among them is Bezdanjača Cave in Croatia, where thirty-two undisturbed graves and the remains of some two hundred individuals were discovered in 1960.⁷³ The bodies had been deposited in natural niches in the cave's walls and had not been covered either with rocks or earth. The remains of several individuals had become mixed up in most instances. Clay vessels lay among the skeletal remains and in some instances, bronze artefacts and pottery had been deposited separately from the human bodies. Hearths were built near the burials. Food remains were uncovered inside the hearths and in the vessels placed beside the burials, alongside two scoops carved from wood and torches of split wood, indicating that elaborate ceremonies and ritual feasts had been held in the cave. The structures separate from the burials are in all likelihood a reflection of rituals associated with mortuary cults. The remains of a timber stand, possibly used for storing vessels and the deceased's garments, were also uncovered, alongside a stone construction packed with vessels and the remains of ochre pigment.

Igric (Igrîța) Cave on the northern fringes of the Királyerdő (Pădurea Craiului) Mountains in Romania had in all likelihood been the setting of similar rituals during the centuries of the Late Bronze Age. János Emődi discovered over forty small deposits of pottery, animal bones and metalwork along the walls of the cave's roughly 300 metres long passages in the 1970s.⁷⁴ The pottery finds were dominated by smaller, finely



Figure 49. Metal detector survey in Baradla Cave

made tableware, although larger cooking pots and storage jars were also represented by a few fragments. Metal finds mainly comprised personal articles, principally costume adornments such as pins, mounts, a bronze belt, bracelets and lock-rings, alongside a few sickle and knife fragments as well as a socketed hammer. The overwhelming majority of the finds was burnt and there were ash and charcoal remains among them. None of the small deposits included human bones, meaning that they cannot be regarded as burials. It would appear that the remains of the funerary pyre lit as part of the mortuary ritual had been deposited in the cave's passages.

The motives underlying deposition in caves and its modes could be manifold. In some instances, hoards containing specific types were deposited in a single location of an extensive cave system, as, for example, in Csoklovina (Cioclovina) Cave in Romania, where assemblages made up of bronze jewellery and amber and glass beads were deposited, originally probably wrapped in textile bags, onto the floor and an altar-like rock formation at the edge of a chamber-like space located 130 metres from the cave's entrance.⁷⁵ Vessel fragments, animal bones – the remains of meat dishes – and charcoal were found in the area of the depositions, an indication of the elaborate rituals once conducted here.

One of the perhaps most renowned caves yielding hoards is the Mušja jama or Fliegenhöhle Cave of the Škocjan cave system in Slovenia:⁷⁶ several hundred valuable bronze artefacts were cast into its monumental chamber through a narrow opening between the twelfth and eighth centuries. About 65% of these artefacts were weapons: spearheads, swords and winged axes as well as cuirass and helmet fragments. The other major type was represented by metal vessels used during alcohol consumption: situlas, cauldrons and cups. The artefacts thrown into the depths of the cave shared one trait, namely that they had all been intentionally damaged and were often also burnt. The typological affinities of the weapons, metal vessels and jewellery articles suggest that some of the participants attending the rituals conducted at the cave had arrived from more distant lands.

We also know of caves that were the settings of simple depositions: for example, no more than a very good quality sword and a winged axe were concealed in a small niche in the Grotta de la Violette in France.⁷⁷ A similarly small deposit of swords and jewellery was discovered in the chimney of a cave at Hárómszlécs (Vyšný Sliach, Slovakia)⁷⁸ and in Lublimit Cave in the valley of the Vargyas Stream in Transylvania, which yielded a single assemblage comprising two battle-axes and two bracelets, deposited in the Early Bronze Age.⁷⁹

One eloquent example of the diversity of the ritual use of caves can be cited from Nana Cave near the small village of Zadalesk in northern Ossetia. The cave itself is associated with the myth of one of the community's ancestors in local lore and it still serves as the village's sanctuary. The villagers have held ritual feasts in the cave since many centuries and the cauldrons, cutlery, drinking horns and the furniture needed for the feasts are stored in the cave. The sacrificial animals are slaughtered in front of the cave and their bones and trophies are placed in the cave's inner spaces.⁸⁰

The above examples provide compelling evidence that certain caves had been the settings of rituals vested with sacral meaning during the Bronze Age: their deposits include offerings presented in the course of funerals and other mortuary ceremonies as well as votive gifts and sacrificial assemblages dedicated to the gods. The use of a particular cave followed local customs and there is no indication of a uniform set of norms regulating the use of caves.



Figure 50. Pottery and bones covering the floor of the Denevér Passage in Baradla Cave

Baradla Cave stands out from among the other caves by its extraordinary complexity. It seems to me that some of the deceased had been interred in a manner resembling the practice observed in Bezdánjača Cave. At the same time, some deposits share numerous similarities with the assemblages of vessels and metalwork burnt on funerary pyres, while others - such as the ones from the Pitvar Chamber - clearly indicate that aside from mortuary rituals, some spaces of the cave had been the setting of sacrificial and votive offerings. Neither can we exclude the possibility that the accumulations of vessel fragments and animal bones are the ritually deposited remains of the ceremonial feasts regularly held in the cave and its adjacent area (Fig. 50).

The bronzesmith's treasure: Tállya-Várhegy

The Tállya-Várhegy hoard was concealed on a mountain towering over the surrounding land on the western fringes of the Zemplén Mountains. The assemblage is made up of bronze costume adornments, jewellery, a bundle of sickles, a spear and a dagger, as well as a smith's set of tools comprising small anvils, punches and a socketed chisel. The artefacts represent specific types, suggesting that the hoard had been assembled according to a cultural code and that its artefacts embody the identity of a specific individual – a man whose garments and weapon types reflect local ties, while the European parallels to his tools express the supra-regional aspect of his identity. His weapons betoken his association with the world of warriors, while the sickles are an indications that arable land played a similarly important role in his life. Even more important for his community was his perhaps most valuable capability, embodied by his metalworking tools.

The find circumstances

In February 2011, three locals were searching for the remains of a German cargo plane shot down during World War 2 in the Tállya-Várhegy area, during which they discovered a conical sheet bronze pendant under a large stone on the north-western slope of Mt. Várhegy. Twenty other objects lay underneath the pendant: they collected eight sickles, four different punches, three bronze bracelets, two conical sheet metal pendants, a domed bronze button and a broken bronze rod. While uncovering the artefacts, they telephoned Miklós Makoldi, an archaeologist working in the Tokaj museum, who asked them to stop “excavating” the finds. Additional bronze artefacts lay some three and six meters deeper than the initially discovered objects. The archaeologist arriving to inspect the site and the finds found still undisturbed bronze items under the ones that had already been lifted and he immediately notified our Hoard Hunter team.

We first uncovered the objects of the hoard's core that had remained in their original position on the snow-covered mountain slope. We were able to uncover an intact sickle, a sickle blade fragment, a pin, an armring, two lock-rings, a larger spiral ring, bronze lumps and conical sheet metal pendants, all of which lay in their original position across a circular area with a diameter of some 40 cm. Lying some 35–40 cm deep under the ground were an intact sickle and a small bronze anvil. Farther up the slope, at a distance of 40–50 cm from the hoard's core, were two bracelets and a sickle. The other articles of the hoard lay downhill from the hoard, in a northerly direction. A few lay in front of a large rock some 30 cm from the hoard, while others were found scattered among larger stones or wedged in-between them. A dagger was located some 100 cm away from the hoard's core, a socketed chisel was discovered in its vicinity and a spearhead wedged underneath a stone lay some 140 cm away. The most distant objects were found 150 cm down the slope from the hoard's core (*Fig. 51*).

The scatter of finds would suggest that all of the hoard's bronze artefacts had originally been deposited in a heap near a larger rock overlooking the area. The deposited objects had perhaps been disturbed by the

roots of an uprooted tree, explaining why some artefacts were found uphill from the hoard's core. The greater part of the dislodged objects moved downwards owing to erosion, and were then scattered in different spots or became wedged in the crevices of the nearby larger rocks and stones. The scattered objects probably originate from the hoard's upper part, while the metalworking tools, the sickles and the conical pendants had been placed at the bottom.

The deposited objects

The hoard contained a total of seventy-two artefacts: a spearhead, a dagger, twelve sickles, seven penannular bracelets with pointed terminals, a bracelet of two coils, nine conical bronze sheet metal pendants (made from a bronze belt plate adorned with geometric patterns), of which two had another piece tucked into them, a cast funnel-shaped pendant, three lock-rings of two coils, a smaller domed button, a larger domed bronze mount with a loop on its reverse (a phalera), a bronze pin, the fragment of a thick wire with recurving



Figure 51. Original position of the objects of the Tállya-Várhegy hoard



Figure 52. The bronze hoard from Tállya-Várhegy

terminals (perhaps the fragment of a torc), a casting jet, a funnel-shaped cast object, four ingot fragments, eight bronze sheet fragments, including one with repoussé decoration, the fragment of a thicker bronze wire, five more delicate bronze wires, a sturdy goldsmith's anvil, a longish anvil, three wide-bladed punches and a socketed chisel (*Fig. 52*).

Given its composition, the hoard fits in nicely with a chronologically and regionally well-definable north-eastern Hungarian group of hoards. Dating from the fourteenth and thirteenth centuries BC (corresponding to the so-called Ópályi and Aranyos hoard horizons), the assemblages assigned to this group are distributed on the eastern fringes of the Bükk Mountains, in the valleys of the Sajó and Hernád rivers and

in the Bodrogeköz and Nyírség regions. One shared trait of these hoards is that they mostly contain intact objects and that they are made up of costume adornments, jewellery, sickles and weapons. The closest parallels to the Tállya-Várhegy hoard are two hoards from Felsődobcsa (Hoard A, for example, contained similar conical sheet metal pendants: *Fig. 53*),⁸¹ and the assemblages of sickles, spearheads and bronze phaleras from Tisza-bezdéd, Pap and Kemece-Hamvaspart.⁸²

Five main groups can be distinguished among the hoard's objects. The first is made up of costume adornments and jewellery. The conical and funnel-shaped pendants, the bronze buttons and the pin with ornamented head had most likely embellished a ceremonial garment. Some of the conical pendants from other sites retained scraps of textile threads preserved by corrosion in their interior,⁸³ suggesting that they had

been sewn onto garments or had been attached to tassels. The pin had served for fastening some textile or leather garment. The uncustomary form and decoration of the bronze pin's head is an indication that it was a special "custom-made" piece.⁸⁴ The bronze buttons could equally well have adorned garments or pieces of weaponry such as helmets or shields, or the straps of the horse gear.⁸⁵ In this case, however, they had probably been used to decorate a garment in view of their low number.

Jewellery is represented by the seven bracelets, the torc fragments of heavy wire, a lock-ring and the bronze finger-rings of multiple coils. Three bracelets are decorated with delicate geometric designs; one is strongly worn, indicating that it had been used for a long time, while the other two are barely used, well-preserved pieces.

The next group is made up of weapons, in this case the spearhead and the dagger. Both weapons are carefully sharpened, good-quality

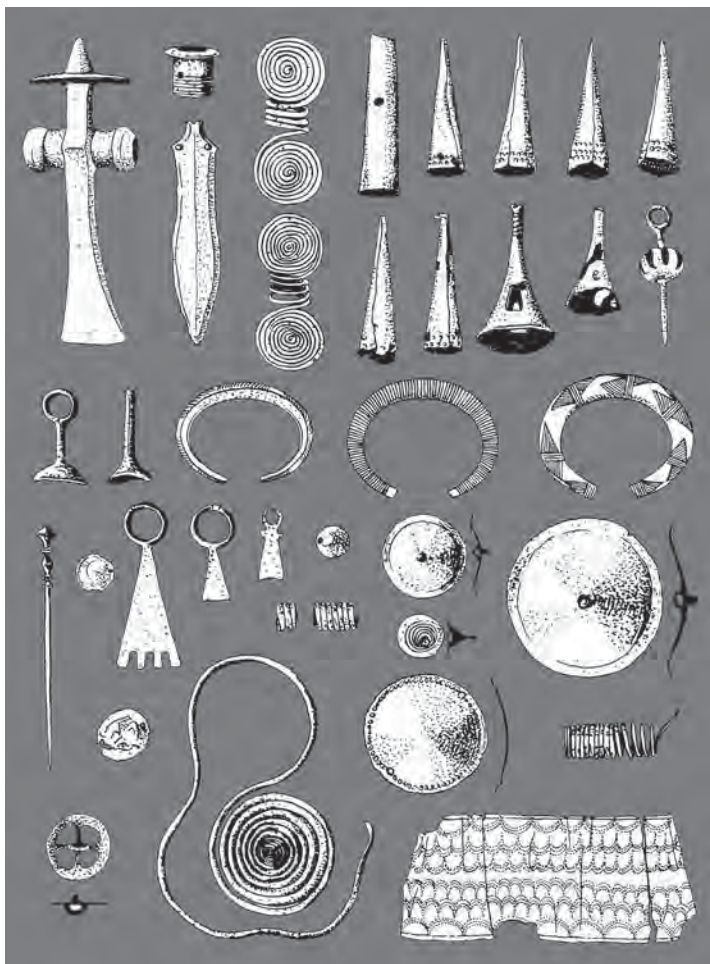


Figure 53. Hoard A from Felsődobcsa

pieces. However, while the spearhead appears to have been deposited in a brand new condition, the dagger had been re-sharpened several times and its rivet holes were strongly worn, an indication that it had been wielded over a longer period. The relatively simple form of the spearhead's wide blade was a type current in the fourteenth-thirteenth centuries BC. Comparable pieces are scarce in this region: similar spearheads with a simple blade and long socket only occur in the Pap and Tiszabездéd hoards.⁸⁶

The dagger with its blade widening in the upper third represents a relatively rare form. Similar pieces, most likely modelled on the dagger types of the Eastern European steppe,⁸⁷ were used in the eastern half of the Carpathian Basin.⁸⁸ Comparable daggers have been recovered from the lavishly outfitted burials of the warrior elite (e.g. Nyírkarász-Gyulaháza),⁸⁹ or from particularly extravagant hoards such as the one from Pécska (Pecica) in Romania.⁹⁰

The third group is represented by sickles. Knobbed sickles are one of the earliest sickle types in the Carpathian Basin, appearing at the close of the Middle Bronze Age, although these implements only began to be included in hoards from the thirteenth-twelfth centuries BC. The other hoards from north-eastern Hungary resembling the assemblage from Tállya-Várhegy rarely include such a high number of sickles – the abundance of sickles is more typical for the hoards of the ensuing period. Although the sickles in the hoards have a sharpened cutting edge, they were not time-worn. These smaller, lighter pieces functioned as harvesting knives or as multifunctional implements that could double as knives.

The fourth group is made up of scrap bronze, various broken artefacts intended for re-melting. They include casting jets, lumps of bronze, bronze wires and pieces cut out of sheet metal belts.

The fifth group comprises a set of ten tools used by a metalsmith (*Fig. 54*). The set contains a small socketed hammer-axe for cutting and hacking metal objects, a small anvil for drawing wire and a larger



Figure 54. Metalworking tools of the Tállya-Várhegy hoard

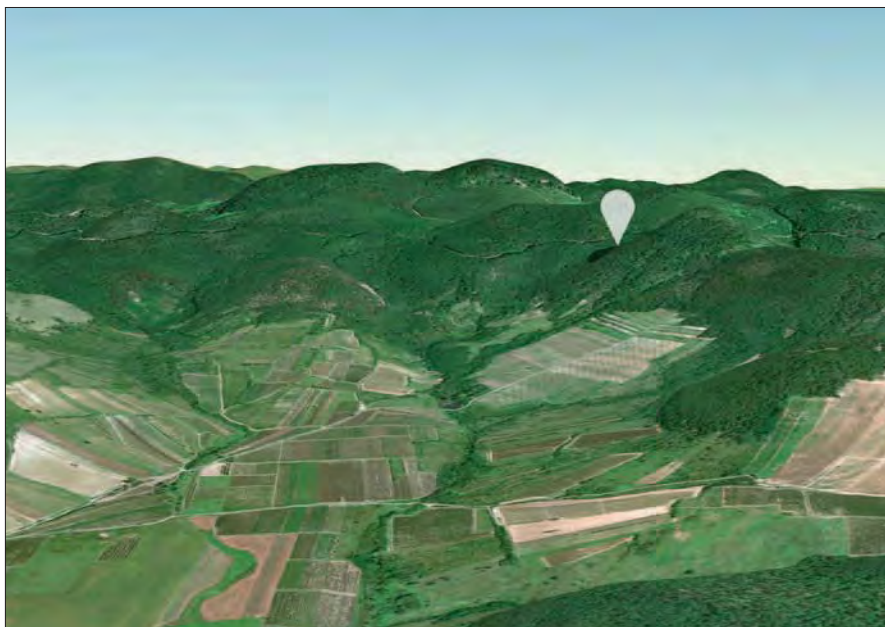


Figure 55. Findspot of the Tállya-Várhegy hoard

anvil for hammering thicker wires and for shaping sheet metal objects as well as seven punches, all of different sizes and with seven types of tips. Although each of these tools had been used, they were nevertheless pieces well looked after, and had no doubt been the personal set of a skilled, versatile bronzesmith.⁹¹ These tools were suited to crafting objects of sheet metal and wire such as bronze jewellery, belt plates and metal vessels, and they could also be used for producing goldwork and weapons as well as for the creation of delicate patterns to adorn them.

The findspot and its environment

The hoard was discovered on the north-western slope of Mt. Várhely (491 m a.s.l.), some 250 metres from its peak (Fig. 55). Mt. Várhegy has steep slopes on each side. Although the findspot of the hoard lies on a more gently sloping section, it is by no means easily accessible and navigating the area has its difficulties. The mountainside where the hoard was concealed is strewn with rocks of various sizes.

A medieval castle occupies the roughly oval plateau with a diameter of 80-100 metres on the 1200 m² large summit.⁹² However, no traces of Bronze Age occupation have been found on the slope of 45° inclination or on the summit crowned by the medieval castle. The nearest contemporaneous Bronze Age settlements lie at a distance of 2-3 kilometres.

Interpretation of the deposition

The special location of the place of deposition of the Tállya-Várhegy hoard and its composition reflecting the careful selection of its items are an indication that the act of deposition had been part of a ritual with a clear choreography governed by strictly determined norms.

The hoard was deposited on the slope of a tall, solitary mountain, far from the period's settlements, in a location that could only be approached with difficulty. The choice of the deposition location was possibly motivated by the sweeping panorama towards the west and south from the spot. It is not at all far-fetched to assume that the selected location offered a view of the community's territory and its fertile arable land.

The few objects found in their original position suggests that the assemblage had been deposited in a heap on the ground or had been concealed at a shallow depth and had then been covered with smaller rocks. The goldsmithing tools lay at the bottom, the conical pendants and the sickles were placed above them and the spearhead and the dagger were on top. It could no longer be established whether the hoard had been wrapped up or placed in an organic container.⁹³

One of the most intriguing issues relating to the Tállya-Várhegy hoard is whether the carefully selected artefacts of the assemblage reflect the personal identity of a particular individual or whether the selection was governed by other norms. What seems certain is that the articles chosen for deposition had a specific meaning for the period's communities,⁹⁴ even if this meaning continues to elude us. Thus, the narrative offered here is merely one of the many potential options. One good starting point is that the hoard's artefacts types can be divided into four categories, each with a symbolic meaning of its own: the first represented by costume adornments and jewellery, the second by weapons, the third by the sickles and the fourth by the bronze raw material and the tool set used by a metalsmith. Of these, the implements of metalworking are undoubtedly the most explicit. Tools and implements for working bronze and gold are principally known from hoards and only quite

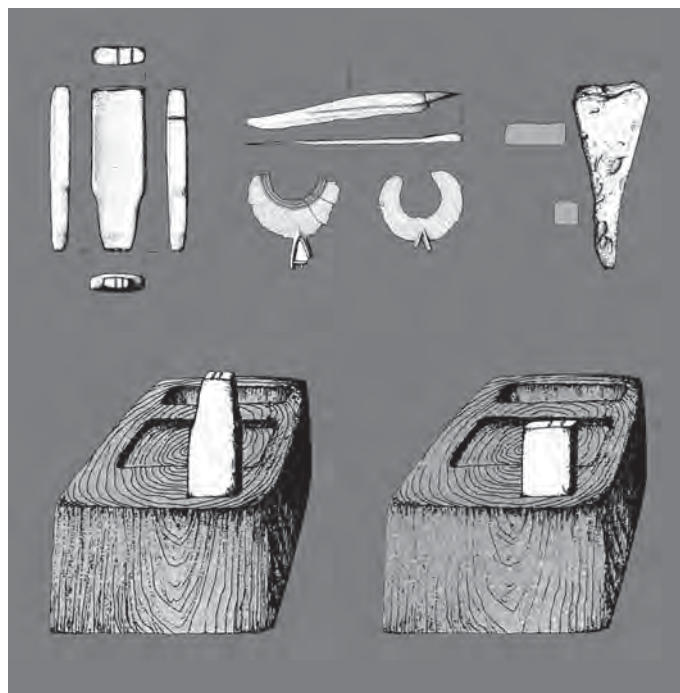


Figure 56. Bronze anvil, knife, razors and a tin bar from a burial uncovered at Lachen-Speyerdorf (top). Reconstruction of how the anvil was used (bottom)



Figure 57. The G nelard hoard (Sa ne-et-Loire, France) containing the almost complete tool-kit of a Late Bronze Age bronzesmith

rarely from burials in the Late Bronze Age.⁹⁵ Complete tool kits were never placed into burials; no more than one or two implements were deposited beside the deceased,⁹⁶ as shown by the grave uncovered at Lachen-Speyerdorf in western Germany, which contained the urn with the cremains, three other vessels, two razors, a knife and an anvil resembling the one from T llya used for special goldsmithing work.⁹⁷ The grave goods included also a small tin ingot (Fig. 56).

The number of metalworking tools known from bronze hoards is much higher. Even though the composition of these hoards differs to a great extent, most only contain a few special tools used for working metal, principally socketed axes and anvils, in addition to various other objects.⁹⁸ The hoard from G nelard (Sa ne-et-Loire) in France is exceptional in that it contained the almost complete tool-kit of a Late Bronze Age smith (Fig. 57).⁹⁹ Made up of tools, raw materials and semi-finished products, the hoard illustrates the complete *cha ne op ratoire* of Late Bronze Age metallurgy. The hoard's artefacts include socketed hammers of various sizes used for different purposes, embossing and planishing hammers, several special anvils, small metal chisels, punches for concentric circles, a tracer for outlining patterns, a polishing stone, metal moulds, raw material rods and three bronze tubes, perhaps for bellows. Three knives and a spearhead were also part of the hoard. The tool set of the T llya-V rhegy hoard was suitable for a smaller range of metalworking operations than the one from G nelard, but it nevertheless clearly shows that its owner had special gold- and bronzesmithing skills.

The dagger and the spearhead represent the next layer of identity, that of warriorhood. These weapons were at least as personal belongings as the special metalsmithing tool set. Aside from the set made up of a battle-axe and a dagger, this was the other most frequent set of weapons. Its inclusion in the hoard probably meant that the weapons wielded by one specific individual had been selected for the assemblage to be deposited.

The third layer can be linked to the sickles. Although seemingly quotidian implements, sickles represent the third most often deposited artefact type in the Late Bronze Age of the Carpathian Basin and there are several indications that a symbolic, ritual meaning was ascribed to these implements, which were indispensable in agricultural work. Sickles were often placed in the burials of the communities (such as the Piliny culture) occupying the territory extending from Poland to the Northern Mountain Range. According to one interpretation, the sickles accompanying the dead acted as a kind of Charon's obol, the currency needed for entering the otherworld.¹⁰⁰ In the west, however, sickles are almost exclusively known from hoards, and the pieces occasionally accompanying the dead have been solely recovered from burials with swords representing the peak of the warrior elite, which gave rise to explanations that the sickles deposited in the burials of the elite symbolised the fertile land and its ownership.¹⁰¹

The fourth layer is made up of costume adornments, among which two main types can be distinguished. The first is represented by the bronze adornments and ornate pin of a lavish garment. Since some of the conical pendants had been fitted into each other, it seems likely that only the bronze embellishments had been removed from the costume and deposited, rather than the entire garment itself. The eight bracelets and finger-rings can be assigned to the other category. Although these are essentially items of female jewellery, some have been recovered from Late Bronze Age weapon burials, implying that they had sometimes been worn by men too.¹⁰²

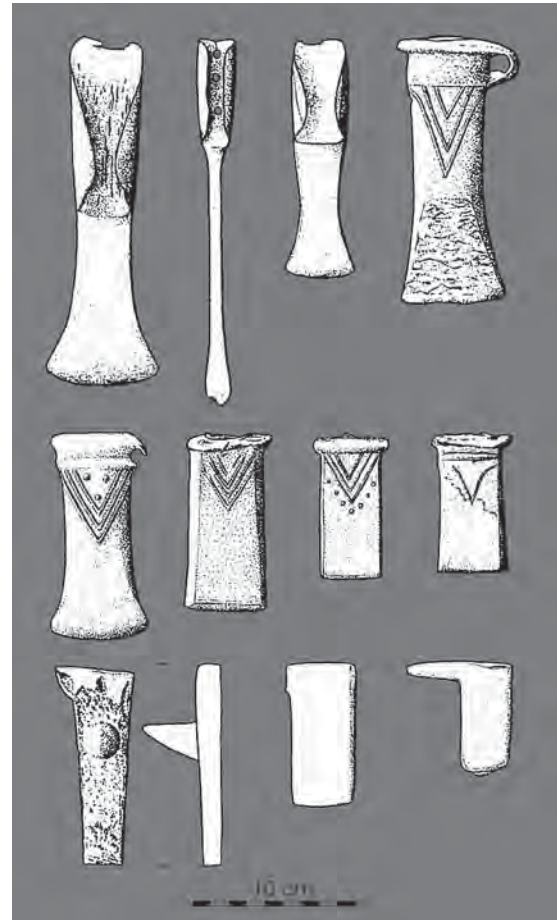


Figure 58. The bronze hoard comprising also metalworking tools found on the Loučka hillfort in the Czech Republic



Figure 59. Conjectural reconstruction of the one-time owner of the Tállya-Várhegy hoard

In the light of the above, it seems possible that the items selected for deposition were associated with the life history of a specific individual and that they represent the many layers of his identity. Looking at the Tállya-Várhegy hoard from this perspective, we see a man who was a respected and accomplished metalsmith, well-versed in the creation of bronze and gold artefacts. He was probably one of the wealthier and high-status members of his community as indicated by his ornate costume and his weapons, a token of his membership in the class of warriors. The hoard's sickles could be symbols of his link with arable land, but they may equally well have been included among the deposited objects as part of the period's ritual paraphernalia, as a sacral currency. The bracelets may have played a similar role, although we cannot exclude the possibility that they were a reference to the female relatives – wives, children – of the man personified by the hoard. In this interpretation, the deposition of the hoard was part of a mortuary ritual in the course of which a

part of the personal belongings of the community's highly-esteemed and respected smith were deposited in an area that had its association with his life-cycle and identity. Our interpretation is underpinned by other assemblages reflecting “warrior and smith” patterns such as the above-mentioned Gévelard hoard containing smithing tools and personal arms and Hoard 2 from the fortified settlement at Loučka in the Czech Republic that was made up of battle-axes, anvils and hammers (*Fig. 58*).¹⁰³

These assemblages highlight the special position of bronzesmiths with specialised skills who were capable of crafting more sophisticated objects in the world of the Late Bronze Age (*Fig. 59*). The craftsmen working with metals were believed to possess magical powers since they were capable of transforming natural materials by enlisting the power of fire and of creating new artefacts.¹⁰⁴ They were respected members of their communities, often with a ritualised role, since their knowledge extended to the creation of lethal weapons, jewellery with apotropaic powers and gold objects symbolising wealth.¹⁰⁵

Treasure islet: Szeged-Gyálarét

An enigmatic gold object came to light at Gyálarét on the outskirts of Szeged in May 2017 on a hillock that had once risen above the surrounding floodplain of the River Tisza. Its size, form and ornamentation resemble the bronze greaves of the Late Bronze Age. However, its interpretation is no easy task, given that none of the currently known similar pieces of armour were crafted from gold.

The uniqueness of the golden greave suggests that this piece had not only embodied the social status of its owner, but that it had been vested with spiritual power and had been accorded special treatment.

The find circumstances

The first piece of the hoard was discovered by a local resident of Gyálarét, who noticed the golden glimmer of the crumpled sheet metal on the side sloping towards the floodplain and took it home, where he carefully cleaned and unfolded it. A smaller gold artefact and a conical pendant fell out of the crumpled greave.

Realising the significance of what he had found, he notified the local officials of the archaeological heritage protection institution. When we surveyed the area with our team, we discovered one domed and two conical golden mounts, and we also found the missing portion of the gold greave, which, similarly to the first piece, was folded (*Fig. 60*). In addition to the greave fragment, we also recovered another four gold mounts and a conical pendant.

The objects had all been buried at a shallow depth, in the upper 30 cm of the soil, and had probably been carefully bundled together. The assemblage in the lower level of the ploughzone had most likely been disturbed and had been dispersed by the plough away from their original location (*Fig. 61*).



Figure 60. The second fragment of the Szeged-Gyálarét greave



Figure 61. Findspots of the various objects at Szeged-Gyálarét (the yellow arrows mark the findspots of the gold mounts, the blue arrow the findspot of the greave's second fragment, the red dashed circle the probable findspot of the first greave fragment)

The deposited objects

The hoard found on the outskirts of Szeged-Gyálarét was made up of a folded greave (Figs 62–63), five conical gold pendants and five golden domed mounts (Fig. 64). The finds weighed 147 g. The piece identified as a greave was a delicate gold sheet hammered into an oval form with two pairs of perforations on each side, indicating that it had been secured to a backing of organic material. The metallographic analyses of the objects revealed that the greave and the other articles had been made from high-purity gold alloyed with silver; however, the exact provenance of the metals could not be securely determined.

Bronze greaves appeared from around the 1300s BC and soon became widely used across Europe.¹⁰⁶ Their appearance can be linked to the process in the wake of which the weaponry of Bronze Age warriors changed radically from the Atlantic coast to the Aegean. Spears of different types began to play a prominent role in warfare, the number of swords multiplied dramatically and previously little known defensive armour, both of the cast and hammered sheet metal variety, made its appearance in the form of cuirasses, shields, helmets and greaves.¹⁰⁷



Figure 62. The gold greave from Szeged-Gyálarét



Figure 63. Reconstruction of the gold greave from Szeged-Gyálarét



Figure 64. The domed and conical mounts found in the area of the gold greave from Szeged-Gyálarét

Even though bronze defensive weapons spread across an extensive territory during a fairly short time, relatively few pieces are actually known, an indication that only a small group of the Late Bronze Age warrior elite was entitled to these objects, which is also underpinned by the distribution of the graves related to the one from Gyálarét. Bronze greaves are known from no more than thirty-five sites dating to the roughly 250–300-year-long duration of the European Late Bronze Age. Graves have been found on seven sites in Hungary, all lying in Transdanubia, but none of the European and Hungarian pieces are made of gold.¹⁰⁸

The gold greave is remarkable not only because of its material, but also because of its delicate repoussé ornamentation created by punching from the reverse. Greaves decorated using a similar technique were current in the twelfth–eleventh centuries BC. The curved motifs recur on the greave from Cannes-Écluse in France,¹⁰⁹ while similar triangle motifs appear on the greave from Schäfstall in Austria.¹¹⁰ The ornamental motif resembling a vine tendril or longish leaf on the Gyálarét grave can be found on several prehistoric gold objects in the southerly regions of the Carpathian Basin. A raised variant of this motif appears on the gold bracelet from Dunavecse (whose date remains controversial) as well as on the gold bracelets from Magyarbénye (Biia, Romania) and Abrudbánya (Abrud, Romania).¹¹¹ The bronze variants of the domed mounts and conical pendants were both popular during the Late Bronze Age and Early Iron Age: mounts of similar size were generally used as adornments on garments and headwear, although the domed bronze

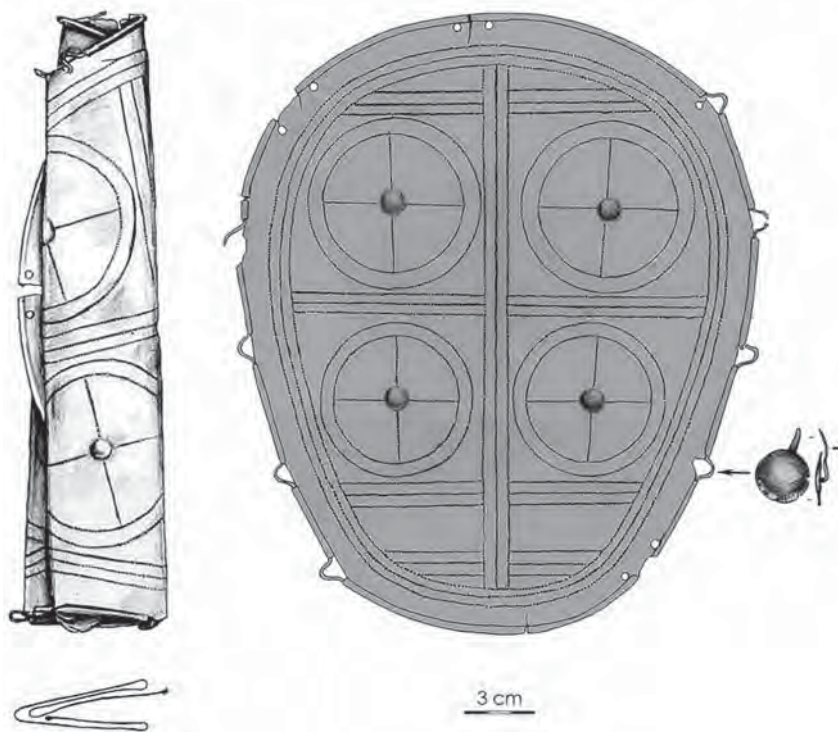


Figure 65. Bronze greave of the Lengyeltóti 5 hoard, folded before its deposition

mount retained in one of the perforations for easing attachment on the bronze greave from Lengyeltóti indicates that these mounts had also functioned as the accessories of greaves.¹¹²

The greave had been folded before its deposition and had been torn in two by tilling after some time. Intentional damage to metalwork deposited as part of sacrificial or votive assemblages was a widespread practice in the Late Bronze Age, as was the careful folding or deliberate crumpling of these objects before their concealment. A similar deliberate damage and crumpling can be noted on the Lengyeltóti greave (Fig. 65) and in the case of the graves from the hoards found at Várvölgy and Cannes-Écluse in France.¹¹³

The findspot and its environment

The gold objects came to light on the perimeter of a former levee, which can still be clearly made out. The relevant map section of the First Military Ordnance Survey made in the later 1700s reveals that it had once been a solitary islet rising from the marshy floodplain of the Tisza (Fig. 66). We conducted a geophysical survey and opened a test trench in the area of the findspot, but found neither any traces of a settlement,

nor of a cemetery in the area. However, the islet was occupied at the time the assemblage was deposited, as shown by the settlement remains dated to the twelfth–eleventh centuries BC uncovered some 500 metres from the findspot of the gold objects.¹¹⁴

Interpretation of the deposition

The outstanding significance of the grave discovered at Szeged-Gyálarét is that it is the first piece of defensive armour crafted from gold found in Central and South-East Europe. Helmets represented the single other protective armour type made of gold in the Near East and Europe during the third and second millennium BC, among which the perhaps best-known piece is the Meskalamdug helmet made from an alloy of silver and gold recovered from a royal burial (2600–2400 BC). The golden helmets from Axtroki and Leiro in Spain (Fig. 67) dated to the fourteenth–twelfth centuries BC¹¹⁵ are much closer in time to the Gyálarét grave.

Homer's *Iliad* contains several references to gold weapons, for example in the description of the golden arms wielded by the Thracian Glaukos, fighting on the Trojan side, and the gold weapons of Rhesos, a Thracian prince. Various passages mention the weapons of the gods, crafted from gold, for example Athena's gold helmet. In Book 8, Hector exhorts the Trojans to seize Nestor's famed golden shield, for then the Greeks will surely depart.¹¹⁶ It would appear that their practical function aside, these gold arms were also regarded as military insignia.

Given that Late Bronze Age cuirasses as well as shields and helmets are extremely rare finds and were arms possessed only by the *crème de la crème* of the warrior elite, we may reasonably posit that the golden greaves had once belonged to an outstanding military leader. However, the find context of the Gyálarét hoard also offers another plausible interpretation. It would appear that the greave had been deposited without its pair. The gold mounts and the conical pendants had perhaps once adorned a lavishly embellished ceremonial garment. In this case, the greave was a symbolic artefact vested with a meaning pointing beyond



Figure 66. The Szeged-Gyálarét islet on the map of the First Military Ordnance Survey (late eighteenth century)



Figure 67. The gold helmet found at Leiro in Spain



Figure 68. The enormous spiral-terminalled armring from Abaujvecser

its utilitarian nature: it was not part of the weapons borne by an existing individual, but a ritual implement, a ceremonial object associated with a being commanding supernatural powers, a hero or mythical ancestor, or his cult.

The existence of a special cult associated with graves is underpinned by an extraordinary assemblage from northern Italy. A pit uncovered in the Late Bronze Age-Early Iron Age cemetery of Desmontá di Veronella contained two bronze greaves, which lay one above the other and had once been secured to a piece of wood, perhaps part of a cult statue. The burial location of the greaves had been marked by a wooden stele or column because the graves dug at a later time encircled the pit with the bronze objects¹¹⁷. Similar costume elements vested with a symbolic role that had been worn during rituals or ceremonies are known from the period's other sites too. One of the most curious among these is the enormous arm spiral found at Abaujvecser (*Fig. 68*) that had originally been deposited in a bog. The 43 cm long, 4 cm thick bronze spiral weighing 12 kg had apparently been made for a veritable giant because the usual weight of these jewellery items was rarely over half a kilogram.¹¹⁸

The potential range of meanings ascribed to the Gyálarét grave is similar to the interpretations proposed for the gold head ornaments of Western Europe.¹¹⁹ These unusual golden head ornaments resembling caps probably played a similar role as the Gyálarét greaves: they were part of the cult paraphernalia and insignia of rank, and as such, they highlighted the power of a particular individual or a group, or possibly of a transcendent being.

3 “TREASURES LYING HEAPED”

The perished centre: Baks-Temető-part

Hidden underneath the islet-like mound rising above the marshland of the Tisza lies one of the most significant Late Bronze Age settlements on the Hungarian Plain (Fig. 69). The wealth of the community occupying the settlement is reflected by three hoards – two of bronze, one of gold artefacts – and the roughly 2500 bronze artefacts collected in the area to date.

Life in the village, one of the major centres on the southern Hungarian Plain that was home to several hundred people, came to an end around 900 BC, for reasons yet unknown to us. The extent and unexpectedness of the calamity and catastrophe that befell the settlement is reflected by the human bones scattered over the site and the mass of valuable bronze objects among the ruins of the houses. The observations made at Baks have contributed to enriching the interpretation range of bronze hoards with a new category. It would appear that in contrast to the hoards discussed in the above, the assemblages discovered at this site were not closed sacrificial assemblages, but were instead valuables hoarded by individual households for practical or ritual purposes, or caches that could be enlarged.

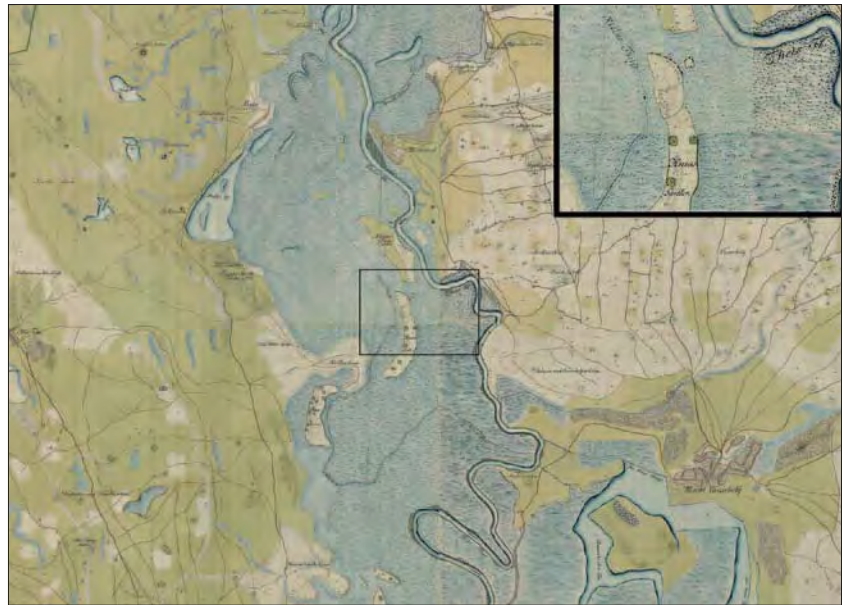


Figure 69. Baks-Temető-part on the map of the First Military Ordnance Survey (late eighteenth century)

The find circumstances

The investigation of the site led to the discovery of three hoards. The first one came to light in 2006, when we found socketed axes, winged axes, bronze cakes and broken sickles in an area with a diameter of roughly 30 metres in the freshly harrowed field.

Realizing the richness of the site, we conducted a test excavation in summer 2007 and began a systematic metal detector survey. We collected additional pieces of the hoard - bronze sickle blade fragments, a bronze knife, a socketed chisel, bracelet fragments, a bronze pin, bronze rings and bronze ingot fragments - in the 20 m by 20 m large trench opened in the area of the ploughed-up artefacts of the first hoard. We found a socketed axe, a broken bronze bracelet and the fragments of a pottery vessel at a depth of roughly 45 cm, an undisturbed level that lay under the ploughzone. Given that these artefacts lay deepest, we assumed that they represented the core of the hoard. The fragments of a larger vessel lay beside the bracelet; however, there was no way of telling whether these were the fragments of the vessel in which the hoard had been originally concealed.

The second hoard, also strongly disturbed, came to light during our 2007 survey and lay some 50-70 metres from the first hoard: we found sickle fragments, socketed axes and the refittable fragments of saw blades in an area measuring some 15 m in diameter. We opened an excavation trench in the area of the artefacts, in which we collected fifty-three pieces of the hoard during its excavation down to the base of the layer disturbed by ploughing.

The small pottery vessel in which the third hoard was concealed was deposited with its mouth downward: it lay 60 cm from the socketed axe of the first hoard. The vessel contained fourteen gold rings looped into two bundles. It remains uncertain whether the vessel containing the gold articles had been buried separately or whether it had been deposited at the same time as the bronze hoard, and had been subsequently dislodged from its original position by cultivation.

We uncovered storage and loam pits dated by pottery of the Late Bronze Age Gáva culture in the trenches opened in the area of the hoard. Unfortunately, deep ploughing had destroyed and dispersed the floor and burnt debris of the buildings that had once stood here, meaning that neither the hoards, nor the stray bronze artefacts could be securely associated with the remains of the settlement's one-time buildings.

The deposited objects

Hoard 1 was made up of two socketed axes, two winged axes, a socketed chisel, twenty-eight sickle fragments, a round bronze cake and two fragmentary bronze cakes (*Fig. 70*), while Hoard 2 contained four intact socketed axes and one broken in half, two broken sickles, thirteen broken saw blades and five lumps of bronze (*Fig. 71*). One of the casting jets was tucked into the socket of one of the broken axes. Both bronze hoards can



Figure 70. Baks-Temetó-part, Hoard 1



Figure 71. Baks-Temetó-part, Hoard 2



Figure 72. Baks-Temető-part, Hoard 3

be neatly fitted into one particular hoard type that was concealed in eastern Hungary in the eleventh–tenth centuries BC, which generally contained intact and damaged tools and implements such as sickles, socketed and winged axes, and spearheads, casting waste and bronze cakes.¹²⁰ There is a marked difference between the period's hoards: treasures made up of superbly crafted, magnificent objects such as swords, helmets and bronze vessels can be clearly distinguished from the assemblages containing everyday artefacts resembling the ones in the two hoards found at Baks. Most of the artefacts in the two hoards are more or less contemporaneous, although one of the socketed axes with a more unusual ornamentation in Hoard 2 suggests that the accumulation of its objects ended at a slightly later date, around the tenth–ninth centuries BC.¹²¹

The ribbed gold rings decorated with evenly spaced interlace patterns were looped into two sets of eight and six rings (*Fig. 72*) before their concealment in the vessel. The rings have a diameter of 1–1.2 cm, except for a smaller piece with a diameter of 0.3 cm. Gold rings of this type represent a generally widespread type of Late Bronze Age goldwork,¹²² comparable pieces found together with other objects¹²³ were made in the eleventh–tenth centuries BC.

The joint deposition of bronze and gold objects is attested in the Late Bronze Age, even if very rarely.¹²⁴ The possible association between Hoards 1 and 3 is most strongly underpinned by the composition and context of the hoard from Tót (Tăuteu, Romania) dated to the tenth century BC: the hoard is contemporaneous with the Baks assemblages and its composition too has much in common with them. The hoard was made up of sickles, socketed axes, saws, bracelets, lumps of bronze, a knife and two buttons, and a small clay vessel containing five gold rings came to light in the bronze hoard's vicinity.

The findspot and its environment

The Late Bronze Age settlement where the three hoards were concealed stands out from among the contemporaneous sites of the southern Hungarian Plain both in terms of its size covering 28 hectares and its unrivalled richness of finds.¹²⁵ Before the regulation of the Tisza, the area was enclosed by the river's main and side channel, and was ringed all year long by a several hundred meters' wide waterlogged marshland (*Figs 73–74*).

On the testimony of the field surveys and our 2007 excavation, the islet was home to an extensive, densely built-up settlement in the eleventh–tenth centuries BC, when the hoards had been buried. Vessel fragments and the debris of the house walls have a denser scatter on the current surface on the islet's eastern side, suggesting that this area had been most intensely occupied.

The metal finds outline a similar picture of the islet's occupation. We collected an unrivalled number of finds, over 2500 bronze artefacts, during the twelve years of the metal detector surveys (*Fig. 75*). Few of these bronze finds were intact: aside from five socketed axes, three socketed chisels, a bronze knife, three strap distributors, eight pins and three bracelets, only smaller rings and mounts can be assigned to the intact

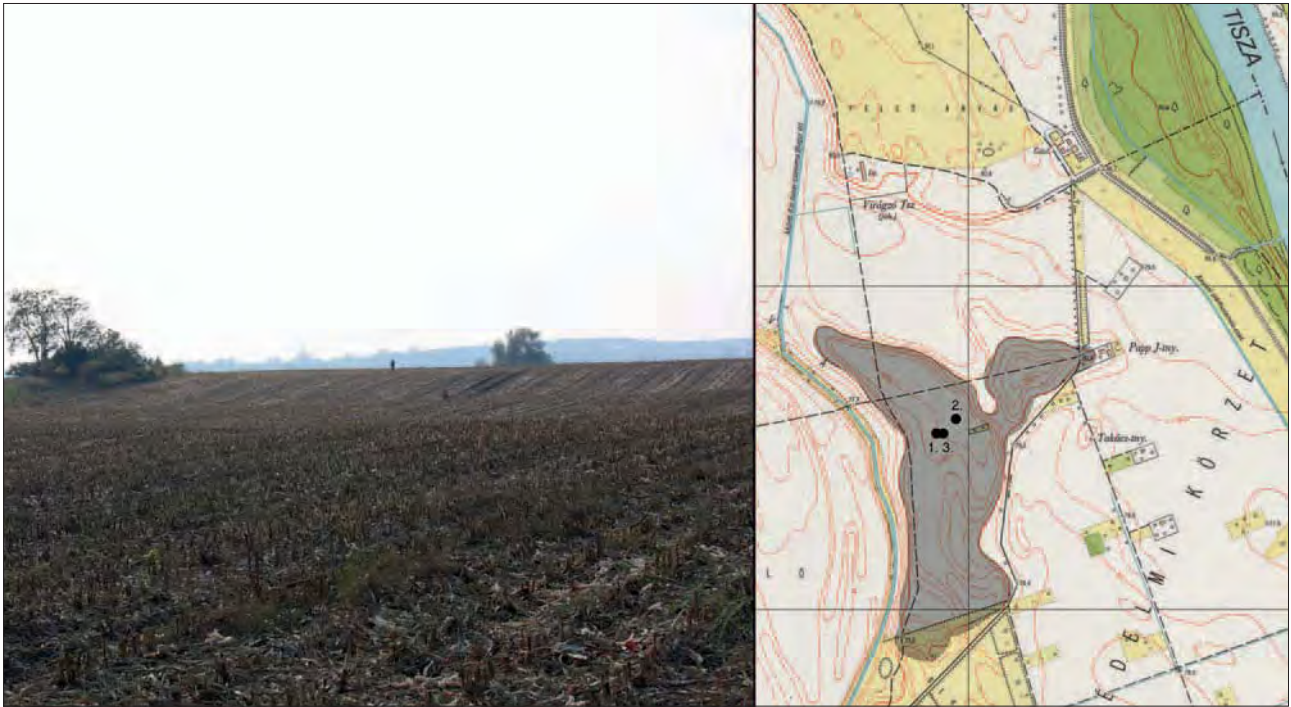


Figure 73. View of the Baks-Temető-part site and the findspots of the three hoards



Figure 74. The Tisza flowing near the Baks-Temető-part site



Figure 75. Selection of the stray bronze finds from Baks-Temetó-part

objects. The number of damaged artefacts scattered over the area was considerably higher. Roughly 30% of the latter were smaller fragments of no longer identifiable objects, while about 35% represented casting waste (casting jets, bronze lumps, ingots and metal cake fragments). The remaining 35% is made up of the most diverse utilitarian objects and jewellery items: fragments of socketed axes, sickles, knives, saw blades, pins, bracelets and brooches. The larger objects include the 14 cm long fragment of an antenna-hilted sword and a 32 cm long fragment of a solid-hilted sword broken in four. Stray bronze finds occur across the entire site, although similarly to the pottery finds, a greater concentration can be noted along a roughly 80–100 metres wide and 700 metres long area on the eastern side facing the Tisza, where about 75% of these finds were collected (Fig. 76)

Very few similarly extensive, intensely occupied Late Bronze Age sites are known in the eastern half of the Carpathian Basin, roughly one every 50–60 kilometres. These “megsites”, covering 20 to 30 hectares and densely built up with houses, emerged in the hubs of major communications arteries during the eleventh-tenth centuries BC when pottery made in the Gáva style began to spread. The settlements at Poroszló-Aponhát,¹²⁶ Pocsaj-Porostiszta¹²⁷ and Érkávás-Sziget (Căuș-Sighetiu, Romania)¹²⁸ can be assigned to this category on the Hungarian Plain. At Poroszló and Érkávás, the houses aligned in the same direction formed orderly rows, an indication of the careful planning of the settlement’s spatial organisation. Enormous quantities of pottery, bones and burnt debris can be collected on these sites, and moulds reflecting local metalworking are frequently encountered among the finds. At Poroszló-Aponhát, the closest parallel to the Baks settlement lying some 180 km away and similarly sited on the high buff overlooking the Tisza, the debris layer of the buildings formed 1–1.5 m thick deposits in some parts of the settlement, recalling settlement mounds (tells).

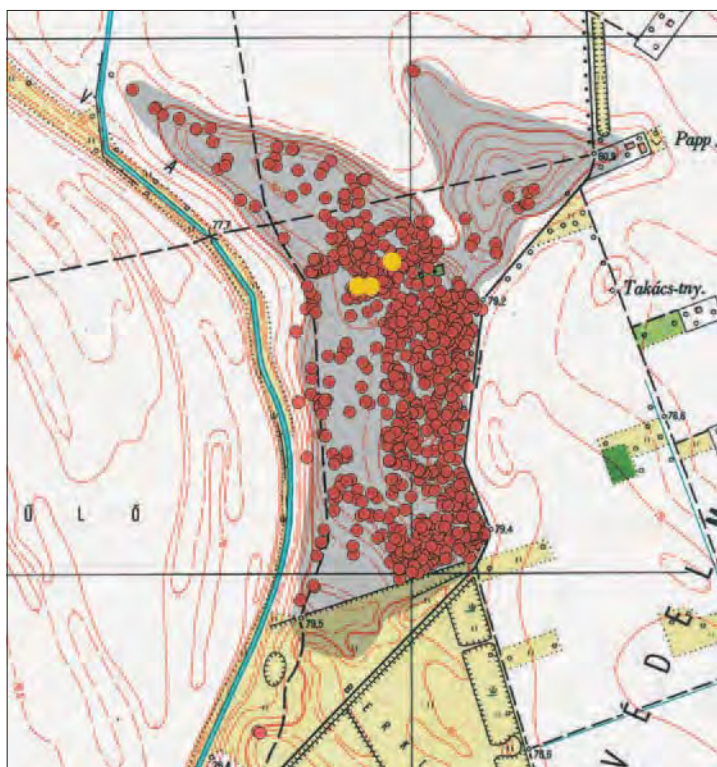


Figure 76. Findspots of stray bronze finds and the three hoards at Baks-Temető-part

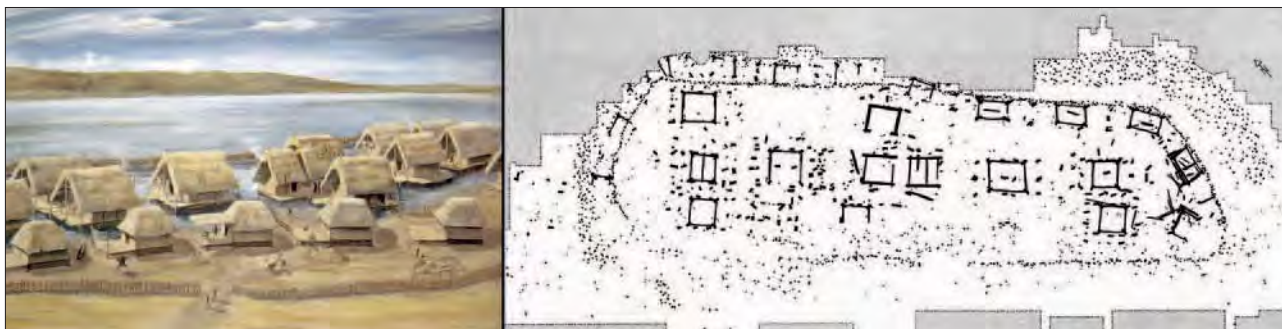


Figure 77. Conjectural reconstruction of the Late Bronze Age settlement at Greifensee-Böschen in Switzerland and the plan of the settlement

Interpretation of the deposition

One unique trait of the Baks site is the large number of bronze artefacts scattered across the settlement. During the past years, we conducted metal detector surveys on over thirty Late Bronze Age settlements in Hungary, none of which yielded the same amount or the same variety of surface bronze finds as at Baks.

What is the reason for this incomparable abundance of bronze finds, unattested elsewhere? To answer this intriguing question, we turned to two Late Bronze Age sites excavated in more distant regions of Europe, Greifensee-Böschen in Switzerland and Must Farm in southern England. The dendrochronological analyses of the samples from Greifensee-Böschen revealed that the lakeside settlement with twenty-four buildings ringed by a palisade had been established around 1047 BC and that it had been abandoned about ten years later, following a conflagration.¹²⁹ The houses had been built on platforms above the shallow water (*Fig. 77*) and the furnishings of the houses sank to bottom of the lake together with the buildings' structural elements. The excavation brought to light the pottery and the bone and stone tools and implements used in the households as well as some 310 bronze objects, most of which were fishing hooks, awls and costume accessories such as ornate pins, rings and mounts. Aside from these, six sickles, four winged axes, a socketed hammer and a spear were also recovered from the remains of the buildings. Traces of wear and re-sharpening indicated that most of the larger tools had been actively used. A comparison with the metalwork from Baks immediately revealed that there were barely any broken pieces. Although the distribution of the bronze artefacts at Greifensee-Böschen was more or less even, there were a few locations with a striking concentration of larger intact pieces.

A similar picture emerges of the Late Bronze Age settlement at Must Farm in southern England, investigated in 2015 and 2016. The nine roundhouses erected on round platforms of the lakeside settlement enclosed by a wooden fence were destroyed by fire in the ninth century BC. The household inventories and masses of the tools, implements and utensils of daily life - among them intact vessels, food remains, wooden tools, textiles and the like - were fully preserved among the ruins of the collapsed buildings. The excavations

brought to light countless intact bronze objects such as sickles, spears, socketed axes and bronze sword blades, some still retaining an intact wooden haft.¹³⁰ One of the perhaps most fascinating finds was a crushed wooden bucket filled with broken bronze objects waiting to be re-used.¹³¹

The two examples cited above shed light on the amount of bronzework in circulation on Late Bronze Age settlements. A part of these were tools and implements in daily use, while another part was made up of sets of various artefacts, stored in containers, that were hoarded for practical reasons. One advantage of bronze, a commodity whose acquisition was no easy task, was that it could be recycled and therefore even broken bronze objects had their value, explaining why special care was taken to collect and preserve them. Intact bronze objects as well as broken or damaged pieces, casting waste and bronze cakes were tangible parts of a household's wealth. The hoarded bronze functioned as a reserve that could be used at any time: as weapons, as working tools, or as currency in practical or ritual transactions. The metal objects and raw material safeguarded in houses betokened their owner's power and wealth. The accumulated valuables were most often stored in the houses, although in some cases, they were kept in a central location as a boastful display, in some cases carefully hidden within the building and only rarely removed from the place of concealment.

In the light of the above, one possible explanation for the abundance of metalwork at Baks-Temető-part is that the Late Bronze Age settlement had perished during an unexpected catastrophe involving a blaze of fire. The conflagration is indicated by the secondarily burnt pottery found scattered on the surface and in the pits, the burnt daub fragments from the houses, and the layer of specks of burnt daub mixed with fine



Figure 78. Storage pits in one of the excavation trenches opened at Baks-Temető-part (left). Typical Late Bronze Age pottery from the excavated features (right)

grey ash under the ploughzone noted during the excavation. The human bones found in fourteen of the eighty-two excavated settlement features can perhaps also be linked to the settlement's destruction. Most of the fifty-two bones were small fragments, often burnt and bearing animal gnaw marks, possibly an indication that the bodies had lain unburied among the burnt, collapsed buildings.¹³² It would appear that the settlement's occupants were unable - or had no inclination - to collect their tools and implements or valuables from their houses that had been consumed by fire and thus the bronze objects buried under the debris survived the ensuing millennia. The distribution of the bronze finds indicates that the households using and hoarding the largest amount of metalwork lived on the settlement's open eastern side facing the main Tisza channel. However, even within this smaller area there were locations with a greater concentration of bronze finds. One of these is a roughly 30 m by 30 m large area along the site's north-eastern side, while another concentration of finds was noted to its south, in the central part of the eastern side and in the settlement's south-eastern corner.

The most important areas of the Late Bronze Age settlement are indicated by the findspots of the three hoards. This area lies in the site's centre, on the islet's highest point and is an area with a diameter of roughly 50 metres. The features uncovered during the excavation and the pottery collected on the surface (Figs 78-79) revealed that this area had been densely built up with residential buildings and various economic structures. The pottery does not differ from the usual household vessels and reflects households well equipped with various utensils: storage jars and cooking pots, tableware for more festive meals and lavishly decorated amphoras for fermenting alcoholic beverages.

The pottery does not differ from the usual household vessels and reflects households well equipped with various utensils: storage jars and cooking pots, tableware for more festive meals and lavishly decorated amphoras for fermenting alcoholic beverages.

It seems likely that the hoards found on the Baks-Temető-part settlement indicate the habitation area of one of the community's leading families or clans. The reserves of broken and intact artefacts were part of the occupants' wealth that had been hoarded or hidden in their houses. The artefacts of the two bronze hoards were selected according to a similar pattern, suggesting that they had begun to be accumulated for a similar reason - a votive gift, a funerary sacrifice or perhaps a dowry.



Figure 79. Animal figurines from the excavation at Baks-Temető-part

The torched farmstead: Zsáka-Dávid-tanya

The peoples of the Late Bronze Age world lived not only in villages and fortified settlements, but also on smaller farmsteads and campsites. The “colonisation” of the Hungarian Plain, the exploitation of large tracts of pasturelands and unbroken, virgin land was accomplished through the chains of these more briefly or intermittently occupied settlements.

The two small bronze hoards uncovered on the outskirts of Zsáka on the fringes of the one-time marshland of the Nagy-Sárrét region had been concealed by the occupants of a farmstead of this type. A closer look at the hoard concealed in the central building offers a glimpse into the life of one of the region’s wealthier communities. The owners of the bronze artefacts amassed over a longer period of time maintained extensive contacts with the world lying beyond the region and it seems likely that they were masters of a larger than average household.



Figure 80. In situ position of Hoard 1 and its objects dispersed by ploughing at Zsáka-Dávid-tanya

The find circumstances

The first intimation of Hoard 1 was a broken socketed axe discovered during a field survey. In 2008, we conducted a metal detector survey for investigating the site. We collected several dozen bronze objects that had been disturbed by ploughing and we found the remains of the pottery vessel into which the bronzes had originally been placed at a depth of roughly 25 cm in the centre of the scatter of finds. Sickles and lumps of bronze were carefully arranged in the pot's intact lower third. We collected a total of sixty artefacts within a range of 8 metres of the hoard, which included intact and broken sickles, a winged axe, broken socketed axes, sword blade fragments and the fragments of a bronze cake (Fig. 80).

The two bracelets of Hoard 2 came to light at a distance of 8 metres from Hoard 1 during the systematic survey of the area. Some 20 cm from the second bracelet there was a clay pot covered with a vessel base under the ploughzone, at a depth of 25-30 cm; the metal detector indicated that it contained a larger amount of metalwork. Following the removal of the base fragment serving as the lid, we found two socketed axes with their cutting edges pointing in the same direction and a winged axe. The upper, unornamented axe was broken in two. A sickle fragment lay on the blade of the winged axe. Underneath the ornamented socketed axe lay two lumps of bronze and a broken axe blade, while a bronze cake fragment was placed under the vessel (Fig. 81).



Figure 81. Hoard 2 with the vessel base covering the hoard found at Zsáka-Dávid-tanya (left).
Arrangement of the objects of Hoard 2 (right)

In 2009, we opened a 200 m² large trench in the area of the bronze hoards. We found sickle fragments and lumps of bronze in the area of Hoard 1, while five other bracelets resembling the ones found earlier came to light in the area of Hoard 2. A bronze fragment hacked out of a bronze cake was squeezed into one of the bracelets. The eight bracelets scattered over a 4–5 metres large area around Hoard 2 had probably been deposited above the “treasure” pot covered with a vessel base and had been dislodged from their original position and dispersed by ploughing.

The deposited objects

Hoard 1 weighed 35 kg and contained 134 artefacts: eleven broken socketed axes, two broken winged axes, a sword blade fragment, a broken long-bladed spearhead, the upper part of a round helmet, six intact and four broken sickles, a chisel, three saw blade fragments, two pins, ten sheet metal fragments, a sheet metal disc, three bronze rivets, two swallow-tail pendants, a round-sectioned ring, a tripartite ring, a bronze rod, three casting jets, twenty-eight bronze cake fragments of different sizes, a round bronze cake fragment, thirty-one bronze droplets with diameters ranging between 2–7 cm, an ingot and bronze lumps (*Fig. 82*). Hoard 2 weighed 2 kg and was made up of an intact socketed axe and a similar axe broken in two, a winged axe broken in two, seven penannular bracelets decorated with geometric patterns, a sickle blade fragment, the blade fragment of a socketed axe, three smaller bronze lumps and a triangular bronze fragment hacked out of a bronze cake (*Fig. 83*).

The two hoards were assembled from types current in the twelfth and eleventh centuries BC, although both contain pieces that could have been made as much as a century earlier, such as the swallow-tail pendants and the button sickles of Hoard 1 and the bracelets of Hoard 2. The latter contains two artefacts representing the formal types of the tenth century BC, suggesting that its accumulation ended later than of the other hoard.

Although the artefacts of the two hoards were accumulated and deposited during roughly the same period, the choice of what was hoarded differed substantially. Hoard 1 represents the period’s mixed hoards that were quite widespread (resembling the Ecseg 2 hoard, discussed in the book’s previous section). One part of the hoard comes from hacked-up bronze cakes and casting waste, another from broken sickles, and a third from weapons, tools, jewellery and sheet metal objects broken into small fragments. Some of the articles such as the sickles were heavily worn, while some were deliberately broken (such as the axes), and one sickle was unfinished, as the casting flashes and the casting jets had not been removed. Aside from tools and implements, the hoard included various weapons: a long-bladed spearhead, a sword blade fragment, a broken winged axe and the crest of a bronze helmet, an indication that the hoard’s owners had ties to the world of warriors.



Figure 82. Zsáka-Dávid-tanya, Hoard 1



Figure 83. Zsáka-Dávid-tanya, Hoard 2

The articles in Hoard 2 appear to have been selected according to another pattern and represent more personal objects: weapons, bracelets and raw material for use in casting.¹³³ One particularly interesting aspect of this hoard is that some of its objects had been deliberately rendered useless: some of the bracelets were broken and crushed, one socketed axe was broken in two, while the winged axe was split in two with a single blow. The winged axe represents a rare, uncommon type: comparable pieces are known from the eastern half of the Carpathian Basin, some were made in Tyrol, while other exemplars are known from Croatia and other regions of Austria.¹³⁴ The axe from Zsáka was a carefully sharpened tool that had been put to use.

The findspot and its environment

Both bronze hoards came to light on the tip of a peninsula extending into the former floodplain of the Berettyó. During our surveys, we found that there had once been a small Late Bronze Age settlement with an extent no larger than 30 m by 30 m in the area. The hoards had been concealed in the farmstead's more intensely occupied part facing the river.

The floor and wall remains of a 14–15 m long and 6–7 m wide Late Bronze Age building came to light in the 10 m by 20 m large trench opened in the area of the hoards in 2009. We found four large crushed vessels in the house's south-western corner, the head of a bronze pin, a saw blade and a sickle blade, alongside the fragments of smaller vessels inside the house. The building was encircled by five Late Bronze Age storage pits (*Fig. 84*).

The vessels brought to light during the excavation represent the earliest types of the Gáva ceramic style (*Fig. 85*), which were produced in the twelfth–eleventh centuries BC. This date was confirmed by the radiocarbon date of the animal bones recovered from one of the pits, which puts the site's occupation between 1250 and 1150 BC. The nearest contemporaneous site lies roughly 600 metres to the north.

Interpretation of the deposition

While there are very few large villages such as the one at Baks-Temető-part on the Hungarian Plain during the Late Bronze Age, small sites resembling the one at Zsáka represent one of the region's most typical settlements. These farmsteads, lying a few hundred metres apart, formed chains along rivers and streams, and were part of a dense network in the areas suited to arable farming and animal husbandry.¹³⁵ These sites were not occupied for long: after the exhaustion of the available resources, the small communities practicing slash-and-burn agriculture and animal husbandry simply moved on, often several times during a generation. The settlements were not of the same type: some formed clusters of farmsteads, some were small, solitary colonies in unbroken virgin land or on the fringes of the marshland and some were intermittently occupied

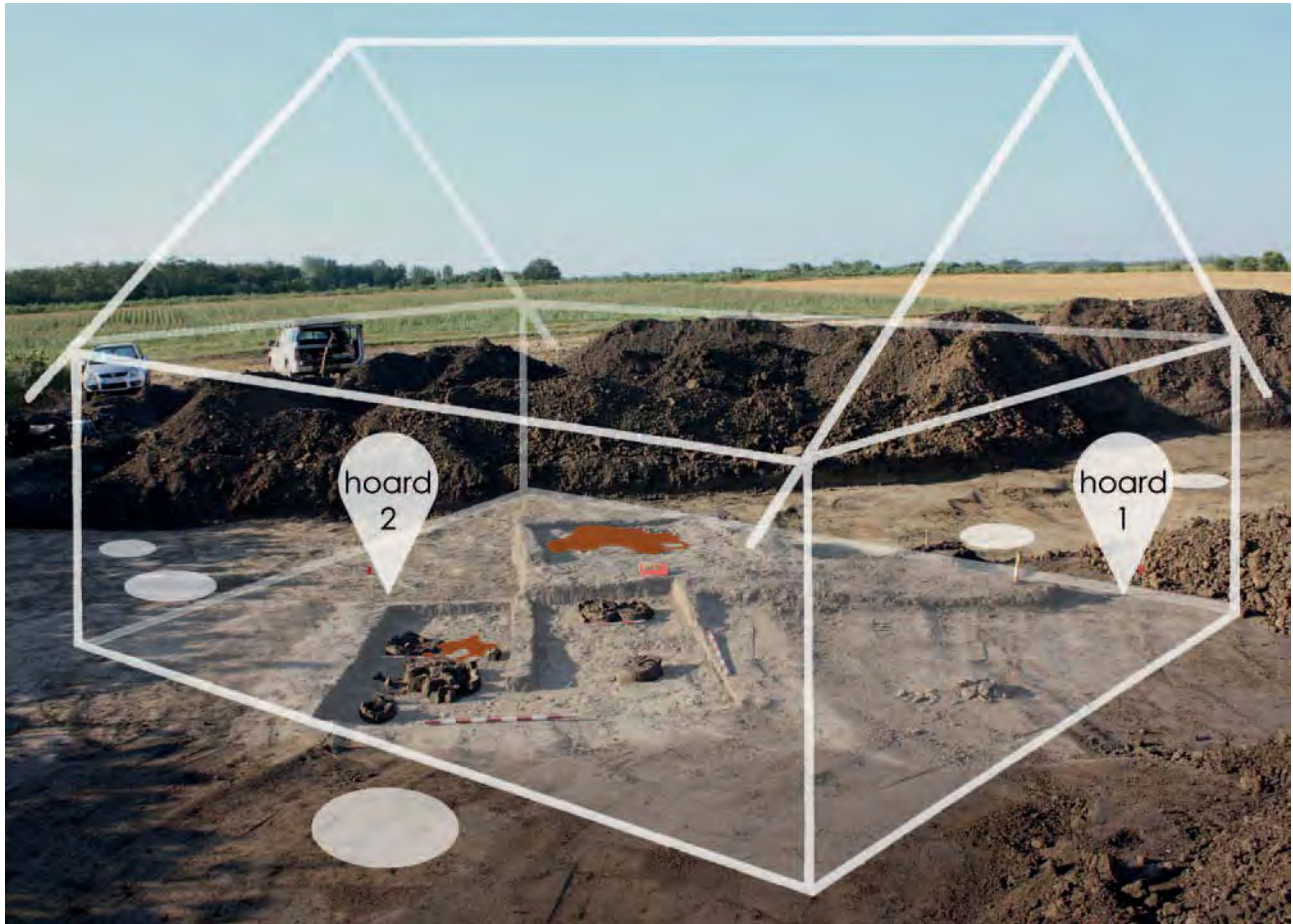


Figure 84. Conjectural reconstruction of the building uncovered in the area of the two hoards at Zsáka-Dávid-tanya (the burnt floor is marked with red, the Late Bronze Age pits are marked with white)

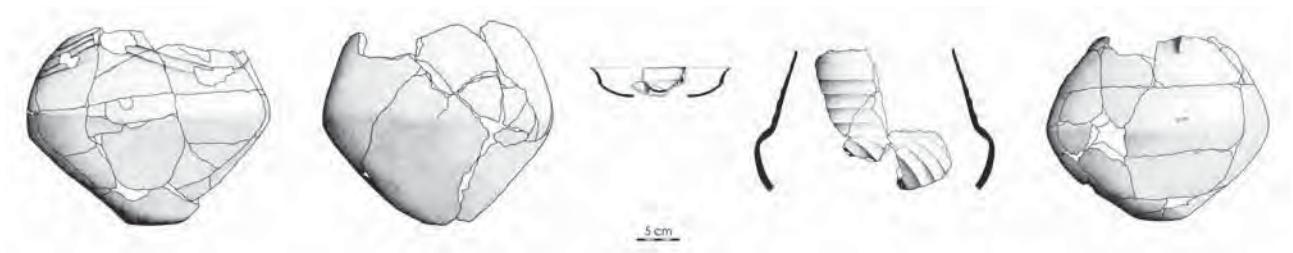


Figure 85. Late Bronze Age pottery found in the house uncovered in the area of the two hoards at Zsáka-Dávid-tanya



Figure 86. Location of different sets of artefacts in the habitation space of an archaic community on a painting by Karl Bodmer (“Interior of the hut of a Mandan chief”, 1833-34)

settlements used by families or communities engaged in stockbreeding. Some were occupied by subordinate groups with a more modest material culture, virtually lacking metal artefacts, while others were residences of more prominent clans and families lording over groups of farmsteads.¹³⁶

With its two hoards, the Zsáka site had probably been a farmstead-like settlement occupied by a high-ranking community. Given its size, it probably incorporated a single larger household¹³⁷ with one or two residential buildings, a few outbuildings and a dozen or so storage pits. On the testimony of the patches of burnt debris, the building in which the hoards were stored had been consumed by fire. The vessels found inside the house indicate that a part of the furnishings had been covered by the debris of the collapsing building. The bronze hoards had probably been stored under the building’s floor.

One intriguing question is to what extent the hoards concealed in the clay vessels had been accessible. It seems possible that the assemblages stored in this manner were “open” in the sense that they could be enlarged, but certain items could also be removed if need be.¹³⁸ In this sense, Hoard 1 with its many different items can be interpreted as the “family treasure”, a bronze reserve, that was amassed during successive generations of the community controlling the household. The various items in these reserves became part of the constantly changing assemblage in many different ways. Some artefacts were handed down from one generation to the next, some were tools and implements that were not put to use, some were damaged, time-worn or miscast objects, some were parts of booty or tools, jewellery and weapons received as gifts. The reserve served as a repository from which objects could also be removed for gifting or for sacrifices, or when tools were needed for simple domestic work or raw material for casting new objects (*Fig. 86*).

Traces of spectacular intentional damage can be made out on some items of the hoard, such as the spearhead fragment and one of the socketed axes,¹³⁹ suggesting that the artefacts had been stripped of the meanings attached to them during their earlier use by means of magical practices prior to their deposition. Artefacts of this type may have included weapons acquired as booty and the personal belongings or jewellery of the deceased.

The hoard's earliest and latest objects are separated by at least 150 years, an indication that the assemblage had been amassed for several generations before its deposition. Hoards that had been accumulated over a similarly long time are fairly common in the Late Bronze Age (*Fig. 87*).¹⁴⁰ One spectacular Hungarian example is the Rohod hoard, whose earliest pieces are battle axes made some two hundred years before the hoard's deposition.¹⁴¹

Hoard 2 differs substantially from Hoard 1, deposited 10 metres away. Its composition is less mixed and its articles appear much more personal in nature: they were probably selected according to a specific pattern with a view to the identity and age of a particular individual. Socketed axes, one of the period's multi-purpose tools, always within a hand's reach in the case of males, were suitable for wood felling, wood carving and agricultural work, and could double as weapons too.¹⁴² The winged axe, although attested across Europe, was a considerably more special and rarer type.¹⁴³ Its one-time owner had probably wielded the axe in battle. One possible explanation for the spectacular and purposeful intentional damage to the axe is that it had been a weapon vested with unusual powers that had belonged to a powerful individual, and that it would have been inappropriate for anyone else to use it. The bracelets were probably part of a set. Their almost pristine condition suggests that their owner had treated them as valuables rather than as jewellery. The mode of deposition reflects intentionality, possibly a ritual action: a bronze lump had been placed under the vessel, the weapons were deposited in the vessel, while the bracelets were heaped above the closed vessel. In this respect, Hoard 2 has more in common with the votive and funerary deposits discussed in the



Figure 87. Late Bronze Age hoard of artefacts accumulated over several hundred years from Újfehértó-Tóhát

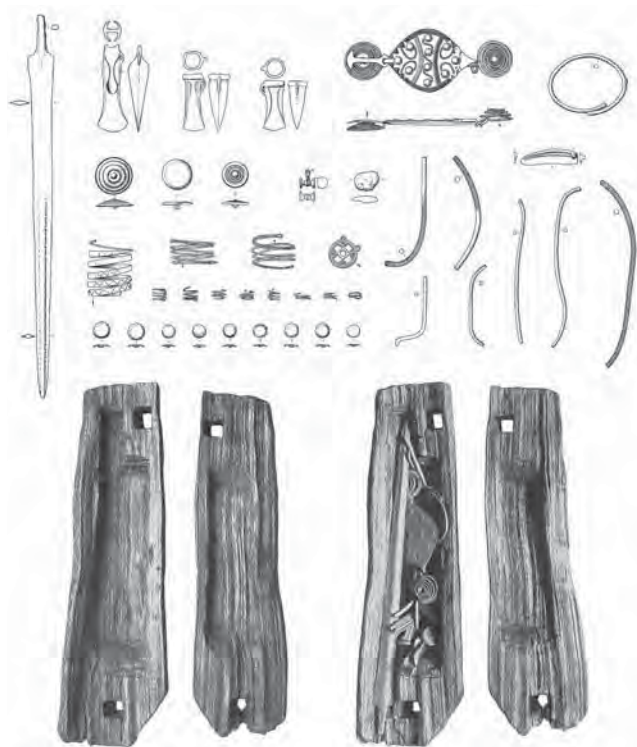


Figure 88. The bronze hoard from Kopaniewo in Poland, stored in a wooden chest

previous chapter - however, it is possible that hoards of this type began to be assembled already during the lifetime of a household's members.

The hoard found at Kopaniewo in Poland illustrates the extent to which these assemblages were valued and safeguarded. Discovered in a Pomeranian peat bog in the early nineteenth century, the hoard contained two socketed axes, four ornamental buttons, a sword, a winged axe, a sickle, a large brooch, a pendant, a bracelet, a neckring hacked into several pieces and bronze cakes - nevertheless, the hoard's undoubtedly most sensational item was the prism-shaped wooden box hewn out of oak into which the artefacts had been placed (*Fig. 88*).¹⁴⁴ The box had quite obviously been intended to serve as the assemblage's container because its interior was carved out to accommodate all the artefacts and a special slot was made for the sword. This would imply that the items in these assemblages had not been selected immediately prior to the deposition, but had been kept as a highly prized reserve for a long time by their owners.

In the light of the above, the Zsáka hoards had in all likelihood been concealed in the central building of a farm-like settlement. While Hoard 1 appears to have been an open assemblage collected over a longer time, reflecting the manifold intentions of the persons engaged in its accumulation, Hoard 2 is more ceremonial in nature, being a personal, closed assemblage. The two hoards would imply that the small settlement functioned as a single larger household, whose leader - on the testimony of Hoard 2 - had wide-ranging connections and was a respected man enjoying a higher social status, a man who lived off the land, but was also part of the warriors' world.

The question remains as to what happened to the building where the hoards had been hidden? Why did the hoards remain buried if they had not been sacrificial deposits? The conflagration destroying the farm can equally well be an indication of a conflict, perhaps of an attack by a rival community, or of a ritual act, the deliberate burning of the house as part of a ceremony, marking the end of its life and of a period in its occupants' life cycle.¹⁴⁵

A peek into a treasury: Tállya-Óvár

The bronze articles of the hoard discovered at Tállya-Óvár were stored under the floor of a building constructed of timber logs daubed with clay in the settlement's central area. The weapons, tools, implements and jewellery of the hoard as well as the ornate clay vessels and food remains found among the building's remnant would suggest that the house had once been occupied by one of the hillfort's leading families that headed a large household. The finds offer a glimpse into the world of a powerful Bronze Age clan with widespread connections.

The find circumstances

The hoard was discovered on the very first day of the metal detector survey conducted in the area of the fortified settlement in 2009, during the investigation of the extensive flat area in the site's central part. The uppermost piece of the hoard, found at a depth of 20 cm, was a socketed axe. The bronze objects lay in a heap, forming several levels. The upper level was made up of socketed axes, three sickles and a sword hilt, underneath which lay a winged axe and other socketed axes, while the lowermost level comprised bracelets, an oval ring, a folded sickle and five socketed axes.

The hoard was deposited on a burnt, plastered, oval surface enclosed by stones, most likely the remains of an earlier hearth. The objects had not been covered since we found neither stones, nor pottery fragments above them. We uncovered several larger vessel fragments in the area that had either lain here or had been placed beside the bronze items later. The position of the bronze artefacts suggests that they had been deposited in a wrapping or container of organic material, wrapped into cloth or leather, or perhaps placed in a bag or sack (*Fig. 89*).

The deposited objects

The hoard contained twenty-two socketed axes, four sickles, four bracelets with engraved decoration, the hilt of a cup-hilted sword, a winged axe with broadening blade and an oval ring, probably part of horse gear. Most of these items are intact; only the sword hilt and two socketed axes were damaged or fragmented. One sickle was bent into a ring, a practice attested in the case of other hoards for making an artefact unfit for use (*Fig. 90*).

The socketed axes, the sickles and the sword hilt are distinctive types that were current at the close of the Late Bronze Age. However, a few socketed axe forms, the winged axe and the oval ring are items that enable a slightly later dating of the deposition to the initial period of the Early Iron Age, to the ninth century BC. The socketed axes had not been carefully cast and include several slightly miscast pieces that were nevertheless suitable for use as tools. Most underwent post-casting treatment and the blades are



Figure 89. The in situ position of the Tállya-Óvár bronze hoard and the successive phases of its hand excavation



Figure 90. The bronze hoard from Tállya-Óvár

sharpened, although most lack a fine sharpening and they do not bear any use-wear traces. The sickle blades are also sharpened, although these implements were apparently never put to use.

The hoard contains two unusual artefacts. One is an oval ring with three flat, round elements on three sides and a small projection on the fourth, whose closest parallels can be found in the Mošanec hoard from the Middle Dniester region, which also contained horse gear and a socketed axe (*Fig. 91, right*).¹⁴⁶ A comparable pair of rings occurs in an Early Iron Age hoard from Szczebrzeszyn in eastern Poland (*Fig. 91, left*), deposited together with a socketed axe, a spearhead and jewellery.¹⁴⁷ Its exact function remains unknown: it may have been worn as jewellery, but it may equally well have been a horse gear element.

The winged axe with broadening blade is an equally intriguing and rare find in eastern Hungary. This weapon type, as already indicated by the hoard from Pázmándfalu and Hoard 2 from Zsáka, was part of the offensive weapons wielded by Late Bronze Age warriors since the thirteenth-twelfth centuries BC. The winged axe from Tállya represents a late variant current in the Early Iron Age, which is most often encountered in the warrior graves found in Austria and southern Germany.¹⁴⁸

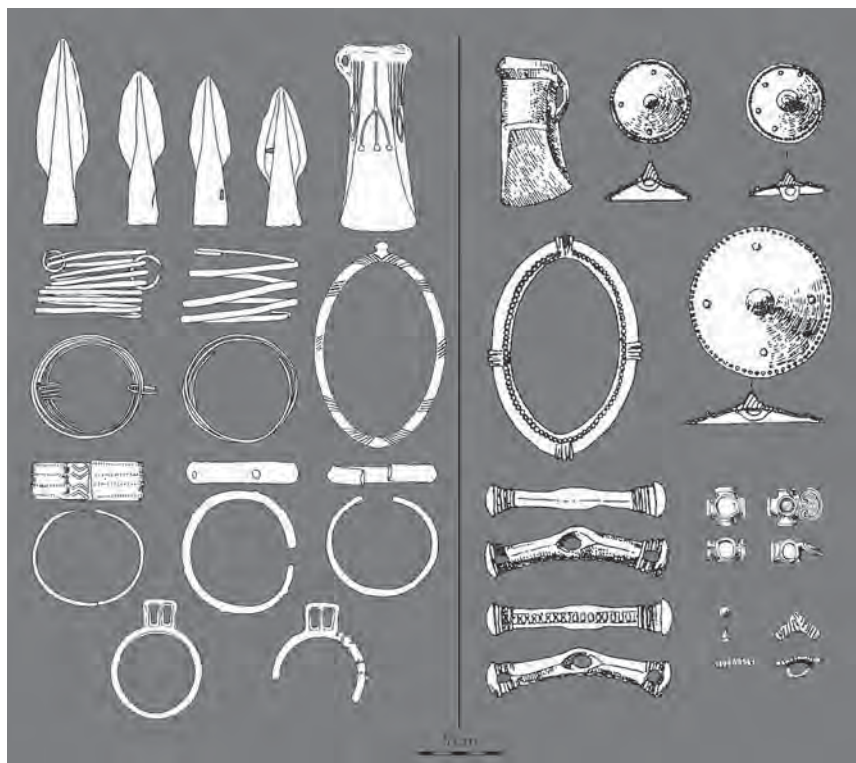


Figure 91. The hoards from Szczebrzeszyn (Poland) and Mošanec (Ukraine), containing rings resembling the ones of the Tállya-Óvár hoard

The findspot and its environment

Tállya-Óvár is a fortified settlement covering 27 hectares in the Zemplén Mountains that was established at the close of the Late Bronze Age (Fig. 92).¹⁴⁹ The pottery finds and the stray bronzework found in the area indicated that the settlement had been densely built up with houses at the time the hoard had been concealed. Between 2009 and 2013, we collected a total of 84 fragmented bronze artefacts dating from the Late Bronze Age and the Early Iron Age. We did not find one single intact object. Most were small lumps of bronze and bronze ingots, alongside casting jets and broken pins, socketed axes, sickles, saw blades and knives. The greatest concentration of metalwork was noted in the settlement's flat central area and in the neighbourhood of the north-western entrance.¹⁵⁰

We opened a 79 m² large trench in the area of the hoard, which we excavated between 2011 and 2013. We uncovered the plastered floor of a building and its wall debris some 1.5 m from the hoard's findspot (Fig. 93). The building had a width of 3.4–4 m and a length of at least 8 m. We were unable to determine whether the hearth where the hoard had been deposited lay inside or immediately beside the building. We found the fragments of good quality tableware in several spots among the house's remains. The vessels were decorated in the Gáva and Kyjatic ceramic style, alongside a few vessels whose counterparts occur in the burials of the Early Iron Age Mezőcsát culture. One indication of the special nature of the hoard's immediate area is that several animal and one human figurine came to light in the area between the house and the hoard. The archaeobotanical analysis of the soil samples from the debris revealed that the settlement's occupants principally cultivated spelt and barley among cereals, from which they prepared porridges. They also ate lentils and gathered hawberries and elderberry in the nearby forest.¹⁵¹

During our survey of the settlement's broader area, we identified five settlements that were contemporaneous with, and probably in a hierarchic

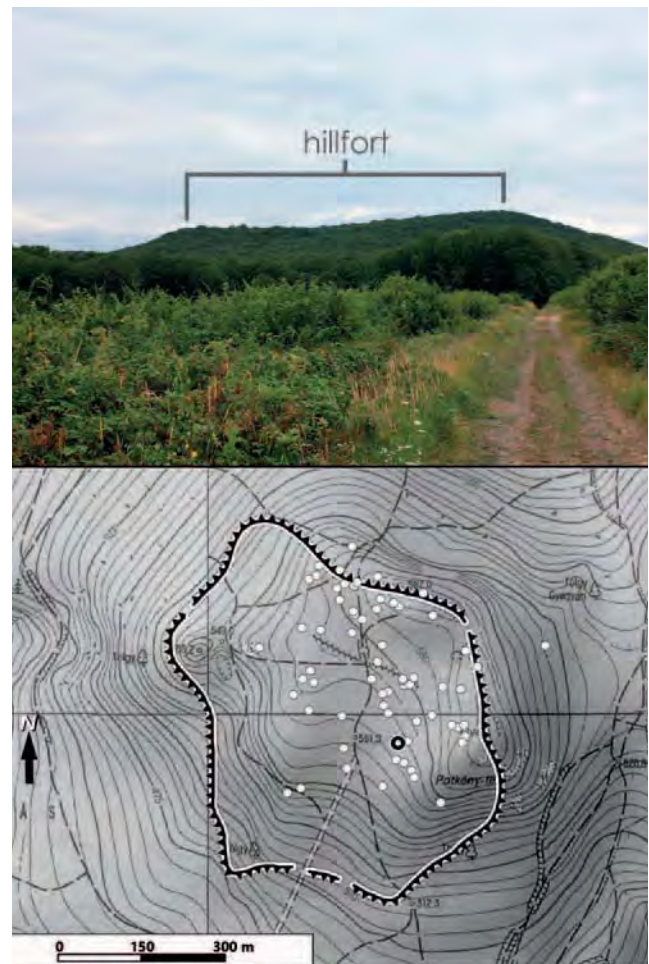


Figure 92. View, location and plan of the Tállya-Óvár hillfort

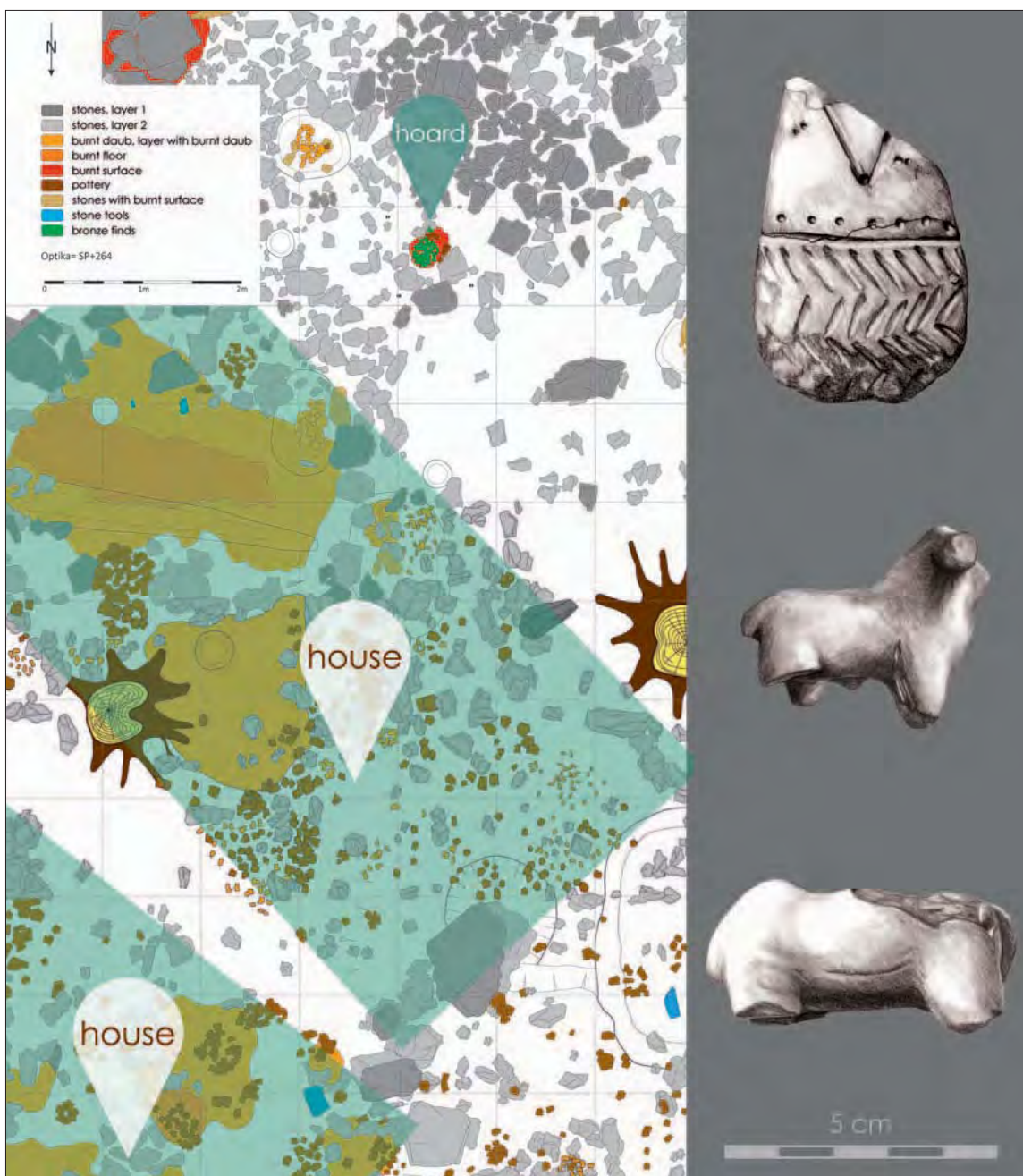


Figure 93. Plan of the houses uncovered in the area of the Tállya-Óvár hoard (left).
The human and animal figurines found in the area of the bronze hoard (right)

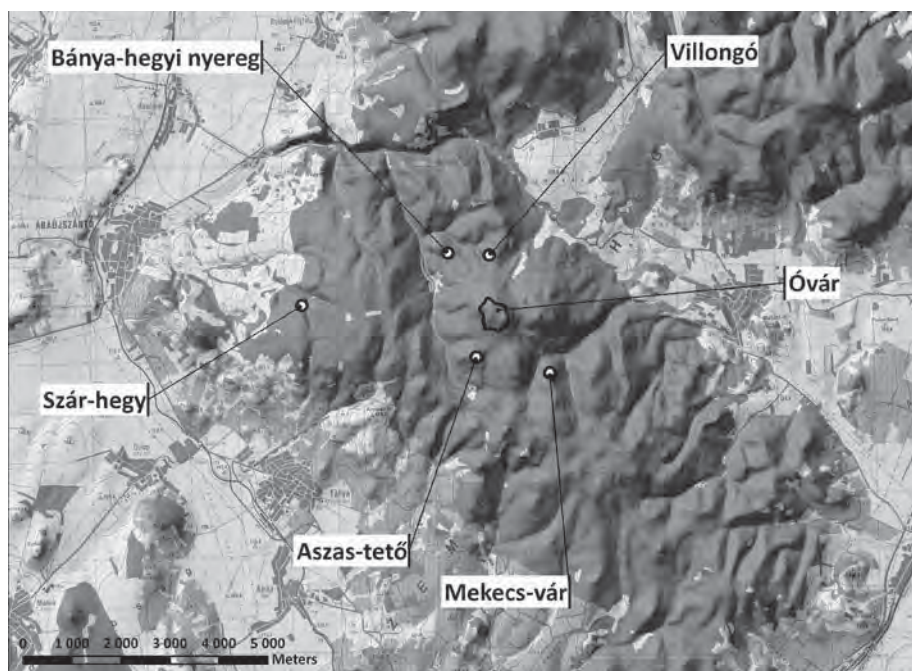


Figure 94. Contemporaneous settlements in the broader area of the Tállya-Óvár hillfort

relationship with, the hillfort where the hoard had been concealed (Fig. 94). The nearest settlement, probably a small farmstead made up of a handful of buildings, lies on the Aszas-tető Peak, some 1.2 km away from Tállya-Óvár. Located slightly farther at 1.5 km as the crow flies is a smaller settlement protected by a ditch on the Mekecs-vár Peak, where we collected finds from the Late Iron Age, although a few pottery sherds indicated its occupation in the Late Bronze Age. The most significant other settlement in the neighbourhood of the Óvár hillfort is located on Mt. Bányá-hegy, at a distance of 1.5 km. The settlement covering 4 hectares lies on a plateau and was apparently unfortified. The central role of the Óvár hillfort is also reflected in that no more than two metal artefacts and the edge fragments of socketed axes were found on the smaller settlements (for example on the Aszas-tető Peak).

Interpretation of the deposition

The hoard of thirty-three artefacts (Fig. 95) came to light in the settlement's central, most densely occupied area. It would appear that the assemblage had been deposited in or immediately beside a building which on the testimony of the tableware and clay figurines found inside and around it had been the setting of elaborate ceremonies and festive feasts.



Figure 95. The bronze hoard from Tállya-Óvár

The value of a hoard such as the one found at Tállya-Óvár for a Bronze Age community lay not only in the amount of bronze raw material it contained, but also in the utilitarian and symbolic importance of certain pieces. The twenty-two socketed axes and the four sickles could have been sufficient for meeting the needs of an extensive chiefly household. The large, heavy winged axe was a formidable weapon, a token of high rank, whose one-time owner was a member of the warriors' world. The sword hilt and the oval ring, a rare type, perhaps part of a ceremonial harness set, were probably also associated with high-status individuals. One important clue for understanding the rationale underlying the accumulation of these objects is that although the sickles and socketed axes had been utilitarian objects for daily work, they had not actually been put to use.

It would appear that similarly to the Baks and the Zsáka hoards, the Tállya assemblage can be conceptualised as a family treasure amassed by a prominent household that could be mobilised if need be. It seems likely that the accumulation of reserves made up of metalwork was a general practice in wealthier households. The size and value of these hoards varied: smaller assemblages made up of a few items represented the riches of a family, as did the hoards comprising a broad array of artefacts weighing as much as 30 to 40 kg that can be linked to individuals with a higher social status and the chiefly hoards containing valuable and prestigious bronze and gold articles signalling rank.

The Homeric epic preserving the Greek traditions of the Late Bronze Age and Early Iron Age often mention family treasures of this type. For example, when Menelaus defeats Adrestus, a warrior fighting on the Trojan side, the latter invokes the riches in his father's treasury when begging to be spared:

*Take me alive, Atrides, take a ransom worth my life!
Treasures are piled up in my rich father's house,
bronze and gold and plenty of well-wrought iron –
father would give you anything, gladly, priceless ransom
if only he learns I'm still alive in Argive ships!*¹⁵²

Homer uses the word *keimelia* for denoting treasures of this type, which comes from the Greek word “to lie” and can be translated as “treasures lying heaped”.¹⁵³ The same word is used when Agamemnon goes about to appease Achilles and offers him immense amounts of gold, precious metal vessels and a slave girl, in other words, superb treasures, while in other passages of the *Iliad*, the word denotes a precious gift or booty.¹⁵⁴ In his study on the world of the Homeric epics, Moses I. Finley makes the following point about the treasures of this type stored in households: “Such objects had some direct use value and they could provide aesthetic satisfaction, too [...] but neither function was of real moment compared to their value as symbolic wealth or prestige wealth. The twin uses of treasure were in possessing it and in giving it away, paradoxical as that may appear. Until the appropriate occasion for a gift presented itself, most treasure was kept hidden under lock and key. It was not ‘used’ in the narrow sense of that word.”¹⁵⁵

In archaic societies, including the world of the Late Bronze Age, gift giving and gift exchanges can be seen as one of the principal socio-economic driving forces.¹⁵⁶ By accepting the gift, the recipient had committed himself, for he was expected to give something in return: political support, military aid, or an important raw material or commodity. The donors often catered to genuine needs by presenting their dependents with tools and weapons. Sometimes, services were paid for in this manner and alliances were often sealed with gift exchanges. In most societies, gifts could not be used for commercial purposes, but had to be used or consumed.¹⁵⁷



Figure 96. Watercolour by James G. Swan depicting the distribution of potlatch (1859)

One of the most extreme forms of ancient gift exchanges was the potlatch ceremony among the Indian tribes living on the Pacific coast of north-west America (Fig. 96). On these festive occasions accompanied by feasts, attended by several communities, the chieftains gave food, blankets, copper ingots and slaves to the tribes, clans and families who attended. The potlatch brought great prestige to the host who distributed almost all of his wealth and he accumulated immense symbolic capital. Owing to the competition for prestige, this custom was eventually taken to the extremes, with some chieftains setting fire to houses and casting all their wealth into the ocean as part of the ceremony.¹⁵⁸ The chieftains enhanced their prestige through the extravagant (and wasteful) gift-giving and the spectacular sacrifice of their valuables with which they demonstrated that

they had the necessary power and the support of the spirits to be able to amass a similar wealth in the future.

The Bronze Age hoards discussed in the above can be fitted into the overall picture of archaic gift economies. These hoards – whether deposited for sacrificial purposes or representing the wealth of a community carefully guarded at home – can be regarded as treasures collected over successive generations that had also been enriched with items acquired through gift exchanges. The objects in these hoards each had a story to tell, a narrative of how it had been acquired: weapons gained as booty evoked heroic deeds, a superb bronze vessel preserved the memory of a guest-friendship, while other pieces the memory of the donor. These narratives also added to the value of the gift itself when it was passed on.¹⁵⁹

4 FORTS AND HOARDS

Dwellers of the fort on high: Martonyi-Szúnyog-tető

The two hoards found at the site and the over one hundred intact and broken bronze objects offer a glimpse into a more “rural” Bronze Age centre than the settlements in the Bükk and Zemplén Mountains discussed in the foregoing. The bronze finds and the hoards outline the different spaces of life on the settlement: the seat of the family leading the settlement, the one-time workshops and the settings of daily life.



*Figure 97. Findspot of Hoard 1 within the Martonyi-Szúnyog-tető hillfort.
The green line marks the course of the one-time rampart*

The find circumstances

We discovered two hoards in the area of the hillfort. Hoard 1, made up of four socketed axes and a bracelet, came to light in May 2008 on the north-eastern slope of the Szúnyog-tető Peak, some 15 metres away from the rampart at the foot of the slope. The bracelet lay somewhat lower down the slope, roughly 15 cm from the axes, while a fourth socketed axe was found even lower down the slope, but in line with the other artefacts, at a distance of 120 cm (Figs 97–98). The bracelet and the socketed axe lying at some distance had probably been deposited together with the other axes, but had been dislodged from their original position by erosion.

Hoard 2, comprising two gold lock-rings and a bronze mount, came to light in July 2013 at the southern end of Szúnyog-tető Peak in a terrace-like level area at a depth of 15 cm. Large stones lay scattered in the area of the gold objects. The pottery sherds and daub fragments collected in the area would suggest that there had been a building here during the Bronze Age and that its foundation had been constructed of stone. The assemblage had been deposited in a round shallow pit after dismantling the foundation. The lower lock-ring was set on a flat stone, the other piece was looped around it and placed slightly tilted to one side. A bronze mount was placed into the first lock-ring. A polished stone artefact lay on one side of the gold items and the body sherd of a large vessel on the other (Fig. 99).

The deposited objects



Hoard 1 comprised four socketed axes and a bronze bracelet decorated with bundles of engraved lines. The three smaller wide-bladed socketed axes with ribbed decoration are typical forms of the eleventh–tenth centuries BC, while the larger axe with curved ribs appears to be somewhat later since comparable pieces are known from the Prügy, Biharugra and Szanda hoards assigned to the ninth–eighth centuries BC.¹⁶⁰ The bracelet underscores this dating, given that similar bracelets can be cited from hoards that had been deposited at the time of the Bronze Age–Iron Age transition (Fig. 100).¹⁶¹

Figure 98. The objects of Hoard 1 after their hand excavation at Martonyi-Szúnyog-tető



Figure 99. Hoard 2 at Martonyi-Szúnyog-tető during the successive phases of its hand excavation

Hoard 2 contained two four-coiled lock-rings of gold wire, each with a twisted passementerie terminal, and a bronze mount. Although similar gold jewellery was worn from the thirteenth century BC onward, most similar pieces are known from eleventh-tenth-century contexts (*Fig. 101*).¹⁶²



Figure 100.
Martonyi-Szúnyog-tető,
Hoard 1



Figure 101. Martonyi-Szúnyog-tető, Hoard 2

The findspot and its environment

The fortified settlement on Martonyi-Szúnyog-tető Peak covering an area of 14 hectares was established on a 48 m high peak in the heartland of the Szalonnai Mountains (*Fig. 102*).¹⁶³ The location was chosen with excellent strategic sense, with full attention to the options of how well it could be defended. On the northern side, the peak could only be approached along two steep, narrow ridges; the routes across the ridges were controlled by the rampart. The line of the rampart protecting the settlement enclosed a spring and two wide, only slightly sloping areas that were suitable for settlement, the Pilis-parlag Peak and the Szúnyog-tető Peak.

The best preserved portions of the rampart enclosing the settlement can be found on the western side and on the two sides of the main entrance on the northern side, where its height ranges between 2-3 m. The south-western section cuts across a deep gully and links the probable spring at the top of the gully to the



Figure 102. Martonyi-Szúnyog-tető: the summit of the hillfort

settlement. Remnants of the rampart are no longer visible on the settlement's eastern side; in this area, the artificially created terrace-like plateau suggests that the settlement had been defended by some structure on this side too. This initial assumption was confirmed by the trial trench opened in the area, which revealed that a 12 cm wide palisade-like defensive structure with a foundation of stones had been constructed here.

Both hoards came to light on the Szúnyog-tető Peak. The roughly 400 metres long, 70–90 metres wide, north to south oriented summit is the settlement's highest point, a gently sloping, even plateau, with clearly recognisable habitation terraces on the eastern and western side. The two hoards lay about 150 metres apart. We opened a trench in the area of Hoard 1 in 2013, in which we uncovered a beehive-shaped pit covered with stones. The pit could be dated on the strength of the typical Kyjatice-style pottery it contained and indicated that the area of the hoard had been occupied, despite it being sloping terrain.

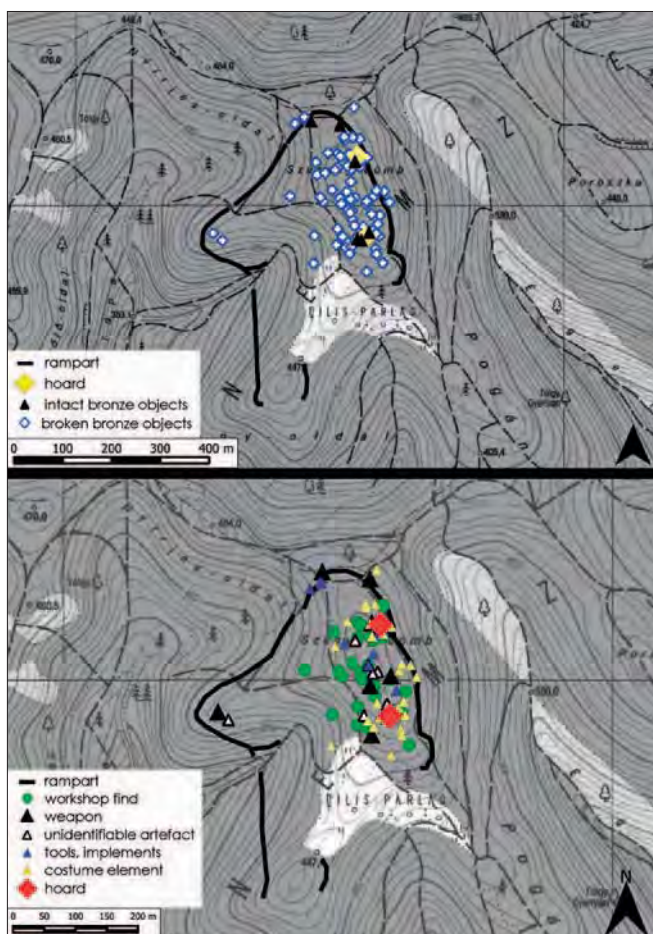


Figure 103. Martonyi-Szúnyog-tető: plan of the hillfort showing the findspots of the hoards and the bronze objects

the surface scatter of the metal finds and hoards was not disturbed. Aside from the two hoards, we collected ninety-six metal finds dating from the Late Bronze Age. Most of these were lumps of bronze, casting jets and fragments of unidentifiable artefacts, but they also included two sword blade fragments, and broken socketed axes, sickles, a spearhead, pins and bracelets. There were eight intact pieces among the finds: three spearheads, a socketed axe, a bracelet, a socketed chisel and two arrowheads.

The plan of the site showing the distribution of the finds reveals that roughly 90% had been found on the Szúnyog-tető Peak, the settlement's central part, and its western slope (Fig. 103). A relatively higher number

Interpretation of the deposition

The Szalonnai Mountains is the smallest mountain range in Hungary, no larger than 50 km². The fortified settlement established on its third highest peak dominated the area and offered an excellent view of the fertile valleys to the north and south. The one-time prominence of the settlement founded in the final centuries of the Late Bronze Age is clearly indicated by the lack of any other fortified settlements within a range of roughly 25–30 kilometres.

On the testimony of the surface scatter of pottery and burnt daub fragments, virtually the entire area of the settlement had been occupied. The higher than average number of vessel sherds found on the Szúnyog-tető Peak and Pilis-parlag Peak suggests that most of the settlement's buildings had been erected in these two areas. Owing to the area's coverage with vegetation, the surface scatter of pottery does not provide a reliable picture of the intensity of occupation. However, the metal detector survey provided a wealth of information of how the settlement's spaces had been used. We did not find any traces of previous metal detecting activity and thus Martonyi-Szúnyog-tető Peak is one of the few prehistoric hillforts where

of bronzes was only found in one other area, the Pilis-parlag Peak, but these were predominantly indistinct small fragments. It is also noteworthy that the scatter of finds had a greater concentration in the area of the two hoards. The sword blade fragments, a spearhead fragment and most of the costume accessories were found in this area. The distribution of the intact pieces too shows a clear correlation with the areas around the hoards: three intact items came to light within a 20 metre range of Hoard 2, while one was found immediately adjacent to Hoard 1. One intriguing detail of this overall picture is that three artefacts associated with metalworking, namely a small bronze chisel and two punches, were found within a 10 metre range of the gold hoard, suggesting that a bronze-smith capable of crafting more sophisticated metalwork and prestige items had been active in the area. In all likelihood, the two bronze hoards marked areas of outstanding importance and we may assume the proximity of chiefly households that were wealthier than the average.

Mention must be made of the three intact spearheads. Two were found in the settlement's northern corner, on the inner side of the rampart protecting the entrance, while the third came to light near Hoard 2 (*Fig. 104*). Remnants of the wooden shaft were preserved inside the socket of long-bladed spearhead by the rampart. The interpretation of the spearheads remains open: they might be the relics of some armed conflict, but they could equally well have been ritual deposits or have been displayed as military trophies.¹⁶⁴



Figure 104. The bronze spearheads from the Martonyi-Szúnyog-tető hillfort

The densely settled fort: Bükkzsérc-Hódos-tető

The fortified settlement at Bükkzsérc-Hódos-tető was one of the nine major hillforts that had commanded the Bükk Mountains at the onset of the first millennium BC. Later, virtually all traces of its former importance faded in the forest-covered area. The prehistoric settlement perched on the peak overlooking a small village in the Bükk Mountains was discovered in 1892 by Gyula Bartalos, the learned priest who devoted his energies to mapping the archaeological relics of the Northern Mountain Range – yet, because only handwritten notes remained of his investigations and even these lay forgotten for long, no-one knew about the site for some 120 years.¹⁶⁵ Thus, neither archaeologists, nor nighthawkers had ever visited the site atop the oak-covered rocky peak.

Dozens of houses had once stood on the flat summit ringed by steep mountainsides, an excellent location for a settlement. The northern side was protected by ramparts, its eastern and western perimeter by an imposing palisade with stone foundations. The two gold and two bronze hoards as well as the 130 prehistoric metal finds discovered here during the past decade offer a fascinating glimpse into the world of its inhabitants.

The find circumstances

We discovered four hoards at this site. Hoard 1, an assemblage of fourteen bracelets, came to light in 2007, from a small pit covered with stones on the steep side of the former settlement. The bracelets had been covered with a larger triangular stone. They were set tightly beside each other, forming a cylinder, and had apparently been bundled together before their deposition (Fig. 105). During the area's excavation in 2009, we realised that the hoard had been concealed on the inner side of the stone foundation of a smaller rampart or palisade, immediately beneath the one-time occupation surface.

Hoard 2, made up of gold articles, lay some 200 metres north of Hoard 1. Discovered in 2009 at a depth of 10–15 cm, the hoard of three gold bracelets and a carefully folded artefact of sheet metal had been buried 20 metres from the edge of the mountainside. The bracelets made of more delicate wire had been placed inside the ones made of thicker wire, while the sheet metal item was tucked inside this “bundle” (Fig. 106). During the area's excavation, we found an area covered with smaller and medium-sized stones, most likely the foundation of a log cabin-like building. The stone foundation was dated by a few indistinct Late Bronze Age–Early Iron Age pottery sherds. The gold hoard had apparently been buried by the building's outer corner. Regrettably, we know nothing more about the building's function and its chronological relation to the hoard.

Hoard 3, a large bronze button and a bronze bracelet, both covered with gold foil, came to light in 2009, at a distance of no more than 20 metres from Hoard 1. The two artefacts had lain at a depth of 15 cm above the steep slope at the settlement's western edge. The button was deposited upside down and the bronze bracelet lay immediately underneath it (Fig. 107). Hoard 4, made up of small gold wire items, was found on a



Figure 105. Hoard 1 with the stone slab covering the objects at Bükkzsérc-Hódos-tető (left).
Hoard 1 after its hand excavation (right)

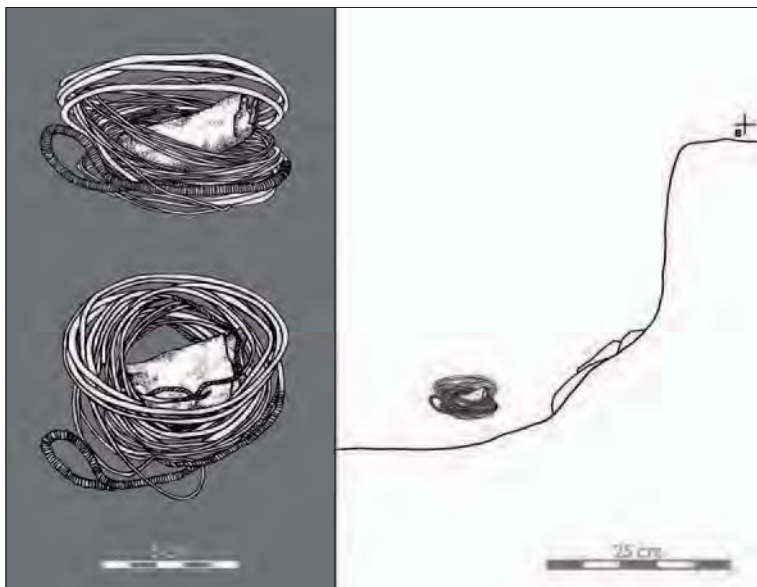


Figure 106. Drawing of the arrangement of the objects of the Bükksérc-Hódos-tető 2 hoard



Figure 107. Arrangement of the objects of the Bükksérc-Hódos-tető 3 hoard

clearing during the survey of a young forest with thick undergrowth in the south-western part of Hódos-tető Peak.

The deposited objects

The bracelets of Hoard 1 were all made of round-sectioned wire with tapering terminals and were decorated with grooved geometric motifs (*Fig. 108*). Clearly discernible use-wear marks reflect their long use. The hoard of bracelets had probably been concealed in the thirteenth-twelfth centuries BC. The main argument for dating the bracelets, all worn for a long time,¹⁶⁶ to this period is that the highest number of hoards similarly made up exclusively of bracelets were deposited during this period in the north-easterly regions of the Carpathian Basin.¹⁶⁷

Hoard 2 contained two gold bracelets of delicate gold wire with twisted terminals, a bracelet of thicker wire whose terminals were wound with delicate wire and a folded sheet gold artefact (*Fig. 109*). The latter had probably been a domed jewellery item. The total weight of the hoard's pieces is 157 g. Similarly to the bronze bracelets of Hoard 1, the dating of the gold objects cannot be narrowed down to a specific period since comparable jewellery was produced from the fourteenth-thirteenth to the eleventh-tenth centuries BC in this region.¹⁶⁸

Hoard 3 comprised a large bronze button covered with gold foil with a diameter of 8.2 cm and a bronze bracelet of thin twisted



Figure 108. Two views of the bracelets of the Bükkszerc-Hódos-tető 1 hoard



Figure 109. The Bükksérc-Hódos-tető 2 hoard



Figure 110. The Bükkszérc-Hódos-tető 3 hoard

wire with hooked terminals (*Fig. 110*). Similar adornments were found in a bronze hoard buried sometime during the fourteenth–thirteenth centuries BC on the outskirts of Borsodgeszt, a village lying 15 kilometres away. The hoard contained bracelets and costume adornments, one of which was a bronze button, similarly attached to a bronze bracelet with thin wire.¹⁶⁹

Hoard 4 was made up of a roughly 30–40 cm long gold wire with twisted terminals folded haphazardly and a small bundle of plain gold wire threaded onto a twisted gold wire.

The findspot and its environment

Rising some 130–180 metres above the surrounding land (*Fig. 111*), the southern side of Hódos-tető Peak offers a splendid view of the gently rolling foothills of the Bükk Mountains. The mountain is bounded by deep valleys to the east and west, while a saddle connects the peak with the range in the north. Ramparts were only erected on the northern side, which blocked the single road leading to the settlement. The southern side provides a good view of Mt. Várhegy by Felsőtárkány (*Fig. 112*), one of the hillforts controlling



Figure 111. Bükkzsérc-Hódos-tető, view of the summit with the remains of the hillfort from the south

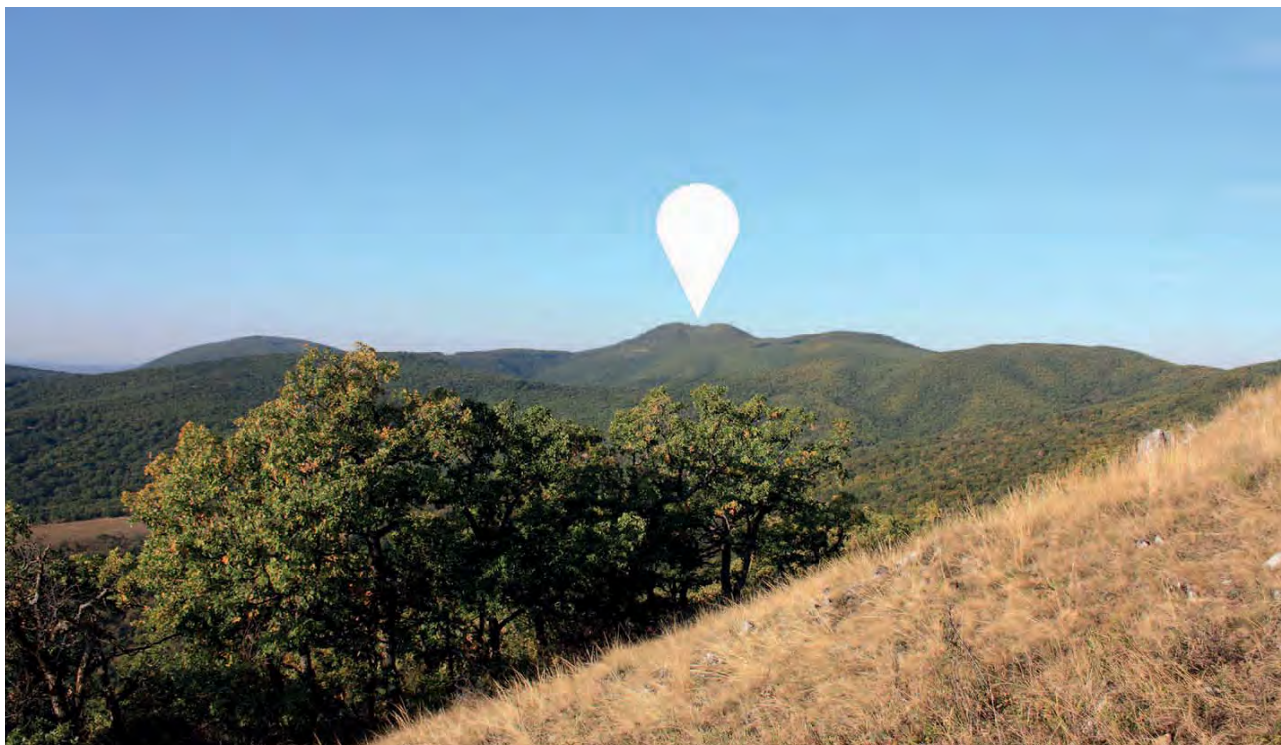


Figure 112. View from Bükkzsérc-Hódos-tető to the south-west, towards the Felsőtárkány-Várhegy hillfort

the region during the Late Bronze Age, as well as a glimpse of the mountains ringing the hillfort at Cserépfalu-Mésztető.¹⁷⁰ We discovered a small Late Bronze Age-Early Iron Age site (Pap-Hegy) on the farther side of a steep-sided deep valley lying at a distance of 600 metres west of the plateau of Hódos-tető Peak. The site covering roughly 2-3 hectares was enclosed by a ditch on its eastern, more gently sloping side; the ditch was barely visible to the naked eye, but could be clearly made out on the LiDAR image. The socketed axe and the pre-Scythian-type strap distributor button as well as three broken bronze objects indicate that it was occupied during roughly the same time as the Hódos-tető settlement.

Interpretation of the deposition

The metalwork from the Bükkzsérc site does not reflect an outstandingly wealthy Late Bronze Age site. If we had to speculate about the artefact types that can be reasonably expected on the period's fortified sites, the list would be something similar to what we found on the Hódos-tető site.

All of the period's typical tools such as socketed axes and sickles occur among the 115 stray bronze artefacts discovered here, alongside a few weapon fragments. Strongly worn dress accessories are quite common, as is casting waste from bronzeworking such as casting jets and small lumps of bronze. Most of the utilitarian objects are small, strongly worn items. There were very few intact bronze objects.

Similarly to the other fortified settlements, the metal finds showed a concentration in a well-definable area. The greatest concentration was noted in a roughly 400 metres long, 50–60 metres wide zone along the settlement's western side (Fig. 113), where we found a knife, a ring-based strap distributor button, broken sickles and socketed axes, the small fragments of a spearhead, pins, casting jets, bronze droplets and small lumps of bronze as well as the two fitting fragments of an extremely worn bronze sword lying 1.5 metres apart. This area also yielded 90% of the quern stone fragments, another indication that this area was in all likelihood one of the focal areas in the community's daily life.

A higher number of bronze artefacts could be found in an area with a diameter of 100 metres, in the area of a smaller peak by the eastern side of the summit. Of the finds collected in this area, mention must be made of a Late Bronze Age ornamented bracelet sharing many similarities with the exemplars in Hoard 1. Similarly as on other comparable sites, hoards were found to have been deposited in the area with the greatest concentration of stray bronze finds. At this site too, the bronze concentrations outline two areas - namely the broader area of Hoard 2 and of Hoards 1 and 3 - where we may assume the proximity of households that had been wealthier than the average.

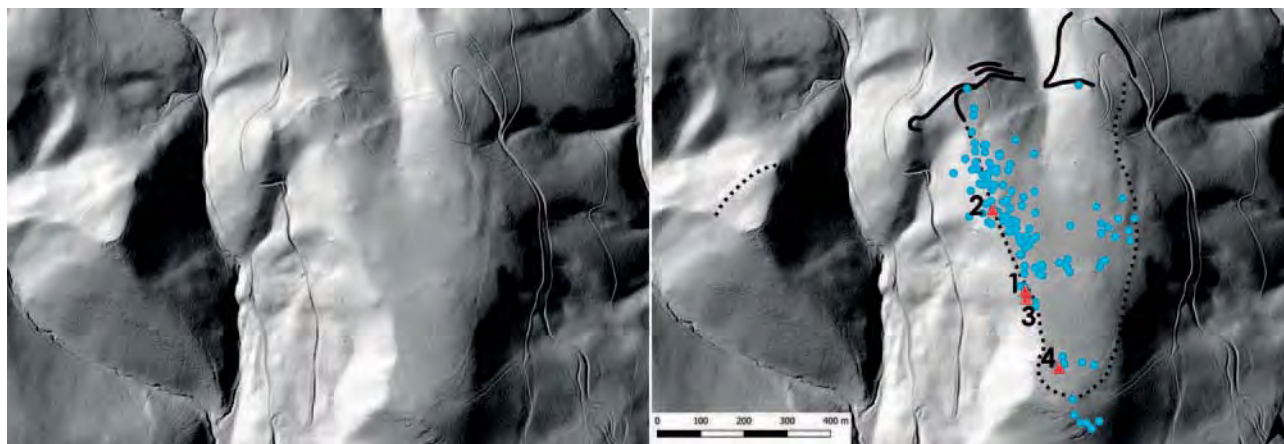


Figure 113. LiDAR image of the Bükkszérc-Hódos-tető hillfort, with the findspots of the hoards and stray bronze artefacts. The ditch enclosing the settlement on Mt. Pap-hegy can be seen to the west

A sparsely settled fort: Mátraszőlős-Kerekbükk

The fortified settlement at Mátraszőlős-Kerekbükk is located on a 100 hectares large mountain summit. The first occupants constructed a formidable stone rampart pierced by gates on the more vulnerable side of the plateau and created an artificial lake by damming. The spacious mountain summit was made habitable through an enormous labour investment – yet, curiously enough, there were only few habitation areas lying about a kilometre apart, which were abandoned within the span of two or three generations.

The single bronze hoard discovered on this site lay in the central part of one of these habitation areas. The countless intact and broken artefacts suggest that this area functioned as the fortified settlement's centre and had perhaps been the initial base of the first community arriving to and settling on the mountaintop.

The find circumstances

The bronze hoard was discovered in June 2007, during the metal detector survey of the fortified settlement. We collected eight Late Bronze Age artefacts on the small, slightly sloping ridge covering an area of 6-7000 m². We found another hoard in the settlement's central area (Fig. 114). The uppermost object in the deposited assemblage was barely covered by the 10-15 cm thick humus. The bronzes were placed into a depression between large stones immediately underneath the surface. Four spearheads with their tips pointing upward and two socketed axes lay on top, in line with the tip of the spearheads. Two other socketed axes lay under the spearheads. The axes and the spearheads appeared to have been bundled together for the deposition. A sickle broken in two lay under the middle spearhead, while a sheet bronze bracelet was found under the larger spearhead on the eastern side. A lump of bronze and a square-sectioned awl were found a few centimetres north of the spearheads and socketed axes, on the other side of the large stones (Fig. 115).

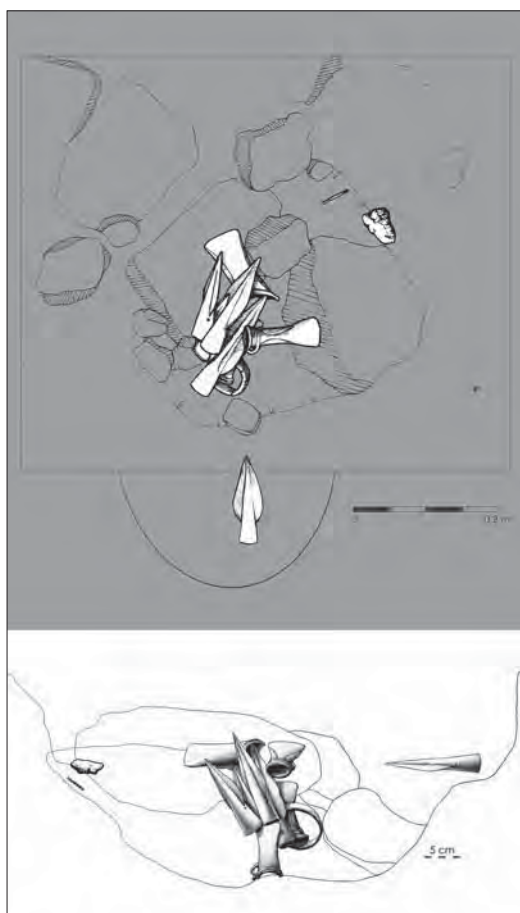
Yet another bronze spearhead came to light some 20 cm south-east of the assemblage, when, following the field documentation of the finds, we lifted the assemblage. Although the other items of the hoard had been lifted when the spearhead was discovered, we nevertheless included it on the drawing



Figure 114. Findspot of the Mátraszőlős-Kerekbükk hoard



Figure 115. Successive phases of the hand excavation of the Mátraszőlős-Kerekbükk hoard



showing the other artefacts (Fig. 116). The thin humus layer covering the hoard could hardly protect its objects from damage caused by the weather and forest management. The fine edges of the spearheads and the socketed axes were nicked, while the sickle and the bracelet had probably been broken under the pressure of the heavy machinery used during felling earlier.

The deposited objects

The hoard was made up of five spearheads, four socketed axes, a sickle broken in two, a bracelet broken in three, a small lump of bronze and an awl, thirteen objects in all. Two socketed axes are decorated with distinctive ribbing and can be assigned to the pseudo-winged axes, while the other two represent the beaked axe type. Three of the spearheads have a simple form, while the fourth has a ribbed socket decorated with an incised geometric pattern. The spearheads, the socketed axes and the button sickle are all types current in the

Figure 116. Arrangement of the objects of the Mátraszőlős-Kerekbükk hoard

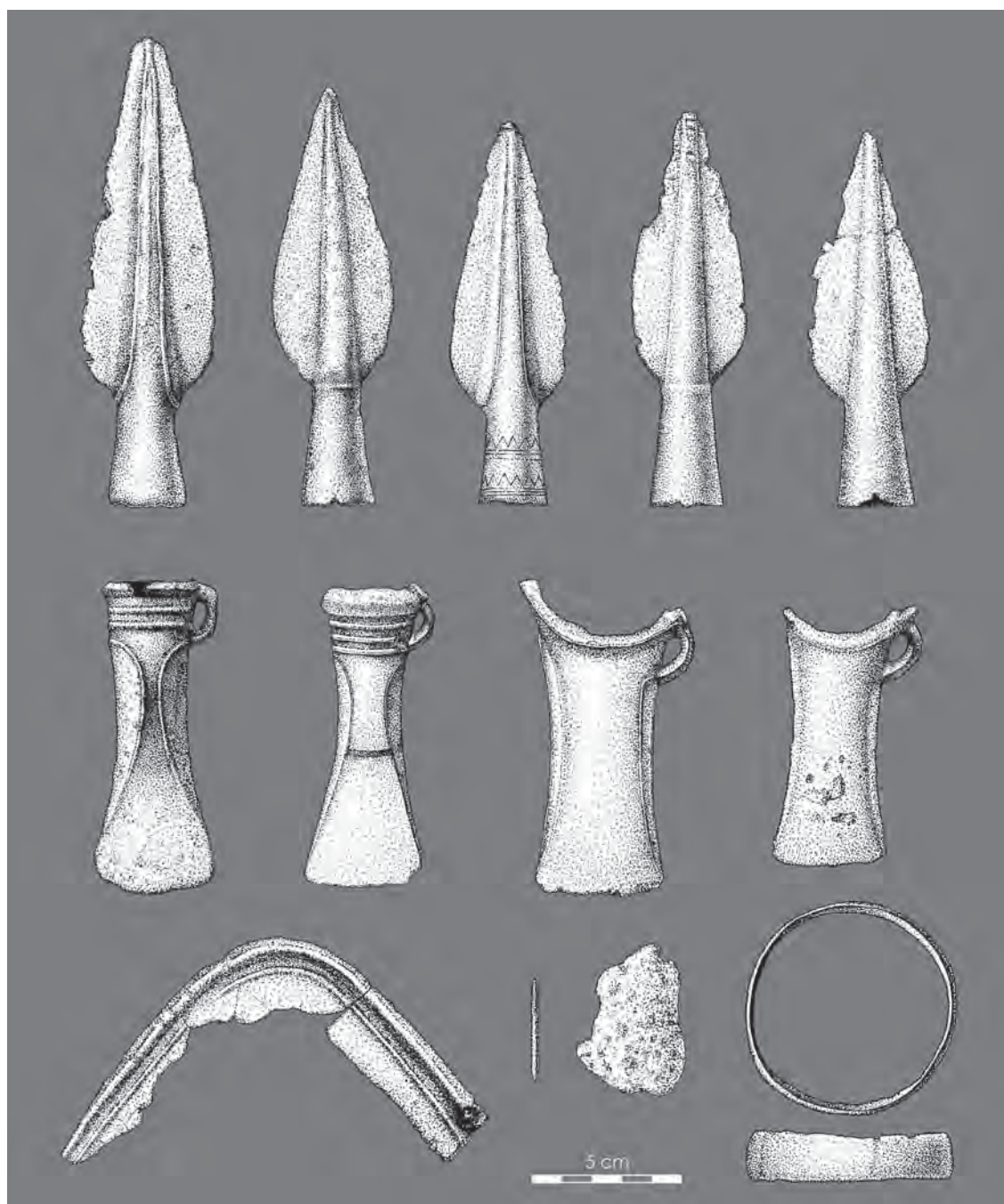


Figure 117. The Mátraszőlős-Kerekbükk hoard

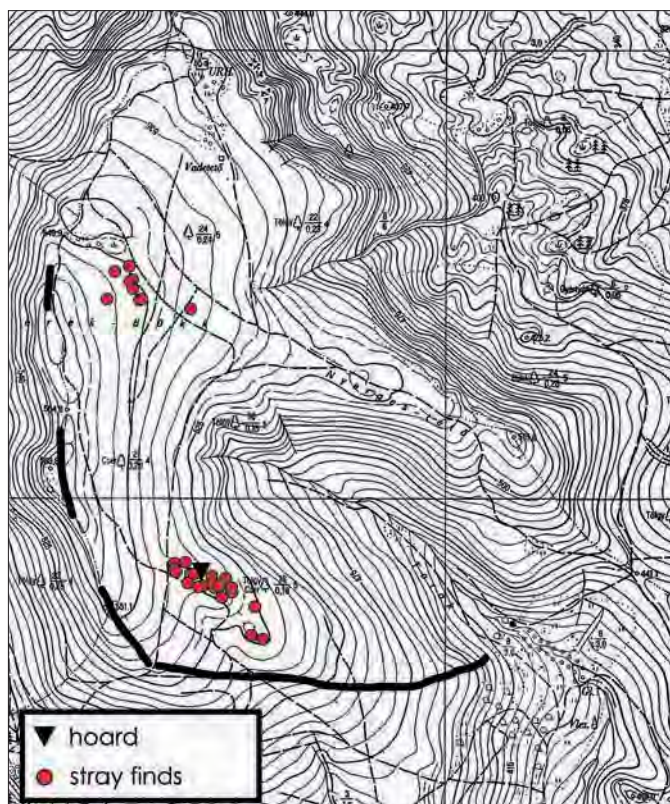


Figure 118. Plan of the Mátraszőlős-Kerekbükk hillfort showing the findspots of the hoard and the stray finds



Carpathian Basin during the twelfth-tenth centuries BC (Fig. 117).

In view of its composition, the Mátraszőlős-Kerekbükk hoard illustrates one of the period's widespread deposition patterns, characterised by hoards containing sickles, socketed axes, spearheads bracelets and lumps of bronze, with most of the artefacts deposited in an intact state. Similar assemblages were fairly common in the tenth-eleventh centuries BC, suggesting that they had been assembled according to a specific ritual and social practice.¹⁷¹ The hoard's composition and the cultural connections of its artefacts share many similarities with the Ecseg 1 hoard found in 1898, whose findspot lies some 5–6 kilometres away.¹⁷² The hoard of ten sickles, five spearheads and ten socketed axes had been concealed in a clay vessel that came to light during vine cultivation.

The findspot and its environment

The almost 100 hectares large fortified settlement at Mátraszőlős-Kerekbükk is enclosed on the southern side by an impressive 650 metres long rampart of large stone blocks that in some spots survived up to a height of 1.5 metres.¹⁷³ The line of the rampart can be traced along a fairly long section until it sharply turns westward, when it becomes smaller and less visible, eventually ceasing altogether.

Figure 119. Stray finds from the area of the Mátraszőlős-Kerekbükk hoard

The area of the hillfort remained uninvestigated prior to our survey and thus we knew next to nothing about the site. We strove to survey all accessible areas of the Late Bronze Age hillfort; however, we only found two areas with Late Bronze Age metal and pottery finds (*Fig. 118*).

The first habitation area lay on the small ridge where the hoard had been concealed. We collected an intact and a broken bronze socketed axe, a round-sectioned bronze bracelet, a small goldsmith's anvil, bronze rings, knife blade fragments, small lumps of bronze and ingots, a total of eighteen Late Bronze Age items, in the roughly 120 metres long and 50 metres wide mostly flat area (*Fig. 119*). In addition to the metal artefacts, we also found pottery and small fragments of burnt daub, an indication of the one-time presence of a more substantial Late Bronze Age habitation area.

The roughly 6000 m² large area owed its prominence to the proximity of the rampart and that the settlement's entire territory was visible from this area. The eastern plateau offering a good view of the land towards Salgótarján could be easily reached within a few minutes' walk. The hoard came to light in the area's middle part rising somewhat above its surroundings.

The second habitation area yielding bronze artefacts lay in north-western part of the fortified settlement, in the area of the artificial lake. We collected eight bronze objects - lumps of bronze, bronze mounts and the cutting edge fragment of a socketed axe - in a roughly 3000 m² large area lying 100-150 metres south-east of the lake. Fragments of an amphora with decorated neck, a storage jar with knobs arranged in pairs on its belly, the fragments of a bowl with faceted rim and pottery sherds from smaller vessels came to light during the hand excavation of one of the bronze lumps.¹⁷⁴ The pottery fragments from seven or eight vessels formed a distinct cluster, lying at a depth of 10-15 cm, probably on the one-time occupation surface (*Fig. 120*).

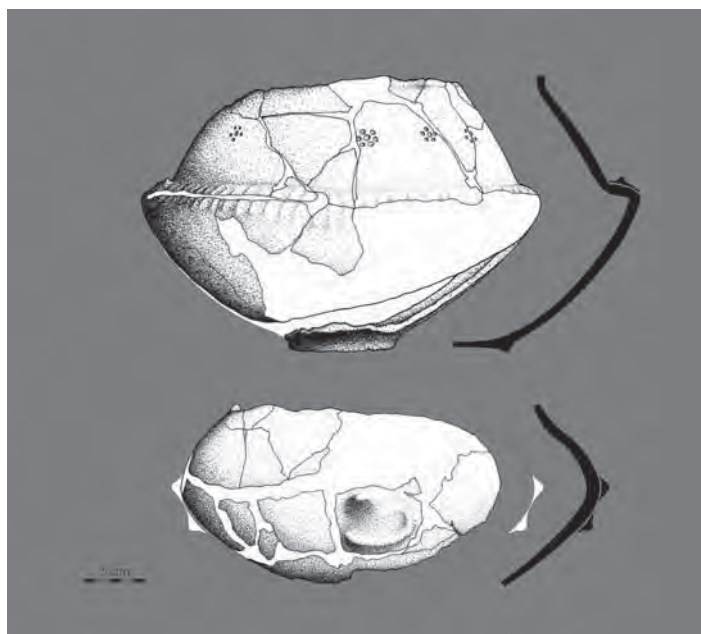


Figure 120. Late Bronze Age vessels decorated in the Kyjatice style from Mátraszőlős-Kerekbükk

Interpretation of the deposition

The following complementary pieces of information provide the necessary guidelines for the interpretation of the deposition act at Mátraszőlős-Kerekbükk.

- (1) The hoard had been concealed in an occupied area, on its highest point, inside a building or in its immediate proximity judging from the burnt daub fragments in the area.
- (2) The area where the hoard had been concealed was probably occupied by a prominent, leading community of the fortified settlement, indicated by the concentration of intact bronze artefacts and the small anvil, suggesting that a metalsmith skilled in producing gold or bronze jewellery had been active in the area.
- (3) The objects of the hoard had been deposited in a pre-conceived order that had its own special meaning: a pair of socketed axes on top and bottom, with the bundle of upward-pointing spearheads in-between.
- (4) The hoard's composition conforms to a pattern that was widespread in eastern Hungary during the eleventh-tenth centuries BC.
- (5) The artefacts deposited in the hoard are all good-quality items and the smaller socketed axe with ribbed decoration and the spearhead with ornamented socket are particularly finely worked pieces.

These points suggest the following narrative for the deposition: the hoard came to light in one of the settlement's areas that could be clearly distinguished, both topographically and in terms of its find material, from the site's other parts. In early societies, most settlements had an area that functioned as the symbolic and genuine "power centre" for its inhabitants, where gatherings were held, where rituals and ceremonies were performed, and where community buildings were erected, such as the men's house, which served as a political and ritual centre. Adult and elderly men gathered in a central building of this type for rituals and other festive occasions, and the building served as a repository of various items that were crucial to the community's identity, such as ritual paraphernalia (masks, musical instruments, costumes and the like), the relics of the ancestors and war trophies.¹⁷⁵ The hoard perhaps marks the location of a central building, a power centre of this type.

The hoard's artefacts were good quality pieces, all kept in good condition, suggesting that they had been selected from the reserve or valuables of a prominent family. The high number of hoards with a similar composition is in all likelihood an indication that the selection of the artefacts conformed to an oft-performed, widespread ritual such as a foundation sacrifice when a new settlement was established or taken into possession.

The unoccupied fort: Parád-Várhegy

Besides the large fortified settlements enclosed by monumental ramparts, there were several smaller hillforts in the mountains of eastern Hungary. Most of these smaller hillforts made their appearance at the close of the Late Bronze Age and the onset of the Early Iron Age. In addition to their smaller size, they are also characterised by the lack of traces indicating permanent occupation for a longer time, even though impressive hoards were buried in many of these settlements.

The investigation of the fortified settlement at Parád-Várhegy on the northern side of the Mátra Mountains yielded a wealth of new information about this fort type. Ringed by steep mountainsides, the settlement bounded by a low and relatively short rampart lacked the traces of occupation encountered elsewhere: we did not find any quern stones or daub fragments indicating the one-time presence of houses, and we only collected tiny pottery fragments. At the same time, one of the most splendid and sophisticated bronze hoards came to light on this site, a seemingly unoccupied hillfort. The assemblage of spearheads, finely worked socketed axes, heavy ornamented neckrings and elegant brooches of delicate wire was concealed sometime in the tenth or ninth century BC.

The find circumstances

We discovered the hoard in 2010, during the site's metal detector survey (Fig. 121). We first found a socketed axe with upward-pointing cutting edge, followed by an assemblage of jewellery and various implements arranged in a small heap in a 10 cm deep depression lying a few centimetres away: two socketed axes set perpendicular to each other and a button sickle lay on top; underneath them, we found a bundle of neckrings,



Figure 121. Findspot of the hoard at Parád-Várhegy

brooches and pins, with a brooch on top and three bronze pins tucked between the bow and the pin. Four neckrings were placed beneath the brooch. A spiral ring of thin wire was looped around the uppermost neckring, while the second and fourth neckring had a part of its body set between the bow and the pin of a brooch. Lying at a distance of 50 cm we found two socketed axes with their cutting edges set obliquely upward.

After lifting these items, we found that further pieces of the hoard lay underneath the previous finds. A pair of spearheads, one pointing south, the other pointing north, were found slightly south of the neckrings, about 3–5 cm deeper, while four other socketed axes and two sickles lay 35–40 cm deeper under the socketed axes found north of the neckrings (*Fig. 122*).

The interpretation of the unusual arrangement of the deposited objects was no easy task. It was obvious that the neckrings and the items placed on them were not disturbed, but the hoard's other pieces were found in looser soil and at different depths. It seems likely that the objects had been deposited in three clusters, one made up of the two spearheads, another comprising the undisturbed assemblage of the neckrings, and the third one consisting of the seven socketed axes and the two sickles, the northernmost of the three.

The deposited objects

The Parád hoard conforms to the local deposition pattern represented by the Bükkszentlászló-type hoards that appeared in the mountain region of north-eastern Hungary and central Slovakia at the close of the Late Bronze Age and the onset of the Early Iron Age.¹⁷⁶ The assemblages assigned to this type generally contain intact items, mostly jewellery such as brooches and neckrings, often alongside socketed axes and bracelets.¹⁷⁷

The hoard was made up of ten socketed axes, three sickles, two spearheads, four neckrings, three pins, three brooches and a spiral ring (*Fig. 123*). The Bükkszentlászló-type brooches were among the period's most elegant jewellery items,¹⁷⁸ while the neckrings with outward coiled terminals decorated with twisting and incised designs¹⁷⁹ as well as the socketed axes¹⁸⁰ are without exception representative pieces of the new bronze types appearing during the Bronze Age-Iron Age transition. The spearhead blade pierced by perforations is noteworthy, being distinctive to one group of iron spearheads that appear at the very beginning of the Iron Age.¹⁸¹ The uniqueness of the exemplars from Parád lies in that they were made from bronze, not from iron. The function of the perforations remains enigmatic – it is possible that they served for sporting military insignia or trophies (perhaps scalps) and if this was indeed the case, they possibly resembled the war spears embellished with feathers and horse hair of the Indian tribes living on the Great Plains, as immortalised by the Swiss painter Karl Bodmer in his well known portrait of Mato Tope, chief of the Mandan tribe, made in the 1830s.¹⁸²



Figure 122. Arrangement of the objects of the Parád-Várhegy hoard



Figure 123. The Parád-Várhegy hoard

The findspot and its environment

Although the fortified settlement in the northern Mátra Mountains is a site known since the early 1800s,¹⁸³ it was never archaeologically explored until our investigations began in 2010, save for a survey of its ramparts.¹⁸⁴ Covering an area of 3 hectares, the settlement established on the flat mountaintop was bounded by steep slopes on three sides (*Fig. 124*). In the south, it was protected by a roughly 120 metres long stone-built rampart and shallow ditch, whose line can be barely made out. In 2012, we cut through the rampart, which revealed that the lower course of stones had been set in a clayey bedding. We found the stones of the collapsed rampart in the 1 m deep ditch, from which we estimated that the rampart had been raised to a height of 1.5 metres. The burnt lumps of clay and charcoal patches on the floor of the ditch suggested that the rampart had been topped with a smaller structure of wood and clay (*Fig. 125*).

Aside from the bronze hoard, we collected fourteen Late Bronze Age-Early Iron Age metal finds between 2010 and 2012, of which six were small fragments, while eight were intact artefacts: a gold ring, a bronze ring, a spearhead, a twisted neckring, two socketed axes, a pin and a button sickle (*Fig. 126*). Similarly to the hoard, the finds can be dated to the Late Bronze Age-Early Iron Age transition.

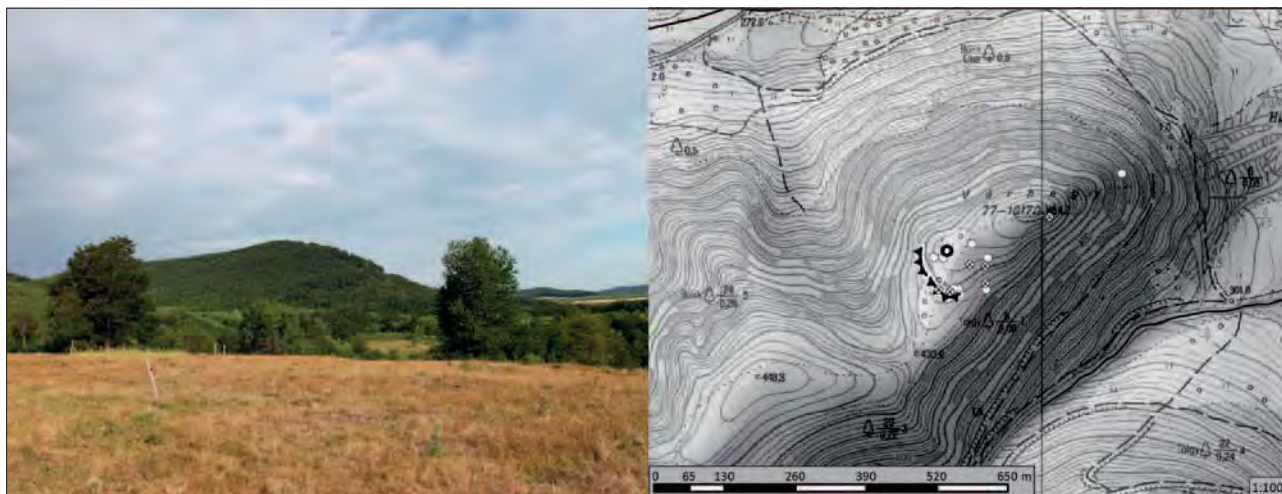


Figure 124. View and plan of the Parád-Várhegy hillfort

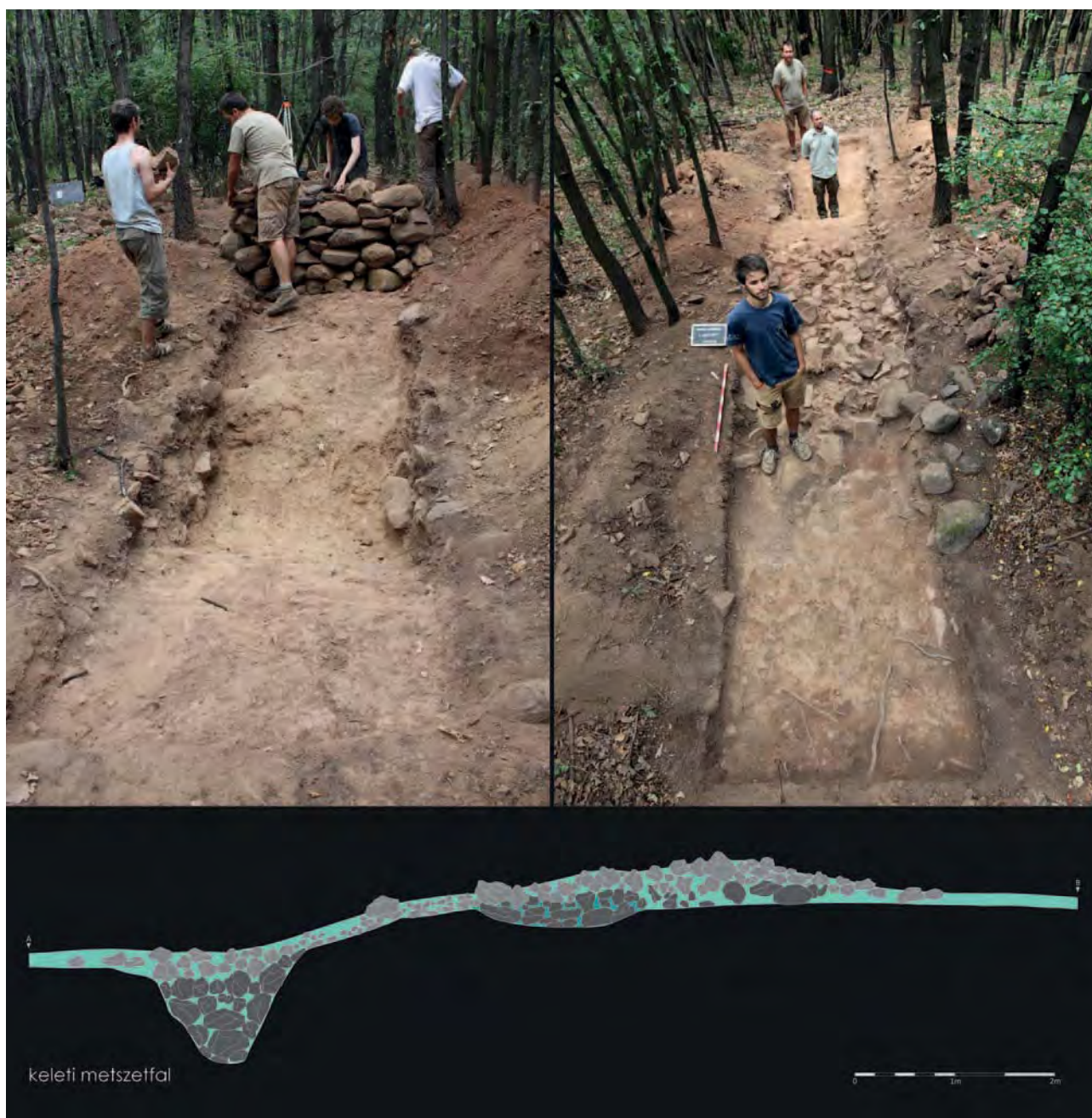


Figure 125. Rampart of the Parád-Várhegy hillfort (top right). We tried to reconstruct the original height of the rampart's stone foundation based on the stones found in the rampart and its ditch (top left). Section of the rampart (bottom)

Most of the objects lay scattered on the surface, save for the neckring, which had been buried in a 20 cm deep small pit (Fig. 127). We did not record any archaeological features in the trenches opened in the area of the single finds; only in the proximity of the sickle did we note a heap of stones. The 25 m² large trench opened in the area of the hoard similarly lacked any features: all we found were two heaps of smaller stones with a diameter of half a metre, whose function and date remains unknown.

We found a handful of pottery sherds, twelve in all, during our fieldwork at the site. These were all undiagnostic fragments from prehistoric pottery, unsuitable for a more precise dating.

Interpretation of the deposition

The Parád-Várhegy hillfort differs from the majority of the Late Bronze Age fortified settlements described and discussed in the above. It covers a small area and its one and a half metres high rampart had more of a symbolic than a defensive role, even if topped with an assumed additional superstructure. We did not find any indications that the settlement had been occupied for a longer time. Nevertheless, despite its apparently unoccupied nature, it yielded surprisingly fine metalwork.

Of the fourteen single metal finds discovered during the metal detector survey, eight were wholly intact, good quality jewellery items and implements. The intact single bronzes found on the period's sites represent a category of finds whose interpretation is still a matter of controversy.¹⁸⁵ In most cases, these finds can be associated with some unexpected crisis, or destroyed households, although the possibility of votive deposition cannot be entirely ruled out either. We could best observe the purposeful concealment of certain artefacts on the fortified settlement of Csernáton-Hegyész (Cernat) in south-eastern Transylvania, Romania. We uncovered a bronze hoard of six socketed axes and a brooch in the settlement's northern part.¹⁸⁶ In the



Figure 126. Stray finds from the Parád-Várhegy hillfort



Figure 127. The bronze neckring buried in a small pit in the Parád-Várhegy hillfort

area around the hoard's findspot, there was a roughly 150 m by 150 m large area, in which we found several intact bronze and iron artefacts of the Late Bronze Age and Early Iron Age, principally socketed axes, each of which had been deposited in a separate shallow pit that could be clearly identified and documented.

One possible interpretation of the Parád-Várhegy site is that it represents a settlement type enclosed by ramparts appearing during the Late Bronze Age-Early Iron Age transition that was not permanently occupied, where hoards assembled from specific metal types and the occasional single artefact were deposited. Their scarce occupation and the buried hoards would suggest that these spaces were used intermittently, on festive occasions and for performing rituals. The other possible interpretation is that the overall structure of fortified settlements in the mountain regions of north-eastern Hungary underwent a transformation during the Late Bronze Age-Early Iron Age transition and smaller, 1 to 3 hectares large hillforts make their appearance alongside the earlier large fortified settlements covering 15 to 100 hectares. Similar smaller hillforts enclosed by stone-built ramparts, dated by Early Iron Age pottery, are known at Abasár-Hajnácskő, Hangony-Pogányvár¹⁸⁷ and Mátrakeresztes-Nagy-rétek.¹⁸⁸ One shared trait of these sites is the conspicuously low amount of pottery, an indication of their brief occupation or that they were built as refuges by smaller communities.

The appearance of this new type of fortified settlement can perhaps be explained by the widespread changes at the onset of the Iron Age, which led to the gradual transformation of the earlier social and power relations.

The stronghold of many treasures: Bükkszentlászló-Nagysánc

One shared trait of the hillforts and fortified settlements of the Late Bronze Age and Early Iron Age across Europe is that not one, but often as many as a dozen hoards of metalwork were sometimes buried on their territory.¹⁸⁹ One of the perhaps best known prehistoric sites yielding several hoards in Hungarian archaeological scholarship is the fortified settlement at Bükkszentlászló-Nagysánc, where three bronze hoards came to light until the early twentieth century. In 2009, we found an undisturbed assemblage of fourteen socketed axes and a bracelet on one of the habitation terraces pockmarked with robber pits.

The find circumstances

In 2009, we conducted a metal detector survey on the site. The hoard came to light in the southern half of the settlement's higher-lying, terrace-like north-eastern area. The artefacts lay at a depth of 15–20 cm, in a layer strewn with stones underlying the humus, in a pit dug by dismantling some of the stones. The uppermost item was a bronze bracelet, underneath which lay a cluster of socketed axes (*Fig. 128*). The position of the axes clearly indicated that they had been strung through their loops and had been deposited as a bundle. A large boulder lay immediately beside the axes, which probably prevented the hoard from being discovered during ploughing or hoeing when the area was still cultivated. An axe with upward-pointing cutting edge was found 15 cm west of the assemblage of axes and the bracelet (*Fig. 129*).



Figure 128. The uppermost items of the Bükkszentlászló-Nagysánc hoard

The deposited objects

The hoard was made up of fourteen bronze socketed axes decorated with curved ribs and a semi-circular-sectioned penannular bronze bracelet (*Fig. 130*). The socketed axes and the bracelet are typical of the new forms appearing and spreading at the onset of the Iron Age.¹⁹⁰ Comparable pieces are known from those hoards found in north-eastern Hungary, in which the weaponry and horse gear of the Eastern European steppe were deposited together with local types, one of these being the Prügy hoard,¹⁹¹ discovered 50 kilometres away from Bükkszentlászló-Nagy-sánc, which contained a horse-headed light axe, a macehead type distributed in



Figure 129. Arrangement of the objects of the Bükkszentlászló-Nagysánc hoard

the Caucasus and a bit type distinctive to the steppe, alongside socketed axes and bracelets resembling the pieces found by us. Similarly, the cheek-pieces and bits with good eastern analogies were concealed together with local axes in the hoard brought to light on the fortified settlement at Szanda-Várhegy.¹⁹²

The choice of items selected for deposition had a meaning of its own. Despite their contemporaneity, the composition of the hoards found earlier on the site differs substantially from the fourth hoard we had discovered. The items assembled for deposition in the first three hoards conform to the pattern of the Bükkszentlászló hoards, characterised by the presence of neckrings, brooches and bracelets alongside tools



Figure 130. The Bükkszentlászló-Nagysánc hoard

and weapons. In contrast, Hoard 4 contained socketed axes and a single bracelet. That this composition conforms to another depositional pattern is substantiated by Hoard 1 from Martonyi, discussed in the above, made up of four socketed axes and a bracelet. It is perhaps not mere chance that at both sites, a single axe was found slightly farther from the closed assemblage. If our field observations were accurate, these represent a special hoard type whose items were selected according to specific ritual norms and their deposition was performed as part of a strictly regulated ceremony.

The findspot and its environment

With its 17 hectares large area, the fortified settlement at Bükkzentlászló is one of the longest known prehistoric sites in Hungary, whose investigation began at an early date (*Fig. 131*). The Late Bronze Age, Scythian period and Celtic assemblages from the site – among them a hoard of Celtic silver coins – have enriched various museum and private collections since 1846. Three bronze hoards were presented to the Hungarian National Museum and the Miskolc museum in the 1920s – regrettably, next to nothing is known about their exact findspot and find circumstances (*Fig. 132*).¹⁹³ Various areas of the settlement were investigated in the course of excavations conducted in 1930, 1958 and 2007.¹⁹⁴ The field surveys and sounding excavations undertaken during the past years have revealed that the entire area enclosed by the ramparts had been occupied at the close of the Late Bronze Age and the onset of the Early Iron Age, and that the ramparts had been constructed at this time.¹⁹⁵ The hoard we had discovered had been concealed in the settlement's north-eastern part where an excavation had been conducted in 1958, which brought to light the



Figure 131. Plan of the Bükkzentlászló-Nagysánc hillfort

debris, hearths and storage pits of buildings dated by Late Bronze Age pottery. Our own collection of surface finds confirms that this area had been densely built up with houses during the Late Bronze Age and Early Iron Age.

Interpretation of the deposition

The abundance of hoards on the fortified settlement at Bükkzentlászló is not a unique phenomenon: among the sites we had investigated, we found five hoards at Telkibánya-Cser-hegy, four at Bükkzserc-Hódos-tető, and two each at Szilvásvár-Kelemen-széke and Martonyi-Szúnyog-tető.

The Várvölgy-Nagy-láz-hegy site, a fortified settlement in the heartland of the Keszthely Mountains, provides the perhaps best illustration of the settlements yielding several hoards, where a total of seventeen hoards were recovered between 1926 and 2003.¹⁹⁶ A part of these hoards showed a concentration in one particular area of the hillfort. More scarcely occupied and densely built-up areas alternated across the settlement's extensive, 160 hectares large territory. Twelve hoards were recovered from a densely built up, intensely occupied area covered with the postholes of buildings and various pits that lay roughly in line, probably along the settlement's main thoroughfare, which traversed the Late Bronze Age settlement in a south to north direction from the elaborate gate fortification of the southern entrance.¹⁹⁷

A similar concentration of hoards was noted at the fortified settlement of Velem-Szent-Vid. Six certain and four assumed hoards found between the 1890s and 1977 are known from this iconic site.¹⁹⁸ The three most significant assemblages - Hoards IA and IB, and the hoard of the sumptuous golden mounts of an ornate female dress - came to light in the area of an abundant spring bubbling up from the ground in the settlement's north-western corner.¹⁹⁹

Similarly to the two previous sites, Celldömök-Sághegy was an intensely occupied, extensive Late Bronze Age-Early Iron Age hillfort, which has been almost completely destroyed by basalt quarrying. Five hoards came to light on the site during the interwar period.²⁰⁰ The one-time prominence of the site is reflected by Hoards 1 and 2, found at a distance of 1 metre from each other in the proximity of a Late Bronze Age building. Hoard 1 contained ornate pins and two bronze cups, while Hoard 2 a gold disc and a

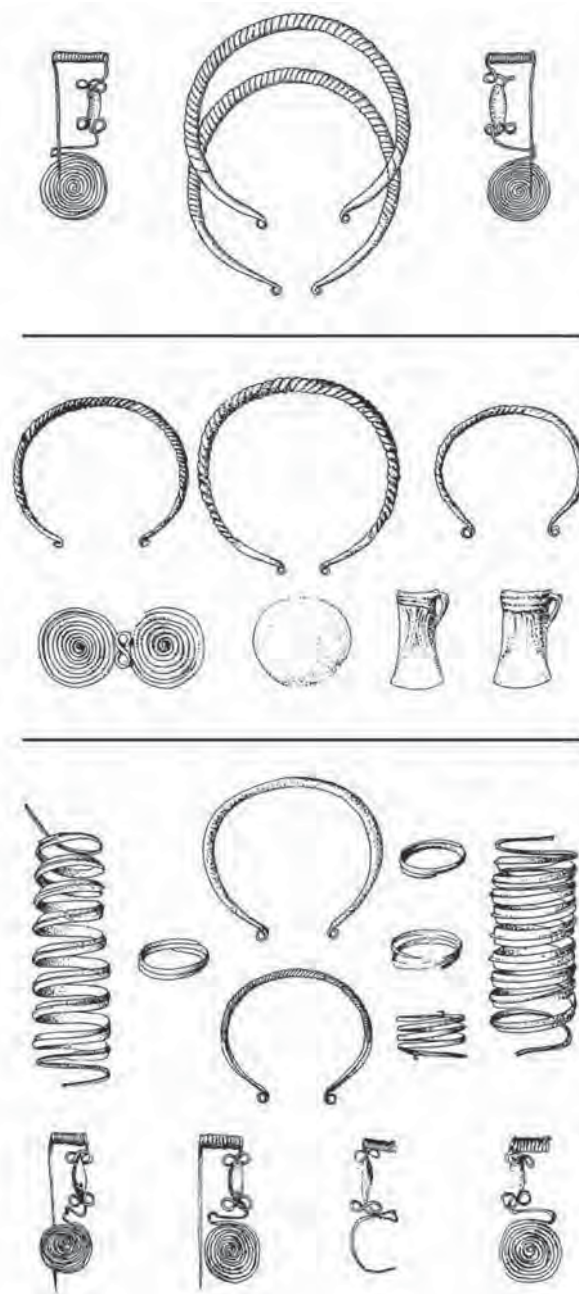


Figure 132. The hoards found at Bükkszentlászló-Nagysánc during the twentieth century

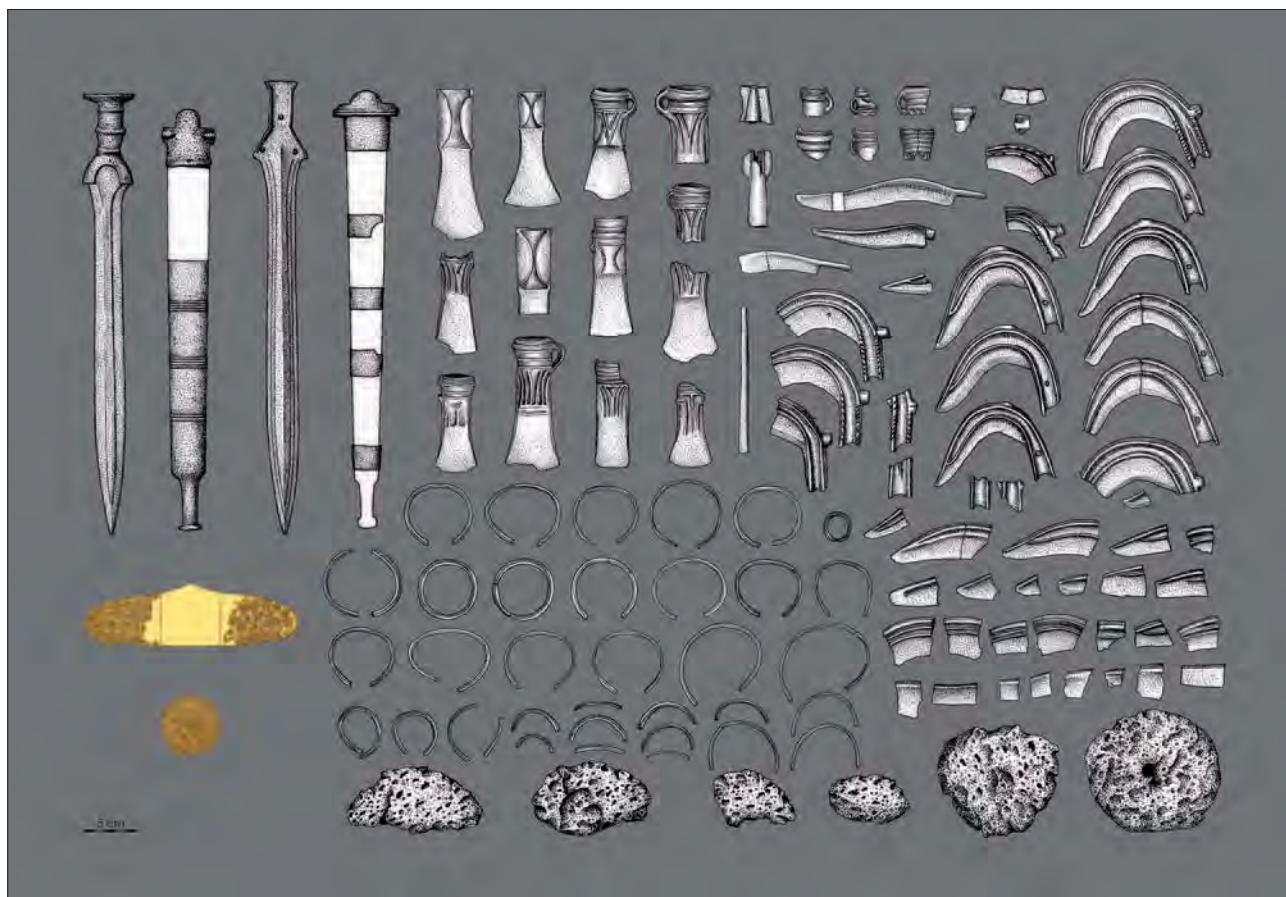


Figure 133. The Celldömölk-Sághegy 2 hoard, found in 1932

gold diadem as well as 762 marble and glass beads, two bronze swords and their scabbards, and dozens of intact and broken socketed axes, sickles, knives, bracelets and a bronze cake (Fig. 133). The two hoards are typical examples of a chiefly stored wealth made up of aristocratic items and large amounts of metal raw material, of the “treasures lying heaped” discussed in relation to the hoard from Tállya-Óvár. Fortified settlements where several hoards were buried are also common in the regions east of the Danube in Hungary. For example, four hoards dating from the thirteenth-twelfth centuries BC were brought to light at Gyöngyösolymos-Kishegy.²⁰¹ Regrettably, virtually nothing is known about the exact findspots or find circumstances of the hoards, and very little information is available about the settlement itself because stone quarrying has destroyed about 80% of the one-time hillfort. No more than 7 hectares of the site remain undisturbed,

which has been ravaged by nighthawkers, and it is therefore hardly surprising that our research team did not even discover stray finds during the site's metal detector survey.

One shared trait of the “hoard concentrations” is that the assemblages all lay in close proximity to each other or in a well-definable area. They were buried within a relatively short time period of no more than 50 to 100 years and their composition is never identical. Some were made up of valuable gold articles, as the hoards from Velem-Szent-Vid and Várvolgy-Nagy-Láz-hegy, others were simpler assemblages containing specific tools types such as the Bükkszentlászló 4 and the Martonyi 1 hoards or had a mixed composition such as the Celldömölk 2 hoard.

In the light of the above examples, the question arises as to the rationale behind the concealment of several hoards assembled according to different patterns, particularly if the deposited assemblages show a concentration in a specific area. In addition to the model of chiefly or prominent households proposed for the hoards found near each other at Baks and Martonyi, another possible interpretation for hoard concentrations should also be considered. We cannot exclude the possibility that, similarly to the ancient Greek sanctuaries, the hoards marked sacred spaces.²⁰² The relevant examples from ancient Greece indicate that the location chosen for repeated deposition could equally well have been associated with a sacred road, a spring or a particular building. The objects intended as votive offerings could be deposited anywhere within the sanctuary precinct (*temenos*). They were mostly placed on tables or stands, but they could also be left in buildings, although these objects were often deposited in the open air or occasionally hung on trees. The votive gifts left in the Greek sanctuaries were manifold, ranging from simple figurines, utilitarian objects, costume accessories and weapons from war booty to valuable articles and statues of precious metal.

More valuable articles were often kept in the temples, in a special room used as a treasury (*adyton*). The larger pan-Hellenic sanctuaries usually had treasuries (*thesouroi*) built by the different cities for storing their costly and precious votive offerings. These housed the offerings made by individuals or the city that in view of their uniqueness, valuable material and outstanding craftsmanship were important mediums of display and often also preserved the memory of important events or persons, or narratives associated with them.²⁰³ The votive assemblages and offerings were collected from time to time for storage or were deposited elsewhere in the course of a ritual.²⁰⁴ Votive offerings of precious metal could not be removed from the sanctuaries; on occasion, they served as emergency reserves that could be re-used by the donors in times of grave danger.

5 TERRITORIES AND BOUNDARIES

The fish in the fort: Telkibánya-Cser-hegy

One of the most surprising assemblages we ever discovered was the bronze hoard containing seven huge fish hooks found at Telkibánya-Cser-hegy, a fortified settlement ringed by impressive ramparts (Fig. 134). The large fishing implements are perhaps an indication that the area controlled by the community inhabiting the hillfort extended to the larger rivers meandering across the plainland.



Figure 134. Rampart of the Telkibánya-Cser-hegy hillfort

The find circumstances

We found five Late Bronze Age hoards on the 15 hectares large fortified settlement at Telkibánya-Cser-hegy as well as 160 single artefacts dating from various periods, although most could be assigned to the Late Bronze Age.²⁰⁵

Hoard 2 containing seven large fishing hooks came to light in 2010. They were deposited in the uppermost part of the fortified settlement, west of its south-eastern perimeter, and roughly 50 metres downward. The mountain top is a flat plateau in this area, which was covered with countless pottery and daub fragments, indicating that it had been densely built up during prehistory.

The seven bronze fish hooks lay at a depth of 25 cm, in a small oval pit with clearly discernible fill. They lay parallel to each other, placed one on top of the other - they had in all likelihood been bundled together for the deposition (*Fig. 135*).

The deposited objects

The bronze fish hooks are provided with a barb, whose function is to keep the point embedded in the fish's mouth, and a hook terminal for attaching the line. The hooks were presumably hammered or bent into the desired shape from thicker wire or a bronze rod. Traces of polishing or filing can be noted on the better-preserved barbs. The hooks fall into roughly the same size category: they weigh between 39 and 54 g, their shank is between 9.8 and 11.8 cm, and their gap - the distance between the point and shank - between 4.8 and 5.4 cm. The hooks are intact, without any visible traces of damage. There are no use-wear traces on the inner or outer side of the hook terminals indicating attachment, suggesting that the fish hooks had been deposited without having been used or after minimal use (*Fig. 136*).

The barbed fish hooks of the Carpathian Basin fall into three size categories: pieces with a short (3–5.5 cm), medium-sized (5.5–7.5 cm) or long shank. The fish hooks of Hoard 2 from Telkibánya represent the latter category. Large fish hooks with hook terminals occur beyond the Carpathian Basin too, although most came to light on sites associated with freshwater fishing. One of the best analogies to the Telkibánya hoard comes from the Late Bronze Age settlement at Frattesina in the Po region of Italy, where seven fish hooks with a length of 12–13 cm were found corroded together (*Fig. 137*).²⁰⁶ The fish hooks known from the Aegean and Italy are predominantly stray finds that had been lost or mislaid during their use. Aside from the Frattesina assemblage, purposefully deposited fish hooks are only known from the Carpathian Basin and the Balkans. Fish hooks placed into burials have been reported from the Aegean²⁰⁷ as well as from Western and Central Europe.²⁰⁸

In modern Hungarian fishing culture, fish hooks similar to the exemplars from Telkibánya are used when fishing for wels catfish (*Silurus glanis*). The largest commercially available fish hooks are 6–7 cm long,



Figure 135. Findspot of the Telkibánya-Cser-hegy 2 hoard and the arrangement of its objects

which are thus smaller than the pieces from Telkibánya with an average shank length of 11 cm. The Hungarian ethnographic record too indicates that fish hooks of this size and form were used for catching catfish. The large fish hooks were either part of a bottom-fishing rig fixed on the ground, or they had a smaller fish as a bait, or they were suspended from a line stretched out between stakes. Fisherfolk generally used several such rigs along a particular river section, often attaching several fish hooks to one rig.²⁰⁹

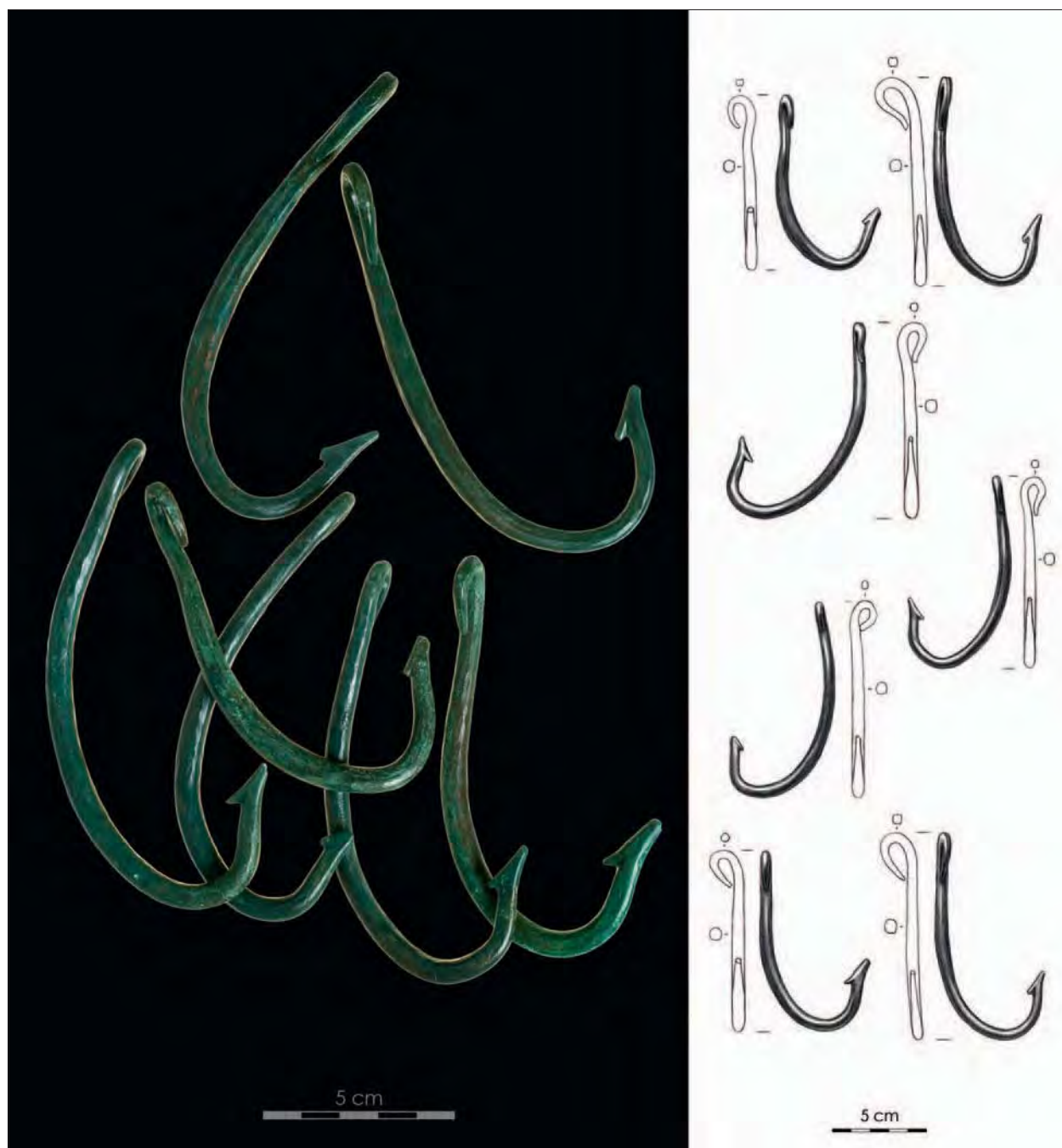


Figure 136. The Telkibánya-Cser-hegy 2 hoard

The largest and most carefully made fish hooks were reserved for catfish because these endured the greatest tear and wear when catching the 50 to 100 kg fish.

Fishing with large fish hooks was principally practiced along rivers. The river closest to Telkibánya where these hooks could have been used is the Hernád, which was regarded as a water rich in fish, including catfish, that could be abundantly caught until the late nineteenth century. The ethnographic record contains references to fishing with fish hooks, although it was not a typical practice.²¹⁰ This fishing method could be best employed along the Bodrog, a river flowing some 30 kilometres from the Telkibánya settlement. In the light of the above, the fish hooks of Hoard 2 found at Telkibánya were probably special pieces explicitly made for catching catfish.

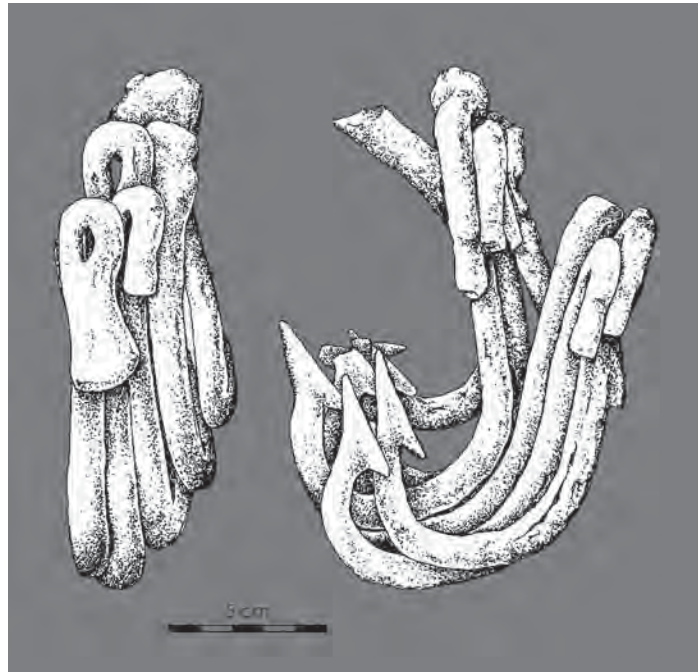


Figure 137. Hoard of large fish hooks from Frattesina in northern Italy

The findspot and its environment

Telkibánya-Cser-hegy²¹¹ is one of the four major fortified settlements with a secure Bronze Age date in the Zemplén Mountains.²¹² The finds collected during the area's field survey indicate that Mt. Cser-hegy was most intensely occupied during the Late Bronze Age and the Late Iron Age. Late Bronze Age metalwork was collected across the site's entire area, with the greatest concentration in the upper quarter ringed by the defencework (Fig. 138). Similarly to the observations made on other Late Bronze Age settlement sites, the majority of the stray bronze finds was made up of small fragments, casting jets and lumps of bronze. There were few intact artefacts: a sickle, a socketed axe, a pin and an hourglass-shaped pendant (Fig. 139).

The Late Bronze Age settlement extended beyond the area enclosed by the ramparts. On the testimony of the Late Bronze Age pottery fragments and a handful of bronze items, the slightly sloping, roughly 6-7 hectares large area west of the ramparts was occupied as far as the point where the mountainside graded into a steep slope.

Four of the five hoards (Nos 2, 3, 4 and 5) we discovered at this site had been concealed in the settlement's highest-lying south-western quarter, in an area with a diameter of roughly 200 metres, within the area

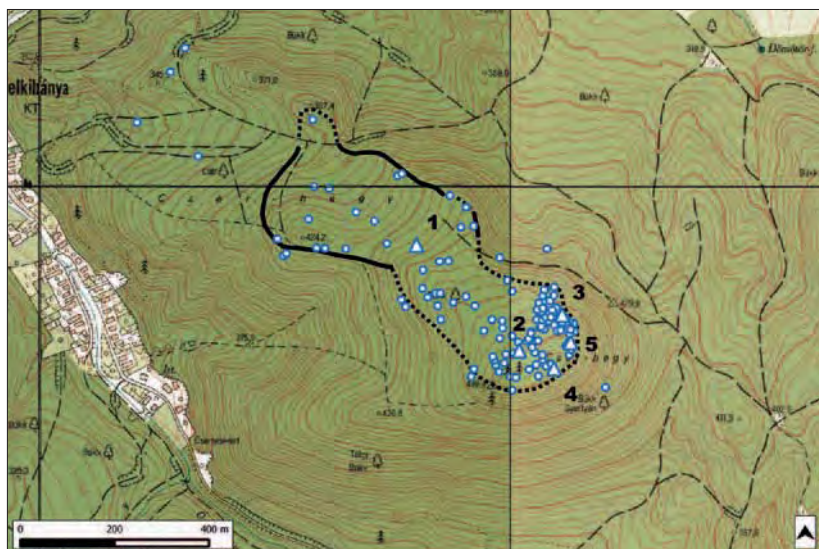


Figure 138. Plan of the Telkibánya-Cser-hegy hillfort showing the findspots of the hoards and the stray finds



enclosed by the ramparts. The pottery and daub fragments collected in the hoard's neighbourhood are an indication that this area had been densely built up. The seven large fish hooks made up Hoard 2. Hoard 3 comprised lock-rings scattered on the slope and bun-shaped bronze ingots, Hoard 4 contained the crumpled remains of a Blatnica-type bronze cup with embossed ornamentation,²¹³ fragments of an ornamented belt plate and bronze plates. Hoard 5 was made up of two artefact clusters lying 1 metre apart, disturbed by tree roots: one cluster was a carefully arranged heap comprising a socketed axe, pendants and ring jewellery with a bronze bracelet on top, while the other cluster contained two bronze pins, a sickle, a phalera, bronze spiral tubes, a socketed chisel and a broken wheel hub (Fig. 140).

Hoard 1 lay some 250 metres north-west of the area in which the other four hoards were concentrated, on a small

Figure 139. Selection of the stray bronze finds found at Telkibánya-Cser-hegy



Figure 140. Hoards 3, 4 and 5 from Telkibánya-Cser-hegy



Figure 141. The Telkibánya-Cser-hegy 1 hoard and the arrangement of its objects

terrace constructed in a somewhat sloping area. The pottery and daub fragments strewn over the surface reflect the one-time presence of buildings. The assemblage was made up of broken socketed axes, a spearhead broken in two, an awl and four large barbed fish hooks with hooked terminals.²¹⁴ The organic material remnants corroded onto the bracelet suggest that the items had been wrapped in a coarsely woven cloth (Fig. 141).

On the testimony of the datable bronze finds, the Late Bronze Age fortified settlement was occupied from the thirteenth to the eleventh century BC.

Interpretation of the deposition

The five hoards and countless single bronze finds and their fragments are an indication that the Telkibánya hillfort was one of the central settlements of the northern Zemplén Mountains (Fig. 142). This prominent position is indirectly confirmed by the unusually large fish hooks of Hoard 2, representing a type that occurs but rarely in the period's material. The hooks suitable for catching large-bodied catfish were carefully made, heavy duty, prized implements. They were probably not part of an average household's everyday implements and they probably occupied a special position among fishing gear made up of nets, gropers, fish traps and smaller hooks of wood or bone. Fishing for catfish called for a knowledge of where to find the lairs of these large-bodied predatory species and specialised skills for preparing the appropriate baits and for making the rigs necessary for its fishing.

Catfish is a valuable source of protein and it seems quite likely that catching a certain amount of this species during specific periods of the year was of strategic importance for a community. Fishing for large specimens of predatory fish was most likely a seasonal activity. The

best times for catching catfish were during their spawning period in spring, providing opportunities for catching the more fatigued specimens, and during small rodent migration in summer, when catfish preyed on shrews and voles swimming across waters. Another seasonal time was winter fishing of the fish in their wintering areas, when meat, prone to rapid decay, could be stored for a longer time. In medieval Hungary, the sturgeon, the giant fish of the Danube, played a similar role: its fishing was a royal prerogative and its meat was the valued prestige food of the court aristocracy.

The question remains as to why two assemblages containing bronze fish hooks suitable for catching large-bodied fish were deposited on a settlement deep in the mountains. These implements could hardly have been used at Telkibánya because only shallow, rapidly flowing streams can be found in the area, in which the largest fish is brown trout (*Salmo trutta*). The nearest river where the fish hooks of the two hoards could have been used was the Hernád flowing 7–8 kilometres away, although the Bodrog, lying 25–30 kilometres away, would have been more suitable.

If the fishing hooks are interpreted as having been used for subsistence by the community living on the Cser-hegy settlement, their presence in the hoards could be an indication that the community's territorial control or catchment area, or its "right of fishing", extended as far as the larger rivers, to the Hernád, but perhaps even as far as the Bodrog. Another possibility is that the hooks had not been deposited by the local occupants, but by members of a community who lived farther away and who only visited the hillfort on festive or ceremonial occasions. In this case, the hoards containing the fish hooks conform to a specific deposition pattern, in which the type and perhaps the number of the items selected for the offering²¹⁵ were vested with a specific meaning for the participants of the deposition ceremony. A hoard from Tyrol containing a bronze sword, the mounts of the baldric and a barbed fish hook with a 7.5 cm long shank and hooked terminal is perhaps a reflection of the symbolic meaning of fish hooks and of a possible association with the social status of the Late Bronze Age elite.²¹⁶

Whichever the case, the presence of the large bronze fish hooks is a clear indication that the Cser-hegy hillfort had been a ritual and possibly a political and economic centre and a gathering place of one or more communities exploiting the resources of areas with differing natural endowments.

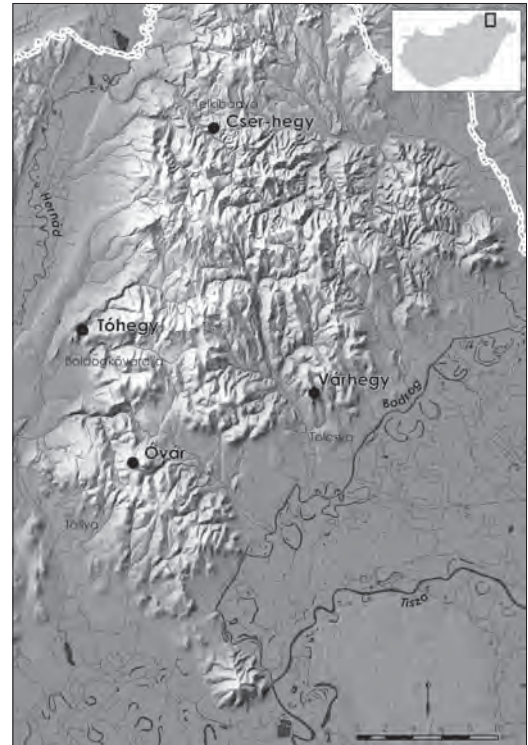


Figure 142. Late Bronze Age hillforts in the Zemplén Mountains

Two neighbouring hillforts: Abasár-Hajnács-kő and Abasár-Rónya-bérc

A prehistoric hillfort ringed by steep rocks and impressive stone walls commands the Hajnács-kő ridge projecting from the southern slopes of the Mátra Mountains. Another Late Bronze Age hillfort was built in its immediate neighbourhood on Rónya-bérc Peak.

The unusual gold hoard found beside the stone ramparts is the perhaps most important assemblage from the Hajnács-kő hillfort. There can be no doubt about the prehistoric origins of the currently unparalleled large gold items of unusual form, even if their date, their function and the reason underlying their concealment remain unknown.

The find circumstances

We discovered the hoard of two decorated gold sheets placed on each other and concealed in the hillfort in 2009 (Fig. 143). The gold articles were deposited at a depth of 25–30 cm in the south-eastern foreground of the rampart separating the settlement's northern part, some 8 metres from the stones of the rampart and 10 metres from the steep side of the mountaintop plateau.

Although the upper sheet was dislodged during its hand excavation, we could reconstruct its original position. The two sheets were placed directly one on the other with their ornamented side upward and the upper sheet almost completely covered the lower one. The two sheets lay under the humus mixed with stones on a layer of fractured stones probably created by erosion. We did not find any traces of a possible cut feature or of a building in the 100 cm by 55 cm large sounding opened in the area of the deposited items. Two undiagnostic body sherds of a hand-thrown prehistoric vessel were found in the humus layer.

The deposited objects

The two gold sheets of the hoard measure 110 mm by 210 mm, their weight is 84 g and 88 g, respectively (Fig. 144). According to the analysis performed in 2017, the upper sheet was an alloy of 90% gold and 10% silver.²¹⁷ The gold sheets from Hajnács-kő differ substantially from the less fine alloys of the period's other gold artefacts in terms of their gold content.

The date of the rectangular gold sheet decorated with a geometric repoussé design remains uncertain. The few distant analogies suggest a date in the Late Bronze Age–Early Iron Age transition, in the ninth century BC. Comparable pieces include the cylindrical bronze sheets bearing geometric patterns of the Hajdúsámson 3 hoard, dated to the tenth–ninth centuries BC, which are interpreted as wrist-guards (Fig. 145).²¹⁸ A similar zig-zag design adorns the tubular gold sheets, perhaps the embellishments of a whip handle or sceptre, of the Gyoma hoard dated to the Early Iron Age.²¹⁹ One pointer for the chronology of the Hajnács-kő gold sheets is their geometric



Figure 143. Findspot of the Abasár-Hajnács-kő hoard and the arrangement of its objects



Figure 144. Front and reverse sides of the two gold plates found at Abasár-Hajnács-kő

pattern, which shares numerous similarities with the ornamentation of the bone plaques deposited in the ninth-eighth-century BC burials of the Early Iron Age Mezőcsát culture.²²⁰

The function of the gold sheets is likewise enigmatic. The rolled-back edge of the long sides and the smaller perforations piercing them suggest that they had been riveted to a thin leather or wooden backing. The outcurving edge on one sheet indicates that the sheets had been pried off from their original backing prior to their deposition.

The findspot and its environment

The fortified settlement covering an area of 1.7 hectares made up of two habitation areas separated by stone ramparts was established on a rocky mountain ridge (Fig. 146). Two parallel ramparts were erected on the ridge's more gently sloping, less well protected southern side. The settlement was bounded by steep slopes on the eastern and western side, and therefore a wall was only constructed along a short section of the western side. The rampart built of large stone blocks has survived to a height of 2 meters and a width of 6 meters in some spots and is one of the best preserved defensive structures of this type in Hungary. Both ramparts are pierced by entrances; even the cornerstones of the 3 meters wide opening of the northern entrance have survived in their original position (Fig. 147). A few smaller stone walls and terraces can be seen beyond the southern rampart, indicating that these areas had also been settled.

Aside from the gold hoard, we only found two lumps of bronze and a medieval iron spearhead. Pottery only occurred in the upper fort, where we collected ten smaller fragments north-west of the rampart, uprooted and dislodged by wild boars. The undecorated body sherds came

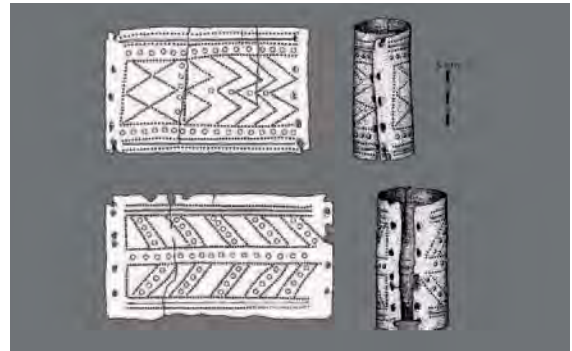


Figure 145. Bronze plates with geometric design of the Hajdúsámson 3 hoard

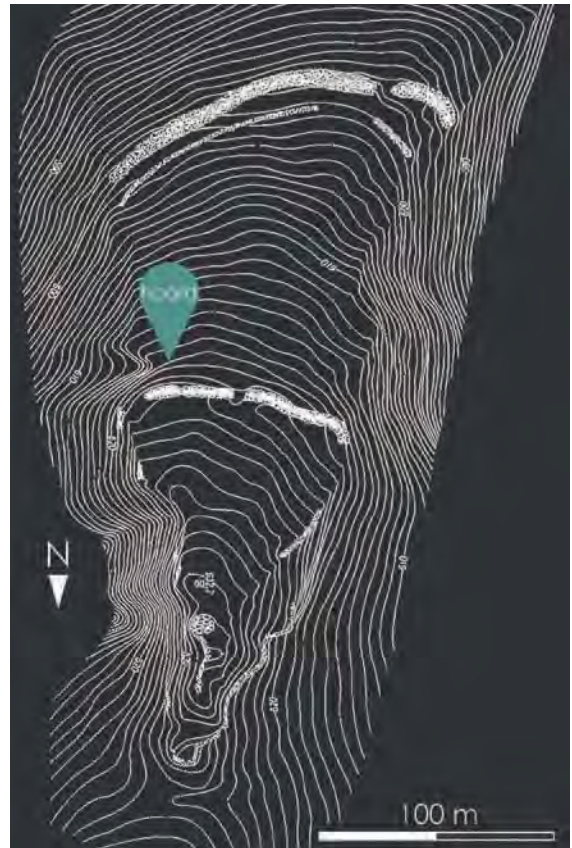


Figure 146. Contour map of the Abasár-Hajnács-kő site showing the findspot of the gold hoard



Figure 147. The entrance through the inner rampart of the Abasár-Hajnács-kő hillfort and section of the western rampart



Figure 148. Bronze finds from the Abasár-Rónya-bérc hillfort

from hand-thrown vessels dating from the Late Bronze Age and Early Iron Age.

Another fortified settlement was established in the neighbourhood of the Hajnács-kő hillfort.²²¹ The two hillforts lie at a distance of 900 metres from each other as the crow flies; however, the barely navigable, steep-sided valley of the Tekeres Stream separates the two. Being somewhat wider than the Hajnács-kő summit, a 42 hectares large settlement was established on the Rónya-bérc summit. The settlement's ramparts were longer here because the slopes were less steep. During our survey of the Abasár hillfort, we found three Late Bronze Age artefacts: a bronze lump and a broken saw blade on the southern side, and a tanged knife with curved back by the north-eastern rampart

(Fig. 148). The Late Bronze Age knife type can be securely dated: it was made in the thirteenth-twelfth centuries BC. We collected considerably more pottery fragments on this settlement than on the other. The greatest density of vessel fragments dating from the Late Bronze Age-Early Iron Age could be noted in the settlement's north-eastern part, within a 50–100 metre range of the rampart's inner side.

Interpretation of the deposition

The two gold sheets had no doubt been unusual, highly prized items. Their importance is enhanced by the fact that they had been deposited in the foreground of the inner fort's defences, not far from the road leading to the entrance. They had probably not been brought here in secrecy since in this case, they would hardly have been buried in a location that was always bustling with life, one of the focal places of the activities in the hillfort. Viewed from this perspective, it is possible that the deposition of the gold articles in one of the hillfort's oft-frequented spots, not far from the entrance, had been a foundation sacrifice near the walls.

The function of the gold sheets remains unclear: however, irrespective of whether they were costume adornments or the mounts of a leather or a wooden emblem, an important symbolic role was no doubt attached to them. The creases and folds along the edges are perhaps an indication that the two sheets had been removed from a damaged object or one that had lost its meaning, and that their burial was an act involving the ritual obliteration of the object's original meaning.

The date and one-time role of the Hajnács-kő hillfort, the setting of the deposition, remain similarly unresolved. The lack of finds in the hillfort indicates that it had been scarcely and briefly occupied – but neither can we exclude the possibility that similarly to the Parád-Várhegy settlement, this hillfort was only visited at certain times, possibly on the occasion of festivities, and that it acted as a ritual arena for the communities living in the broader area.

The nature of the relationship between the Hajnács-kő and the neighbouring Rónya-bérc hillfort is yet another intriguing issue (Fig. 149, left). The topography of the two sites differs substantially: Hajnács-kő is a small hillfort, but its ramparts are higher and wider as well as more elaborate than those of the Rónya-bérc hillfort, while the latter was much larger and appears to have been more densely settled. Their chronological position is also unclear: the finds with a dating value would suggest that the Rónya-bérc settlement had been established earlier, although it is possible that there had been a period when both hillforts had been occupied simultaneously.

Assuming their contemporaneity, the question arises as to the relation between the two settlements. The erection of independent strongholds in close proximity to each other is hardly an unknown phenomenon in later historical periods.²²² They could equally well have been functional units or strongholds established by two rival, hostile communities in each other's neighbourhood.

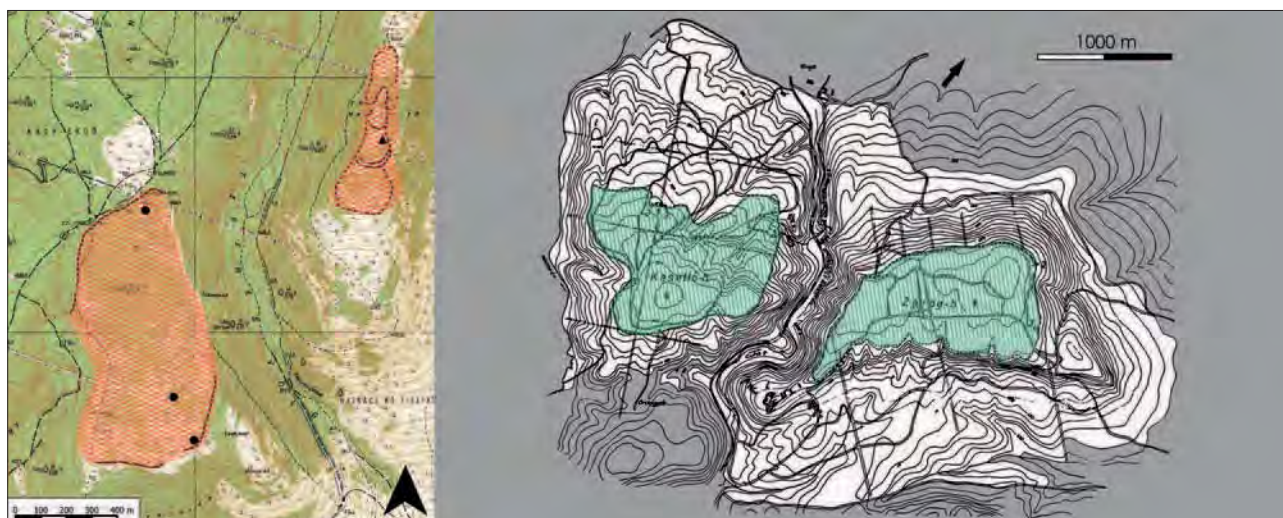


Figure 149. Late Bronze Age hillforts lying close to each other. Abasár-Hajnács-kő and Abasár-Rónya-bérc (left). Bakonyszentlászló-Kesellő-hegy and Bakonyszentkirály-Zörög-hegy (right)

The neighbouring hillforts at Abasár are not unique in the Late Bronze Age of the Carpathian Basin. Two large fortified settlements were established and occupied at roughly the same time at Bakonyszentlászló-Kesellő-hegy and Bakonyszentkirály-Zörög-hegy in Transdanubia in the twelfth-tenth centuries BC (Fig. 149, right). The two largest prehistoric hillforts in the Bakony Mountains were separated by no more than 600 metres and a steep-sided stream valley.²²³

Another dimension to the relationship between competing, rival hillforts is that in addition to their strategic importance, a symbolic meaning was often ascribed to hillforts. The strongholds constructed in oft-frequented locations of certain territories - for example on summits or on disputed boundaries - served as a visual reminder of the strength and power of the community controlling the territory to the neighbouring groups. In this case, two contemporaneous strongholds built in close proximity to each other may have indirectly marked the boundary of their ancestral territory.

The swords on the plain: Mezőberény-Telek-dűlő

A profound transformation can be noted on the grassland of the Hungarian Plain during the twelfth–tenth centuries BC: hillforts were built at distances of 10–15 km from each other and the formerly uninhabited areas were populated by a network of farmsteads and smaller settlements. Parallel to this “colonisation”, hoards containing swords began to be deposited in growing numbers in various locations of the landscape.

The pair of swords buried at Mezőberény on one of the steppe meadows provides an eloquent example of how an act of deposition can imbue a seemingly neutral location of a landscape with a new meaning.



*Figure 150. The excavated objects of the sword hoard discovered at Mezőberény-Telek-dűlő and the finder (left).
The two sword fragments found first (right)*



Figure 151. Fragments of the swords spread by the plough at Mezőberény-Telek-dűlő

The find circumstances

The hilt of a bronze sword came to light in a sprouting field of maize in an area known as Telek-dűlő, north-west of Mezőberény, in 2014. A sword blade fragment lay 10 metres from the hilt. Our metal detector team collected a further six bronze sword fragments in the area of the first two finds (*Fig. 150*). All the fragments lay in the 35–40 cm thick humus layer disturbed by ploughing, all in a secondary position. The fragments lay relatively close to each other, almost in a line, within a 5 metre range, suggesting that they had been deposited beside each other and had been only recently dislodged from their original position (*Fig. 151*).

The deposited objects

The fragments collected at the site enabled the refitting of two cup-hilted swords (*Fig. 152*). This weapon type was one of the most widely wielded sword types from the eastern fringes of the Carpathian Basin to the eastern Alpine range during the eleventh–tenth centuries BC.²²⁴

Both swords are superbly crafted weapons: they were exceptionally well cast, their hilt is decorated with a sophisticated geometric design and their finely polished blade is engraved with bundles of lines. Despite many shared traits, the ornamentation of the two swords differs. One has a hilt decorated with concentric circles, the other with a design created from triangles. The highest number of similar weapons is known from

eastern Hungary, east of the Tisza. Swords with a comparable design of concentric circles on the hilt can be cited from the Hajdúböszörmény and Tiszakarád hoards,²²⁵ while the closest parallels to the sword ornamented with a pattern of triangles, a rarer type, is known from the Hajdúböszörmény hoard.²²⁶

The microscopic examination of the swords revealed that they had been bent, but not broken prior to their deposition and that their fragmentation into three and five pieces, respectively, can be attributed to agricultural cultivation.²²⁷ Both swords had been sharpened, polished and put to use. The damage to their blade was modern and thus there is nothing to prove that they had been used in battle.

The findspot and its environment

The two swords came to light at the edge of a shallow channel-like depression compared to the surrounding land. We meticulously surveyed the broader area of the findspot within a range of 250 metres, but did not find traces of a settlement or of another hoard.

The nearest site to the hoard's findspot that can be securely dated to the Late Bronze Age lies roughly 2.5 kilometres away on the outskirts of Hunya. Extensive settlements yielding abundant pottery that can be assigned to the period of the Gáva ceramic style can be found 3 kilometres to the north in the Körös valley, on the outskirts of Csárdaszállás and Köröstarcsa.

The region's settlement network conforms to the typical duality noted in the Tisza and Körös valleys: the larger, more intensely occupied settlements are located along the fringes of the lower-lying river valleys, north of the hoard's findspot. The higher-lying area to the south, with a poorer supply of water, was more sparsely populated and the settlements are smaller, suggesting chains of campsites and farmsteads of the type discussed in the case of the Zsáka hoards.

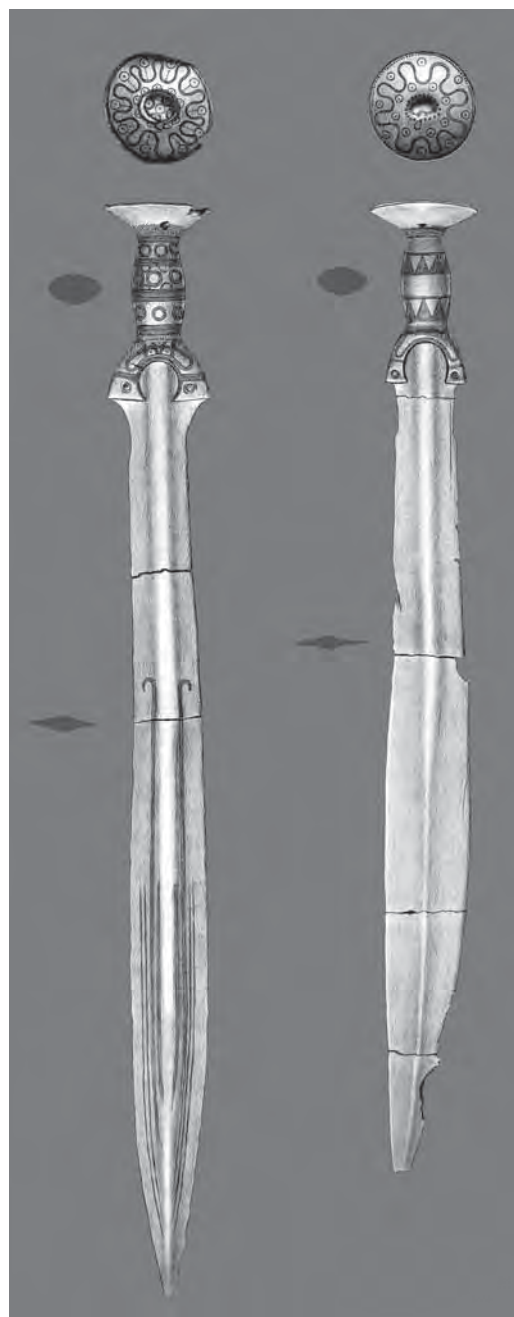


Figure 152. Drawing of the swords of the Mezöberény-Telek-dülő hoard

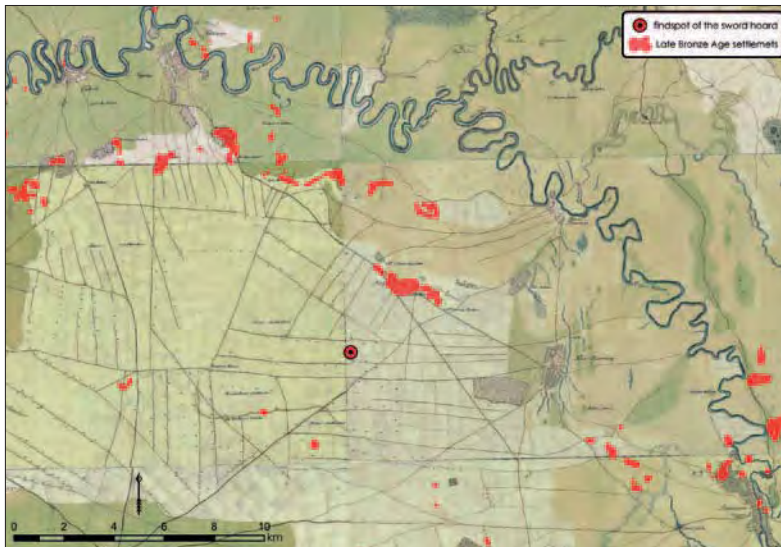


Figure 153. Findspot of the Mezőberény-Telekdűlő swords and the area's contemporaneous settlements on the map of the First Military Ordnance Survey (late eighteenth century)

The relevant map section of the First Military Ordnance Survey reveals that the findspot of the swords lay in the centre of a flat, uninhabited meadowland (Fig. 153). The cohesive soil, although difficult to cultivate, would have been suited to cereal cultivation and pasturing livestock, as shown by the fields marked on the map. The area's vegetation in the Late Bronze Age would have been a grass-covered steppe meadow that was only occasionally interrupted by sedge marshes and gallery woods.

Interpretation of the deposition

Swords were items vested with immense significance in the Late Bronze Age world. The size and ornamentation of swords were generally made according to the requirements and specifications of the customers, with a consideration of their body size and their style of swordsmanship, which made swords highly personal articles. A sword thus became a bearer of its owner's identity: its form and decorative motifs were a reflection of the owner's rank, social status and, in some cases, the extent of his connections. In certain cases, swords became independent of their original owners and grew into "personalities" in their own right, and it was believed that they could influence the deeds and fate of their new owners.²²⁸ As weapons, swords were quite obviously associated with men and embodied martial skills. Their use involved a special combat mode, namely face to face combat, which called for extraordinary braveness and skills.²²⁹

In his study on the rationale(s) underlying sword depositions, Tudor Soroceanu surveyed and analysed the iconographic evidence and written sources of the 2500-year-long period from the Bronze Age to the

Roman period, offering a comprehensive overview of the ritual role and symbolic significance of prehistoric swords. His examples include swords as the personification of deities and swords received from gods and supernatural beings. He also cites swords that functioned as cult relics, when the sacrifices were presented to swords. The swords dedicated to deities that could not be used in the earthly world represent a special category, which included weapons acquired as war booty, that were destroyed as parts of ecstatic rituals. The importance of swords is highlighted by their role in oaths, their burial, their thrusting into the ground to mark certain locations or boundaries.²³⁰

Given their symbolic significance, most of the Late Bronze Age swords were deposited in a singular manner, conforming to special rituals. They were often buried singly or together with other swords, but they were not accompanied by other artefact types. “Pure” sword deposits occur across Europe, but are particularly typical in the eastern regions of the Carpathian Basin.²³¹

Although we have nothing to go by regarding the exact deposition location of the Mezőberény swords, it seems likely that they had been deposited at the same time and in close proximity to each other. Sword hoards with a known or reconstructable context attest to their burial in a purposeful, pre-determined order or manner, as for example the sword found thrust into the ground at Nyíregyháza-Rozs-rétszőlő²³² and the Krasznokvajda hoard of sixteen swords, which had been bundled up and buried with their tips pointing southward.²³³

Swords intended as votive deposits were generally buried in special locations. They were often cast into rivers and lakes: in Hungary, over forty intact Bronze Age swords have been recovered from the Danube and the Tisza, mostly in the proximity of former crossing places and fords.²³⁴ Several swords were concealed, either singly or multiply, in caves and rockshelters, as for example at Háromszléc (Vyšný Sliac) in western Slovakia, where six swords and a few personal jewellery items were concealed in a limestone chimney in a specific arrangement.²³⁵ Another typical trait of hoards containing swords is that unlike the other hoard types, these were always concealed far from settlements, a deposition type exemplified by the pair of swords from Mezőberény.

Roughly 90% of the period’s settlements in the broader Mezőberény area can be found in the valleys with looser soils of the larger perennial rivers such as the Körös and the Tisza. The loess-covered table-land with

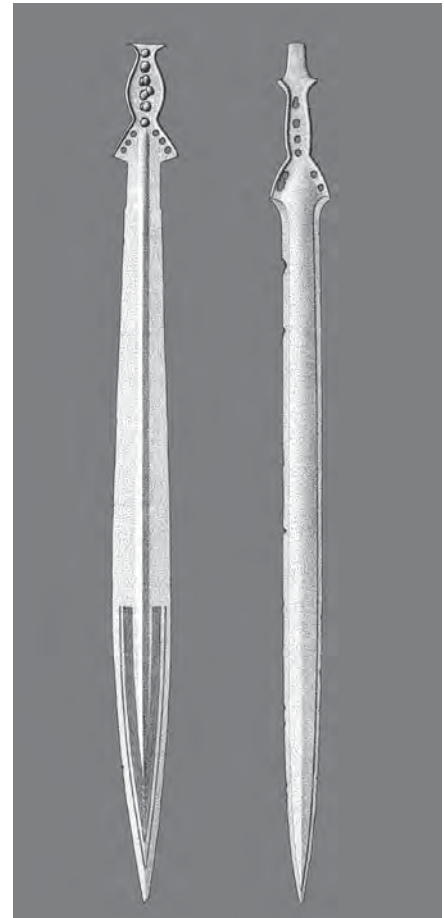


Figure 154. Late Bronze Age swords from Hódmezővásárhely-Kút völgy (left) and Hódmezővásárhely-Batida (right)

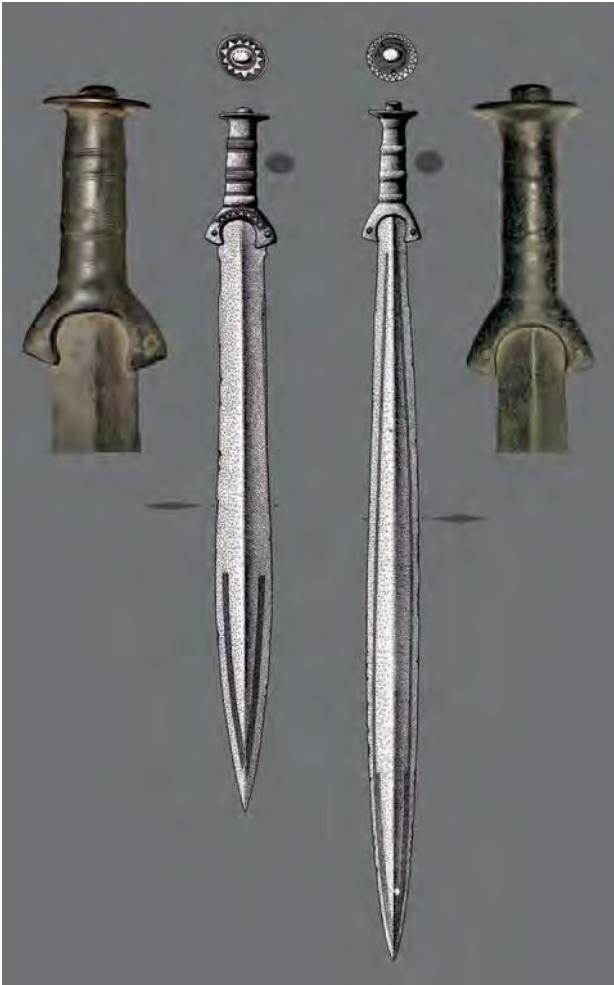


Figure 155. The sword hoard from Orosháza-Gyopáros

völgy (Fig. 154, left).²⁴² Both swords are distinctive, individual weapons with carefully sharpened edges that had been put to use.

The swords found at Orosháza-Gyopáros (Fig. 155), whose findspot lies at a distance of 35 kilometres, also in the table-land, provide the closest parallel to the deposition mode of the Mezőberény swords. The two swords came to light on the shore of Lake Gyopáros-tó, whose water had medicinal properties. While no traces of Late Bronze Age settlements are known in the immediate area of the findspot, a fortified settlement lies some 500 metres away, and it seems likely that the concealment of the swords can be associated with

good quality, but compacter, chernozem-type soils that are difficult to break, lying farther from the major rivers, began to be occupied from the Late Bronze Age onward, when there is a visible increase in smaller settlements along the intermittent water-courses of the table-land, on the previously unexploited dry pastureland.²³⁶ The driving force stimulating this colonisation was the growing importance of stockbreeding²³⁷ and the search for new pastures. A similar tendency can be noted in other European regions too, where the extent of cattle breeding grew dynamically during the Late Bronze Age. Animals became one of the principal means of gaining prestige, in the wake of which earlier uninhabited or forested land began to be utilised as pastures.²³⁸

The clans participating in the colonisation of the pastures in the table-land built a series of hillforts²³⁹ and the bronze hoards appearing in the *puszta* region can quite certainly be associated with them. Hoards of this type are known along the shore of Lake Fehér-tó at Kardoskút, where two hoards of broken artefacts were deposited in close proximity to each other.²⁴⁰ Hoards containing weapons appeared in pastureland areas, too: a single sword came to light at Hódmezővásárhely-Batida (Fig. 154, right),²⁴¹ while two excellently crafted bronze swords, buried together with two socketed axes and a cast bronze object, were discovered at Hódmezővásárhely-Kút-

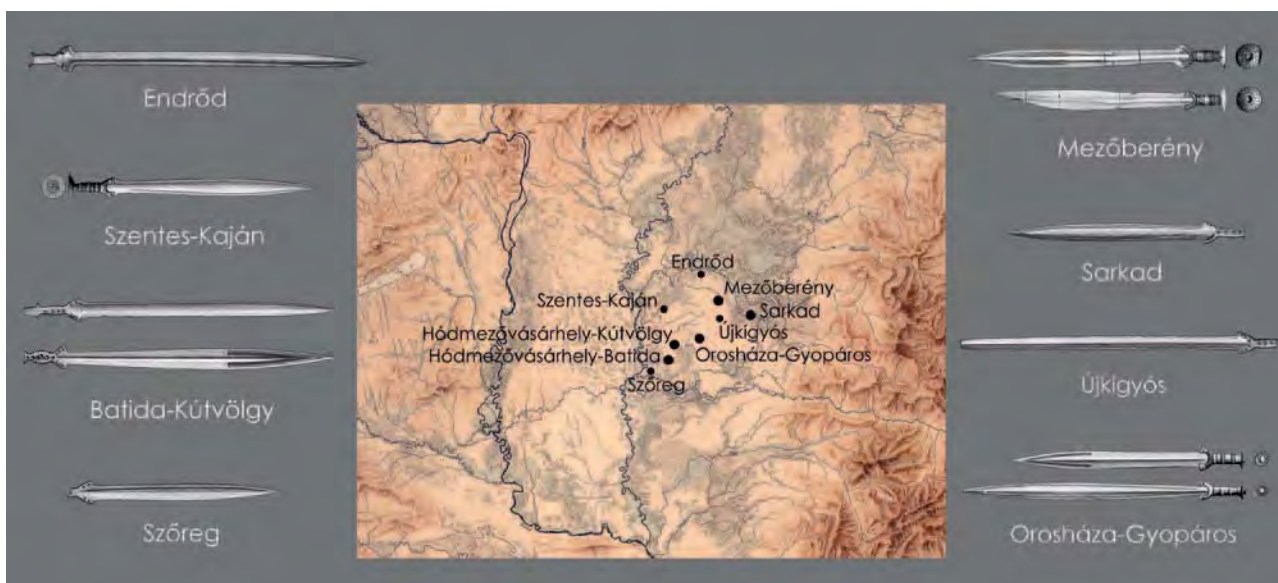


Figure 156. Depositions of intact bronze swords in the southern Hungarian Plain

the community occupying it. János Gábor Tarbay's examination of the swords revealed that the hilts of the swords were strongly worn, indicating that they had been put to use for a longer period of time before their deposition.²⁴³

In the light of the above, it seems more than likely that the Mezőberény swords and the similar sword depositions far from settlements in the southern Hungarian Plain had been buried by the communities colonising the formerly uninhabited area (Fig. 156). Areas suitable for pasturing grew more valuable owing to the growth of the cattle stock ensuring prestige and the appropriate demarcation of boundaries became an important issue. The leading families of the groups occupying the grasslands confirmed their possession of the land with deposition rituals at meaningful locations of their territories both for their own and for neighbouring communities.²⁴⁴

It is difficult to pinpoint the specific reason underlying the deposition; one other feasible interpretation is that the two weapons preserved the memory of a martial action - in this case, the breaking of the sword perhaps symbolised the defeat of their one-time owner,²⁴⁵ while their differing proportions and ornamentation perhaps indicate that they had been owned by two different persons. Another important clue for interpretation is that no other deposition acts were performed in the area either earlier or subsequently, and thus the deposition of the weapons perhaps marked one particular event as well as its location, and also infused a specific area of the landscape with a new meaning.



Figure 157. Findspot of the Szilvásvárads-Alsó-Nagy-verő 1 hoard and the arrangement of its objects

6 THE RITUAL LANDSCAPE

The horses in the wood 1: Szilvásvárads-Alsó-Nagy-verő

In summer 2012, when we uncovered the items of Hoard 3 on the Alsó-Nagy-verő ridge, we were surprised to see that the bronze artefacts had been deposited in a strict order. The mouthpiece was placed between the two cheek-pieces, while the bronze buttons once adorning the bridle and the reins wound behind them, as if the intention had been to harness an enormous horse.

Three years earlier, we had found a hoard of bronze mounts and large round phaleras a few metres from the bit. The remnants of some organic material adhering to the bronze articles and the bronze mounts forming regular rows suggested that a carefully folded leather artefact had been deposited here.

The find circumstances

During our survey of the small open settlement, we found three contemporaneous hoards of differing composition. Hoard 1 was discovered in 2009, during the site's first metal detector survey. The hoard's artefacts lay among the roots of an old beech tree, some 20–30 metres from the settlement's western edge (Fig. 157). The artefacts lay at a depth of 10–20 cm; most had been dislodged from their original position by an earlier disturbance, probably uprooted by a wild boar. The hoard's undisturbed core was made up of three large bronze discs that partially overlay each other. There were seven bronze mounts with their attachment loops facing upward forming two rows, one over the other. After lifting them, we found four small bronze mounts, again with their attachment loop upward, arranged in a row under the lowermost disc (Fig. 158). Five attachment loops retained remnants of twisted cords, to which leather remains adhered in some spots. We opened a trench in the area of the hoard, in which we found two heaps of smaller mounts, a spiral tube of wire and a large bronze disc with the attachment loop upward within a 1 metre range of the large phaleras. Three rings and twenty-one mounts came to light outside the sounding, within a roughly 3 metre range of the hoard's core.

In 2012, we opened a 10 m by 10 m trench in the area of the hoard, which yielded a further thirty-five small bronze mounts, a cast ring and two spiral tubes, all of which lay in a secondary position; they had probably been dislodged by erosion and disturbance by wild boar.



Figure 158. Successive phases of the hand excavation of the Szilvásvár-Alsó-Nagy-verő 1 hoard (phase 1: upper left, phase 2: lower left, phase 3: upper right, phase 4: lower right)

Hoard 2, concealed in one of the fissures of a large limestone rock by the settlement's northern edge, was discovered in 2009. The 1-1.5 metre high, strongly eroded rock is the largest and most spectacular landmark element in the site's environment. The small hoard of six items had been hidden in a 40-50 cm long and 4-5 cm fissure on the rock's eastern side facing the settlement. The sheet and ingot fragments formed a closed cluster in the middle of the fissure (*Fig. 159*).



Figure 159. Findspot of the Szilvásvárads-Alsó-Nagy-verő 2 hoard and its objects

Hoard 3, discovered in 2012, lay some 10 metres from Hoard 1, near the settlement's edge. The mouthpiece lying at a depth of 15 cm came to light first. The two bronze cheek-pieces lay some 120 cm farther: they were placed parallel to each other, 110 cm apart. Domed and cross-shaped harness fittings were found scattered along an east-west axis. Most lay at the same depth of 25–30 cm as the cheek-pieces, although a few were no more than 5–10 cm under the current surface. Most harness fittings were found west of the cheek-pieces, only two pieces lay to their east (Fig. 160).

We opened a 10 m by 5 m trench around the hoard, but did not find any cut features or other archaeological features.



Figure 160. Arrangement of the objects of the Szilvásvárads-Alsó-Nagy-verő 3 hoard

The deposited objects

Hoard 1 was made up of four large, slightly conical bronze phaleras with an attachment loop on the reverse, 76 small mounts with an attachment loop on the reverse, four rings cast in one and three bronze spiral tubes (*Fig. 161*). Some of the phaleras and mounts retained the remnants of a twisted cord in their loop, while two mounts had remains resembling leather corroded to them. The position of the artefacts in the hoard's core and the organic remains suggest that they had been sewn onto leather. The at least 10 cm wide leather object had been folded in two or three before its deposition. Comparable smaller and larger button-like bronze mounts are frequently encountered in the burials of the Mezőcsát culture and in Early Iron Age hoards, usually in association with horse-bits and mouth-pieces,²⁴⁶ suggesting that the button-like mounts, spiral tubes and rings had been the adornments of an ornate horse gear, although they may also have been costume adornments or accessories.

Hoard 2, found in the rock fissure, comprised six objects: two small ingots, a sickle blade fragment, the blade fragment of a socketed axe, the fragment of a cast object and a folded metal sheet (*cf. Fig. 159*).

Hoard 3, an almost complete harness set, was made up of eighteen items: two cheek-pieces, a bit, three cross-shaped, eleven domed and a curved mount (*Fig. 162*). The set is a typical representative of the harness sets with steppean and Caucasian cultural affiliations appearing in the eastern half of the Carpathian Basin from the ninth century onward.²⁴⁷ Comparable disc-terminalled bits are known from the Dinnyés, Szanda, Prügy, Vetés and Fügöd hoards containing pre-Scythian-type artefacts²⁴⁸ and a burial uncovered at Füzesabony.²⁴⁹ Cross-shaped button mounts with an attachment loop on the reverse, domed button mounts and curved mounts are likewise frequent accessories of Early Iron Age harness sets.²⁵⁰ The bit is strongly worn, the bridle mounts bear tiny traces of damage, indicating that the harness set had been used over a longer period of time.

The findspot and its environment

The settlement occupied during the Late Bronze Age and Early Iron Age lies some 250 metres above the valley of the Szalajka Stream. The site itself is covered with a forest of old beech trees (*Fig. 163*). Covering some 2.8 hectares, the prehistoric settlement extends across the ridge of the Alsó-Nagy-verő range and the saddle between it and the slope fan some 20 metres lower. We collected a substantial amount of prehistoric pottery and daub fragments that lay scattered across the more sheltered, only slightly sloping area.

A total of twenty-five bronze artefacts dating from the Late Bronze Age and the Early Iron Age came to light. Most of these were lumps of bronze, ingots, sheet bronze fragments, ring fragments and cutting edge fragments of socketed axes, alongside an hourglass-shaped pendant, a button sickle, a folded bracelet, a socketed chisel with ornamented socket and a socketed axe. The socketed axe lay in the burnt debris of a



Figure 161. The Szilvásvárads-Alsó-Nagy-verő 1 hoard

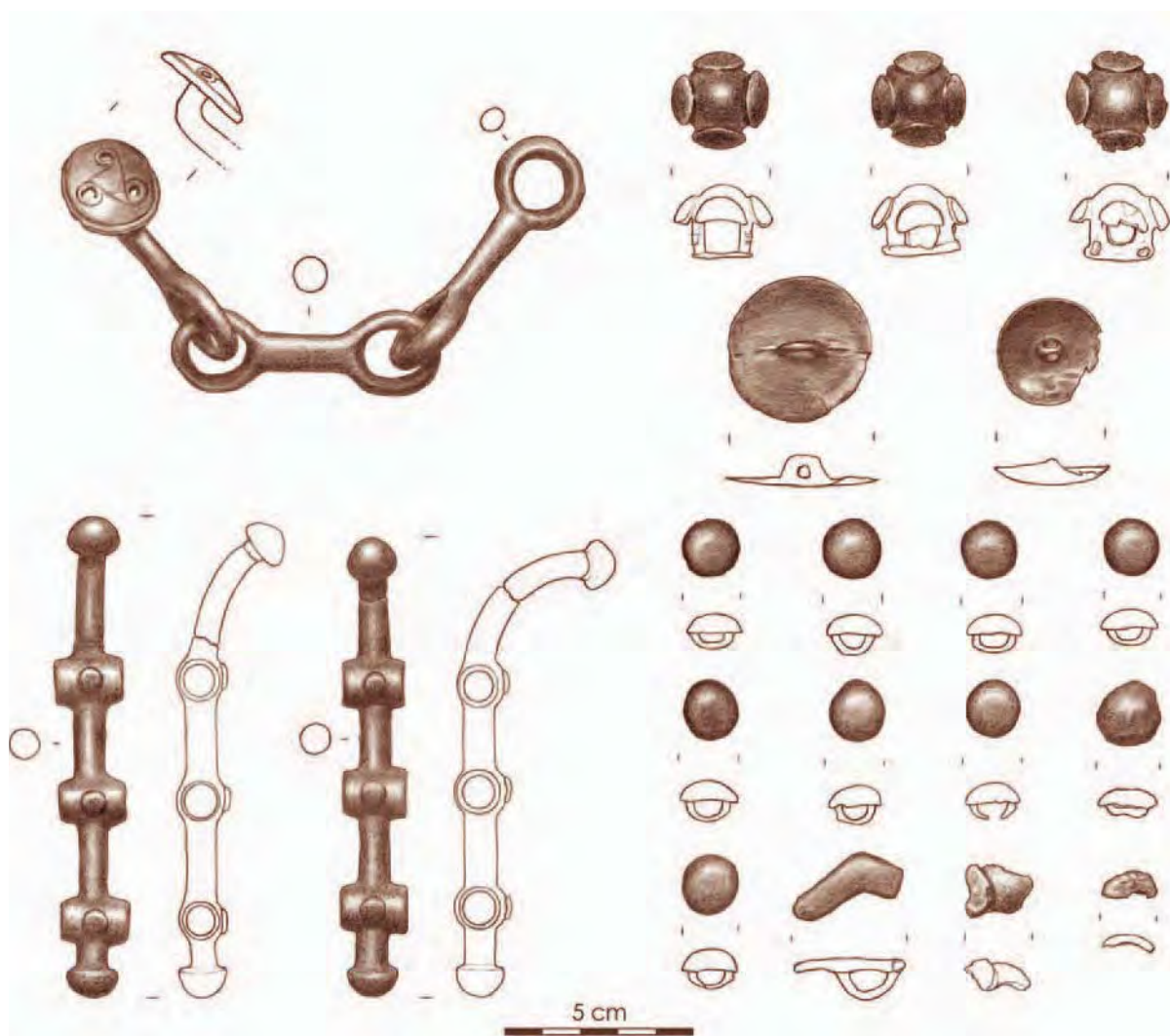


Figure 162. The Szilvássvár-Alsó-Nagy-verő 3 hoard

house and its socket retained charred remnants of its shaft. The settlement was most likely established at the close of the Late Bronze Age and, judging from a three-edged Scythian-type arrowhead, it remained occupied until the Middle Iron Age.

The ruins of medieval Éleskővár Castle can be found 70 metres beneath the slope fan, at a distance of roughly 300 metres. We did not find any prehistoric pottery in this area, although an intact socketed axe recovered from the flat area west of the castle indicates that it had been also settled during the Bronze Age.

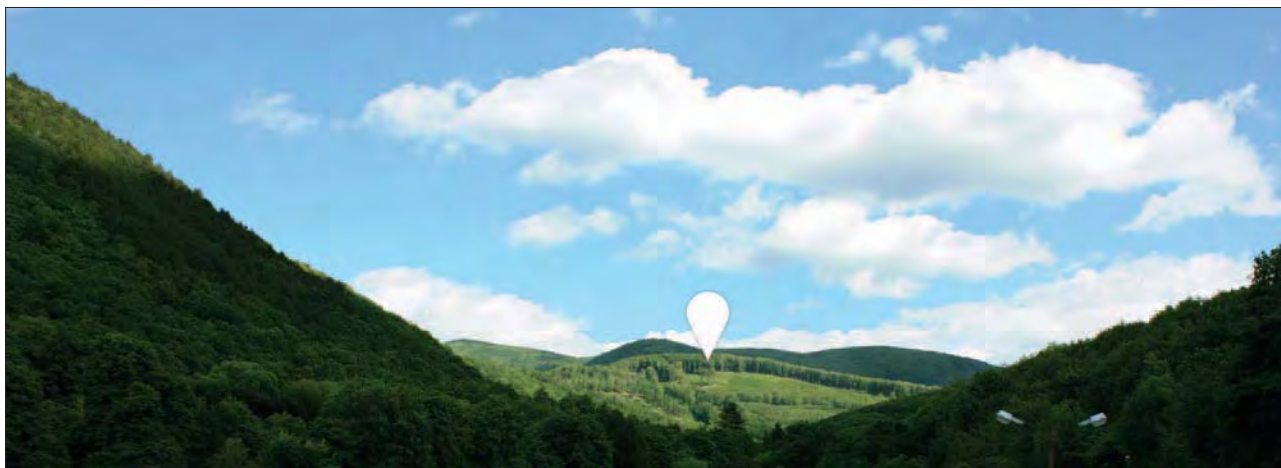


Figure 163. View of the Szilvásvárads-Alsó-Nagy-verő hillfort from the entrance to the Szalajka Valley

Interpretation of the deposition

Buried no more than 10 metres apart, the association between Hoards 1 and 3 is evidenced not only by their similar chronological position, but also by their composition and deposition mode (*Fig. 164*). It seems quite certain that they had been deposited during the same period, namely the Early Iron Age – the current record does not allow a more accurate dating. They may have been deposited on the same day, but they may equally well be separated by a few decades.

There are several indications that the two hoards had been buried as part of a ceremony.²⁵¹ It must here be recalled that Hoard 1 was not merely a collection of bronze artefacts, but had contained a leather object, possibly a harness (*Fig. 165*) or an ornate garment. The deposited object had been carefully folded, suggesting that it had been a valuable item. The arrangement of the items in Hoard 3 differed spectacularly from the usual practice. The bit and the cheek-pieces, the bridle and rein mounts had been deposited as if harnessing a huge, imaginary horse: the mouth-piece in the middle, the cheek-pieces on either side, and the mounts embellishing the harness straps behind them (cf. *Fig. 160*). The deposition ritual apparently involved the breaking off of the tips of the cheek-pieces and their placement beside them. A similarly pre-conceived elaborate arrangement as part of a deposition is extremely rare. The renowned Transylvanian bronze hoard from Homoróddaróc (Drăușeni, Romania) found between 1810 and 1812 possibly represents a similarly carefully choreographed deposition: according to the contemporaneous description, it contained a sword thrust into the ground and thirty socketed axes with an orderly arrangement around it.²⁵²

There is ample evidence that some of the period's hoards contained not merely bronze articles, but that a profusely decorated garment or leather harness set had been deposited. One of the most spectacular



Figure 164. Findspots of the Szilvásvárads-Alsó-Nagy-verő 1 and 3 hoards

assemblages is the Blanot hoard from France, made up of a bracelet, a belt studded with mounts, three elaborate leather necklaces of gold and bronze beads and a leather dress trimmed with bronze mounts, all deposited in a cauldron, which had been capped with a large bronze cup. Placed beside the cauldron were eleven smaller bronze vessels, six bronze leg ornaments and a clay pot containing bronze rings and pendants. The sheepskin garment was neatly folded into a rectangular bundle before its deposition in the cauldron.²⁵³ The articles in the Zalaszentmihály-Pötréte hoard in western Hungary had probably been the adornments of a similarly “extravagant” festive garment. The hoard recovered from a peat bog contained bronze mounts, phaleras, a brooch, pendants and magnificent amber beads (cf. Fig. 8).²⁵⁴ A leather belt sewn with bronze mounts, spirals and larger rings was among the articles deposited in a hoard brought to light in the Ilija-Sitno hillfort in Slovakia.²⁵⁵ The hoard from Ückeritz in Germany provides an excellent example of the votive deposit of a harness set containing leather elements. Remnants of the leather bridle were corroded onto the bronze artefacts in the assemblage that contained bits and the bronze ornaments of the set for harnessing at least two horses.²⁵⁶

Horses and horse riding undoubtedly played a prominent role in the life of the people who deposited Hoard 3. While horse gear was included in the hoards of weapons and jewellery deposited during earlier centuries in the Carpathian Basin,²⁵⁷ the number of hoards with harness elements grew dynamically and the

articles associated with riding became some of the most frequent items in the magnificent hoards of the elite. This was part of the current of transformation starting in the early first millennium BC whose impact can be noted from Inner Asia to the Alpine region, in the wake of which we witness, among others, the spread of new riding techniques. Simultaneously, iron artefacts and the typical elements of the weaponry of the steppe nomads make their appearance. These changes can be traced to the successful nomadic communities of the Eurasian steppe, who could control their riding horses more efficiently than previously and were thus able to exploit them more fully in their military ventures and in their stock-breeding economy.²⁵⁸ The communities living in the easterly regions of the Carpathian Basin gradually adopted these innovations from the close of the Late Bronze Age, reflected by the growing presence of weapons and horse gear reflecting eastern impacts among the equipment of the elite

as well as the emergence of a horse cult in South-East Europe and the eastern half of the Carpathian Basin.²⁵⁹

Although Hoard 2 contained insignificant pieces compared to the other two assemblages, the location and mode of its deposition nevertheless make it interesting (cf. *Fig. 159*). The assemblage of six small bronze articles weighing a mere 37 g squeezed into a fissure in the rock could hardly have represented valuables to be concealed for later use – it seems more likely that it had been a votive offering made as part of some ritual.

It can hardly be mere chance that the three hoards had been concealed slightly farther from the settlement, at the edge of the mountain ridge. It is possible that this was how the landscape was incorporated into the deposition ritual, given that the location offers a splendid view of distant mountains, the valley and the setting sun.

The broader region's largest Late Bronze Age hillfort lies 3 kilometres away, on the other side of the stream valley. The impressive ramparts looming in the distance are clearly visible from Alsó-Nagy-verő – yet, the question remains as to whether there was a link between the two settlements aside from their proximity to each other. The next section also addresses this question.

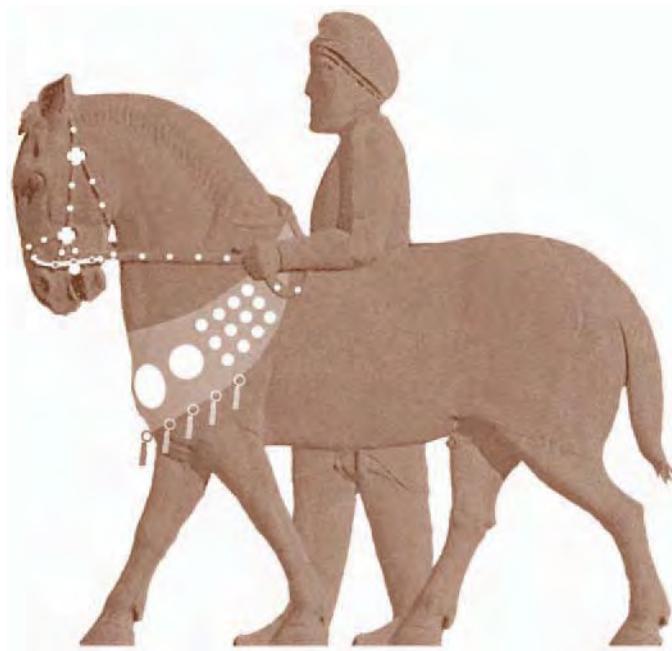


Figure 165. Conjectural reconstruction of an Early Iron Age harness based on the objects of the Szilvásvár-*Alsó-Nagy-verő* 1 and 2 hoards

The horses in the wood 2: Szilvásvár-Kelemenszéke

Szilvásvár-Kelemenszéke is the second largest hillfort in the Bükk Mountains. The elaborate rampart system encloses an almost 100 hectares large area. While the site was occupied during several periods, the Late Bronze Age occupation between the twelfth and tenth centuries surpasses by far the intensity of previous settlements. We have found over six hundred Bronze Age artefacts and two hoards in the hillfort, whose interior is structured by clearly recognisable impressive ramparts, ditches and habitation terraces. Tumulus burials and enigmatic earthworks can be found near the one-time entrances. There are few places in Hungary where the cultural landscape created by prehistoric communities was so diverse and has been preserved intact to a similar extent. This was the site where we could observe an ancestral ritual landscape in all its complexity, of which the hoards we pursued were integral building blocks.



Figure 166. Arrangement of the objects of the Szilvásvár-Kelemenszéke 1 hoard

The find circumstances

Hoard 1 came to light in 2006 in the site's north-western part. The spiral bracelets were slipped into each other and aligned west to east, and there were larger stones strewn around them. The assemblage was in all likelihood originally deposited under a heap of stones, which was later disrupted by erosion. We did not find any traces of settlement features in the small trial trench opened around the findspot. After lifting the bracelets, we found other items tucked into them: cast rings threaded onto thin wire on top, followed by two bundles of spiral tubes packed tightly next to each other. A biconical, perforated amber button and a spectacle spiral was placed beside the spiral tubes, roughly in the middle of the bundle of bracelets, while underneath them lay a smaller biconical amber bead and a metal bead strand connector element (*Fig. 166*).

We discovered another bronze hoard (Hoard 2) during our fieldwork in 2018, in the same north-western area, some 350 metres from Hoard 1. The artefacts had been bundled up in a container, probably a bag made of organic material, and then placed in a small pit (*Fig. 167*). The lowermost items were folded bronze sheets and broken ring jewellery, which were overlain by three bracelets and a large phalera with embossed decoration. Above these items were two neckrings, a larger round sheet folded in half, a socketed chisel, an oft-sharpened spearhead, a sickle, a solid bracelet and a heap of neckrings, alongside a sheet folded into a rectangular form, an intact pin, two sickles and a bronze casting jet. Lying 25 cm away from the core of the hoard were two smaller artefacts, specifically a tube of sheet metal and a cast ring. These too were placed in a small pit, whose soil mark could be observed, i.e. they had not been dislodged by erosion.



Figure 167. Arrangement of the objects of the Szilvásvárad-Kelemenszéke 2 hoard

The deposited objects

Hoard 1 (*Fig. 168*) is a typical representative of the bronze assemblages that were often buried in the Northern Mountain Range and eastern Slovakia during the thirteenth and twelfth centuries BC. These were almost exclusively made up of costume accessories and jewellery, lacking weapons and tools.²⁶⁰ Their most distinctive type is the arm spiral with twisted terminals of triangular-sectioned wire, which is accompanied by armlets, bracelets, pins and wire jewellery. Hoards of this type have been found at Rimaszombat (Rimavská Sobota, Slovakia, Hoard 4), Kozárd, Borsodgeszt and Kisgyőr,²⁶¹ as well as at Szécsény-Benczúrfalva, where bronze bracelets and spiral pendants resembling the ones from Kelemenszéke were deposited in Hoard F.²⁶² On the testimony of the Rimaszombat and Szécsény-Benczúrfalva hoards, the bracelets were worn during the thirteenth–twelfth centuries BC, while the double spiral pendant and the bird barque-shaped jewellery piece occurs in later, twelfth–eleventh-century assemblages too.²⁶³ The hoards resembling the assemblage from Kelemenszéke indicate that there was a regional fashion trend during the centuries of the Late Bronze Age that was conscientiously adopted by elite women for their ceremonial garb.

Hoard 2, made up of 51 items, can be assigned to the category of mixed hoards of the thirteenth to eleventh centuries BC (such as the Zsáka 1 and the Baks 1 and 2 hoards discussed in the above). The hoard contained intact and broken artefacts, among them jewellery items (neckrings, bracelets and pendants), weapons (a spearhead) and various tools (an awl and sickles) as well as casting debris.

The findspot and its environment

The Late Bronze Age hillfort at Szilvásvár-Kelemenszéke is ringed by an elaborate rampart system that still retains its monumentality (*Fig. 169*). The defences enclosing Late Bronze Age settlements were adapted to the terrain in order to ensure the optimal exploitation of the natural endowments of the location selected for settlement. This practice can be clearly seen in the case of the Szilvásvár-Kelemenszéke hillfort: the ramparts follow the line of the mountain, often bridging differences in elevation of as much as 100 metres, incorporating rocks when running uphill or extending across the level surface along the mountain edge. Given their optimal course, the community erecting the ramparts ensured that the settlement would occupy the greatest possible area and that the natural advantages would be maximally exploited for its defence. The monumental walls and gate fortifications visible from afar undoubtedly also played a symbolic role. The formidable hillfort on the mountain peak rising above the surrounding land, its visibility enhanced by the forest clearance around it, boasted of the power and might of the community occupying it.

Although the exact date of the ramparts remains uncertain, the excavations conducted at the site suggest that their construction began after the Late Bronze Age occupation, in the eleventh–tenth centuries BC. The initial defences were later enlarged: new ramparts were raised to enclose a roughly 15 hectares large area



Figure 168. The Szilvásvárad-Kelemenszéke 1 hoard

on the south-western side, while a system of outer ramparts and ditches was built in three locations in the settlement's foreground and a rampart section was added to divide the settlement in two.

The field surveys revealed that virtually the entire area of the hillfort was occupied during the Late Bronze Age, save for the steep mountainsides and the narrow north-eastern area between the ramparts, where there were no finds. The distribution of the pottery sherds indicates that the settlement's most intensely occupied part was its south-western area, in the neighbourhood of the two springs and along the streams issuing from them. Terracing was undertaken in several locations by the Bronze Age community. Some quite certainly accommodated houses and it is also possible that some of the terraces with a more favourable location had been used for arable farming. In 2018, we conducted a magnetometer survey on three terraces. The pits and post-holes bore witness to their dense occupation, and in some cases, we could even identify rows of building on the terraces extending parallel to each other.

Countless intact and broken quern stones, one of the most important utensils of the period's households, came to light. Their high number is an indication that substantial amounts of cereals had been stored and processed by the households. Cereals were probably taken to the households from the neighbouring villages and farmsteads since the amount necessary for the hillfort's occupants could hardly have been grown on the mountainside.



Figure 169. The south-western ramparts of the Szilvásvár-Kelemenszéke hillfort (left). Eastern side of the hillfort and the course of its ramparts (right)

We conducted systematic metal detector surveys in the hillfort from 2006, in the course of which we found two hoards and some six hundred Bronze Age metal artefacts (*Fig. 170*).²⁶⁴ Most of these bronzes represented casting waste such as bronze ingots, casting jets and lumps of bronze, alongside broken pins, sickles, spearheads and socketed axes. Three gold objects were also brought to light: the fragment of a jewellery item made from gold wire, a solid gold lock-ring and a lock-ring of twisted gold wire (*Fig. 171*).

Certain areas had a higher scatter of bronzes than others within the Late Bronze Age settlement. The greatest concentration could be noted on the western side, in the area closest to the rampart, suggesting that the community's wealthiest households lay here. The gold jewellery, Hoard 2 and 90% of the quern stones were discovered in this area.

The Late Bronze Age settlement was not restricted to the area enclosed by the earthworks. The largest occupied location, extending over roughly 1 hectare, lay in the western foreground of the ramparts. We collected the fragments of thirty bronze artefacts and an intact sickle. We identified farmstead-like traces of occupation in three areas along the roads and the streams within a 1-1.5 km range of the settlement.

External ramparts were erected in five locations around the hillfort. The rampart and ditch perpendicular to the road in front of the north-eastern entrance was visibly an external defence, whose function was the control over the road leading along the narrow ridge. The perhaps most interesting external earthwork is the Fésűs-halom, built along the road leading to the hillfort from the north-west. The roughly 90 metres long rampart has nine parallel ramparts branching out of it.

Three clusters of tumuli can be found in the broader area of the hillfort. Four burial mounds - two larger and two medium-sized ones - can be found 150-200 metres away from the ramparts, on the slope of Mt. Rókalyuk-orum (*Fig. 172*). A similar cluster lies along the road running to the hillfort from the

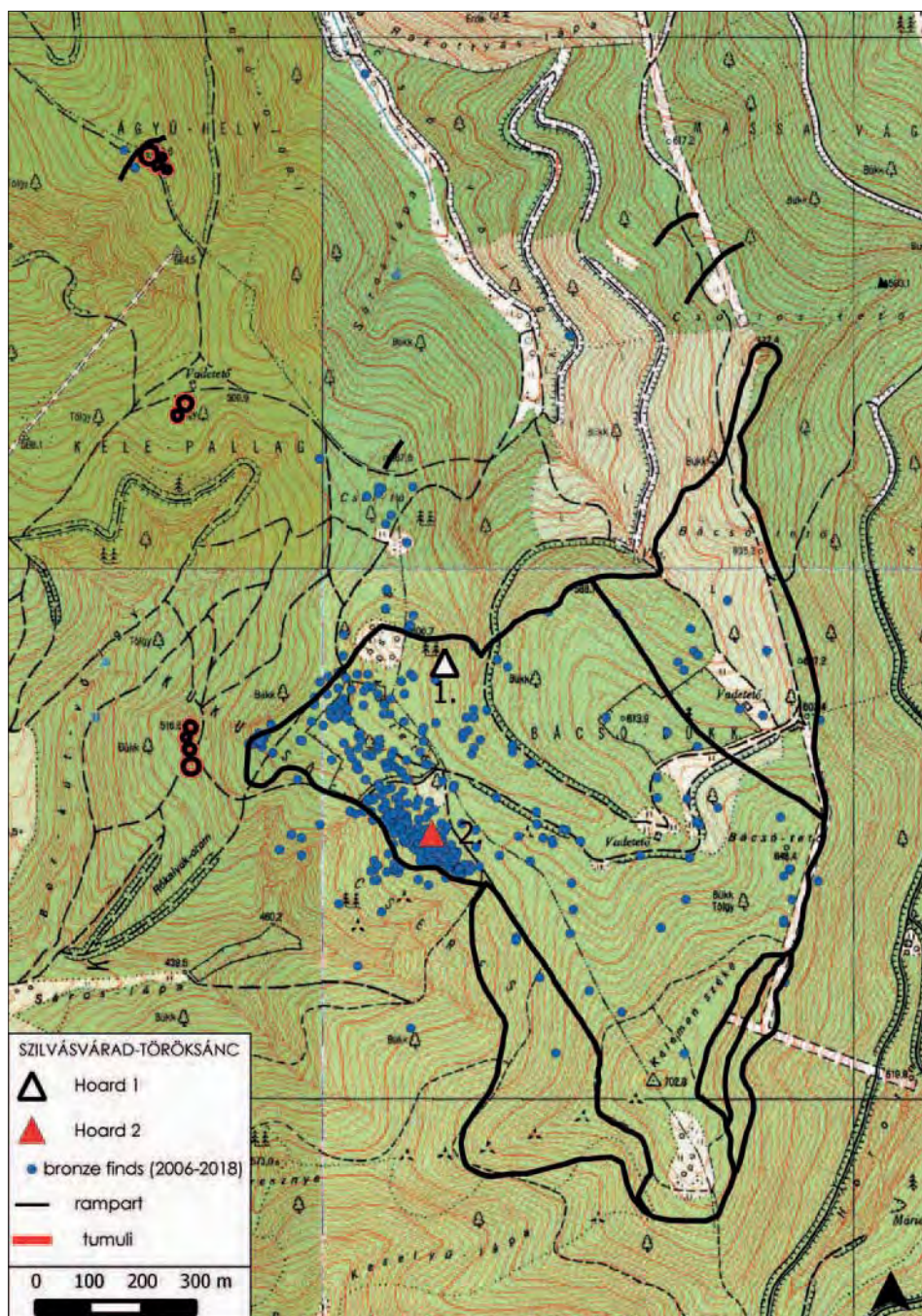


Figure 170. Plan of the Szilvásvárad-Kelemenszéke hillfort with the findspots of the bronze objects



Figure 171. Selection of the Late Bronze Age gold and bronze finds from Szilvásvár-Kelemenszéke



north-east, in an area known as Kelle-pallag, where two strongly eroded, medium-sized tumuli have been identified. The farthest-lying cluster of four tumuli is located 600 metres from the settlement, on a summit known as Ágyú-hely. A barely visible small rampart and shallow ditch extends in the foreground of the tumuli. We identified the traces of a small Late Bronze Age burial ground with cremation burials near this tumulus cluster. Nothing is known about the date, the structure and the builders of the burial mounds. Most have a small depression in their centre, an indication of a wooden burial chamber underneath, which had collapsed, or of the looting of the tumulus. It seems likely that the tumuli are contemporaneous with the settlement and were erected for the elite of the hillfort's community.

Interpretation of the deposition

Hoard 1 was deposited in a highly relevant location of the one-time settlement, one that was prominent in several respects. The rocky Bácsó-kő Peak, rising some 50–60 m above the surrounding land, was no doubt a spectacular landmark and natural phenomenon in the Bronze Age too. One of the two streams of the settlement flows under the slope where the hoard was buried and its spring is located nearby. A road running parallel to the stream enters the settlement in this location and it seems likely that one of the northern entrances was erected here. The hoard itself had

Figure 172. Tumulus burial in the area of the Szilvásvár-Kelemenszéke hillfort



Figure 173. Findspots of Hoard 1 and the cast bronze figure of a waterfowl at Szilvásvár-Kelemenszéke

been concealed about 25–30 metres above the stream, on a slope below an artificial terrace, from where there is a good view of the rocks of Bácsó-kő Peak and this was the view that greeted one when arriving to the settlement (Fig. 173).

The deposited items had been put to use, but were not strongly worn, suggesting that they had been the adornments and accessories of a festive costume. The pair of bracelets, the rings and pendants sewn onto the garment, and the beads of the necklace probably symbolised a wealthy woman or her family. The deposition of the assemblage in one of the settlement's busy locations highlighted the authority and power of this family or of the individual making the offering. It is possible that the place of the deposition was marked in some manner – with a post or a heap of stones – that would serve as a visual reminder of the deposition ceremony and of the community or individual(s) performing it to all arriving to or departing from the settlement.

The long ridge where, judging from the intact bronze and gold artefacts, the buildings of the households enjoying a prominent social status had once stood, begins 70–80 metres above the hoard's deposition location. The cast bronze figurine portraying a waterfowl, the site's emblematic find, came to light some 60 metres away from the hoard. The bronze sheet on its base indicates that it had been attached to some other object, perhaps a bronze vessel or a helmet (Fig. 174).²⁶⁵

In the light of the above, it seems possible that the location of Hoard 1 marked an area whose significance was highlighted by the deposition of a valuable assemblage in a striking location. What was the meaning attached to this location? Given the hoard's date and the location, it seems feasible that the intention was to leave a memorial that would be a reminder of the families or of a particular individual who had founded the settlement. This interpretation is bolstered by the hoard's date: it is among the earliest finds of the Late

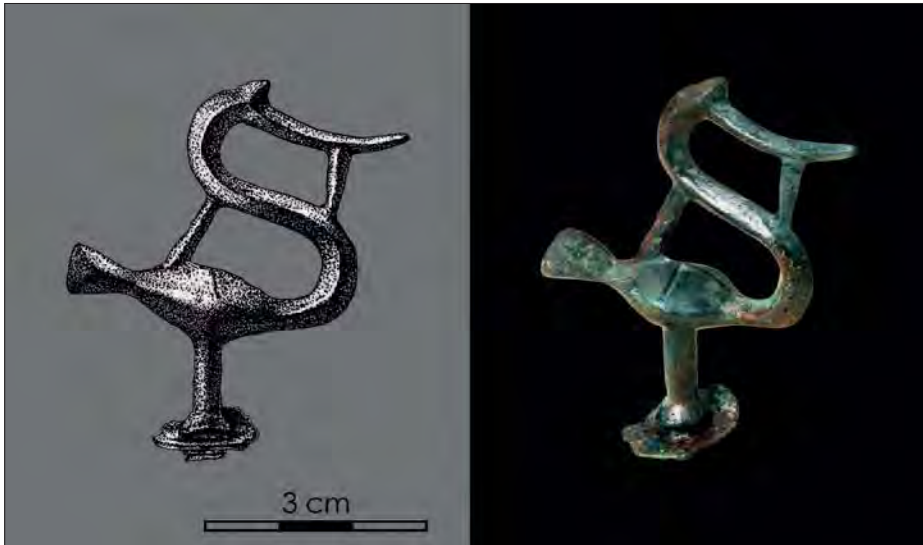


Figure 174. Cast bronze figure of a waterfowl from the Szilvásvár-Kelemenszéke hillfort

Bronze Age settlement, dating from the thirteenth–twelfth centuries BC, possibly contemporaneous with the founders' generation. The hoard's deposition immediately beside the rampart, near an assumed gateway, probably to protect the vulnerable transition through the defences by means of a votive offering infused the location with a sacrality of its own.

Hoard 2 was entirely different, both in terms of its location and its composition. The assemblage comprised mostly broken or strongly worn artefacts, and it was buried in an intensely occupied area that was probably densely built up with houses, and can be likened to the hoards from Baks and Zsáka discussed in the foregoing. There is no conclusive evidence that it had been a votive deposit: it is equally feasible that the hoard of carefully bundled bronze items intended for recycling represented the reserve of a smaller household that had been preserved among the ruins of a perished house.

Uncovering the ritual landscape of the Bronze Age

The natural environment in which prehistoric communities lived their daily lives was simultaneously a ritual landscape, an expression as well as a reflection of their microcosm, in which elements of the landscape were vested with a symbolic meaning. In some cases, the act of deposition imbued one part of the landscape with meaning, incorporating the votive offering into the community's collective memory.²⁶⁶

Of all the sites we have investigated, the nature of the Szilvásvár settlement and the highly informative find material from this site provide the clearest insight into the elements that went into the creation of the

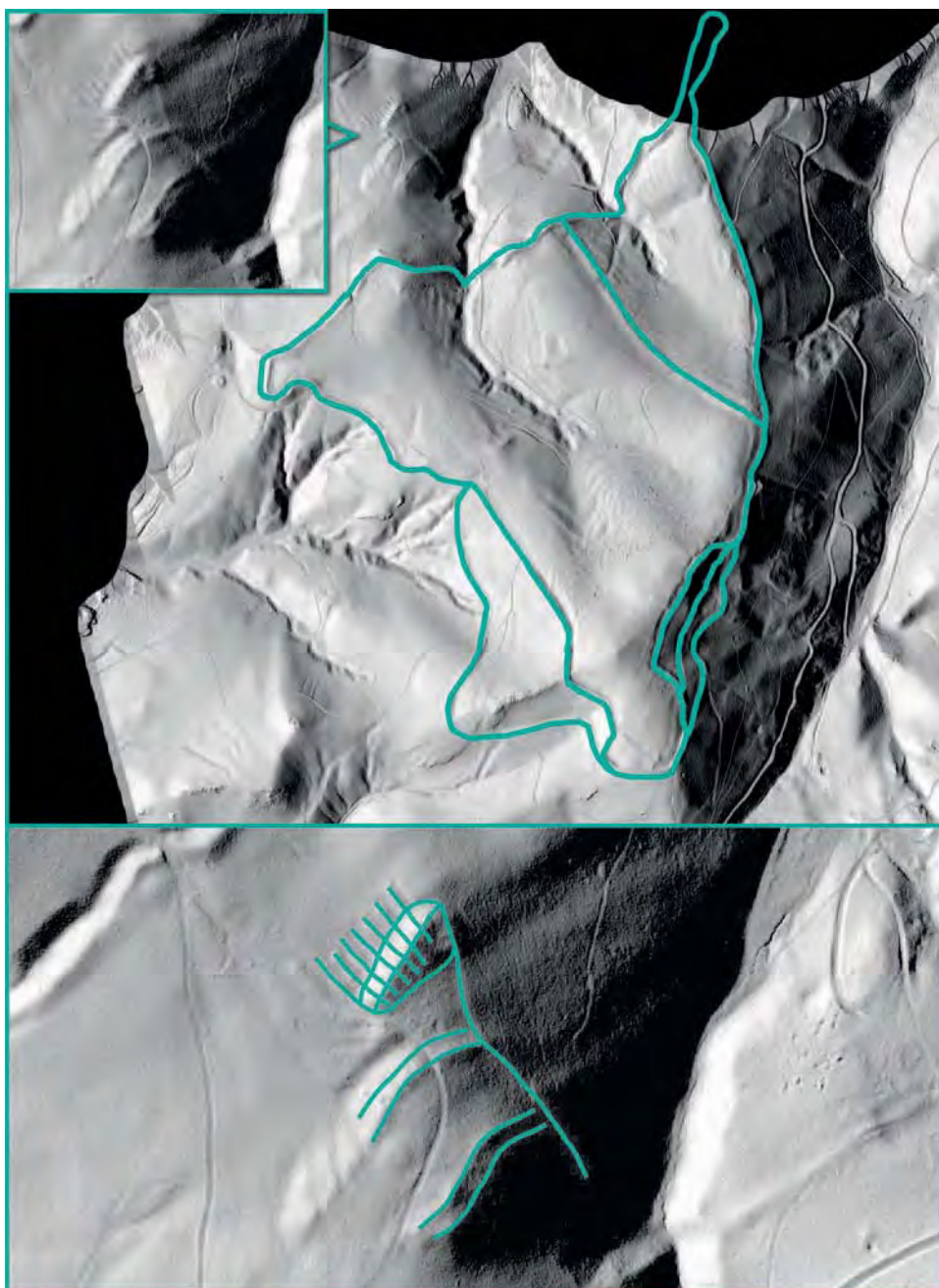


Figure 175. The animal figure outlined by the ramparts in the area known as Fésűs-sáncok [Comb ramparts] on the LiDAR image of the Szilvássvár-Kelemenszéke hillfort

ritual landscape of a community living in the area three thousand years ago. The elements of the structured mentalscape visible to us are the hoards deposited on the settlement, the tumulus burials outside the ramparts and the cemeteries – however, we only discovered the most important component during our 2018 fieldwork, when we received the aerial laser scan (LiDAR) images of the area,²⁶⁷ from which we hoped to identify the uncertain rampart sections and previously undetected tumuli. The unexpected surprise came when we examined the area known as Fésűs-sánc [Comb rampart], which we had earlier written off as a rampart with a curious structure. The analysis of the LiDAR images revealed that there were several ramparts that were virtually invisible to the naked eye, but which, if viewed from the air, outlined a roughly 167 metres long and 80 metres wide, strongly stylised animal figure (*Fig. 175*). We cut through the ramparts forming the neck and the spine of the creature, perhaps a horse or a deer, which revealed that they had been constructed from small stones. There are substantial size differences between the various parts of the structure, perhaps an indication that it had not been completed. We found but a handful of indistinct pottery fragments during the excavation of the rampart; however, we collected large pottery fragments and bronze artefacts dating from the Late Bronze Age in the area of the head and the forelegs, which indicated occupation or human activity during the period. We found a solitary tumulus burial by the feet of the figure.

Comparable monumental animal figures created in prehistoric times are known in other regions of Europe too. The perhaps most famous among these is the White Horse of Uffington in England, formed from crushed white chalk (*Fig. 176*). Similarly to the Szilvásvár ad figure, it was placed on a ridge. It was for a long time believed to be a Celtic monument from the Late Iron Age – however, in the 1990s, it was convincingly demonstrated that the figure had been constructed much earlier, in the fourteenth–tenth centuries BC. The Uffington horse shares many similarities with the Kelemenszéke animal, both regarding its topographical location and the date of its creation.²⁶⁸



The Szilvásvár ad animal figure was built some 350 metres from the Late Bronze Age ramparts. Aside from its practical function, the road leading to it most likely had a ritual role, too, since it also led to the two tumulus cemeteries north of the settlement and the burial ground with cremation burials. It may also have served as a processional way, along which the monumental figure represented one of the stations.

Figure 176. The Uffington White Horse in southern England

7 A HUNGARIAN PERSPECTIVE ON A EUROPEAN ARCHAEOLOGICAL PHENOMENON

The nature of deposition: regularity vs. diversity

The burial or concealment of assemblages made up of purposefully selected objects is a practice attested since the Neolithic in the Carpathian Basin. However, this practice became truly intense from the Early Bronze Age onward (from 2500–2300 BC) and we witness the continuously growing number of deposited assemblages up to the onset of the Iron Age in the eighth century BC. Although the deposition of metalwork is a constantly attested practice during these one and a half thousand years, there are some periods in which the number of deposited assemblages suddenly declines or spectacularly increases. The regional distribution of Bronze Age hoards is likewise uneven. Similarly to the European continent (*Fig. 177*), there are regions in Hungary where the number of deposited metal objects increased, while in others, deposition was much less frequent, and hoards are virtually lacking in some regions.

Figure 177. Regional concentrations of bronze depositions in Europe in the fourteenth–eleventh centuries BC (light green and dark green shading mark areas with higher concentrations of hoards)

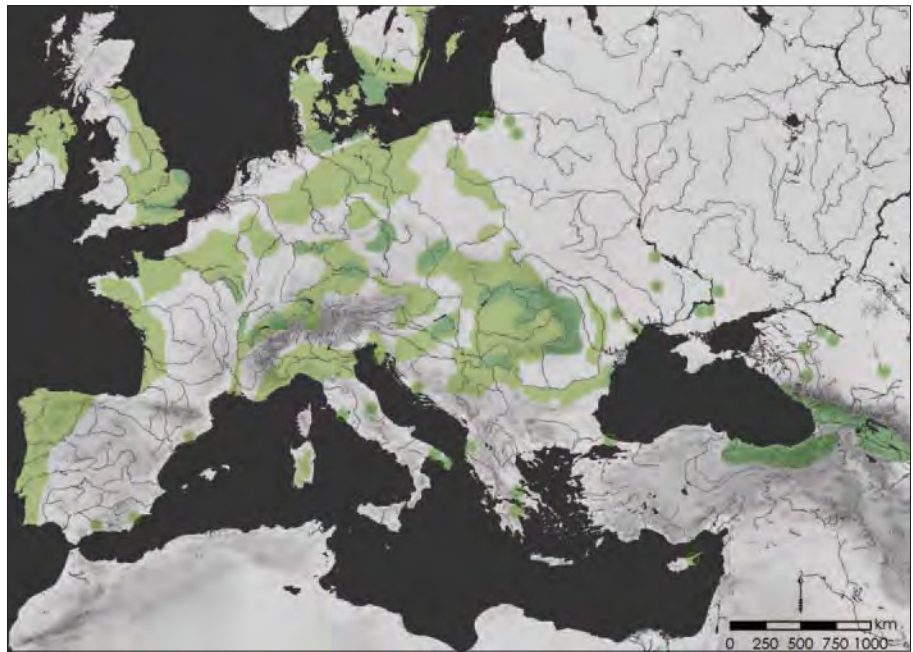




Figure 178. Swords folded in a similar way from the Pázmándfalu 2 hoard (top) and the Nogara-Pila del Brancon hoard in Italy (bottom)



Figure 179. Late Bronze Age hoard of broken artefacts from Nyíregyháza-Oros

Even though the deposition mode of the enormous number of assemblages varies, as does the composition of the hoards, archaeological scholarship realised by the mid-twentieth century that most Bronze Age hoards had been assembled according to specific patterns and norms. In some cases, the special function of the deposited objects, their ornamentation or their biographies played a role in their selection, in others, the emphasis was on their weight and amount. The carefully selected objects were often subject to a specific treatment: they were folded (Fig. 178) or tucked into each other, or hacked or broken into smaller pieces. Intentional damage to the objects also follows certain patterns: in some cases, the object was fragmented into pieces of roughly similar size or weight, in others, the deposited jewellery items, weapons and bronze vessels were ruthlessly smashed or torn apart to render them unfit for use (Fig. 179).²⁶⁹

The deposition patterns determined not only the composition of hoard: there is increasing evidence that certain artefact types were deposited in one particular environment.²⁷⁰ For example, most finds of intact defensive arms such as cuirasses (Fig. 180) have been recovered from bogs and rivers, and a similar regularity can be noted in the case of swords: of the several hundred Late Bronze Age swords known from Hungary, the intact exemplars were almost without exception buried far from settlements or cast into a river.²⁷¹

It is at least as striking that in contrast to swords, assemblages with deliberately fragmented and broken bronze articles were predominantly brought to light on Bronze Age settlements in Hungary. Sickles were also treated in a particular manner: while they were

never deposited in burials between the thirteenth and ninth centuries BC, several thousand are known from hoards.²⁷² Another apparent custom was that artefact types of particular importance such as bronze vessels and swords were arranged in a certain way as part of the deposition ceremony.²⁷³

A few of the patterns that can be distinguished regarding the composition, treatment and arrangement of the items selected for deposition reflects the existence of pan-European norms that were also observed in Hungary. Regional deposition practices often remained unchanged for long centuries. In eastern Hungary, for example, the number of emblematic hoards containing intact jewellery and weapons alongside the occasional superb bronze vessels (*Fig. 181*) is strikingly high from the sixteenth to the tenth century BC, while assemblages of this type are lacking in Transdanubia, where these items were either placed in burials or were broken up and intentionally damaged before their concealment.²⁷⁴ Regional differences are apparent in the number and the condition of the artefacts selected for deposition. In some regions, hoards containing several thousand items and weighing as much as 100 kg are not infrequent, while in others, assemblages made up of ten to fifteen articles and weighing 1-2 kg are regarded as outstanding collections. Regional differences can also be noted in how and to what extent the artefacts chosen for deposition were damaged.

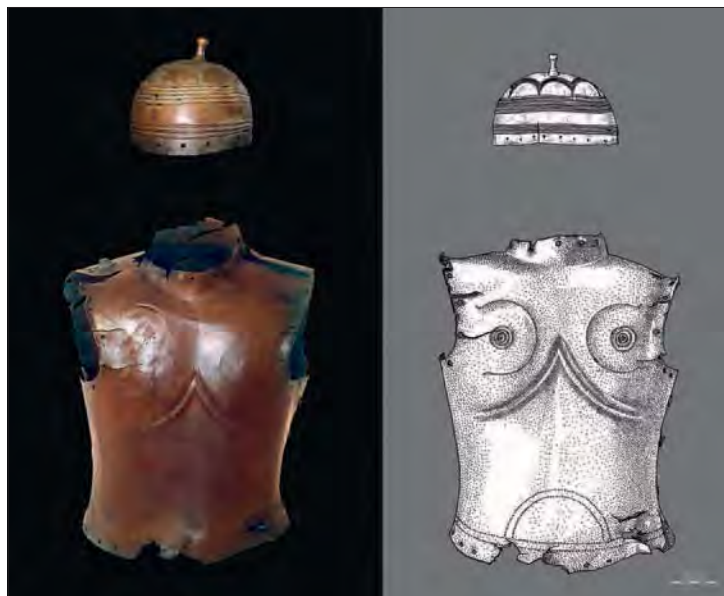


Figure 180. Late Bronze Age cuirass and helmet from the Danube section at Pilismarót and Paks



Figure 181. The Hajdúsámson 2 hoard: a set of superb bronze vessels of the Late Bronze Age

The rationale(s) behind deposition

The deposition of metalwork, a widespread practice during the European Bronze Age, is a singular, unique phenomenon that has no obvious ethnographic or historical parallels.²⁷⁵ The possible rationale(s) for the deposition and concealment of these valuable bronze items and of bronze material has been a hotly debated issue in European archaeological scholarship since the nineteenth century. Two main directions can be distinguished among the period's specialists in the interpretation of how hoards were assembled and the ultimate reason of their deposition: some researchers have argued for the ritual nature of the practice, while others have made a case for more quotidian motivations.²⁷⁶

Several types are distinguished between hoards deposited for profane reasons based on the rationale underlying the deposition: valuables that were buried in times of turmoil and war or other crises, hoards that can be regarded as merchants' stock, founders' hoards predominantly containing broken items intended for recycling and the assemblages that were lost or accidentally dropped in water are also assigned to this category. Archaeologists of the classical German school such as Paul Reinecke and Friedrich Holste, who were a major influence on Hungarian archaeological scholarship in the early decades of the twentieth century, were inclined to interpret deposition acts as the concealment of valuables in times of unrest. Accordingly, the hoards buried in relation to a historical event can be associated with a clearly discernible destruction horizons. They invoked the lavish treasures associated with the incursions of the Germanic tribes in the Roman provinces, with the Thirty Years' War and with the devastation of the Ottoman Turks in South-East Europe as parallels.

The other main category in the interpretations proposed by the scholars opting for a profane motivation behind deposition is that certain hoard types can be regarded as founders' hoards, stocks of raw material, buried by metalsmiths. Assemblages comprising broken or miscast artefacts and bronze cakes as well as hoards containing tools and jewellery according to their alloy type are also assigned here. One explanation for the deliberate fragmentation of the artefacts was that this would make their transportation easier or that it possibly meant a practice of apportioning metal to conform to standard weight units. Hoards interpreted as representing merchants' stock-in-trade made up of series of visibly unused, identical bronze types were also assigned to this category.

The profane interpretation was challenged from the very beginning - the proponents of the alternative explanation argued that most hoards had been buried for ritual reasons. According to this line of thought, the deliberately concealed gold and bronze items had been offerings and votive gifts to various deities and supernatural beings. Assemblages that could be associated with burials, but had been buried independently of graves, were relegated to this type too. The ritual interpretation of bronze and gold hoards, initially advocated by Scandinavian archaeological scholarship, gained ground and eventually became virtually exclusive in the leading German schools from the 1960s onward. The main argument for the ritual nature

of hoards was their “selectivity”, i.e. that their contents were selected according to specific cultural criteria, the deposited items were carefully arranged and that even though the composition of hoards differed from one region to the next and from one period to the other, certain patterns could nevertheless be identified, which was a strong case for the interpretation of deposition acts having been regulated by rituals.²⁷⁷

It has been suggested that one special category among ritual hoards was represented by assemblages that had been “withdrawn” from the profane world because they contained “dangerous” or ritually impure artefacts such as jewellery or tools that had been cursed or weapons tainted by blood taken from an enemy as part of military booty.²⁷⁸

It has been repeatedly pointed out by the scholars favouring a ritual background that the lavish array of valuables chosen for the sacrifice was not merely a display for the supernatural or otherworldly powers. Underlying sacrality were rational economic and social interests. The individual or community performing the deposition simultaneously displayed its economic power and largesse through the abundance of the sacrificed commodities withdrawn from daily use and circulation. Viewed from this perspective, Bronze Age depositions are akin to what is termed competitive exchange in ethnographic studies: the greater the wealth an individual or community is capable of destroying, the higher the prestige and social status that can be acquired.²⁷⁹

Some studies on the motivations behind deposition argued for strict economic interests in the burial or sacrifice of hoards. According to this model, if there was too much bronze in circulation, the burial or sacrifice of substantial hoards meant the intentional withdrawal of significant amounts of metal from exchange systems, which stabilised and maintained the value of bronze raw material and of certain prestige item types.²⁸⁰

It has since long been realised that there is no “one size fits all” interpretation for the burial of Bronze Age hoards and that hoards deposited for profane and ritual reasons existed simultaneously in a particular period. The main issue is how the hoards that could be assigned to either of these categories can be distinguished from each other and how the rationale behind their deposition can be identified.²⁸¹

Hoardings and cultural memory

From the early 2000s, studies on deposition acts were enriched by a new and more sophisticated approach that looked beyond the binary of sacred and profane.²⁸² The basic tenet of this approach is that deposition can be described as a ritualised social practice that covered wide areas of one-time life. Hoards are conceptualised as sacrificial or votive deposits that were strongly intertwined with the social relations characterising the world of chiefdoms and with the chains of gift exchanges that were essential to the economy and the circulation of certain commodities.

The study of the cultural biographies of the deposited artefacts – how they were used, their one-time function and their treatment during the deposition – plays an important role in this approach for it can shed light on the new meanings they acquired during their use-life, during the different life-cycles of their owners and on the occasion of their deposition. A deposited item can have a symbolic meaning, one case in point being a miniature cuirass²⁸³ and a larger than average piece of jewellery,²⁸⁴ or a socketed axe that was sacrificed as a symbol of a completed communal work. Other objects represent themselves, as in cases when the weapons of a man past the weapon-bearing age or the jewellery that can no longer be worn by a girl or a woman are deposited in the course of a transition ritual. Important additional shades of meaning can be associated with votive deposits involving the sacrifice of a gift such as an exotic bronze vessel made in a distant land and received from an important person.

Particular attention has been accorded to the relation between hoards and the one-time landscape in more recent studies on deposition practices. It has been convincingly demonstrated that this relation was governed by similarly strict norms as the selection of a hoard's artefacts and their arrangement. It has become apparent that the landscape was ritualised for Bronze Age communities and that hoards marked the major hubs of this mentalscape.²⁸⁵ The deposition of several hoards in a well-definable area marked sacred precincts, boundaries or processional ways;²⁸⁶ in other instances, the deposition of a hoard infused a location that appears to be neutral or profane to the modern eye with cosmological or ritual meaning.

New studies have pointed out that deposition acts most likely played a key role in the construction and maintenance of cultural memory. Acts of deposition infused a location of the landscape with a specific identity, the ritual act sacralised the selected location, while the ceremony and the assemblage of special or highly prized items created emotional and social memory. In this sense, hoards were significant building blocks of the collective memory and sense of cohesion of a particular community.

AFTERWORD

*Golden lady of the forest,
benign king of the forest,
accept our glittering gold,
be appeased by our silver!
Take the glimmer of gold,
take the shimmer of silver,
I offer my gold into your hands,
my silver betwixt your fingers,
to Tapio, Lord of the Forest,
to the merriment in the beasts' lair.
Spread your cherished kerchief under my gold,
lest it be scattered,
lest its glimmer fade among the weeds.
I have famed gold,
beget in German lands,
won in Riga battles,
robbed in Danish raids.²⁸⁷*

This spell, chanted during the presentation of sacrifices, was recorded in Finland in the later nineteenth century and was published in 1880 (*The Magic Songs of the Finns*). Even though this chant is far removed in time and space from the Bronze Age hoards discussed here, it nevertheless illuminates the narratives that I have woven around these assemblages. It evokes the ritual accompanying the deposition, it speaks to the otherworldly beings and ancestral spirits hidden in the landscape, and it recounts how the items selected for votive deposition were acquired.

The hoards discussed in the foregoing were selected to illustrate the immensely rich and colourful practice of Bronze Age deposition. A single interpretative model can hardly do justice to the diverse histories of these hoards. The narratives and interpretations proposed here cannot be regarded as conclusive – new information provided by metallographic and use-wear analyses as well as the discovery of new hoards can offer not one, but many novel avenues for alternative narratives. The current record is insufficient for drawing final conclusions and therefore the possibility remains for offering new, alternative interpretations of hoards and their contexts.

ENDNOTES

- ¹ KEMENCZEI 1991a, 41, Taf. 35, 145.
- ² CIMELIOTHECA, 143, Nr. 19; HAMPEL 1892, 73; SOROCEANU 1995, 62.
- ³ LEHOCZKY 1872, 226.
- ⁴ NOVÁKI 1965-1966, 67. There is a huge stone called the Devil's Table (*Teufeltisch*) with a plate-like impression on its top at the assumed findspot of the sickle hoard.
- ⁵ V. SZABÓ-BÁLINT 2017, 19-21.
- ⁶ KUBINYI 1861, 85-86.
- ⁷ JÓSA-KEMENCZEI 1965, 26; HAMPEL, 1892, 42-43.
- ⁸ JÓSA-KEMENCZEI 1965, 20, 24; FEKETE 2008.
- ⁹ MIHALIK 1910, 61.
- ¹⁰ For a detailed overview of Kálmán Miske's investigation of the Velem-Szent Vid site, see ILON 2015, 9-14.
- ¹¹ TOMPA 1928a.
- ¹² CSALOG 1976, 61-62; MOZSOLICS 1985, 101.
- ¹³ Although discovered during an excavation, no documentation was made of the large weapon hoard found at Bükkaranyos-Földvár (KEMENCZEI 1984, 115).
- ¹⁴ MOZSOLICS 1963.
- ¹⁵ PATAY 1969, 167-168, Abb. 1.
- ¹⁶ MÜLLER 1972, 59, 64-65, 70.
- ¹⁷ V. SZABÓ-BÁLINT 2017.
- ¹⁸ V. SZABÓ 2013, 798-801, Figs 4-6.
- ¹⁹ MOZSOLICS 1985; KEMENCZEI 1984, Taf. CLXII-CLXXVI, CLXXVIIb-CLXXXVIa; HANSEN 2005, 215, 218, 221.
- ²⁰ BORN-HANSEN 2001, 138-140.
- ²¹ SCHAUER 1979, 70-71; LESHTAKOV 2017, 227-228, 262-267, Tab. 4-5, 64-66, 69.
- ²² SCHAUER 1979, 69-70.
- ²³ SCHAUER 1979, 70, Abb.6; ŘÍHOVSKÝ 1996, 56-58.
- ²⁴ LESHTAKOV 2015, 252, 254.
- ²⁵ The *yari* is a long-bladed, sharp, double-edged spear type, which is principally a thrusting weapon, while the *naginata* resembles swords in that it was used both for thrusting and cutting. Similarly to swords, spears were highly prized, carefully made weapons in medieval Japan, with certain types calling for special combat skills.
- ²⁶ NOVOTNÁ 1991, 43-47, Taf. 8; PATAY 1990, 18-21, Taf. 1-2.

- ²⁷ PATAY 1990, 18–21. Taf. 1.3, Taf. 2. 4–5.
- ²⁸ BADER 1983, 15–21, 27–31. Taf. 1.3–7.
- ²⁹ PINTÉR 1899.
- ³⁰ An interesting variation on the interpretation suggested here has been proposed by Tillmann Vachta, according to which hoards with various broken and intact artefacts resembling the one from Ecseg may have been a collection of single votive offerings, perhaps made by specific individuals, which had been collected and kept in a community storage space and then deposited jointly as part of a ritual (VACHTA 2016b).
- ³¹ For a discussion of the pre-determined order and arrangement of the artefacts according to specific patterns, cf. SOROCEANU 1995, 37–45.
- ³² FONTIJN 2002, 35.
- ³³ HAGL 2008; HAGL 2009.
- ³⁴ POWROZNIK 2017; MEYER et al. 2017.
- ³⁵ SÓREGI 1931, 74.
- ³⁶ For an overview of the Late Bronze Age helmets and greaves, cf. MÖDLINGER 2017; for Hungarian cuirass finds, cf. PETRES-JANKOVITS 2014.
- ³⁷ FONTIJN 2002, 34, 264–265; HANSEN 2008, 300–302; NEUMANN 2014, 201–240.
- ³⁸ SPERBER 1999; CLAUSING 2005.
- ³⁹ The closest site with the burials of a warrior community lies at Mosonszolnok-Haidehof-puszta, where a tumulus cemetery was disturbed by the plough (HAMPEL 1896, Taf. 186–187; PATEK 1968, Taf. 46–48).
- ⁴⁰ ILON 2012.
- ⁴¹ KEMENCZEI 1990, Abb. 12. 1–4.
- ⁴² NOVÁK-VÁCZI 2012.
- ⁴³ UCKELMANN 2012, 56–59, Taf. 84–112.
- ⁴⁴ One of the most spectacular hoards of this type was found at Nogara-Pila de Brancon in northern Italy (JANKOVITS 1999; SESTIERI et al. 2012).
- ⁴⁵ MAKKAY 2006.
- ⁴⁶ HONTI-JANKOVITS 2016.
- ⁴⁷ MOZSOLICS 1985, 96–98.
- ⁴⁸ TARBAY 2015.
- ⁴⁹ TOČÍK-PAULÍK 1960.
- ⁵⁰ TOČÍK-PAULÍK 1960.
- ⁵¹ Several passages in the *Iliad* describe how the apportioning of meat was an important privilege of the leaders (e.g. *Iliad*, Book 7, 360–369, Book 9, 240–260, Book 24, 731–737).
- ⁵² BRADLEY 1990, 102; NEBELSICK 1997, 40; BORN- HANSEN 2001, 154–156; SPERBER 2006.
- ⁵³ Weapons wrapped in wool cloth were uncovered in a burial on the outskirts of Jánosháza (FEKETE 2004, 161–162).

- ⁵⁴ Several hoards containing high numbers of weapons dating from the fourteenth–thirteenth centuries BC, interpreted as sacrifices commemorating victories (KRISTIANSEN 1999a; KRISTIANSEN 2002), are known from the region east of the Danube (e.g. Bükkaranyos, Zalkod: KEMENCZEI 1984, Taf. XXVII–XXVIII, LXVIII). In contrast to the Pázmándfalu hoards, the artefacts in these assemblages are never burnt or fused together. The Pázmándfalu hoard also differs in that it apparently contained arms and personal belongings expressing their owner’s identity.
- ⁵⁵ The cult of heroes practiced by Bronze Age communities cannot be compared to the more sophisticated hero cults of Antiquity. For a detailed discussion, cf. HARRISON 2004, 176–178.
- ⁵⁶ The gold spiral weighs 22 g, the total weight of the conical mounts is 3 g.
- ⁵⁷ KRÜGER et al. 2012, 33–36, Fig. 6.
- ⁵⁸ JANKOVITS 2017, 279–287, Taf. 98–100.
- ⁵⁹ HOLL 2007, 272.
- ⁶⁰ HOLL 2007, 269.
- ⁶¹ REZI KATÓ 2014, 333, Fig. 3.
- ⁶² Aside from the locations discussed here, we only found Late Bronze artefacts in the Fekete [Black] Chamber and the Róka [Fox] Passage: a lump of bronze in the former and a small sheet fragment in the latter.
- ⁶³ Balázs Holl’s kind pers. comm.
- ⁶⁴ Aside from the above, we found a broken bronze bar and an ornate pin used for fastening clothing during our survey.
- ⁶⁵ PATAY 1990, 49, Taf. 36. 70.
- ⁶⁶ KEMENCZEI 1984, Taf. C. 4–8, 18; REZI KATÓ 2017.
- ⁶⁷ HOLL 2007, 267–270; REZI KATÓ 2014, 328–336.
- ⁶⁸ Nineteenth-century descriptions note the high number of human and animal bones as well as finds of pottery sherds (SZÉKELY 2014, 370–371, 374).
- ⁶⁹ KEMENCZEI 1984, Taf. CI–CIV; REZI KATÓ 2014, Fig. 17.
- ⁷⁰ HOLL 2007, 279–280, Fig. 5; REZI KATÓ 2017.
- ⁷¹ REZI KATÓ 2017.
- ⁷² ROMSAUER 1995; SOROCEANU 1995, 27–29; PEŠA 2006; SOROCEANU 2012, 233–238; NEUMANN 2014, 172–176.
- ⁷³ DRECHSLER-BIŽIĆ 1979–1980.
- ⁷⁴ EMÓDI 1980.
- ⁷⁵ ROTEA 2017.
- ⁷⁶ TERŽAN et al. 2016.
- ⁷⁷ BONNAMOUR–COMBIER 1972.
- ⁷⁸ UHLÁR 1959.
- ⁷⁹ DÉNES–V. SZABÓ 1998.
- ⁸⁰ SZABÓ 2018, 454, Pl. 18. c, D, 19–20.
- ⁸¹ MOZSOLICS 1973, 134–135, Taf. 47; KEMENCZEI 1984, 116, Taf. XLVI.
- ⁸² MOZSOLICS 1973, Taf. 43–44, Taf. 57.D; KEMENCZEI 1984, 125, Taf. LXI.

- ⁸³ E.g. EMÓDI 2003, 78, Fig. 8; JANKOVITS 2018, 259.
- ⁸⁴ The closest parallel to the pin can be cited from the Felsődobsza B hoard, an assemblage with a similar composition dating from the same period (MOZSOLICS 1973, Taf. 47. 29).
- ⁸⁵ Cf. the different phalera types of the Ópályi hoard (MOZSOLICS 1973, Taf. 18. 1-2, Taf. 19).
- ⁸⁶ MOZSOLICS 1973, Taf. 44. 3, Taf. 57. D. 12.
- ⁸⁷ BOROFFKA-BOROFFKA 2010, 193-194, Abb. 3.
- ⁸⁸ KEMENCZEI 1988, 27-28; BADER 1991, 68-71; BOROFFKA-BOROFFKA 2010.
- ⁸⁹ MOZSOLICS 1973, Taf. 67.
- ⁹⁰ KEMENCZEI 1991b, Fig. 6. 32.
- ⁹¹ ARMBRUSTER 2000.
- ⁹² NOVÁKI et al. 2007, 124-125.
- ⁹³ Similar containers have been documented in several instances: for example, the Brandgaben hoard (Austria) was hidden in a leather bag (WINDHOLZ-KONRAD 2012, 139), while the gold hoard from Killymoon, County Tyrone (Ireland) was placed in a wooden box.
- ⁹⁴ For the interpretation of hoards and the possible meanings of the deposited items, cf. FONTIJN 2002, 23-25.
- ⁹⁵ HANSEN 1994, 127-149; NESSEL 2010, 383, 385; SALAŠ 2014.
- ⁹⁶ NESSEL 2012.
- ⁹⁷ SPERBER 2000.
- ⁹⁸ One good example is the Brno-Řečkovice hoard from the Czech Republic that aside from broken bronze tools and weapons, contained no more than three metalworking tools: an anvil, a chisel and a hammer (SALAŠ 2014).
- ⁹⁹ THEVENOT 1998.
- ¹⁰⁰ VASIĆ 1994, 17.
- ¹⁰¹ SPERBER 1999, 609.
- ¹⁰² CLAUSING 2005, 94.
- ¹⁰³ ČIŽMÁŘ-SALAŠ 2009, 74, Abb. 4-5.
- ¹⁰⁴ ÉLIADE 2004, 58-59, 73-74, 107-118.
- ¹⁰⁵ FONTIJN 2002, 3.6.1.
- ¹⁰⁶ CLAUSING 2002; MÖDLINGER 2017, 217-264.
- ¹⁰⁷ BORN-HANSEN 2001, 51-65; TARBAY 2015.
- ¹⁰⁸ HONTI-JANKOVITS 2016, Fig. 9.
- ¹⁰⁹ GAUCHER-ROBERT 1967, Fig. 46.
- ¹¹⁰ WOLFGANG 1980.
- ¹¹¹ KOVÁCS 2000, 46-47, Fig. 24, Figs 26-27; KEMENCZEI 2005, 81-82.
- ¹¹² HONTI-JANKOVITS 2016, Fig. 3, Fig. 5.
- ¹¹³ NEBELSICK 1997; HONTI-JANKOVITS 2016, 72, 80, Fig. 2, Fig. 8.
- ¹¹⁴ V. SZABÓ 1996, 21, Fig. 47.
- ¹¹⁵ SPRINGER-BAUMEISTER 2003, 299-300.

- ¹¹⁶ *Iliad*, Book 6, 281–282, Book 10, 506–510, Book 5, 851–853, Book 8, 217–224.
- ¹¹⁷ SALZANI 1986; HONTI-JANKOVITS 2016, 79; MÖDLINGER 2017, 225.
- ¹¹⁸ HELLEBRANDT 2011.
- ¹¹⁹ SCHAUER 1986; GERLOFF 2003; SPERBER 2003.
- ¹²⁰ Comparable hoards found in the broader area include the Szentes-Nagyhegy 1 and 4 hoards as well as the hoards from Újszentmargita, Vésztő and Polgár-Folyás (MOZSOLICS 2000, Taf. 91–92, 96–97).
- ¹²¹ The following contemporaneous hoards are known from the southern Hungarian Plain: Szentes (KEMENCZEI 1996a, Abb. 25–30; MOZSOLICS 2000, Taf. 96–97), Tarhos (MOZSOLICS 2000, Taf. 102, 1–5), Óföldrék (KEMENCZEI 1996a, Abb. 14a) and Arad (Arad, Romania) (PETRESCU-DÎMBOVIȚA 1978, Taf. 223–224, 225A).
- ¹²² KEMENCZEI 2000, 75; MOZSOLICS 2000, Taf. 108; NOVOTNÁ 1989, 177; BÍRÓ 2007.
- ¹²³ E.g. Szomotor (Somotorská hora, Slovakia) (NOVOTNÁ 1989, 179, Abb. 2), Bardóc (Brăduț, Romania) (PETRESCU-DÎMBOVIȚA 1978, 140, Taf. 227), Tóti (Tăuteu, Romania) (PETRESCU-DÎMBOVIȚA 1978, 145–146, Taf. 247B. 1–18, Taf. 248. 19–48) and Tiszakarád (MOZSOLICS 2000, 85, Taf. 108.8).
- ¹²⁴ For similar assemblages from the Carpathian Basin, cf. KACSÓ 2006.
- ¹²⁵ For a description and discussion of the Baks site, cf. V. SZABÓ 2011b.
- ¹²⁶ SZABÓ 2004, 143, Figs 9–10.
- ¹²⁷ Although we systematically surveyed the 25 hectares large area of the Pocsaj settlement and also conducted a metal detector survey, we only found fifty-two stray finds of Late Bronze Age metalwork.
- ¹²⁸ KIENLIN et al. 2012, 87, 90, Figs 15–16.
- ¹²⁹ EBERSCHWEILER et al. 2007.
- ¹³⁰ <http://www.mustfarm.com/bronze-age-settlement/about/> (last accessed April 10, 2019).
- ¹³¹ https://www.facebook.com/MustFarmArchaeology/?eid=ARABaMD7YTZP-f6UiT0marqtaEiodhe6LjOMbOEpOxyuqaIquI2Ux_X3cRTsItjsjgi2eGixnRnQ07I (last accessed April 10, 2019).
- ¹³² The human bones from the site were examined by anthropologist Tamás Hajdú.
- ¹³³ The highly similar Hajdúböszörmény-Hetven-laponyag hoard attests to the existence of different deposition patterns (TARBAY 2017, 113–122, Figs 8–10).
- ¹³⁴ TARBAY 2018, 33–34.
- ¹³⁵ V. SZABÓ 2009, 145–146.
- ¹³⁶ The finds from the Polgár-M3/1 site provide an eloquent example that farmstead-like settlements were also occupied by communities with a higher social status (V. SZABÓ 2004, 148, Fig. 8).
- ¹³⁷ For a discussion of the concept of household in the archaeological sense, cf. KALLA 2011.
- ¹³⁸ For a discussion of open hoards, cf. HODDER 2004; BRADLEY 2005, 151; TARBAY 2018, 200.
- ¹³⁹ The hoard will be assessed by Gábor János Tarbay (TARBAY 2018).
- ¹⁴⁰ We observed a similar pattern in the case of the Újfehértó hoard, discovered by us: there was a difference of at least two hundred years between the earliest and latest items. For the interpretation of similar assemblages, cf. VACHTA 2016b, 111–113.

- ¹⁴¹ MOZSOLICS 2000, Taf. 80-81.
- ¹⁴² ROBERTS-OTTAWAY 2003.
- ¹⁴³ TARBAY 2018, 33-34.
- ¹⁴⁴ KUNKEL 1931, Taf. 26.6.
- ¹⁴⁵ SZEVEÉNYI 2013, 218-220.
- ¹⁴⁶ SMIRNOVA-VOJNAROVSKYJ 1994, Ris. 1. 1-2, Ris. 2. 1-2; METZNER-NEBELSICK 2002, Abb. 162.
- ¹⁴⁷ KUŚNIERZ 2013, Ryc. 3. 4-5.
- ¹⁴⁸ E.g. MÜLLER-KARPE 1959, Abb. 8. 23-24, Taf. 46. 26, Taf. 50. 1-2, 4-5, 8, Taf. 173. A. 5; MAYER 1977, 167-177, 179, Taf. 61. 833, 835, Taf. 65. 886, Taf. 66. 891.
- ¹⁴⁹ NOVÁKI et al. 2007, 123.
- ¹⁵⁰ The robber pits indicate that the listed site has been looted for years.
- ¹⁵¹ The plant remains from the site were assessed by Máté Mervel.
- ¹⁵² *Iliad*, Book 6, 54-58 (tr. Robert Fagles).
- ¹⁵³ *Odyssey*, Book 4, 690 (tr. Robert Fagles); FEKETE 2013, 100. Mária Fekete was the first to use the Homeric expression of *keimelia* for denoting certain types of bronze hoards in Hungarian Bronze Age studies (FEKETE 2009, 38-39, 42).
- ¹⁵⁴ FISCHER 1973; FINLEY 1977, 61; FEKETE 2013.
- ¹⁵⁵ FINLEY 1977, 61.
- ¹⁵⁶ NEUMANN 2014, 42-43; HANSEN 2016, 212-221; VACHTA 2016a, 173-174.
- ¹⁵⁷ MAUSS 2000, 195-332.
- ¹⁵⁸ AVERKIJEVA 1982, 120-142; MAUSS 2000, 255-256.
- ¹⁵⁹ As illustrated by the oft-quoted passage of Homer's *Odyssey*, describing Menelaus' gift to Telemachus: a silver vessel, whose value is praised by Menelaus by recounting that it had been made by Hephaestus himself and that he had received it from the king of Sidon (Book 4, 690-696).
- ¹⁶⁰ KEMENCZEI 2005, Taf. 16. 90, Taf. 27. 13, Taf. 28. 16, Taf. 32. 17, Taf. 35. E.4.
- ¹⁶¹ KEMENCZEI 1996b, 101, Abb. 8. 6, Abb. 9. 4; SZILAS 2003.
- ¹⁶² MÜLLER 2013, 98.
- ¹⁶³ D. MATUZ-NOVÁKI 2002, 8-9; NOVÁKI et al. 2007, 70, Fig. 47..
- ¹⁶⁴ Similar finds whose interpretation remains controversial are known from the Late Bronze Age hillfort of Heunischenburg in Bavaria (ABELS 2002, 21, 63-64, 91-93, Abb 30).
- ¹⁶⁵ For the site's research history, cf. V. SZABÓ-BÍRÓ 2009, 72.
- ¹⁶⁶ Bracelets resembling the pieces in Hoard 1 made their appearance during the preceding period, in the fourteenth-thirteenth centuries BC (MOZSOLICS 1973, 56-60; KOBAL 2000, Taf. 20-21) and they are also attested in the ensuing period, in the eleventh-tenth centuries BC, albeit more rarely (e.g. KEMENCZEI 1984, Taf. CXXI. 13-15; MOZSOLICS 2000, Taf. 81. 11).
- ¹⁶⁷ HANSEN 1994, 284; VACHTA 2008, 70-71.

- ¹⁶⁸ Their parallels, without a pretension at completeness, from assemblages dated to the fourteenth–twelfth centuries BC are as follows: Merczyfalva (Carani, Romania), Kosd, Békésszentandrás (MOZSOLICS 1973, 99, Taf. 106, 107); from hoards dated to the twelfth–tenth centuries BC: Eberswalde (SPRINGER-BAUMEISTER 2003, 294–296); from the ninth century BC: Salzburg-Maxglan (MOOSLEITNER 1996, 324, Abb. 9).
- ¹⁶⁹ MOZSOLICS 1973, 124, Taf. 11. 2; KEMENCZEI 1984, 115; XLV.7.
- ¹⁷⁰ NOVÁKI et al. 2007, 29, NOVÁKI et al. 2009, 26–27.
- ¹⁷¹ Other hoards in this category include the ones from Mérc (KEMENCZEI 1996a, Abb. 18–19; MOZSOLICS 2000, Taf. 50), Nyírtura (KEMENCZEI 1984, Taf. CCXIXa; MOZSOLICS 2000, Taf. 69, 1–7, 12), Szarvas (KEMENCZEI 1996a, Abb. 23–24; MOZSOLICS 2000, Taf. 91) and Taktakenéz (KEMENCZEI 1984, Taf. CCXIXb; MOZSOLICS 2000, Taf. 100–101).
- ¹⁷² PINTÉR 1899; KEMENCZEI 1984, Taf. CXVIa; KEMENCZEI 1996a, 77.
- ¹⁷³ D. MATUZ-NOVÁKI 2002, 17, Abb. 32.
- ¹⁷⁴ The vessels were made and ornamented in the typical Kyjatice ceramic style (e.g. KEMENCZEI 1984, Taf. LXXXIV, 1, 14, 19, 20).
- ¹⁷⁵ MÜLLER 2016, 26–27.
- ¹⁷⁶ KEMENCZEI 1996a, 84.
- ¹⁷⁷ E.g. the Bükkszentlászló 1 hoard (KEMENCZEI 1984, Taf. CXXIIIa) and the Bacsófalva hoard (Počúvadlo, Slovakia: OŽDÁNI-ŽEBRAK 2017, Taf. IX).
- ¹⁷⁸ NOVOTNÁ 2001, 32–35.
- ¹⁷⁹ KEMENCZEI 1984, 55, Taf. CXXIII.a–d; KEMENCZEI 1996b, 258–263.
- ¹⁸⁰ Comparable socketed axes can be found in the Early Iron Age hoards from Prügy, Szanda and Kecel (KEMENCZEI 2005, Taf. 23.1, 27–29, Taf. 32. 18–21) and in the Bükkszentlászló hoard we had discovered.
- ¹⁸¹ METZNER-NEBELSICK 2002, 386–387; KEMENCZEI 2005, 71–72; DEICKE 2011, 71–73, Abb. 64–65.
- ¹⁸² WIED-BODMER 2001, 77.
- ¹⁸³ D. MATUZ-NOVÁKI 2002, 13, Abb. 21; NOVÁKI et al. 2009, 51.
- ¹⁸⁴ However, we did find traces of robber pits dug by nighthawkers.
- ¹⁸⁵ EGGERT 2001, 78–79; HANSEN 2002, 95.
- ¹⁸⁶ V. SZABÓ 2011a; V. SZABÓ 2016, 188, Abb. 22–23.
- ¹⁸⁷ V. SZABÓ 2018, 131, Fig. 21.
- ¹⁸⁸ For the site, cf. V. SZABÓ 2018, 131, Fig. 22.
- ¹⁸⁹ For a discussion of the sites where several hoards were buried, cf. VACHTA 2012; OSTERMEIER 2012, 164–165; VACHTA 2016a, 111–131, 192; HUTH 2016.
- ¹⁹⁰ E.g. KEMENCZEI 2005, 76, 78, Taf. 24. 18–22, Taf. 25. 23–24, Taf. 30. 48–59; METZNER-NEBELSICK 2002, Abb. 15. 3–5, 9–10.
- ¹⁹¹ KEMENCZEI 2005, 134–135, Taf. 26.C–31.A.
- ¹⁹² KEMENCZEI 2005, Taf. 31C; 32.

- ¹⁹³ Tibor Kemenczei described the finds as coming from three separate hoards (KEMENCZEI 1984, 146, Taf. CXXIII. a-c), while Amália Mozsolics believed that they had been part of the same hoard kept in different museum collections (MOZSOLICS 2000, 36-37, Taf. 6, Taf. 7. 1-7).
- ¹⁹⁴ For the excavations and their finds, cf. D. MATUZ-NOVÁKI 2002, 9-10, 22-23, 33-35; NOVÁKI et al. 2007, 75-76.
- ¹⁹⁵ CZAJLIK et al. 2007, 121.
- ¹⁹⁶ A gold hoard came to light in 1926 (TOMPA 1928b, 204-207, 344, Abb. 95.1-12; KEMENCZEI 2000, 77-79, Fig. 44 and Fig. 46; MÜLLER 2013, 81-82), a bronze hoard in 1952 and a small bronze hoard and four bronze vessels in 1981 (PATAY 1990, 33, 36, 47, 80; MÜLLER 2006a, 227-228). A gold hoard and twelve bronze hoards were uncovered in the course of the salvage excavation directed by Róbert Müller between 2003 and 2006 (MÜLLER 2013).
- ¹⁹⁷ MÜLLER 2006a, 229; MÜLLER 2006b, Fig. 4.
- ¹⁹⁸ CZAJLIK 1993, 317-327; FEKETE 2008.
- ¹⁹⁹ CZAJLIK 1993, 318, Fig. 2a; ILON 2015, 18-19, Figs 3-4.
- ²⁰⁰ KEMENCZEI 1996b, 91-105; MOZSOLICS 2000, 37-39.
- ²⁰¹ For the hillfort, cf. D. MATUZ-NOVÁKI 2002, 15, Abb. 28; for the hoards, cf. KEMENCZEI 1984, 148.
- ²⁰² VACHTA 2012, 193-195; HANSEN 2013; VACHTA 2016b, 112-113.
- ²⁰³ HANSEN 1994, 386; EMERSON 2007, 29; BAITINGER 2016; HANSEN 2016, 228.
- ²⁰⁴ HANSEN 2016, 229; VACHTA 2016b, 113.
- ²⁰⁵ V. SZABÓ 2011a, 339, Taf. 5; V. SZABÓ 2016, 176-177. Abb. 12-13.
- ²⁰⁶ SALZANI 1989, 66-67, Abb. 1.5; JUNG et al. 2016, 184, 187, 191, Abb. 5.1.
- ²⁰⁷ JUNG et al. 2016, 184-185.
- ²⁰⁸ E.g. PARE 1999, 441-442, Fig. 16. 7.
- ²⁰⁹ HERMANN 1887, 181-184, 357-359, 368, Fig. 60. 4, Fig. 64. 7-8, Fig. 239. H, Fig. 240. 3, Fig. 248; SZILÁGYI 1995, 214-222, 242.
- ²¹⁰ SZILÁGYI 1980, 45-46, 71-72.
- ²¹¹ D. MATUZ-NOVÁKI 2002, 7; NOVÁKI et al. 2007, 126-127.
- ²¹² The other three intensely occupied hillforts in the Zemplén Mountains are Tolcsva-Várhegy, Tállya-Óvár and Boldogkőváralja-Tó-hegy (D. MATUZ-NOVÁKI 2002, 7-8).
- ²¹³ Patay 1990, 51-54, Taf. 38.
- ²¹⁴ V. SZABÓ 2011a, Taf. 5. 1-2; V. SZABÓ 2016, Abb. 13.
- ²¹⁵ As in the case of the Frattesina hoard, cited in the above, which was made up of seven large bronze fish hooks.
- ²¹⁶ APPLER 2004.
- ²¹⁷ The non-destructive element analysis was performed with a portable XRF instrument and a prompt gamma activation analysis (PGAA) was also undertaken by Boglárka Maróti and Zsolt Kasztovszky in the Nuclear Analytical and Radiography Laboratory of the Centre for Energy Research of the Hungarian Academy of Sciences.
- ²¹⁸ MOZSOLICS 2000, 48, Taf. 37. 1-4.
- ²¹⁹ METZNER-NEBELSICK 2002, 478-479; KEMENCZEI 2005, 126, Taf. 3. B. 1-2.

- ²²⁰ BÓKA 2012, Fig. 8. B.
- ²²¹ D. MATUZ-NOVÁKI 2002, 14, Abb. 25; NOVÁKI et al. 2009, 14.
- ²²² BEILKE-VOIGT-NAKOINZ 2017; NAKOINZ et al. 2017, 59–60.
- ²²³ NOVÁKI 1979, 105, 120, Fig. 12.
- ²²⁴ KEMENCZEI 1991a, 50–61, Taf. 44–59; STOCKHAMMER 2004, 118–126, Karte 31; SOÓS 2015.
- ²²⁵ KEMENCZEI 1991a, Taf. 52. 231, 54. 234.
- ²²⁶ KEMENCZEI 1991a, Taf. 56. 242.
- ²²⁷ The microscopic examination of the weapons was performed by János Gábor Tarbay.
- ²²⁸ FONTIJN 2002, 21–224; STOCKHAMMER 2004, 137–139; MOLLOY 2011; MÖDLINGER 2011, 67–104; NOVÁK-VÁCZI 2012, 99–105.
- ²²⁹ FONTIJN 2002, 227.
- ²³⁰ For the symbolism and ritual role of prehistoric swords, cf. SOROCEANU 2011.
- ²³¹ HANSEN 1994, Abb. 29.
- ²³² The sword was found in 1995 during the excavation of Site 25 on the M3 Motorway: it had been thrust into the ground, its hilt lay at a depth of 30 cm (MAKKAY 1995, 36).
- ²³³ MOZSOLICS 1972, 190.
- ²³⁴ SZATHMÁRI 2005.
- ²³⁵ UHLÁR 1959.
- ²³⁶ V. SZABÓ 2004, 149–151; BÓKA 2013.
- ²³⁷ METZNER-NEBELSICK 2010, 142–143.
- ²³⁸ EARLE 1997, 22–33; CHAPMAN et al. 2009, 166–169.
- ²³⁹ For a comprehensive discussion, cf. CZUKOR et al. 2017.
- ²⁴⁰ MOZSOLICS 1985, 128, Taf. 255–256.
- ²⁴¹ KEMENCZEI 1988, Taf. 39. 355.
- ²⁴² KEMENCZEI 1988, Taf. 45. 394.
- ²⁴³ TARBAY 2016, Fig. 1.
- ²⁴⁴ Similarly to the hoards discussed here, the stone steles symbolising warriors erected on the grasslands of southern Portugal and south-western Spain reflect the strong association between Late Bronze Age territoriality and ideological symbols (HARISSON 2004, 29–35).
- ²⁴⁵ ČIVILYTÉ 2009, 145.
- ²⁴⁶ METZNER-NEBELSICK 2002, 348–352, Abb. 141A; KEMENCZEI 2005, 115, Taf. 1. E2–4, Taf. 2. C3–5, Taf. 14. 24–34, Taf. 15. 55–119. A11–12, Taf. 27. 6–7
- ²⁴⁷ METZNER-NEBELSICK 2002, 207–362; KEMENCZEI 2005, 97–119.
- ²⁴⁸ KEMENCZEI 2005, 103–104, Taf. 13. C7, 184, Taf. 21–5–6, 39. B5.
- ²⁴⁹ KEMENCZEI 2005, 100–101, Taf. 2. A 2–3, B2–3, 13. C2, 19. B4–7, 21. B1–4; 32. 4–5, 39–1–4.
- ²⁵⁰ KEMENCZEI 2005, 112, 114–115, Taf. 9. C4, 36. 16, 52A. 13, 15, 56D. 9–12.

- ²⁵¹ The value of Hoards 1 and 3 to academic research is that they are the first Early Iron Age hoards containing horse gear in Hungary whose contexts have been precisely recorded. The single other similar hoard containing horse gear and weapons in the Carpathian Basin that has been excavated by an archaeologist comes from Alsótárlaka (Târtăria, Romania; BORȘ 2015).
- ²⁵² BADER 1991, 169, Nr. 424; SOROCEANU 1995, 64, Abb. 11f; MAKKAY 1995, 34–35.
- ²⁵³ THEVENOT 1991.
- ²⁵⁴ MÜLLER 1972.
- ²⁵⁵ OŽĎÁNI-ŽEBRÁK 2017, 275, Tab. I. 1–5; VI. 10–11.
- ²⁵⁶ LAMPE 1982, 42, Abb. 13, Taf. 44c, 30p-s.
- ²⁵⁷ HÜTTEL 1981, 127–147, Taf. 17–20; PANKAU 2015, 44–48.
- ²⁵⁸ DREWS 2004, 56–85.
- ²⁵⁹ METZNER-NEBELSICK-NEBELSICK 1999.
- ²⁶⁰ PATAY 1969, 206; NOVOTNÁ 2001, 43–44.
- ²⁶¹ NOVOTNÁ 1970, Taf. XLII. 3–4; KEMENCZEI 1984, Taf. XLV. 1, 6, 8, Taf. XLIX. L. b, 2.
- ²⁶² PATAY 1969, Taf. LII. a; KEMENCZEI 1984, Taf. LIV. 1–4, 10.
- ²⁶³ JANKOVITS 2018, 241–244.
- ²⁶⁴ The first metal detector survey was undertaken because Péter Bíró, who regularly visited and surveyed the site, had found Late Bronze Age artefacts in several locations. The material he collected was predominantly made up of socketed axes, saw blades, pins, mounts and their fragments as well as smaller ingots, alongside a gold ring with an interlace pattern and a gold wire fragment. He found most of these items without the use of a metal detector, in the settlement's intensely occupied areas, among the roots of fallen trees and the eroded surfaces along forest roads (BÍRÓ 2007).
- ²⁶⁵ Perhaps similar to the bird figures perched on the rim of the strainer of the Nadap hoard (PETRES 1990, Taf. 75, 187; MAKKAY 2006, Pl. XXX).
- ²⁶⁶ FONTIJN 2002, 259–272; HANSEN 2008; BALLMER 2010, 124–129.
- ²⁶⁷ We received the first image from the Bükk National Park. The second image was made by archaeologist Károly Belényesy on our request as part of the HELM SOLUTIONS GINOP-2.1.1-15-2015-00695 project.
- ²⁶⁸ POLLARD 2017.
- ²⁶⁹ BRADLEY 2005, 151–164; REZI 2011.
- ²⁷⁰ FONTIJN 2002, 259–272.
- ²⁷¹ MOZSOLICS 1975; SZATHMÁRI 2005.
- ²⁷² FEJÉR *in press*.
- ²⁷³ SOROCEANU 1995.
- ²⁷⁴ HANSEN 2005; VACHTA 2008.
- ²⁷⁵ VON BRUNN 1968, 238–239; FONTIJN 2002, 20; HANSEN 2002; HANSEN 2013.
- ²⁷⁶ For an overview of the various interpretations of deposition practices, cf. HUTH 1997, 4–62; FONTIJN 2002, 13–35; BALLMER 2015, 2–6.

²⁷⁷ VON BRUNN 1968; HANSEN 1994, 381-396; HÄNSEL 1997.

²⁷⁸ KRISTIANSEN 2002; RANDSBORG 2002.

²⁷⁹ BRADLEY 1990, 39; TAYLOR 1993, 18-22, 33-42; HANSEN 1994, 374; VACHTA 2008, 116-117.

²⁸⁰ ROWLANDS 1980, 46; LEVY 1982, 102; HUTH 1997, 197.

²⁸¹ LEVY 1982, 24; GEISSLINGER 1984; RANDSBORG 2002.

²⁸² Cf. FONTIJN 2002; HANSEN 2005, 211-212; NEUMANN 2014; BALLMER 2015; VACHTA 2016a.

²⁸³ WINDHOLZ-KONRAD 2012, Abb. 19.

²⁸⁴ HELLEBRANDT 2011.

²⁸⁵ HANSEN 2008; BALLMER 2010.

²⁸⁶ One good example of the latter is the ancient mountain route beside the Traun in Austria: thirty-six hoards were buried along its 18 kilometre long section (WINDHOLZ-KONRAD 2012).

²⁸⁷ Spell chanted during sacrifices. In: G. Bereczki (ed.), *Hozott isten, holdacska! Finnugor varázsigék, imádságok, siratók*. Budapest 1979.

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GLOSSARY

- Casting jet** - A casting jet is part of the casting waste. The molten metal that originally filled the funnel-shaped aperture of moulds used for casting various artefacts took up the shape of the aperture after the molten metal cooled. Casting jets are knocked off after the artefact is taken out of the mould.
- Facetting** - A procedure employed during Late Bronze Age pottery production involving the creation of flat planes on the rim, shoulder or belly that lent a semblance of metal to the clay vessels. This decorative procedure was used for good-quality tableware and ornate storage vessels.
- Felsőpályi-type situla** - Large bronze vessel type for holding and mixing alcoholic beverages, which probably emerged in the elite centres of eastern Hungary in the thirteenth-eleventh centuries BC. It differs from the period's other situlas and bronze buckets by the vessel body made of two bronze plates riveted together and the bronze rings looped through its handles.
- Gáva culture** - A ceramic style distributed east of the Tisza on the Hungarian Plain and in the Transylvanian Basin from the twelfth-eleventh centuries onward, characterised by vessels with a black exterior and yellow interior. The vessels are carefully polished to lend them a metallic sheen. They often have scalloped rims and are decorated with fluting or incised bundles of lines.
- Hajdúböszörmény-type metalwork** - A style of metalwork appearing east of the Tisza in the eleventh century BC, named after a hoard containing bronze vessels, a helmet and swords discovered in 1858. The most distinctive types are bronze vessels decorated with bird figures and Sun discs, cup-hilted swords and bell-shaped helmets.
- Hoard horizon** - Hungarian archaeological scholarship of the later twentieth century believed that hoards could be ordered into chronological groups that could be correlated with a specific series of events such as wars or crises. Accordingly, hoards made up of similar artefact types distributed across larger territories were considered to have been deposited at roughly the same time and for similar reasons.
- Kurd-type metalwork** - Designation of a metalworking style distributed in Transdanubia and certain areas east of the Tisza during the thirteenth-twelfth centuries BC, named after a hoard discovered in 1894 at Kurd in County Tolna. The period's deposition patterns include hoards made up of individual jewellery or weapons, small hoards principally containing tools and implements, and hoards containing large amounts of metal. Most hoards contain intentionally damaged, broken and hacked items.
- Kyjatice culture** - A ceramic style attested in the region of the Börzsöny, the Mátra and the Bükk Mountains as well as in eastern Slovakia between the twelfth and ninth centuries BC. The distinctive pottery assigned to this style such as cups with interior decoration and funnel-necked, biconical amphoras decorated with shallow fluting and punctates has been found on the region's hillforts and the cemeteries containing cremation burials in their area.

Mezőcsát culture - An archaeological culture distributed in the foothills of the Northern Mountain Range and along the Tisza in the area of the Körös and Maros confluence from the ninth century BC onward (from the onset of the Early Iron Age), which maintained links with the forested steppe region of Eastern Europe. The culture's communities interred their dead laid on the back in small inhumation cemeteries. The burials were provided with vessel sets made up of amphoras, bowls and cups, alongside chunks of beef and mutton. In some cases, the dead were also provisioned with iron artefacts and, more rarely, with bronze harness sets.

Passementerie brooch - One of the most elegant and spectacular brooch types of the Bronze Age. The type made its appearance in the twelfth-eleventh centuries BC; the first pieces were most likely made by goldsmiths active in the Carpathian Basin. They are usually 15-20 cm long, although some can attain a length of as much as 40 cm. Crafted from wire, these brooches have one main and six to eight side spirals and they were often embellished with small chains, bird figures and leaf pendants.

Pseudo-winged socketed axe - A socketed axe whose socket is decorated with a moulded design resembling the wings of winged axes.

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Gábor V. Szabó

BRONZE AGE TREASURES IN HUNGARY
THE QUEST FOR BURIED WEAPONS, TOOLS AND JEWELLERY

HEREDITAS ARCHAEOLOGICA HUNGARIAE

The legacy of the Late Bronze Age communities populating the Carpathian Basin between the fourteenth and tenth centuries BC represents the perhaps most colourful and numerous range of artefacts before the Roman conquest. These peoples transformed the landscape on a previously unprecedented scale with the erection of tumuli over their burials and the construction of monumental hillforts; they drew previously unbroken land into cultivation and founded many dozens of new settlements deep in the forest-covered hills and mountains. Their most spectacular relics are the hoards containing a dazzling array of bronze and gold articles, whose deposition and concealment has fuelled incessant debates for over a century. We now know that the assemblages containing valuable weapons, jewellery and a variety of tools and implements were assembled according to specific cultural norms. Each of these hoards has a different story to tell: some preserve the memory of journeys to distant lands, spectacular rituals and sumptuous feasts, others evoke the toils of daily life and bloody wars. The widespread deposition and concealment of hoards is solely attested in Bronze Age Europe during the second millennium BC – a similar practice is unknown during other periods in the history of Europe or on other continents. The research team headed by the author has systematically visited the known Bronze Age sites of Hungary and conducted metal detecting surveys in order to locate and salvage as many as possible of the Bronze Age treasures still hidden in the ground. This book offers a fascinating glimpse into this long bygone age through the discovered hoards, bringing us closer to the peoples who buried them and the possible events behind their concealment.

