A CRUEL FATE? THE UNIQUE BRONZE AGE BURIAL FROM IVANOVICE NA HANÉ (OKR. VYŠKOV/CZ)

During the Late Bronze Age, the standard method for handling the bodies of the deceased in the broader Central European region was their burning on a pyre followed by the deposition of the remains at a community cemetery. The deposition of non-cremated bodies at cemeteries appears in only several regions and time segments and represents only an exception to this rule (summarising for Central Europe: Wiesner 2009, 122-148). Besides common burials, many other methods of handling human bodies are known. Relatively great attention is repeatedly devoted to human remains appearing in connection with fortifications or in another context indicating a possible link to armed conflicts and violence (Thorpe 2013). Situations are also known in which human remains appear in an entirely unusual spatial context, e.g. in the inaccessible spaces of caves or in swamps – these are commonly interpreted as evidence of sacrificial practices (Peter-Röcher 2003). The occurrence of human bodies or their parts is naturally far more common in standard pits at contemporary settlements, offering a substantially broader range of interpretational possibilities (Peter-Röcher 2007, 106-118). These situations appear in virtually all regions, though they are considerably more common in certain territories (typically in central and northwest Bohemia; Jiráň 2013). One of the typical traits of this phenomenon, the focus of repeated attention, is the absence of an accompanying inventory in the form of parts of costumes or other artefacts. This article presents a situation that can be regarded at first glance as a part of this phenomenon, although a detailed assessment reveals that it differs significantly and can, therefore, be designated as entirely unique on a Central European scale. A rescue excavation conducted in Ivanovice na Hané (okr. Vyškov/CZ) in 2002 uncovered a human body deposited in a settlement pit specific on two levels: the presence of a rich set of personal ornaments and its spatial context – the event occurred outside of the contemporary settlement component.

EXCAVATIONS IN THE VYŠKOV REGION

Development-led excavations were conducted in south Moravia (fig. 1) in 2002-2003 prior to the construction of the motorway near Vyškov in a section 16.5 km in length. Of a total of 26 sites subjected to open area excavation, four were settlement components and one a burial component of the Middle Bronze Age (Bz B-C), while six were settlement components and one a burial component of the Late Bronze Age (Bz D-Ha A). All of these locations were subsequently processed as a whole and published in the form of a catalogue (Parma 2011; Parma/Šmíd 2013). Due to the accelerated progress of the road construction, the excavations in 2002-2003 were conducted in the form of an open area examination, and all of the sunken features identified after the overburden was stripped were investigated and documented. The extensive nature of the excavation made it necessary to work quickly and to keep documentation to the bare minimum. The conservation of artefacts was performed along with all other finds using the standard method without detailed documentation or the collection of samples. The information was further supplemented

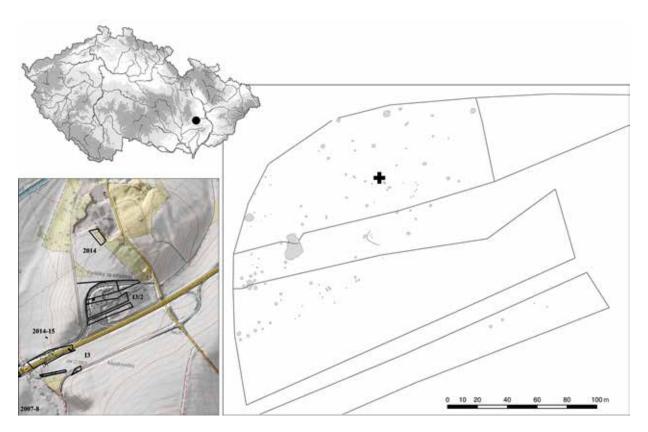


Fig. 1 Location of Ivanovice na Hané 3/2 (okr. Vyškov/CZ) on the map and the plan of the excavation with the position of feature 519 marked with a cross. – (Illustrations D. Vitulová / D. Parma).

and placed in the broader context within a three-year project in 2014-2016, which also included the compilation of the regional settlement history of the Bronze Age (Parma et al. 2017). All of the finds are held at the Muzeum Vyškovska in Vyškov.

The studied region of the Vyškov Gate is a natural communication corridor in a lowland area with a dense prehistoric settlement, where the predominant loess subsoil is covered with chernozem. The sequence of the region's settlement roughly corresponds to known prehistoric development in the south Moravian and Lower Austrian areas with a dense settlement from the beginning of the Neolithic, with the only difference being the specific settlement structure in the Final Bronze Age and the Hallstatt period identified on the basis of new site lists. In this period, the settlement did not cover the studied region evenly but is concentrated only in its geomorphologically more rugged parts (Parma/Holubová/Rybářová 2016).

SITUATION

The body of an older woman (grave 818) was deposited in a prone position with slightly crouched lower limbs (**fig. 2**) on the bottom of a standard storage pit (feature 519) with a regular round ground plan featuring a flat bottom of a diameter greater than that of the mouth of the pit (diameter on the surface 1.55 m, depth 0.9 m) at a location designated as Ivanovice na Hané 3/2 in the middle of a vast and concealed area on a gentle hill (**fig. 1**). The body is oriented east-west, the head to the east and the face down, a position that probably resulted from falling to the bottom of the pit from the west.

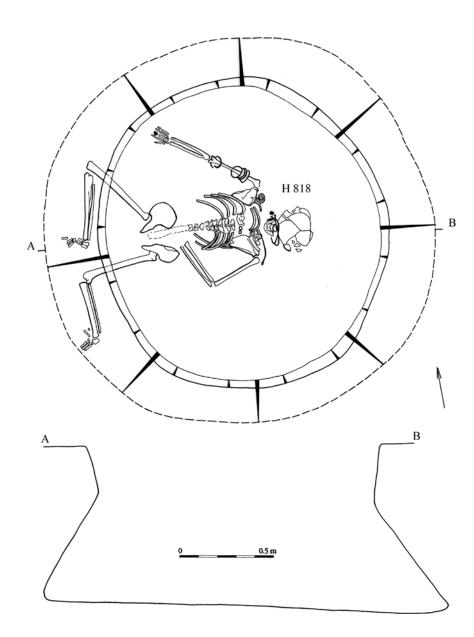
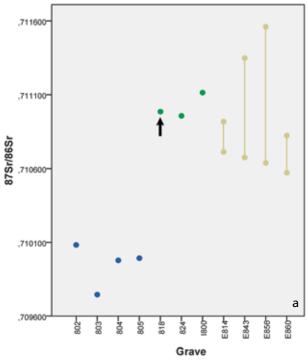


Fig. 2 Ivanovice na Hané 3/2 (okr. Vyškov/CZ). Deposit in feature 519. – (Drawing D. Parma).

A pair of bronze torcs placed in an antipodal manner were found in a functional position on the skeleton; a fibula was on the left shoulder, a pin on the right shoulder, and five heavily worn rings (armbands) were on the left forearm. A paired set of wire spirals with larger and small diameters was discovered on the right side of the skull, on the left side only a single spiral with a larger diameter. Three cast rings were on the fingers of the left hand, while two others near the spine were apparently worn in the hair. A metal detector used on the fill also produced fragments of additional wire spirals of a larger diameter, a spiral of a smaller diameter made from gold, and part of a specific wire ornament (published in detail, including the broader context, in Parma 2004; 2011, 180-182 pls 76-80). With the exception of minute fragments of pottery of a general prehistoric age, the fill did not contain any other finds. No samples were collected from the feature's fill, which was merely investigated manually; hence, only the documentation, the skeleton and the assemblage of standardly conserved metal ornaments are available for further evaluation. Possible remnants of cultural layers in the vicinity of the feature were mechanically removed prior to the beginning of the excavation and were not investigated, which is the standard procedure in similar large-scale excavations.



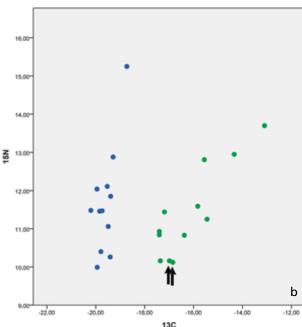


Fig. 3 The results of stable isotope analyses of individuals from excavations in the vicinity of Ivanovice na Hané (okr. Vyškov/CZ): a $^{86/87}\text{Sr.}-b$ $\delta^{13}\text{C}$ and $\delta^{15}\text{N.}-$ Green: samples from the Late Bronze Age; blue: individuals from the Early Bronze Age; brown: individuals from the Final Eneolithic. – The samples from feature 519 are marked with an arrow. – (Illustration D. Parma).

THE SKELETON

The skeletal remains were relatively well preserved and permitted repeated and detailed anthropological and palaeopathological analyses (basic determination by Drozdová 2004; in detail in Parma et al. 2017, 296-305). The deceased individual was reliably identified as a woman over the age of 40, in the estimated range of 40-50 years; only common pathological phenomena related to an advanced age were found on her skeleton: dentoalveolar cysts, caries dentis, intravital tooth loss, spondylosis, bilateral spondylolysis. No evidence of violence clarifying the cause of death was identified on the skeleton. The loss of teeth and related infection must have been painful and even if the degenerative changes in the spine surely limited the individual's movement, it is not possible in this case to speak of physiological changes that would have led to the individual's expulsion from society on the basis of her appearance and behaviour. No evidence of violence clarifying the cause of death was identified on the skeleton.

The question of the woman's mobility was resolved by an analysis of the ratio of 87/86Sr isotopes in an enamel sample of a first permanent molar (M1), and the individual's diet was reconstructed by measuring the $\delta^{13}C$ and $\delta^{15}N$ isotopes. A small number of skeletons from the Late Bronze Age from the Vyškov region were chosen as the primary comparative sample, and these were further supplemented with an assemblage of skeletons from the Early Bronze Age as well as published data on the population of the Final Eneolithic from another site near Ivanovice na Hané (at a distance of 1.2 km from the deposit described here; Smrčka/Drozdová/Erban 2011). The interpretation of the ratio of 87/86Sr isotopes, in particular, was complicated by the small number of individuals; the analysis showed two distinct groups divided mainly on the basis of dating. Three individuals from the Late Bronze Age and the skeleton from feature 519 have values similar to individuals from the end of the Eneolithic, whereas the data of four indi-

viduals from the Early Bronze Age are different. The Late Bronze Age and Eneolithic population can in all likelihood be regarded as local, and the values determined for the woman in feature 518 do not show any significant differences (**fig. 3a**).

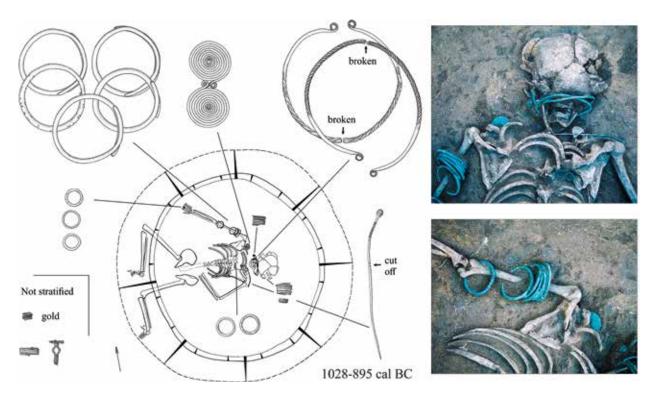


Fig. 4 Ivanovice na Hané 3/2 (okr. Vyškov/CZ), feature 519. Interpretative sketch with the position of individual artefacts. – (Illustration D. Parma).

Likewise, a comparison of $\delta^{13}C$ and $\delta^{15}N$ values for the reconstruction of the diet does not reveal any outlying values indicating eating habits considerably distinct from those of the contemporary population in the region. Evident in results incorporating a larger number of individuals is a sharp change in diet between the Early and the Late Bronze Age caused by the emergence of the cultivation of millet, which is also reliably documented in an analysis of plant macro-remains (Parma et al. 2017, 332-337). Noteworthy on the woman in feature 519 is the conformity of values measured in samples from teeth (M1) and from bones (rib), indicating only small changes in the composition of the diet between childhood and mature age (**fig. 3b**). Similarly, based on $\delta^{34}S$ values it is possible to rule out a possible share of seafood in the diet and, on the basis of an analysis of buccal dental microwear, the possibility of extreme eating habits in the period prior to death was rejected (Parma et al. 2017, 315-330).

The noticeable value of some of the analyses is reduced by the small amount of comparable contemporary samples since the clear predominance of cremation with all of the subsequent transformations in the Late Bronze Age makes it impossible to acquire anthropological or bioarchaeological data on the contemporary local population. Nevertheless, strontium isotopic data do not suggest the non-local origin of the woman, and also the possibility of explaining her difference from the rest of the population by extreme dietary demands (e.g. vegetarian or other unified diets) can be ruled out.

FINDS AND THEIR DATING

The ornaments of the woman deposited in feature 519 (fig. 4) are located in a functional position and undamaged (bracelets, spirals), in a functional position and damaged (pin and both torcs), and in a secondary position, probably the result of bioturbation (temple ring, gold spiral). Of particular interest are three inten-

tionally destroyed pieces – the pin was cut off and both torcs were mechanically broken in half, causing the deformation of one of them. Nevertheless, despite their non-functional state, all of the ornaments were arranged in their original position, both torcs moreover in an antipodal position (clearly visible in fig. 4). From a typological perspective, the ornaments are artefacts both locally common and entirely exceptional. Those in the first group include a pair of smaller and larger metal spirals made from simple wire forming a set. The pair of undecorated spirals with a diameter of 19 and 9 mm (fig. 5, 7. 9) was found in situ on the right side of the skull, on the left side of the skull only one specimen of a larger diameter (18 mm) with a twisted terminal (fig. 5, 6). It can be assumed that the smaller spiral made of simple gold wire with a diameter of 12 mm (fig. 5, 8) obtained from the fill is the missing half of a pair. Spiral pairs made of simple wire are the most common ornament of the Late and Final Bronze Age, with numerous parallels at all larger Moravian cemeteries (randomly, Domamyslice [okr. Prostějov/CZ]; Sedláček 2005). They also appear made from gold in small and larger diameters; at least eight specimens are known from Moravia, most from Late Bronze Age cremation graves (Stuchlík 1997); these graves typically do not differ greatly with respect to the quantity and quality of inventory, and it is possible to speak of social exceptionality only in the case of an inhumation grave from Blučina (okr. Brno-venkov/CZ; most recent in Parma/Stuchlík 2017) and a cremation grave with weapons from Brno-Obřany (Stegmann-Rajtár 1986). Likewise, cast rings with a plano-convex profile (fig. 15, 18. 22) are absolutely common finds known from both hoards (Salaš 2005, 103) and burial inventories (Domamyslice; Sedláček 2005). Five of the same open ring ornaments (fig. 5, 1. 4. 10) with a round profile and flat terminals folded over one another and decorated with bundles of oblique engraved grooves (heavily worn) are a common type in the Late and Final Bronze Age (Salaš 2005, 90-91).

Cast torcs with false twisting in a single direction and smooth hammered terminals wound in an eyelet (fig. 5, 12-13) are widely distributed throughout Central Europe from the early to the late stage of the Urnfield culture; they clearly appear in Moravian hoards beginning in the earlier stage of the Urnfield culture (e.g. Malhostovice [okr. Brno-venkov/CZ]; Rousínov [okr. Vyškov/CZ]; Salaš 2005, 76) before becoming part of grave inventories in the late stage, although they are a regular part of grave inventories in southwest Slovakia in the early stage of the Urnfield culture in Chotín (okr. Komárno/SK), the variant has less distinct twisting (Novotná 1984, 30-36). The pin with a horizontally segmented head and a pointy extension (fig. 5, 5) belongs to a small and highly variable secondary group (pins with horizontally segmented globular head according to J. Říhovský, or its variant with a pointed extension; Říhovský 1979, pl. 39, 861-864, to which no. 1281 must be added. A pin with a biconically segmented Říhovský variant 3 head is very similar; Říhovský 1979, pl. 37, 756-757). While both of the closest parallels from Burgschleinitz (Bez. Horn/A) and Klentnice (okr. Břeclav/CZ; Říhovský 1979, nos 864. 1281) are unfortunately lacking their find context, four pins from western Slovakia designated by M. Novotná as the Trenčianské Teplice type are very good parallels; three of these pins are still dated to Ha A (Novotná 1980, 138-139 nos 894-897). The occurrence of similar types with a segmented globular head is linked to the early stage of the Urnfield culture, as is (to a certain extent) the related Fels am Wagram type (Říhovský 1979, 171).

Spectacle fibulae with figure-eight coils (**fig. 5, 11**) are not typical for the Moravian environment, with different variants of shield fibulae representing a common domestic type. To date the only Moravian specimens come from the fortified hilltop settlement of Jívová-Tepenec (okr. Olomouc/CZ) with a high point of occupation in Ha B (Říhovský 1993, 67-71) and from cremation graves with Final Bronze Age pottery from Kuřim (okr. Brno-venkov/CZ; Štrof 2003, fig. 4, 8). S. Pabst's new and more detailed classification distinguishes many technical details, especially the method of winding the figure-eight coils. While exemplars from Jívová and Kuřim represent a later and more common variant with front winding, the Ivanovice specimen has rear winding (hidden from the visible side) and in combination with the round cross-section of the wire corresponds to the Gyermely type. This type is distributed primarily in the Carpathian Basin, and the Ivanovice

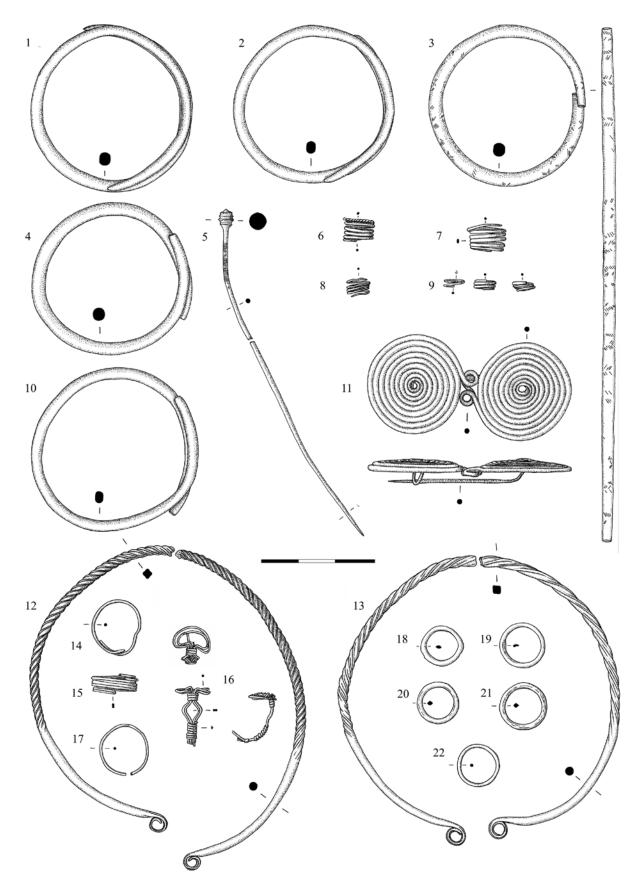


Fig. 5 Ivanovice na Hané 3/2 (okr. Vyškov/CZ). Woman's ornaments from feature 519. – 1-7. 9-22 bronze; 8 gold. – (Drawings M. Kršová).

find along with an exemplar from a hoard in Karmin in Silesia are the lone specimens north of the Danube and can, therefore, be regarded as an import. Chronologically, this type is common in stages Ha A2 and B1, as the name derived from the hoard in Gyermely also suggests. Spectacle fibulae represent female ornaments without a specific link to social status, albeit with great regional variability (Pabst 2011, 204-207 fig. 3 list 3A).

The ornament from doubled bronze wire with pseudo-figure-eight coils on the end (fig. 5, 16) remains quite unique in the Moravian environment. The end with the coil is broken off and was retrieved from the fill, as was also the case with fragments of another spiral from doubled wire with a diameter of 26 mm with two preserved windings (fig. 5, 14-15. 17). Since it concerns the only ornament from a doubled wire in the inventory, the parallel find suggests that it originally formed a single whole. Although the position of the ornament and hence its function are unknown, parallel objects from Slovenia are again interpreted as decorative hair accessories (Pabst 2010, list 7). Due to the absence of a greater amount of wire, the artefact evidently is not a larger piece interpreted as a torc or tiara, which, for that matter, appear only in gold versions.

In bronze versions in the form of small spirals, these ornaments appear primarily in Slovenia and northern Croatia in stages Ha A2-B1. In the most recent comprehensive processing, S. Pabst designates them as the Velem-Szentvid type, which predates the later Vajuga-Pesak type occurring exclusively in the central Balkans (Pabst 2010, 34-35 fig. 8). The largest assemblage outside of the eastern Alps comes from old finds from Velem-Szentvid (Kom. Vas/H; at least six specimens), where the artefacts have always ornaments from doubled wire with approximately eight windings. The assemblage includes an exemplar practically identical to the one from Ivanovice, differing only in the transverse joint (sheet metal instead of wire; von Miske 1908, pl. 36, 5), while five other specimens have slightly different figure-eight terminals (von Miske 1908, pls 36, 6-7. 17; 41, 7-8). According to A. Mozsolics, one specimen comes from hoard lb, another three from hoard la from 1896; the key to dating in both cases is the presence of rosette fibulae and spectacle fibulae with a figure-eight coil of the Gyermely type – both units are classified in the Gyermely hoard horizon (Mozsolics 1985, 213). The northernmost find to date is a small bronze fragment from the settlement layer from Šarovce (okr. Levice/SK), for which M. Novotná considers a dating in the early stage of the Urnfield culture; however, this dating is not clear given the nature of the context (Novotná 1984, 47-48). Another bronze fragment comes from cremation grave 152 in Budapest-Békásmegyer, where the artefacts are fragments of round ornaments, though unfortunately without additional datable finds (Kalicz-Schreiber 2010, pl. 68, 18-20). From the perspective of geographical distribution, the find from Ivanovice na Hané can be reliably classified as an import.

A practical parallel type of ornament with longer winding and made of gold is known from the Várvölgy hoards in western Hungary and from the latest find from Arikogel (Bez. Gmunden/A) in Upper Austria. A total of 14 specimens from the hoard in Várvölgy-Felsözsid (Kom. Zala/H) appear together with gold plaques and are again dated by A. Mozsolics to the Gyermely horizon of hoards with an interpretation as torcs (Várvölgy type; Mozsolics 1981). Two pairs from Arikogel with six to seven windings are interpreted as bracelets. Ornaments from this site also include another four pairs of spirals of a smaller diameter (5 cm) decorated exclusively with twisting. The assemblage did not contain other chronologically sensitive objects and is datable only on the basis of parallels (Gruber 2008). Three other gold pieces come from Osijek (Osječko baranjska zup./HR; Mozsolics 1981, 300), while the westernmost specimen to date is from Libochovany (okr. Litoměřice/CZ) in northwest Bohemia (Hrala 1997, 178 pl. 16, 298).

If wire ornaments similar to the Ivanovice specimen appear in the Middle-Danube cultural region with accompanying inventory, they can be dated to the horizon of Gyermely deposits, which has been standardly synchronised with stage Ha A2; however, the latest works suggest a later dating at the beginning of Ha B, although it is clear that this involved a very local phenomenon in northwest Hungary (Hansen 1996). The

further important evidence is the repeatedly emphasised stylistic similarity of spirals with the construction of rosette fibulae as leading forms in stage Ha A2 (Mozsolics 1981).

The set of ornaments belonging to the woman in feature 519, therefore, includes both common and unusual elements, and it is particularly remarkable as a whole – it is one of the largest assemblages of bronze ornaments from Urnfield culture grave units in Moravia. Although parallels in the local environment can be found for most of the specimens, as a whole the assemblage is unique in the broader Central European space. Sets of this size are unusual in the early stage of the Urnfield culture; richly furnished graves include grave 132 from Blučina, an inhumation burial of a woman containing a necklace with glass, amber and bronze beads, a pair of pins, a bracelet and a pair of spirals, one of which is from gold (in detail in Parma/ Stuchlik 2017). Twisted torcs do not appear in published grave units from the early stages of the Urnfield culture in Moravia (e.g. they are missing entirely at the heretofore largest excavated cemetery in Moravičany), and these artefacts do not begin to appear until the end of Ha A, whereas units with better dating belong mainly to stage Ha B1 (e.g. Klentnice graves 18, 51, 53; Říhovský 1965; Domamyslice graves 5, 33, 44, 55, 85, 102; Sedláček 2005). The published units always contain only a single specimen or a fragment thereof, moreover never in combination with a fibula. Pairs of torcs do not even appear in central Bohemian or northern Slovak assemblages from the Late and Final Bronze Age (Kytlicová 1981; Makarová 2008). Interesting parallels to the entire assemblage can be found in Macedonia and the northwest Balkans, where, in the period corresponding to stage Ha B1, a combination of spectacle fibulae and two or more twisted torcs is one of the typical female ornament sets associated with a higher social status (Pabst 2011, 213-216).

ABSOLUTE DATING

Two samples from one femur were collected for radiocarbon dating carried out by the accelerator mass spectrometry (AMS) at the CIRCE INNOVA laboratory in Caserta, Italy (Terrasi et al. 2007; Passariello et al. 2007). The first sample produced low collagen (conventional age was DSH-6379: 3033±27 BP) and the femur was re-sampled. The second sample yielded an ample amount of collagen and a conventional age DSH-7661_G: 2825±27 BP gave at 95.4% probability 1051-908 BC (1010-931 cal BC at 68.2% probability; OxCal 4.3 with IntCal13; Bronk Ramsey 2009; Reimer et al. 2013; in detail in Parma et al. 2017, 285-286).

Since the collagen originates from a bone of an individual aged 40-50 years, the measured 14 C determination does not pertain to the age at death and the subsequent date of the burial (Geyh 2001; Barta/Štolc 2007). It is the latter archaeological event, which is of our interest as it represents both the *termini a quo* and *ante quem* for the circulation of buried artefacts in an once-living society (cf. Barta 2008). To acquire a better estimate of the date of the individual's death, we use here the human bone collagen offset correction (Barta/Štolc 2007; Barta 2008). Owing to the shape of the calibration curve and standard deviation (27 14 C yrs), the shift between the uncorrected and corrected (HBCOcorr = 21.21 ± 1.67 14 C yrs; Barta/Štolc 2007, pl. 2) date is 23 yrs for the start and 13 yrs for the end of posterior density regions at 95.4 % probability level. Accordingly, the estimate of the death of the deceased female represents a year within the interval 1028-895 cal BC (95.4 % probability) or 995-920 cal BC (68.2 % probability).

This considerably long interval is a result of the shape of the calibration curve and without further chronometric evidence cannot be refined. According to the standard synchronisation of relative and absolute chronologies (e.g. Primas 2008, fig. 1, 3) this interval corresponds to the duration of Ha B1 stage. Even though the Late Bronze Age settlement around Ivanovice na Hané represent sites exclusively with the Ha A pottery style, the dated burial may well be contemporary with the end of this horizon as evidenced by another single ¹⁴C date (Parma et al. 2017, 249-250). However, it is also possible that the deposit is an isolated

case of an activity in a region virtually abandoned in the Final Bronze Age as the sites with clearly different Ha B pottery style are completely missing in this area.

CONTEXT

The spatial context of the deposit is highly unique. As in many other contemporary cases, the woman's body was deposited in a settlement pit of a standard shape and size, though in this instance completely away from the contemporary settlement area. The settlement components of stage Ha A are manifested in dozens or even hundreds of features with large find assemblages (e. g. Ivanovice na Hané 6 and 7; see Parma/Šmíd 2013), in the topsoil in typical assemblages of small artefacts. A total of 4.2 ha were excavated at the Ivanovice na Hané 3/2 site in 2002, revealing 122 features, of which only one can be dated to the Late or Final Bronze Age, a feature that was located more than 40 m from the edge of the excavated area (fig. 1). The open area excavation was supplemented in 2004 by a linear ditch towards the west, which again captured only older components, and in 2014-2015 by a linear ditch and open area excavation to the north with an area of roughly 1 ha, which revealed only several features with a small number of assemblages datable in general to the Bronze Age (fig. 1). Systematic metal detector surveys were conducted on the accessible fields in the surrounding area, though with a negative result, a sharp contrast compared to the large find assemblage from the area to the west of the site at the Ivanovice na Hané 3 location. The presence of common settlement components of the Late Bronze Age in a form known from many excavations in the region can, therefore, be ruled out at Ivanovice na Hané 3/2.

The adequate amount of data acquired during the rescue excavations and subsequent surveys make it possible to perform a basic reconstruction of prehistoric activities around the Ivanovice na Hané 3/2 site (fig. 6). The earliest evidence of human activity is a small settlement component from the Early Eneolithic on the hilltop and a small settlement component from the Early Eneolithic (Funnel Beaker culture) on the right bank of the Medlovický stream. A vast Corded Ware culture cemetery was located on the hilltop in the Final Eneolithic (summarised in Kolář et al. 2011), and the large gaps of space between the graves make it possible to assume the existence of above-ground marking in the form of barrows. Bell Beaker culture settlement activity is then visible on the right bank of the Medlovický stream (fig. 6A).

Settlement areas were located on the hilltop and on the banks of the stream below in the Early Bronze Age (fig. 6B) – these are two spatially divided and, evidently, non-contemporaneous units. Larger assemblages from the Ivanovice na Hané 3 site can be placed in the classic phase of the Únětice culture, the smaller amount of material from the Ivanovice na Hané 3/2 site only generally in the Early Bronze Age. This settlement component respects the space of the Early Eneolithic cemetery and is situated at its southwestern edge. A settlement was located on the banks of the Medlovický stream and a burial component on the hilltop at the end of the Middle Bronze Age, and the presence of above-ground marking in the form of barrows can again be assumed (fig. 6C). The Middle Bronze Age cemetery partially overlaps with the Final Eneolithic burials.

A smaller settlement component located on the banks of the stream in the Late Bronze Age can probably be dated to the initial Urnfield culture or the beginning of its early stage, while a group of unusual cremation graves from Ha A was located further to the north. The results of surface collections indicate another functionally undetermined component of the Late Bronze Age (summarised in Parma et al. 2017, 64-94). The deposit in pit 519 on the hilltop is completely isolated and is located in the space of both earlier burial components, virtually in the middle of the Eneolithic cemetery (**fig. 6D**). No later activities were determined at either location, and a settlement from the Final Bronze Age is missing entirely from the broader region (Parma/Holubová/Rybářová 2016). Settlement components of the La Tène and Roman period then used a

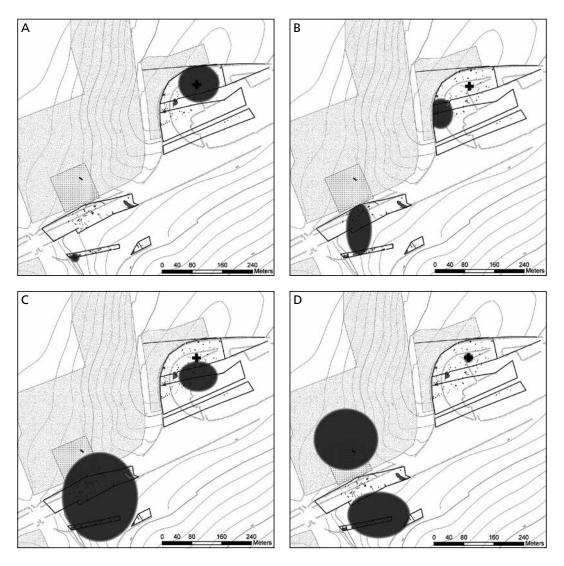


Fig. 6 Spatial context of the Ivanovice na Hané 3/2 site (okr. Vyškov/CZ). Marked evidence (grey colour) of activity from the Final Eneolithic (**A**), Early Bronze Age (**B**), Middle Bronze Age (**C**) and Late Bronze Age (**D**); evidence of the Final Bronze Age activity is missing entirely. – (Map D. Vitulová / D. Parma).

location on the opposite left bank of the Medlovický stream. The woman was therefore deposited on the bottom of a pit completely away from the contemporary settlement and burial area, in the space of an earlier burial component probably marked by a barrow.

INTERPRETATION

While the deposition of human bodies in settlement features in the Bronze Age is a well-known and wide-spread phenomenon, the situation from Ivanovice na Hané 3/2 is unique due to its spatial context and the rich assemblage of ornaments. The body of the woman was deposited in an earlier burial area away from the contemporary settlement, and given the likely presence of barrows, it can probably also be designated as a memorial site. In the case of a dating to stage Ha B, it was something of a »foreign« landscape located away from the settled area. The assemblage of ornaments contains artefacts typically local in nature (spirals, pins, armbands) as well as imports. These include a fibula and a hair ornament of the Velem-Szentvid type with parallels in the Carpathian Basin, especially in key units of the horizon of the Gyermely hoards (including the

eponymous hoard). Instead of the originally assumed stage Ha A2, today these are classified up to Ha B1; the absolute date from the skeleton is closer to the later chronological position. Although the assemblage taken as a whole is lacking a parallel in the surrounding region, the wearer of these ornaments is probably of local origin and did not differ with respect to diet or physical stature from the contemporary population.

A key aspect is the clear evidence of the intentional destruction of three artefacts – both torcs were broken in half and the pin was cut off (the breaks are visible, sharp and share the same patina as the surface of the artefact), followed by their arrangement in a functional position, in the case of the torcs an antipodal position. Similar behaviour fits well into the Late Bronze Age in particular – intentionally, violently and often very thoroughly destroyed metal objects are part of deposits with a possible ritual context and are also found in the inventories of cremated burials (Nebelsick 2000). The massive and intentional destruction of artefacts is especially typical for a group of hoards of bronze objects from southern Moravia and the broader geographical area in the Late Bronze Age. New finds make it possible to relatively convincingly consider the votive significance of these hoards (Salaš 2005, 234-236), and they can also be directly labelled as sacrifices (Metzner-Nebelsick 2012).

In the centre of the entire event is the body of a woman whose social status or role as part of a ceremony is indicated by a large set of ornaments with a unique composition, some of which were intentionally destroyed. If the ornaments indicate the role or status of the individual, the intentionally destroyed ornaments point to the status of the sacrifice, and hence it is not unrealistic to expect that the violence applied to the metal artefacts accompanied the violence directed towards the individual. The entire situation can be interpreted as a votive deposit containing a human body. If the sacrificial process is regarded mainly as a means of communication with the divine powers, the type of pit corresponding to an underground silo is also significant, as it refers to the agricultural cycle, the Earth in general and related fertility forces.

CONCLUSION

The find from Ivanovice na Hané is a unique example of a situation that, thanks to ample evidence, can be interpreted as a deposit from the transition from the Late to Final Bronze Age; in the middle of the entire situation is a human body. As a result of the coarse excavation method, only a limited amount of detailed data is available, and another complication is the absence of comparative samples for the bioarchaeological study due to the cremation burial rite. On the other hand, detailed knowledge of the spatial context of the find is certainly an advantage. The rich assemblage of ornaments with clear imports and relatively distant geographic parallels is a remarkable evidence of the possible elite social role of the woman in the Late and Final Bronze Age, an issue that is extremely difficult to resolve in Central Europe due to the highly destructive and levelling burial practices. At the same time, it is another contribution to the question of the identification and identity of the elite, since the case does not involve a female burial accompanying a man – a warrior, the presumed founder of a local community at the end of the Bronze Age. The individual artefacts and their composition as a whole clearly indicate the inter-regional contacts of the woman who otherwise did not differ from her contemporaries with respect to her origin and diet. Last but not least, the absolute date makes the situation an interesting contribution to the issue of dating artefacts typical for the horizon of the Gyermely hoards in western Hungary.

Acknowledgements

The study was funded by the Grantová agentura České republiky, Late Bronze Age – context and informational potential of extensive project 14-33170P »Archaeology of the Middle Bronze Age and rescue excavations«.

References

- Barta 2008: P. Barta, Absolute Dating of the Bronze Age in East-Central Europe: Methods and Applications, vol. 1 [unpubl. PhD thesis Bratislava, Nitra 2009].
- Barta/Štolc 2007: P. Barta / S. Štolc Jr., HBCO correction: its impact for archaeological absolute dating. Radiocarbon 49/2, 2007, 465-472.
- Bronk Ramsey 2009: Ch. Bronk Ramsey, Bayesian analysis of radiocarbon dates. Radiocarbon 51/1, 2009, 337-360.
- Drozdová 2004: E. Drozdová, Antropologický rozbor kosterních pozůstatků z lokalit Ivanovice na Hané 3 a Ivanovice na Hané 3/2 (Anthropologische Analyse der Skelettreste aus den Fundstellen Ivanovice na Hané 3 und Ivanovice na Hané 3/2). In: Popelnicová pole a doba halštatská; příspěvky z VIII. konference, České Budějovice 22.-24. 9. 2004. Archeologické Výzkumy v Jižních Čechách Supplementum 1 (České Budějovice 2004) 451-458.
- Geyh 2001: M. A. Geyh, Bomb radiocarbon dating of animal tissue and hair. Radiocarbon 43/2, 2001, 723-730.
- Gruber 2008: H. Gruber, Schätze aus Gold. Die urnenfelderzeitlichen Depotfunde vom Arikogel und aus dem Koppental. In: H. Gruber (ed.), Schätze. Gräber. Opferplätze. Traunkirchen 08. Archäologie im Salzkammergut [exhibition catalogue Traunkirchen]. Fundberichte aus Österreich: Materialhefte Reihe A Sonderheft 6 (Horn 2008) 72-77.
- Hansen 1996: S. Hansen, Bemerkungen zur zeitlichen Stellung der Hortfunde des Typus Gyermely. Archäologisches Korrespondenzblatt 26, 1996, 433-441.
- Hrala 1997: J. Hrala, Böhmen. In: G. Lehrberger / J. Fridrich / R. Gebhard / J. Hrala (eds), Das prähistorische Gold in Bayern, Böhmen und Mähren: Herkunft Technologie Funde. Památky Archeologické Supplementum 7 (Praha 1997) 169-189.
- Jiráň 2013: L. Jiráň (ed.), The Prehistory of Bohemia. 4: The Bronze Age (Praha 2013).
- Kalicz-Schreiber 2010: R. Kalicz-Schreiber, Ein Gräberfeld der Spätbronzezeit von Budapest-Békásmegyer (Budapest 2010).
- Kolář et al. 2011: J. Kolář / M. Dobisíková / G. Dreslerová / E. Drozdová / M. Fojtová / M. Hložek / M. Gregerová / A. Přichystal / K. Urbanová / M. Wagenknechtová, Kultura se šňůrovou keramikou v povodí říčky Hané na střední Moravě. Pohřební areály z prostoru dálnice D1 v úseku Vyškov Mořice a dalších staveb (The Corded Ware Culture in the Haná basin in Central Moravia [Czech Republic]. Burial grounds from the area of motorway D1 between Vyškov and Mořice and from other construction places). Pravěk Supplementum 23 (Brno 2011).
- Kytlicová 1981: O. Kytlicová, Ein Beitrag zu den Schmuckgarnituren des böhmischen Knoviz-Milavecer Bereichs. In: H. Lorenz (ed.), Studien zur Bronzezeit. Festschrift für Wilhelm Albert v. Brunn (Mainz 1981) 213-249.
- Makarová 2008: E. Makarová, Ženský kroj lužickej kultúry v dobe bronzovej na Slovensku. Pokus o rekonštrukciu na základe hrobových nálezov a depotov (Female costume of the Slovak branch of the Lusatian Culture in the Bronze Age. An attempt at the reconstruction on the ground of grave and hoard findings). Študijné zvesti AÚ SAV 44, 2008, 65-192.
- Metzner-Nebelsick 2012: C. Metzner-Nebelsick, Das Opfer. Betrachtungen aus archäologischer Sicht. In: A. Lang / P. Marinković (eds), Bios Cultus (Im)mortalitas. Zu Religion und Kultur Von

- den biologischen Grundlagen bis zu Jenseitsvorstellungen. Beiträge der interdisziplinären Kolloquien vom 10.-11. März 2006 und 24.-25. Juli 2009 in der Ludwig-Maximilians-Universität München. Internationale Archäologie. Arbeitsgemeinschaft, Symposium, Tagung, Kongress 16 (Rahden/Westf. 2012) 157-179
- von Miske 1908: K. von Miske, Die prähistorische Ansiedlung Velem St. Vid (Wien 1908).
- Mozsolics 1981: A. Mozsolics, Der Goldfund von Várvölgy-Felsözsid. In: H. Lorenz (ed.), Studien zur Bronzezeit. Festschrift für Wilhelm Albert v. Brunn (Mainz 1981) 299-308.
 - 1985: A. Mozsolics, Bronzefunde aus Ungarn. Depotfundhorizonte von Aranyos, Kurd und Gyermely (Budapest 1985).
- Nebelsick 2000: L. Nebelsick, Rent asunder: ritual violence in Late Bronze Age hoards. In: Ch. Pare (ed.), Metals Make the World go Round. The Supply and Circulation of Metals in Bronze Age Europe. Proceedings of a conference held at the University of Birmingham in June 1997 (Oxford 2000) 160-175.
- Novotná 1980: M. Novotná, Die Nadeln in der Slowakei. PBF XIII, 6 (München 1980).
 - 1984: M. Novotná, Halsringe und Diademe in der Slowakei. PBF XI, 4 (München 1984).
- Pabst 2010: S. Pabst, Transalpine Verbindungen im typologischen Beziehungsgeflecht ältereisenzeitlicher Brillenfibeln. Archaeologica Austriaca 94, 2010, 27-56.
 - 2011: S. Pabst, Die großräumige Ausbreitung der Brillenfibeln am Übergang von der Bronze- zur Eisenzeit Kommunikationswege und und soziale Hintergründe. In: U. L. Dietz / A. Jockenhövel (eds), Bronzen im Spannungsfeld zwischen praktischer Nutzung und symbolischer Bedeutung. Beiträge zum internationalen Kolloquium am 9. und 10. Oktober 2008 in Münster. PBF XX, 13 (Stuttgart 2011) 199-234.
- Parma 2004: D. Parma, Sídlištní pohřby z Ivanovic na Hané (Siedlungsbestattungen aus Ivanovice na Hané). In: Popelnicová pole a doba halštatská; příspěvky z VIII. konference, České Budějovice 22.-24.9.2004. Archeologické Výzkumy v Jižních Čechách Supplementum 1 (České Budějovice 2004) 429-450.
 - 2011: D. Parma, Sídelní areály střední a mladší doby bronzové z trasy dálnice D 1 u Vyškova. Katalog část 1 (Siedlungsareale der mittleren und jüngeren Bronzezeit in der Trasse der Autobahn D1 bei Vyškov. Katalog Teil 1). Pravěk Supplementum 22 (Brno 2011).
- Parma/Šmíd 2013: D. Parma / M. Šmíd, Sídelní areály střední a mladší doby bronzové z trasy dálnice D 1 u Vyškova. Katalog – část 2 (Siedlungsareale der mittleren und jüngeren Bronzezeit in der Trasse der Autobahn D1 bei Vyškov. Katalog – Teil 2). Pravěk Supplementum 26 (Brno 2013).
- Parma/Stuchlík 2017: D. Parma/S. Stuchlík, Kostrové hroby z doby popelnicových polí na Moravě. Slovenská Archeológia 65/2, 2017, 225-254.
- Parma/Holubová/Rybářová 2016: D. Parma/Z. Holubová/K. Rybářová, Sídelní struktury doby bronzové v oblasti Vyškovské brány. Studia Archaeologica Brunensia 21/1, 2016, 21-46.
- Parma et al. 2017: D. Parma / P. Barta / R. Bíško / J. Bíšková / M. Hajnalová / Z. Holubová / L. Horáčková / I. Jarošová / J. Kala / S. Kaupová / R. Křivánek / M. Nývltová Fišáková / A. Přichystal / M. Rob-

- líčková / Z. Tvrdý / H. Nohálová / L. Vargová, Archeologie střední a mladší doby bronzové na Vyškovsku. Interpretační potenciál plošných záchranných výzkumů (Archaeology of the Middle and Late Bronze Age in Vyškov region. Informational potential of extensive rescue excavations) (Brno 2017).
- Passariello et al. 2007: I. Passariello / F. Marzaiolli / C. Lubritto / M. Rubino / A. D'Onofrio / N. De Cesare / G. Borriello / G. Casa / A. Palmieri / D. Rogalla / C. Sabbarese / F. Terrasi, Radiocarbon sample preparation at the CIRCE AMS laboratory in Caserta, Italy. Radiocarbon 49/2, 2007, 225-232.
- Peter-Röcher 2003: H. Peter-Röcher, Ritual Opfer Totenkult. Zur Kontroverse um die nacheiszeitliche Höhlennutzung. In: C. Metzner-Nebelsick (ed.), Rituale in der Vorgeschichte, Antike und Gegenwart. Interdisziplinäre Tagung vom 1.-2. Februar 2002 in Berlin. Internationale Archäologie. Arbeitsgemeinschaft, Symposium, Tagung, Kongress 4 (Rahden/Westf. 2003) 85-97.
 - 2007: H. Peter-Röcher, Gewalt und Krieg im prähistorischen Europa. Beiträge zur Konfliktforschung auf der Grundlage archäologischer, anthropologischer und ethnologischer Quellen. Universitätsforschungen zur Prähistorischen Archäologie 143 (Bonn 2007).
- Primas 2008: M. Primas, Bronzezeit zwischen Elbe und Po. Strukturwandel in Zentraleuropa 2200-800v. Chr. Universitätsforschungen zur Prähistorischen Archäologie 150 (Bonn 2008).
- Reimer et al. 2013: P. J. Reimer / E. Bard / A. Bayliss / J. W. Beck / P. G. Blackwell / Ch. Bronk Ramsey / P. M. Grootes / T. P. Guilderson / H. Haflidason / I. Hajdas / C. Hatté / T. J. Heaton / D. L. Hoffmann / A. G. Hogg / K. A. Hughen / K. F. Kaiser / B. Kromer / S. W. Manning / M. Niu / R. W. Reimer / D. A. Richards / E. M. Scott / J. R. Southon / R. A. Staff / C. S. M. Turney / J. van der Plicht, IntCal13 and Marine13 Radiocarbon Age Calibration Curves 0-50,000 Years cal BP. Radiocarbon 55/4, 2013, 1869-1887.
- Říhovský 1965: J. Říhovský, Das Urnengräberfeld von Klentnice. Fontes Archaeologici Pragenses 8 (Pragae 1965).
 - 1979: J. Říhovský, Die Nadeln in Mähren und im Ostalpengebiet. PBF XIII, 5 (München 1979).
 - 1993: J. Říhovský, Die Fibeln in Mähren. PBF XIV, 9 (Stuttgart 1993).

- Salaš 2005: M. Salaš, Bronzové depoty střední až pozdní doby bronzové na Moravě a ve Slezsku (Hügelgräberbronze- und urnenfelderzeitliche Metalldepots in Mähren) (Brno 2005).
- Sedláček 2005: R. Sedláček, Domamyslice. Pohřebiště lidu popelnicových polí (Domamyslice. Das Gräberfeld der Urnenfelderkultur). Pravěk Supplementum 13 (Brno 2005).
- Smrčka/Drozdová/Erban 2011: V. Smrčka / E. Drozdová / V. Erban, Mobilita náhodně vybraných jedinců z pohřebiště Hoštice I Za Hanou (Mobility of randomly selected individuals in the burial place of Hoštice I). In: E. Drozdová / T. Balueva / J. Benešová / F. Bůzek / V. Erban / V. Kanický / A. Matějíčková / H. Nejezchlebová / P. Ovesná / V. Smrčka / M. Vaňharová / E. Veselovskaya / J. Zocová, Hoštice I Za Hanou. Výsledky antropologické analýzy pohřebiště lidu kultury zvoncovitých pohárů (Brno 2011) 166-170.
- Stegmann-Rajtár 1986: S. Stegmann-Rajtár, Neuerkentnisse zum Grab 169 von Brno-Obřany (Mähren). In: Hallstatt-Kolloquium; Veszprém 1984. Antaeus Beiheft 3 (Budapest 1986) 211-219.
- Stuchlík 1997: S. Stuchlík, Mähren. In: G. Lehrberger / J. Fridrich / R. Gebhard / J. Hrala (eds), Das prähistorische Gold in Bayern, Böhmen und Mähren: Herkunft Technologie Funde. Památky Archeologické Supplementum 7 (Praha 1997) 149-150. 165-166. 297-299.
- Štrof 2003: A. Štrof, Žárové hroby ze závěru pozdní doby bronzové u Kuřimi (Brandgräber aus dem Ende der Spätbronzezeit bei Kuřim). Pravěk NŘ 13, 2003 (2005), 203-220.
- Terrasi et al. 2007: F. Terrasi / D. Rogalla / N. De Cesare / A. D'Onofrio / C. Lubritto / F. Marzaioli / I. Passariello / M. Rubino / C. Sabbarese / G. Casa / A. Palmieri / L. Gialanella / G. Imbriani / V. Roca / M. Romano / M. Sundquist / R. Loger, A new AMS facility in Caserta/Italy. Nuclear Instruments and Methods in Physics Research B 259, 2007, 14-17.
- Thorpe 2013: N. Thorpe, Warfare in the European Bronze Age. In: H. Fokkens / A. Harding (eds), The Oxford handbook of European Bronze Age (Oxford 2013) 234-247.
- Wiesner 2009: N. Wiesner, Grabbau und Bestattungssitten während der Urnenfelderzeit im südlichen Mitteleuropa. Ein Beitrag zur Entwicklung der Grabsitten in der späten Bronzezeit. Internationale Archäologie. Arbeitsgemeinschaft, Symposium, Tagung, Kongress 110 (Rahden/Westf. 2009).

Zusammenfassung / Summary / Résumé

Ein grausames Schicksal? Das einzigartige Grab aus der Bronzezeit von Ivanovice ne Hané (okr. Vyškov/CZ)

Reste nicht eingeäscherter menschlicher Körper aus einer Periode, in der Brandbestattung die reguläre Bestattungssitte darstellt, sind ein seltenes, aber gut bekanntes Phänomen. In ungewöhnlichen Fundkontexten wie Höhlen und Sümpfen werden sie normalerweise mit symbolischen und sakralen Aspekten menschlicher Aktivitäten in Verbindung gebracht, wobei die Möglichkeit, dass es sich hier um Opfer handelte, auch zur Diskussion gestellt wird. Andererseits ist es denkbar, bei Bestattungen in gewöhnlichen Siedlungen eine viel größere Bandbreite von Interpretationen in Betracht zu ziehen, inklusive Notbestattungen, Ausdruck legaler Handlungen oder Ausdruck von sozialem Status oder ethnischer Herkunft der Individuen, die in dieser Art beigesetzt worden waren. Der einzigartige Fund einer Frau mit einer luxuriösen Garnitur von Schmuckstücken aus Ivanovice na Hané vereint beide Aspekte. Der besondere Fundzusammenhang und intentionell zerstörte Beigaben sprechen dafür, dass diese Bestattung in einer normalen Siedlungsgrube mit einem hohen Grad an Wahrscheinlichkeit das Zeugnis eines bemerkenswerten Ereignisses, vermutlich eines besonderen Opfers, darstellt. Insgesamt weist das Schmuckensemble mit nachweislichen Importen keine Parallele im örtlichen Kontext auf und deutet auf den gehobenen gesellschaftlichen Status der Bestatteten, die von lokaler Herkunft

war. Die einzelnen Objekte besitzen gute Vergleichsstücke in den Hortfunden des Gyermely-Horizontes, und dank der ¹⁴C-Datierung eines Knochens liefert der Fund von Ivanovice na Hané einen wichtigen Beitrag zur absoluten Datierung dieses Horizontes.

Übersetzung: M. Struck

A Cruel Fate? The Unique Bronze Age Burial from Ivanovice na Hané (okr. Vyškov/CZ)

Remains of inhumed human bodies from a period in which cremation was the strict burial rite norm are a rare yet well-known phenomenon. In unusual find environments such as caves and swamps, they are commonly linked to symbolic and non-profane aspects of human activities, and the possibility of sacrifices has also been raised. On the other hand, in the environment of common settlements, it is possible to consider a much broader range of interpretational possibilities, including emergency burials, the consequences of legal acts or as a reflection of the social or ethnic status of individuals buried in this manner. The unique find of a woman with a luxurious set of ornaments from Ivanovice na Hané combines both aspects. Thanks to its specific spatial context and the evidence of the intentional destruction of artefacts, the burial in a common settlement pit can be interpreted with a high degree of certainty as a remarkable event, probably a specific type of sacrifice. As a whole, the assemblage of ornaments with demonstrable imports has no parallel in local contexts and points to the elite status of the individual of local origin. The individual artefacts have good parallels in the hoards of the Gyermely horizon, and thanks to a radiocarbon date from a bone this find provides us with an important contribution to the absolute dating of this find horizon.

Un destin cruel? Une sépulture unique de l'âge de Bronze à Ivanovice na Hané (okr. Vyškov/CZ)

Les restes de corps humains inhumés à une période où la crémation était la norme stricte pour le rite funéraire sont un phénomène rare mais bien connu. Dans les milieux de découverte inhabituels comme les grottes et les marécages, ils sont généralement liés à des aspects symboliques et non défensifs des activités humaines, et la possibilité de sacrifices a également été évoquée. D'autre part, dans le contexte des habitats, il est possible d'envisager un éventail beaucoup plus large de possibilités d'interprétation, y compris les enterrements d'urgence, les conséquences des actes juridiques ou le reflet du statut social ou ethnique des personnes inhumées de cette manière. La découverte unique d'une femme avec un luxueux ensemble d'ornements de Ivanovice na Hané combine les deux aspects. Grâce à son contexte spatial spécifique et à l'évidence de la destruction intentionnelle d'artefacts, l'inhumation dans une fosse commune peut être interprétée avec un degré élevé de certitude comme un événement remarquable, probablement un type spécifique de sacrifice. Dans l'ensemble, l'assemblage d'ornements avec des importations démontrables n'a pas de parallèle dans l'environnement local et indique le statut d'élite de l'individu d'origine locale. Les artefacts individuels trouvent de bons parallèles dans les dépôts de l'horizon Gyermely, et grâce à une date radiocarbone d'un os, cette découverte nous fournit une contribution importante à la datation absolue de cet horizon de découverte.

Schlüsselwörter / Keywords / Mots clés

Tschechische Republik / späte Bronzezeit / Bestattung / Bioarchäologie / Bronzeschmuck / absolute Datierung Czech Republic / Late Bronze Age / burial / bioarchaeology / bronze ornaments / absolute dating République tchèque / âge du Bronze Final / tombe / bioarchéologie / ornements de bronze / datation absolue

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