

## RESEARCH ARTICLE – VÝZKUMNÝ ČLÁNEK

## A child, twelve goats, three sheep, a cow, and a horse: An unusual grave from the Late Eneolithic in Brno-Slatina (South Moravia, Czech Republic)

Dítě, dvanáct koz, tři ovce, kráva a kůň:  
Neobvyklý hrob z mladého eneolitu v Brně-Slatině

František Trampota – Jarmila Bíšková – Jiří Kala – Petr Kos –  
Miriam Nývltová Fišáková – David Parma

*The discovery of a child burial in Brno-Slatina containing both complete and disarticulated animal remains represents a unique funerary practice with no direct analogies. The grave was located near a prominent limestone crag; it had been secondarily opened, and no grave goods were found. Based on radiocarbon dating, its chronology corresponds to the Late Eneolithic. In addition to anthropological, zooarchaeological, and taphonomic analyses, the find was assessed within the larger spatial context of the Morava River basin, where new, specific settlement patterns, diverse burial practices, and three distinct pottery styles (Jevišovice, Bošáca, and Globular Amphora) emerged. In a broader sense, these burial practices can be interpreted as a reflection of the growing presence of steppe populations who came into contact with indigenous Neolithic societies.*

Late Eneolithic – burial – child – zooarchaeology – secondary mortuary practices

*Nález rozměrného hrobu dítěte v Brně-Slatině, obsahujícího kompletní i částečné zvířecí pozůstatky, představuje jedinečný funerální projev bez přímých paralel. Hrob byl situován v blízkosti výrazného vápencového bradla. Později byl sekundárně otevřen a nebyly v něm nalezeny žádné hrobové přídavky. Na základě radiokarbonového datování je možné jeho chronologické zařazení do mladého eneolitu. Kromě antropologických, zooarcheologických a tafonomických analýz byl náález vyhodnocen v širším kontextu regionu povodí Moravy, kde se objevily nové specifické sídelní projevy, rozmanité pohřební zvyklosti a tři odlišné keramické styly (jevišovický, bošácký a kulovitě amfory). V širším smyslu lze tyto pohřební praktiky interpretovat jako odraz narůstající přítomnosti stepních populací, které přicházely do kontaktu s původními neolitickými společnostmi.*

mladý eneolit – pohřeb – dítě – zooarcheologie – druhotné pohřební praktiky

### Introduction

The onset of the Late Eneolithic period in Moravia (c. 2950–2500 BC) represents a time when agricultural societies experienced a significant diversification of material culture for the first time in the history of the region. This phenomenon is evidenced by the presence of at least three distinct decorative pottery styles—Jevišovice, Bošáca, and Globular Amphora—which are traditionally interpreted as archaeological cultures. The differences among these groups were manifested not only in material terms but also in spatial distribution and settlement patterns. In addition to these groups, settlement assemblages have been identified with pottery that is not typologically distinct enough to be assigned to

a specific pottery style. These assemblages can only be classified as belonging to the Late Eneolithic. Settlements featuring Jevišovice-style pottery are primarily concentrated on the eastern edge of the Bohemian Massif, particularly in south Moravia and Lower Austria (Horváth 2022, fig. 4). Jevišovice pottery also appears, albeit less frequently, at settlements in east Moravia, southwest Slovakia (Mellnerová Šuteková 2015), and sporadically in Bohemia (Hrala 1959; Neustupný et al. 2013, 89) as well as in western Hungary (Régészeti Adatbázis).

Settlements with Globular Amphora pottery are confined to central Moravia and form a small settlement enclave (e.g. Šmíd 1999; also Fig. 8 in this article) that represents the southernmost extent of Globular Amphora distribution in Central Europe. Bošáca pottery is predominantly found in southwest Slovakia, with a smaller number of settlement sites in east Moravia and isolated occurrences in central and east Bohemia (Kalferst – Prostrředník 1998; Dobeš et al. 2013).

Beyond settlement finds, Peška (2023) has published probability densities of radiocarbon dates derived from graves, primarily in central Moravia. These graves are associated with the earliest Corded Ware pottery or other elements of material culture characteristic of populations from this period linked to the East European steppes.

The burial practices of the Late Eneolithic include the deposition of both cremated and uncremated bodies. Particularly in the case of inhumation burials, assigning individual graves to specific pottery styles (archaeological cultures) is often highly ambiguous. This issue is also exemplified by the specific grave discovery from Brno-Slatina that will be presented in this study. Despite the recovery of abundant zooarchaeological material, no artefacts were found, and the grave's chronological position is determined solely based on radiocarbon dating. We examine the find in light of knowledge of Late Eneolithic burial rituals and the spatial and landscape preferences of populations at the time.

The current state of knowledge has advanced significantly due to aDNA analyses of prehistoric populations, which allow for tracking the degree of social integration or isolation of communities based on specific haplogroups, or even more precisely through the reconstruction of direct lineage. Although a comprehensive genetic study of agricultural prehistory in Moravia has not yet been conducted, findings from other regions and periods highlight the inherent risks of directly correlating genetic relationships with material culture. The specifics of pottery production must be examined without the *a priori* assumption of rigidly defined social group boundaries. A similar approach is applied in interpreting an isolated burial situation within the Late Eneolithic, where settlement and burial structures do not necessarily produce a unified image of the society.

## The site and its context

The rescue excavation in the northern foothills of Švédské šance Hill, located at the boundary between the municipal districts of Brno-Slatina and Brno-Tuřany (Fig. 1), was conducted by the Institute for Archaeological Heritage in Brno (hereinafter IAH Brno) in June and July 2006 under the direction of P. Kos. This excavation was part of a series of interventions in the gradually expanding new municipal industrial zone, designated as C1 in the investor's documentation. Adjacent to this area, to the south and east of the hill, lie areas labelled B1 and B2, while another archaeologically significant area, A1, is located

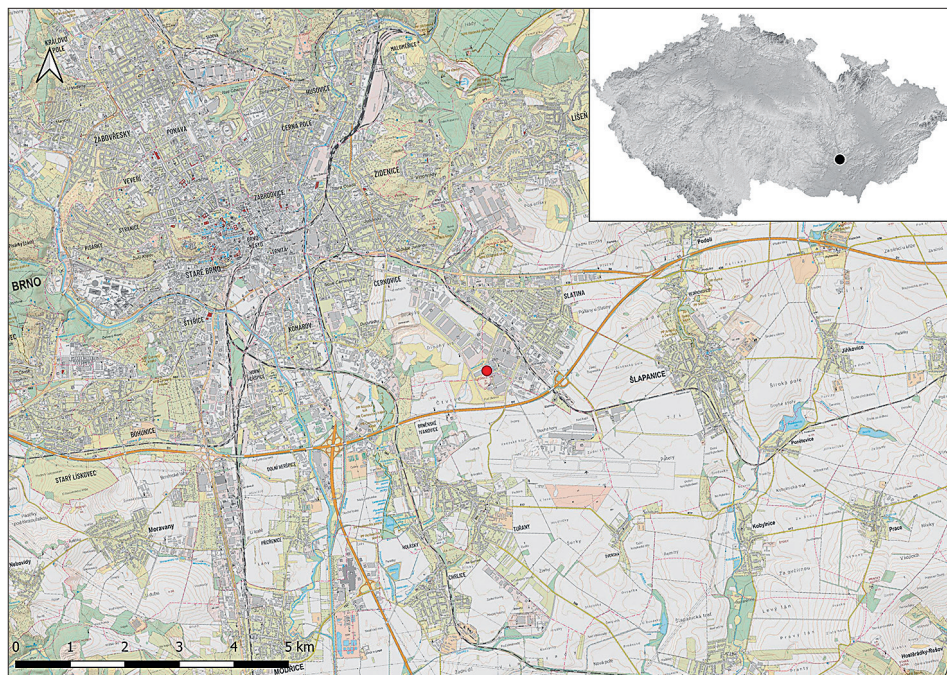


Fig. 1. Location of the site within the context of the city of Brno (Base Map of the Czech Republic 1:25,000).

c. 200 metres to the northeast (Fig. 2). Many other areas in the industrial zone were surveyed without identifying any archaeological features.

The excavation in area C1 uncovered a total of 361 pit features, the vast majority of which belonged to La Tène period settlements. Earlier activity is represented solely by feature 600 containing a Late Eneolithic child burial. In areas B1 and B2, sporadic Eneolithic settlement activities were identified alongside a prominent settlement and funerary component from the Early Bronze Age, as well as medieval and later activities (summarised in *Geislerová – Parma 2013*, 213–216).

Švédské šance Hill itself, originally reaching an elevation of 256 metres above sea level (*Oppenheimer 1907*, 222), is a crag (*klippe* in geological terminology). It was exploited as a quarry and subsequently significantly altered and elevated by a slag landfill during the 20th century. Švédské šance Hill rose approximately 20 metres above the surrounding landscape, forming a prominent landmark in the middle of the Tuřany Plateau. This plateau consists of Miocene and Pleistocene fluvial sediments from the Svratka and Svitava rivers, partially overlain with loess deposits. The crag itself is a remnant of Upper Jurassic limestones containing chert concretions up to 15 cm in size. It is therefore plausible that this natural monument also served in the past as a source of raw material for the production of chipped stone tools, which are not markedly different from the cherts of the Stránská skála type (*Přichystal 2013*, 76).

The landscape immediately surrounding the crag was only episodically used during prehistory. Intensive prehistoric settlement in the area is primarily concentrated near the Svratka River and close to the Říčka Valley. No evidence of Neolithic settlement activity

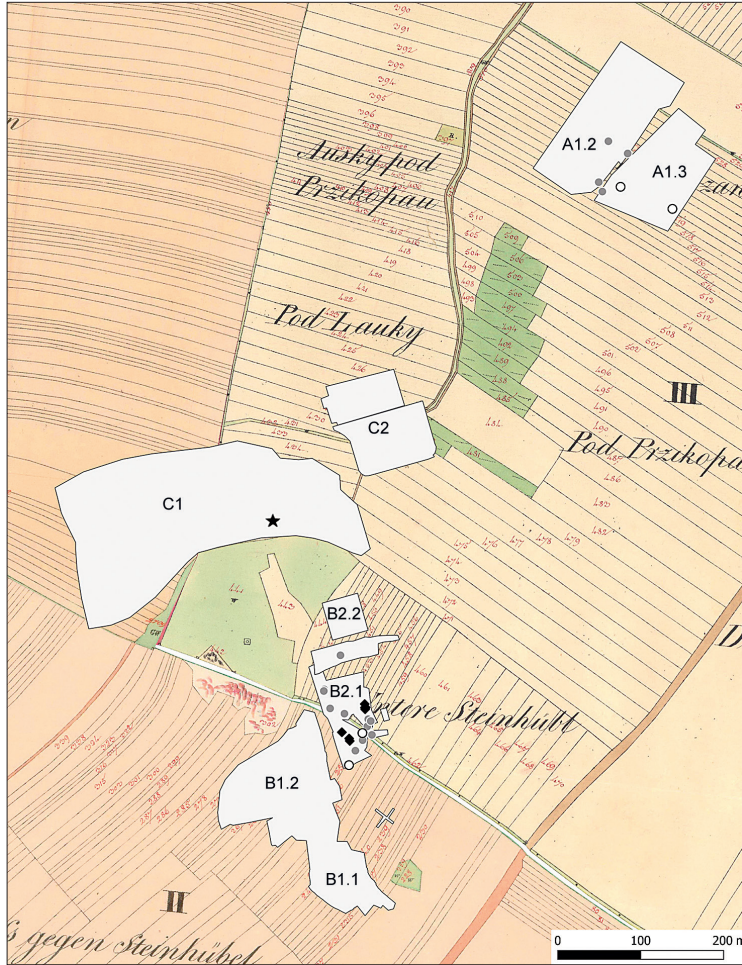


Fig. 2. Brno-Slatina. Location of the site based on the Stable Cadastre (1824–1836). The Švédské šance Crag is marked in red, situated between the excavated areas (white). Star – grave 800; rhombus – TRB feature; white circle – Baden feature; grey circle – Eneolithic feature (general).

is known in the immediate vicinity. During the Early Eneolithic, settlement features containing Funnel Beaker pottery (*Kos 2006b*) and classical Baden pottery (excavation by IAH Brno, *Kos 2005; 2006a; Geislerová – Parma 2013, 214*) have been documented directly beneath Švédské šance Crag. However, there is no evidence of settlement activity from the Late Eneolithic, and given the extent of the investigated areas, it is very likely that no contemporaneous graves were located near the child burial in feature 600.

The nearest evidence of settlement activity from this period comes from Šlapanice – Brněnská pole, 3.5 km away, which can only be generally attributed to the Late Neolithic (*Geislerová – Parma 2013, 293*). Similarly, at a comparable distance, the closest settlement at Brno-Židenice, Tovačovského Street yielded evidence of a Jevišovice settlement (*Čížmář 2019*), which was part of the zone in the lower Svitava River Valley densely occupied during the Late Eneolithic. In a broader chronological and spatial perspective, Brno and its surroundings ranked among the most densely settled regions in agrarian prehistory in Moravia.

## Grave discovery context

The excavated grave featured a rectangular ground plan measuring  $4.65 \times 3.4$  m with a depth of 1 m from the level of the overburden (the loess subsoil surface); its longer axis was oriented in a north-south direction. Shallow, step-like extensions protruded westwards and eastwards from the northern half.

The feature was manually cleaned on the surface and divided into four quadrants, which were excavated sequentially starting with sectors 1 and 3. In sector 1, human skeletal remains were encountered at a depth of 0.4 m. The situation was documented in detail. A dark fill layer (context 423) containing intact skeletal remains (skeleton 800) was identified near the walls of the pit, while a reddish-brown fill (context 421) in the central area contained only scattered animal bones.

The child's skeleton was laid in a stretched position, oriented north-south along the eastern wall of the grave pit. The upper limbs were flexed over the chest, with partial disarticulation likely caused by bioturbation (*Fig. 3; Fig. 4*). After the removal of skeleton 800, the remaining fill of sector 1 was cleared without any further finds discovered. After the bottom of sector 3 was excavated, only a few stones up to 0.2 m in size were found in the dark intact layer (contexts 423 and 425) at depths of 0.6–1 m. Sector 4 revealed a similar situation, again without significant finds.

In contrast, sector 2 at depths of 0.6–0.8 m in the dark fill layer (context 423) contained substantial parts of at least two animal skeletons, designated K1 and K2 (*Fig. 5*). Both were laid in the southwest corner, oriented north-south with their heads to the north and their abdomens facing each other; K2 was situated beneath K1. Further north, disarticulated remains of a third skeleton (K3) were discovered. The absence of skulls in all skeletons was likely due to the decomposition and consumption of these elements by osteophagous organisms.

After the skeletons were excavated, additional disarticulated animal bones (K3, K4, and K5) were found on another level at a depth of approximately 0.8 m. No further specific contexts were documented after these were removed from the pit. The excavation of the entire feature yielded only a small collection of prehistoric potsherds, which were insufficient for a precise dating.

The entire situation can be interpreted as a specific grave with a re-opening. The original grave fill, a dark layer (context 423), contained child's skeleton 800 near the centre of the eastern wall and the pair of animal skeletons K1 and K2 in the southwest corner. Besides a few stones as the only other finds in the northern half of the feature, these were all deposited within the fill rather than directly on the pit bottom, as is typical for burial contexts. The disarticulation of animal skeletons K3 to K5 indicates that the reddish-brown fill (context 421) resulted from a secondary disturbance of the original situation. However, no indications for dating this event exist. This grave re-opening is most evident in profiles E-F-G (sector 4) and D-B-H (sector 1) (*Fig. 6*). It likely also accounts for the extensions to the west and east in the northern part of the grave.

In the profiles of sectors 1 and 3, the dark fill (context 423) containing the skeletons is stratigraphically the oldest layer; it rests on the pit bottom and remains intact to a depth of 0.2 m above the base. Although no deposits or burials were directly placed on the bottom, the stratigraphic sequence in the northern part of sector 3 (profile A-B-C) shows that

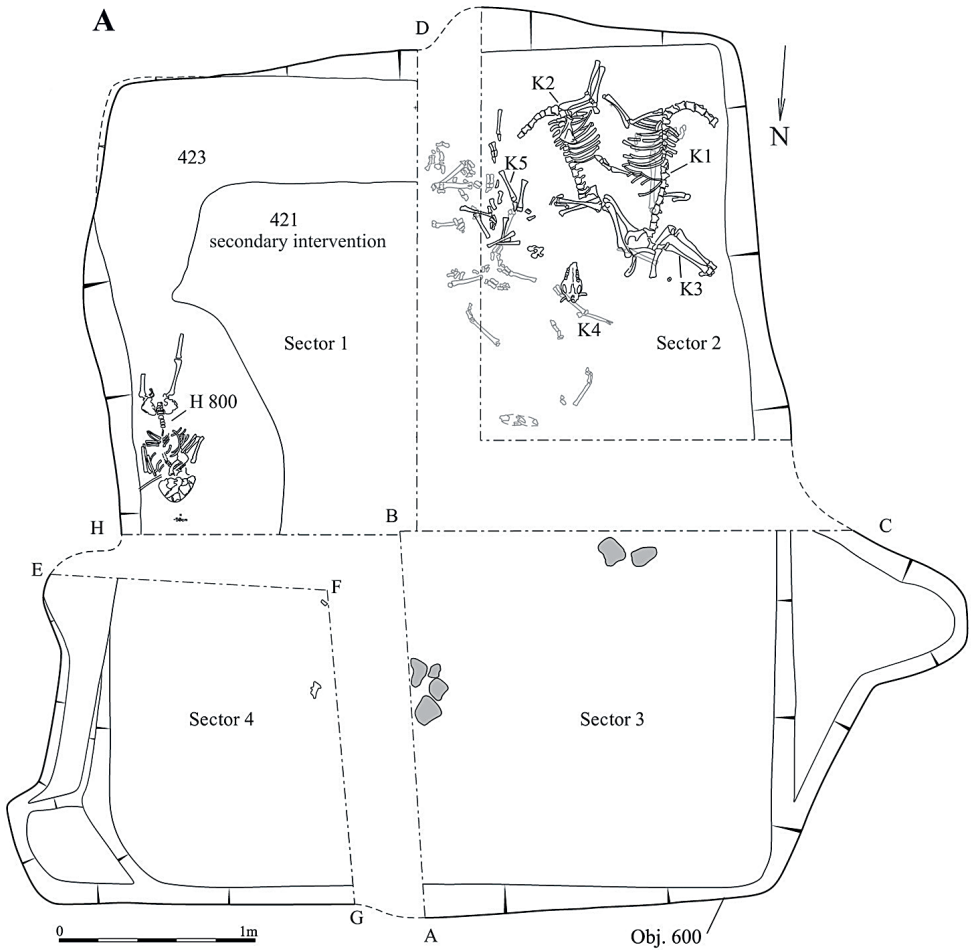


Fig. 3. Brno-Slatina. A – Overall ground plan of feature 600 showing all individual levels. B – Photo of the grave pit.

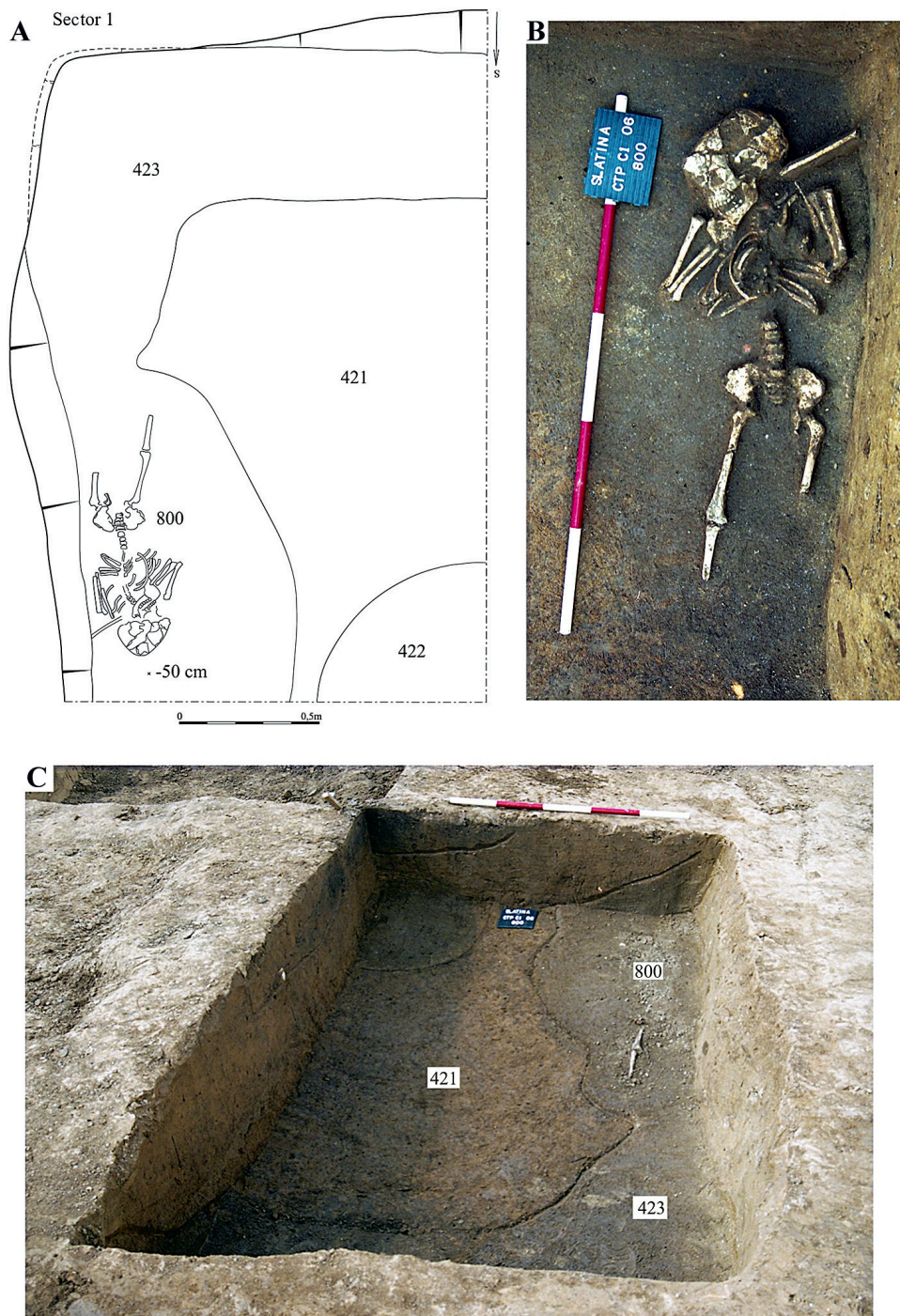


Fig. 4. Brno-Slatina. Feature 600, detail of sector 1. A – Ground plan of level 0.5 m showing the fill of grave re-opening context 421; B – Skeleton 800; C – Sector 1, level -0.5 m, view from the south.

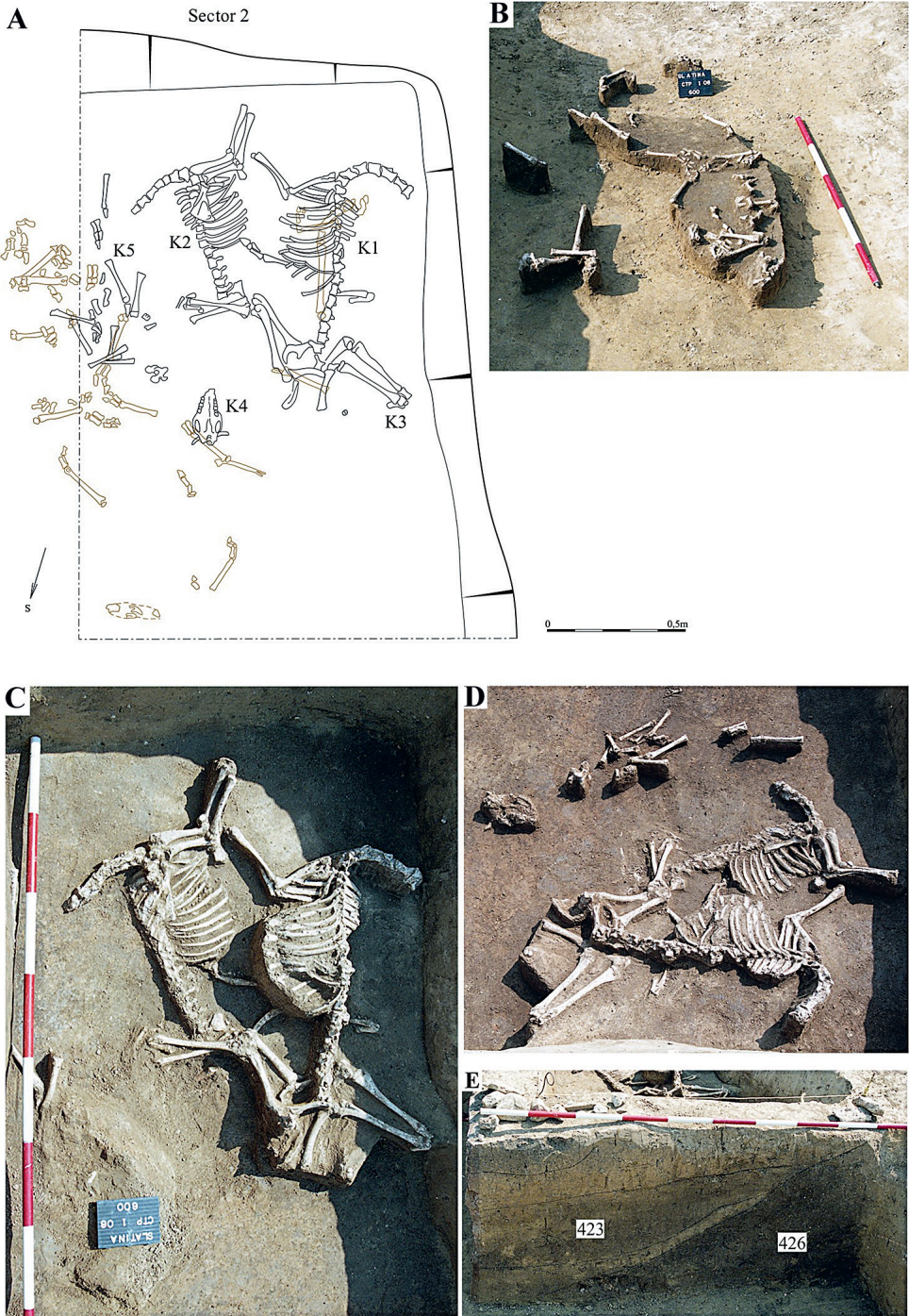
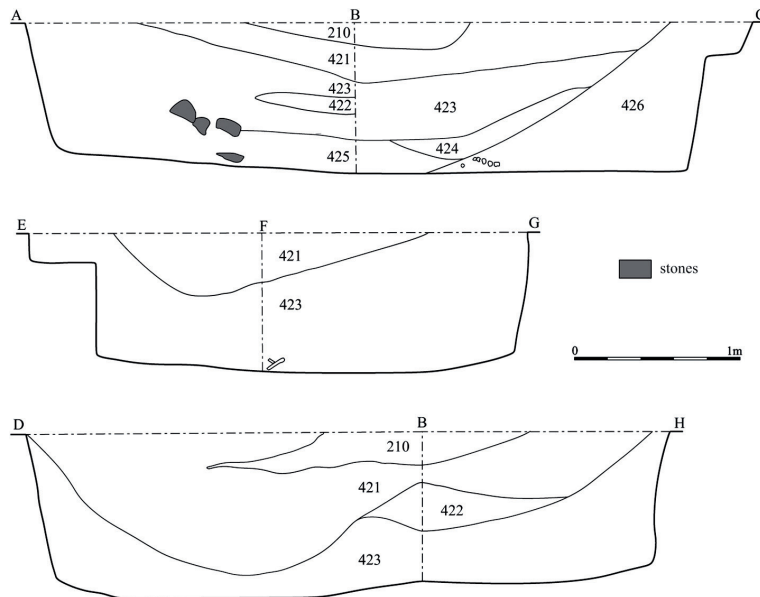


Fig. 5. Brno-Slatina. Feature 600, detail of sector 2. A – Ground plans of levels 0.4 m (black) and 0.5 m (brown); B to D – Gradual excavation of skeletons K1 to K5; E – Profile B-C in sector 3.

Fig. 6. Brno-Slati-  
na. Feature 600,  
profiles.



an even older fill (context 426) preceded the dark layer (context 423). Nevertheless, no deposits or burial contexts were found in this earlier fill.

Considering the grave's position in a La Tène settlement area characterised by artefact-rich surface layers, it is therefore possible that context 423 itself represents the fill of an earlier grave re-opening. Regardless, the regular rectangular shape of the feature indicates a single initial formation event, while the subsequent filling reflects at least three distinct episodes. None of these involved the placement of deposits or burials directly on the grave bottom. Radiocarbon dating is relevant for the second event (context 423), while the absence of finds in the latest fill (context 421) suggests it may predate the La Tène period.

## Analyses

### Anthropological analysis

A basic anthropological analysis was carried out on skeleton 800 – the relatively well-preserved, incomplete, and largely fragmented skeletal remains of a child. The surface erosion of the bones is mild to moderate, and the fragments are generally light beige in colour. The skull is severely damaged to the extent that it cannot be reconstructed, but it is essentially complete, with larger portions of all bones preserved. Morphological traits have not yet been reliably assessed. In both jaws, a combination of deciduous and permanent teeth is clearly visible; only the first molars in both the upper and lower jaws had erupted.

Numerous smaller fragments of ribs and some vertebrae are preserved from the axial skeleton. Fractured diaphyses of long bones and smaller fragments of limb girdles are identified in both the upper and lower limbs. The skeleton of the hands and feet has not survived, except for a few fragments of metacarpal bones.

Species/bone type	Capra aegagrus hircus K1	Capra aegagrus hircus K2	Capra aegagrus hircus K3	Capra aegagrus hircus K4	Capra aegagrus hircus K5	Capra aegagrus hircus	Ovis aries	Bos taurus	Equus ferus caballus
Skull	4f/1	7f/1	2f/1	12f/1					
Horn cores				2/1					
Upper jaw				2f/1					
Lower jaw				3f/1					
Teeth	6/1	7/1	3/1	11/1	2/1				
Atlas	1/1	1/1							
Axis (C2 vertebra)	1/1	1/1		1/1					
Vertebrae	6/1	6/1	4/1	5/1					1/1
Sacral bone	1/1	1/1		1f/1					
Ribs	32f/1	28f/1	11f/1	7f/1					1f/1
Scapulae	2/1	3f/1	1f/1						
Humerus	2/1	2/1	1f/1						
Proximal part of humerus					1/1				
Distal part of humerus				1/1			1/1		
Ulna	2/1	2/1	1/1						
Radius	2/1	2/1	2/1	1/1					
Proximal part of radius					1/1				
Carpal bones	6/1	4/1	5/1	2/1					
Metacarpal bones	2/1	2/1	2/1	1/1	2/1	14/7	4/3		
Phalanges	20/1	17/1	5/1	2/1	5/1	152/7	21/3		
Pelvis	1/1	1/1	1f/1					1f/1	
Femur	2/1	2/1							
Proximal part of femur			1/1						
Distal part of femur				2/1	1/1				
Tibia	2/1	2/1	1/1						
Proximal part of tibia				2/1	1/1				
Tarsal bones	4/1	8/1	2/1						
Metatarsal bones	2/1	2/1				13/7	3/3		
Proximal part of metatarsal bones									
Distal part of metatarsal bones			2/1	1/1					
Patella	1/1	2/1							

Tab. 1. Brno-Slatina. Frequency of finds of individual parts of the skeleton in individual species/number of individuals. F – Fragment.

The skeletal remains belong to a child approximately six years old based on the degree of tooth development and mineralisation (*Ubelaker 1978; Vlček 1994*). This age is roughly consistent with the recorded lengths of the humerus and femur (148 and 206 mm; *Stloukal – Hanáková 1978*). The sex of the child cannot be reliably determined using morphological methods.

### Zooarchaeological analysis

The archaeozoological material was identified using commonly used anatomical atlases and handbooks (*Schmid 1972; Červený et al. 1999; Komárek et al. 2001*). To distinguish between sheep and goats, the works of *Payne (1973)*, *Prummel and Frisch (1986)*, *Halstead and Collins (1995; 2002)*, along with *Adams and Crabtree (2008)*, were used.

For determining the age of animals, contemporary methods based on epiphyseal development (*Reitz – Wing 2008*), tooth eruption, and wear (*Payne 1973; Grant 1982*) were used. The quality of meat based on the discovered bones was assessed according to the works of *Steinhauser (2000)* and *Kuswati et al. (2014)*. The basic quantification methods follow standard methodologies as outlined in the works of *Kyselý (2004)* and *Reitz and Wing (2008)*. Taphonomic interventions were analysed using the methods of *Lyman (2008)*, and insect traces were examined using the works of *Anderson and Van Laerhoven (1996)*, *Anton et al. (2011)*, and *Genard (2007)*.

In feature 600, the following animal species were found: domestic horse (*Equus caballus f. caballus*), domestic cattle (*Bos taurus*), domestic sheep (*Ovis ammon f. aries*), and domestic goat (*Capra aegagrus f. hircus*). From wild fauna, only molluscs were present, specifically the shells of the hedge snail (*Cepaea hortensis*).

Notably, two nearly complete skeletons of domestic goats (*Capra aegagrus f. hircus*) were preserved in feature 600, specifically skeletons K1 and K2, as well as three incomplete skeletons—K3, K4, and K5. In addition to these individuals, zooarchaeological material comprised remains of seven other domestic goats and three domestic sheep, which were found beneath skeletons K1 to K5 (*Tab. 1*). The most complete skeletons, K1 and K2, were laid with their abdomens facing each other. Both were uncovered without skulls, but skull fragments, including teeth, were identified during the zooarchaeological analysis. These were young individuals; based on the unfused epiphyses and the preserved teeth, these animals were less than 15 months old (*Schmid 1972; Červený et al. 1999; Komárek et al. 2001*). For such young individuals, the skull is thin-walled and porous, which is why it disintegrates easily and is also the first to be consumed by osteophagous organisms. Individual K1 was lying on top of individual K2, primarily with its hind limbs. Beneath K2 lay the incomplete individual K3, represented by skull fragments, teeth, vertebrae, ribs, bones of the forelimb, and part of the hind limbs. Individual K4 was preserved in the form of a skull with teeth and early horn buds, along with fragments of vertebrae, ribs, and long bones of both the forelimbs and hind limbs, including phalanges. Similarly, remains of individual K5 included teeth, long bones of the forelimbs and hind limbs, and phalanges. Among other domestic goat and sheep individuals, mainly metacarpal and metatarsal bones, phalanges, and, in sheep, the distal part of the humerus were identified. This composition is more typical of kitchen waste, as these skeletal parts contain little meat.

The horse was represented by a fragment of the distal humerus, a vertebra, and the head of a rib. In the case of domestic cattle, a fragment of the pelvis with the acetabulum

(the hip joint socket) was recorded—also categorized as waste. However, the thoracic and pelvic regions contain the highest-quality type A meat, while most of the diaphysis and the distal part of the humerus consist of lower-quality type AB meat. Since these were young goats and sheep, it was not possible to measure relevant osteometric dimensions or calculate the withers height of the animals.

All examined bones showed distinct traces of gnawing by molluscs and insects. This indicates that the carcasses of these animals were accessible and not buried or only covered by a thin layer of porous sediment (e.g., branches, leaves, fine humus). The fact that skeletons K1 and K2 were otherwise in an anatomical position suggests that these two carcasses decomposed during a warm and dry climate, which led to rapid mummification. Consequently, the carcasses were predominantly consumed by osteophagous organisms. The tunnels and pits on the bones were created by members of the families *Phoridae* (hump-backed flies, *Diptera*) and *Dermestidae* (skin beetles), and there are visible gnaw marks from snails, likely from the species *Cepaea hortensis* (white-lipped snail), which supplemented its calcium intake in this manner (Genard 2007). Shells of this snail were found among the domestic goat carcasses. No other traces, such as carnivore gnaw marks, were detected on the studied bones.

### Radiocarbon dating

To determine the chronology of feature 600, two bone samples were analysed at the Czech Radiocarbon Laboratory (CRL). The first sample (CRL 23\_0836) was taken from the proximal part of the right femur of the buried child, while the second sample (CRL 23\_0837) originated from goat individual K2 (Tab. 2). The purified samples were crushed, and the fraction was repeatedly leached in solutions of diluted HCl, water, diluted NaOH, water, and highly diluted HCl. The collagen isolated from the samples was gelatinised at a temperature of 75°C and filtered using a glass fibre filter. The dissolved fraction was processed by ultrafiltration, and the retentate was dried to a constant weight at a temperature of 60°C. The measurement of the graphitised samples was carried out using the AMS system MILEA at the CRL facility.

lab number	C14 age	$\sigma$	sample	Collagen (%)	Calibrated values (95,4%)
CRL 23_0836	4 135	19	human bone	2,74	2870 – 2623 BC
CRL 23_0837	4 090	20	animal bone ( <i>Capra hircus</i> )	1,41	2849 – 2502 BC

Tab. 2. Brno-Slatina. Radiocarbon dates.

Both calibrated dates correspond to the Late Eneolithic period. Assuming that both sampled individuals were deposited in the grave simultaneously, the calibrated values can be combined using the ‘Combine’ function implemented in the OxCal 4.4 software (Bronk Ramsey 2009). Calibration was made with the IntCal 2020 calibration curve (Reimer et al. 2020). The result ( $A_{\text{comb}}=80.5$ ) does not, however, significantly reduce the wide span of probability distribution estimating the death of the buried child and goat. In the result, the sequences come out approximately as 2850–2810, 2750–2730, and 2700–2580 cal BC (95.4% probability) (Fig. 7). It can only be stated that the remains date to the Late Eneolithic

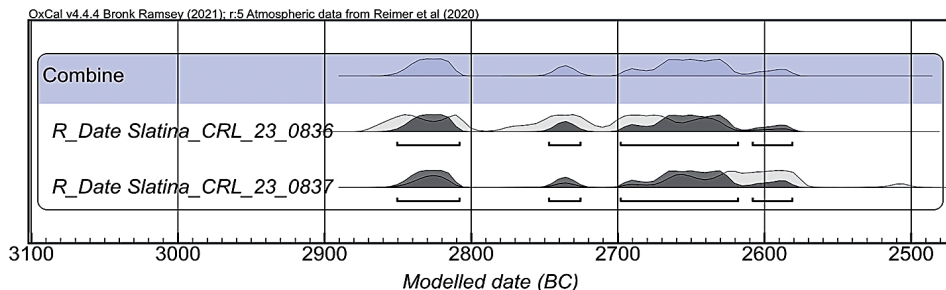


Fig. 7. The Combine model of two radiocarbon dates.

because obtained radiocarbon dates are largely defined by the flattening of the calibration curve. In the first half of the 3rd millennium (more precisely in the years 2880–2580 cal BC and 2620–2480 cal BC) there is a large plateau on the curve, which makes it difficult to precisely place the dates in the absolute time scale (e.g. *Furholt 2003*, 15, Abb. 1).

## Discussion

Outside the contemporary settlement component and in the immediate vicinity of a prominent landscape feature – a crag – a large, regularly rectangular pit was dug during the Late Eneolithic. Following partial backfilling, an uncremated child's body was deposited inside, along with numerous whole skeletons of young animals or their parts during several subsequent events. Some of the goat skeletons were demonstrably arranged and left exposed for some time, accessible to molluscs and insects but not carnivores. The feature was later disturbed by a substantial re-opening, suggesting it remained visible on the surface or marked for an extended period. The relatively complex and deliberate deposition clearly indicates a grave, which can be further supported by the absence of any contemporary activities in the surrounding area.

This situation is unusual not only in terms of deposited objects but also its taphonomy having no analogies at currently known Late Eneolithic funerary sites. The bodies of the buried and grave goods are typically found at the bottom, and in cases of secondary disturbance, the original grave arrangement is either absent, the remains dislocated, or deposited within the shaft backfill. Here, the situation is reversed: in the lower layers, mainly isolated animal bones or disarticulated animal body parts were discovered. The human body was found approximately halfway down the backfill, undisturbed, with no other finds beneath. Its position relative to the large grave pit is atypical, as it lies at the very edge, outside the context of other grave goods.

A possible explanation might be that the Brno-Slatina context accommodates at least a two-phase burial sequence. In the first phase, the originally buried body was completely removed from the grave in connection with a re-opening, leaving a cluster of animal bones as the original grave goods. In the second phase, the child was interred along with at least two goats. However, this explanation does not adequately account for the presence of the dark layer above the bottom, which contained no objects and remained undisturbed by re-opening the grave.

To understand the significance of this situation, it is necessary to contextualise it within the funerary practices and the spatial framework of Late Eneolithic populations. Determining the chronological contemporaneity of the observed phenomena using radiocarbon dating is problematic, as the period is characterised by an extended plateau on the calibration curve roughly between 2880 and 2580 BC. Therefore, we turned to relative chronology as a means to gather evidence of contemporary mortuary practices. Nevertheless, we attribute the grave to a specific pottery group only if an artefact unequivocally associated with that group was found within it. Cenotaphs are excluded from the list of graves, as their interpretation remains speculative.

Only three urn cremation graves can be confidently attributed to the Jevišovice pottery style: two from Brno-Štýřice, Polní Street (*Peška – Polcerová 2017*), and one from Popůvky – Pod Šípem (*Geislerová – Parma 2018*, 287). Another known cremation grave was discovered at the Jevišovice settlement in Mokrý u Brna, Dlouhé kopaniny site (*Kos 2019*); however, the associated potsherds lack specific forms or decoration. Among other contemporary cremation burials, two cremation graves of the Bošáca group near a Corded Ware tumulus in Hlinsko u Lipníka are worth mentioning (*Peška et al. 2020*). Beyond Moravia, urn cremation graves associated with the Jevišovice culture can be noted in Lower Austria, specifically at Thunau am Kamp, the Obere Holzweise site, where two urn cremation graves were uncovered in stone boxes (*Ruttkay 1992*).

Contemporary inhumation graves have been discovered at several sites, including Kroměříž-Miňůvky (*Jarošová et al. 2006*; *Peška – Tajer 2006*), Dambořice at the Spálený site (three inhumation graves; *Šmíd et al. 2021*, 18), and Hohenau an der March (*Mitschamärheim 1958*). The grave of a child from Kroměříž-Miňůvky was found near a Jevišovice settlement; however, its grave goods include a bovine molar, a bowl of the ‘Laibacher Moor’ style, and a jug that corresponds to the Coșofeni pottery style originating from western Romania, eastern Serbia, and northwest Bulgaria. This assemblage is contemporaneous with the early stage of Jevišovice pottery production based on modelled radiocarbon dates (*Ciugudean et al. 2022*). The individual from Kroměříž-Miňůvky could not be radiocarbon-dated, and only two animal bones from a nearby settlement were dated to the Jevišovice period. While a contemporaneous age is likely, the grave cannot be directly associated with Jevišovice pottery, as bowls of the ‘Laibacher Moor’ style are a widespread phenomenon, and the jug points to an entirely different region.

A similar situation applies to the grave from Hohenau an der March in Lower Austria, where the skeleton of a child was discovered in a crouched position. The grave goods in this case consist of two miniature vessels and the metatarsus of a young bovine. In the same vein, these items cannot be categorically linked to Jevišovice pottery but can only be generally attributed to the Late Eneolithic.

The remains of contemporary inhumation burials, which exhibit considerable heterogeneity, are known in very small numbers. Therefore, it is not surprising that no direct analogies to the burial from Brno-Slatina have been found in Moravia or Lower Austria. However, certain shared features can be observed: the inhumation graves always involve children or young individuals, and all cases include animal skeletons in the grave, albeit in significantly smaller quantities. Human graves containing animals are a prominent phenomenon of the period and are particularly associated with the Globular Amphora. While no such graves have been identified in Moravia, numerous examples of human-animal burials, as well as sacrificial pits containing only animal remains and spatially related to

human graves, have been documented in eastern Germany, Poland, and western Ukraine. However, the species of animals interred in these contexts differ significantly from the finds at Brno-Slatina, with cattle being the most commonly preferred, followed by pigs, while goats and sheep are only occasionally present (e.g., *Szczodrowski 2015; Witkowska et al. 2020; Pasterkiewicz 2021*). In Kujawy (Poland), *Szmyt (2006, 7)* pointed out the significantly low proportion of sheep and goats in human graves and sacrificial pits compared to the ratio of their bones found in regular settlement waste. Grave goods are also commonly found in these human burial contexts, making it highly questionable to associate the Brno discovery with Globular Amphora culture contexts.

It can be hypothesised that Moravia exhibited a less distinctive burial rite that, in certain respects, could be likened to Corded Ware culture burial practices. This would align chronologically with the situation in Bohemia, where graves containing the earliest Corded Ware pottery are evidenced not only by radiocarbon dating but also by the unmistakable identification of pottery and other artefacts (*Dobeš et al. 2021*). In our case, only burial practices can be compared. The grave from Brno-Slatina shares much of the shape with Corded Ware burials, and its dimensions are a metre longer than the largest Corded Ware grave so far identified in Moravia, which also contained the burial of a child (*Kolář 2018, fig. 51*). Re-openings are also typical for Corded Ware graves, as is the deposition of entire animal bodies, which occurs rarely, while parts of animal bodies are relatively common. The most frequently represented species is also sheep/goat, with occasional finds of horse limb bones (*Kolář 2018, table 65*).

Another significant aspect for understanding the social complexity of the period is the placement of graves in the landscape. Jevišovice and Bošáca cremation graves are always located on sites with pronounced topography, particularly in the context of hills and highlands, which are typically core areas of Jevišovice or Bošáca settlement. In contrast, inhumation graves that cannot be definitively associated with a specific material culture group are located in flat, open landscapes or at the boundary between plains and hilly terrains. The distribution of inhumation graves in the later Eneolithic also coincides with the known distribution of Corded Ware graves, and they are absent west of the Svitava and Svatka rivers, where Corded Ware graves are only rarely found (*Kolář 2018, fig. 32*). However, a quantitative comparison of these two assemblages may be problematic.

When considering the spatial distribution of inhumation graves in relation to population density, and disregarding settlement affiliations with various pottery production types, it is evident that inhumation graves are located in areas with a notably low distribution of settlements, thus reflecting low population density. The grave in Brno-Slatina, for example, is situated between a densely settled area to its north and a virtually unoccupied zone to its south (*Fig. 8*).

A cursory assessment of inhumation and cremation burial practices in a long-term perspective, from the beginning of the Eneolithic period, reveals that inhumation graves are significantly less prone to contain grave goods, particularly pottery vessels. During the Baalberge period, groups of graves with individuals in extended positions rarely included artefacts, and later only isolated barrows or box graves with grave goods were added (*Šmíd et al. 2018; 2021; Trampota et al. 2021*). In contrast, Boleráz cremation graves, typically barrows, are characterised by numerous grave goods, including pottery vessels (e.g., *Šmíd 2003*). A small number of inhumation graves without pottery are known from the classical and late Baden periods (e.g. Hlinsko u Lipníka, not dated by the radiocarbon

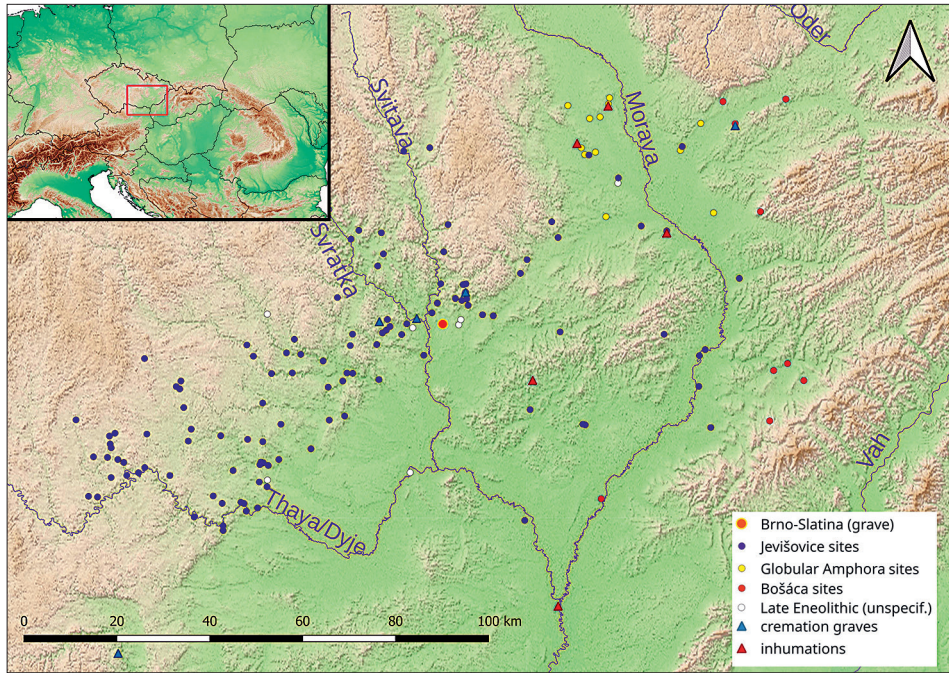


Fig. 8. Settlements and burials in the Late Eneolithic in the Morava River basin.

method, Pavelčík 1990; Brno-Trnitá, Trampota et al. 2021, 324), as well as two cremation graves from Šakvice (*Dočkalová – Šebela 2002*) and Sudoměřice (*Parma – Šmíd 2007*), both of which were deposited in pottery vessels. In the Late Eneolithic, both burial types seemed to coexist, with inhumation burials later being associated with a range of pottery grave goods.

From a general perspective, western Moravia represents a homogeneous region dominated by Jevišovice pottery production. In contrast, central and eastern Moravia are characterised by a mix of Globular Amphora, Bošáca, and Jevišovice pottery, graves linked to the Corded Ware burial practices, and occasional references to Coțofeni pottery. Some inhumation graves in these areas may share a common origin with steppe populations, a hypothesis supported by the low settlement density observed in the flatter regions of Moravia.

Attributes of steppe populations in Moravia have been noted as early as the transition from the Boleráz to classical Baden phases, exemplified by the grave from Olomouc-Nemilany (*Peška – Tajer 2006*). The authors link this grave to the Corded Ware culture, despite four radiocarbon dates showing a much earlier chronology than the assumed range of this culture. *Kolář (2018, 40)* associates this grave with steppe areas, although formally it cannot be associated with the Yamnaya burial practices.

The picture of Moravia before the formation of the Corded Ware culture broadly aligns with description of the gradual hybridisation of two distinct populations—steppe and late Neolithic (in a genetic sense) – proposed by *Kristiansen et al. (2017)*. While the archaeological record in eastern Moravia exhibits more steppe characteristics, including inhumation

tion burial rites with secondary mortuary practices, in the west, evidence points to a society with unique settlement preferences, chronologically unparalleled until that time.

Hybridisation is an appropriate term for characterising the grave from Brno-Slatina. It exhibits contemporary phenomena, such as human burials with animals, but at the same time, it cannot be equated with the standardised burial practices associated with the Globular Amphora or the Yamnaya. The burial shares some features with Corded Ware graves, though it is chronologically too early. This suggests that it reflects the social transformation of populations with a steppe way of life, who likely inhabited lowland areas of Moravia in small numbers, from which the Corded Ware phenomenon later emerged.

It can be expected that more insight into the social complexity of the Late Eneolithic and the profound changes associated with this period will emerge from the complete publication of other burial assemblages, of which only fragmentary information is currently available, as well as analyses of stable isotopes and paleogenetics. The grave from Brno-Slatina should play an indispensable role in advancing our knowledge of the process of complex societal transformation.

## Conclusion

A large and unusual grave found in Brno-Slatina contained the inhumation burial of a child and seventeen animals in a complete or partial state. The grave was clearly reopened and significantly disturbed. No grave goods were found, but thanks to radiocarbon dating, the burial can be dated to the Late Eneolithic, specifically to the period between 2850 and 2580 cal BC. The grave was located in a flat landscape with a prominent natural limestone monument and represented a solitary situation.

In comparison with other contemporary finds, it cannot be definitively identified as analogous to any other burial discovery. Contemporary burial practices include both cremation, which can be associated with the Jevišovice pottery production, and inhumations, which cannot be clearly attributed to any specific pottery group. The practice of inhumation during the Late Eneolithic, possibly even earlier, is likely indicative of populations with a steppe lifestyle, whose hybridisation with local Late Eneolithic populations led to the emergence of a society characterised by specific burial practices associated with the Corded Ware.

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FRANTIŠEK TRAMPOTA, *Institute of Archaeology of the Czech Academy of Sciences, Prague, Letenská 123/4, CZ-118 00 Praha, Czech Republic; Regional Museum in Mikulov, Zámek 1/4, CZ-692 01 Mikulov, Czech Republic* [trampota@arup.cas.cz](mailto:trampota@arup.cas.cz)

JARMILA BÍŠKOVÁ, *Nuclear Physics Institute, Czech Academy of Sciences, Hlavní 130, CZ-250 68 Řež, Czech Republic; Department of Archaeology and Museology, Faculty of Arts, Masaryk University, Arna Nováka 1, CZ-602 00 Brno, Czech Republic; [jarmila.nedbalova@gmail.com](mailto:jarmila.nedbalova@gmail.com)*

JIŘÍ KALA, *Institute for Archaeological Heritage Brno, Kaloudova 30, CZ-614 00 Brno, Czech Republic* [kala@uapp.cz](mailto:kala@uapp.cz)

PETR KOS, *Institute for Archaeological Heritage Brno, Kaloudova 30, CZ-614 00 Brno, Czech Republic* [kos@uapp.cz](mailto:kos@uapp.cz)

MIRIAM NÝVLTOVÁ FIŠÁKOVÁ, *Department of Physiology, Faculty of Medicine, Masaryk University, Kamenice 753/5, CZ-625 00 Brno, Czech Republic; [miriam.nyvltova@med.muni.cz](mailto:miriam.nyvltova@med.muni.cz)*

DAVID PARMA, *Institute for Archaeological Heritage Brno, Kaloudova 30, CZ-614 00 Brno, Czech Republic* [parma@uapp.cz](mailto:parma@uapp.cz)