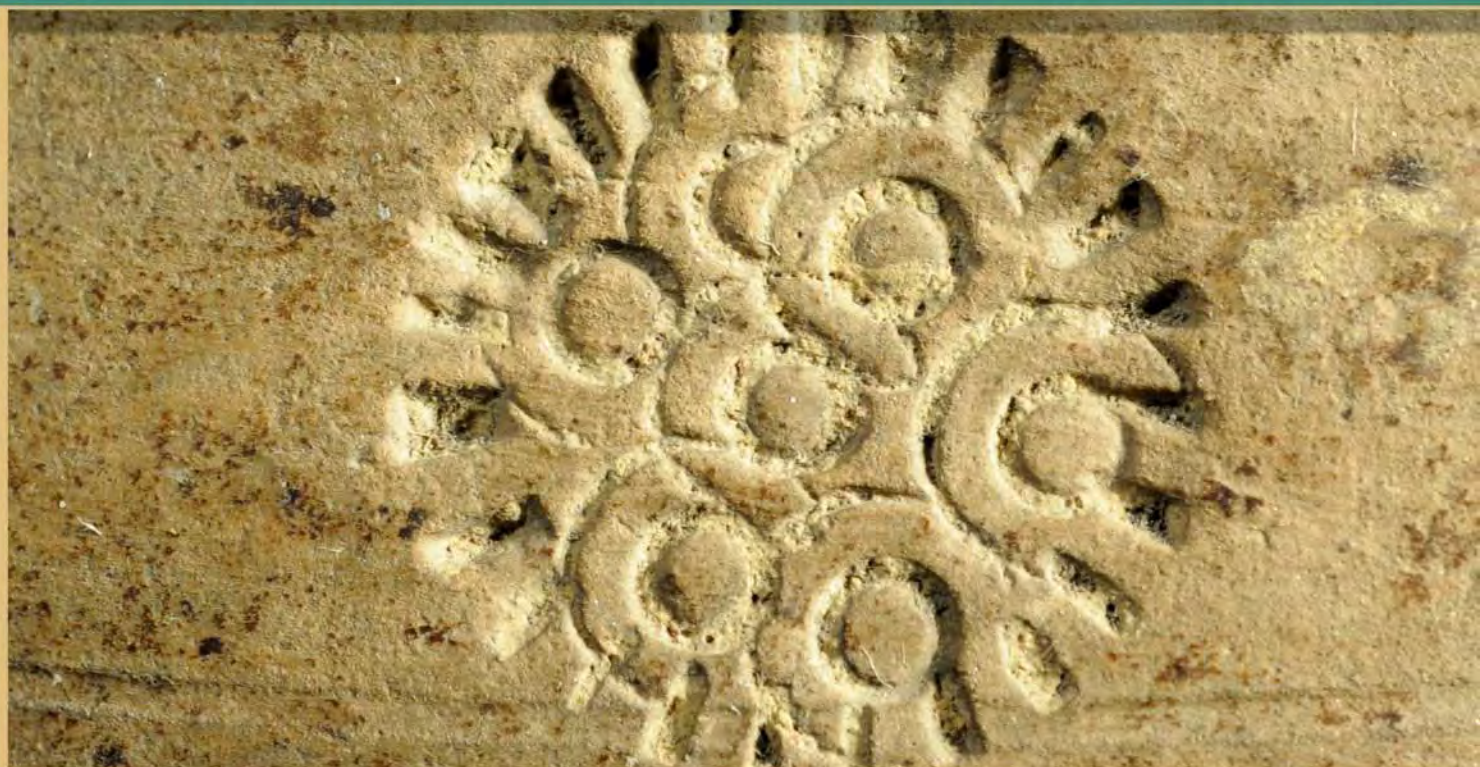




THE LATE IRON AGE CEMETERY FROM
FÂNTÂNELE-*DÂMBUL POPII*

SÁNDOR BERECKI
AUREL RUSTOIU

Sándor Berecki
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**The Late Iron Age Cemetery
from Fântânele-Dâmbul Popii**

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with contributions by:

Adrian Cătălin Cășălean
and
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I. INTRODUCTION

The Fântânele–*Dâmbul Popii* site is located in the upper valley of the Meleş creek, a tributary of the Someşul Mare River in north-eastern Transylvania. Geographically, the area lies on the eastern periphery of the Transylvanian Plateau, between the Someş and Mureş Rivers, within the Lechinţa Hills, a landscape characterised by rolling hills dissected by numerous small water-courses. The archaeological site occupies the western, gently sloping side of a low hill approximately 430 m long and 100 m wide, situated within the present-day territory of Fântânele. Its surface bears clear traces of erosion resulting from long-term agricultural activity (Fig. 1).

The Late Iron Age cemetery extended over an area measuring approximately 220 m along the E–W axis and 40 m along the N–S axis, occupying the western part of the hill. The Early Iron Age and Gepidic cemeteries were identified and excavated farther to the east. The concentration of funerary remains belonging to different chronological periods within the same relatively restricted landscape indicates that the area retained a funerary significance over a remarkably long period, although the individual burial grounds did not necessarily occupy precisely the same space. The later history of the site has added another layer to this long-term funerary use: part of the archaeological area is nowadays occupied by the cemetery of the present-day village.

The Fântânele–*Dâmbul Popii* cemetery provides one of the Transylvanian examples of the successive use of the same broader funerary landscape during the Early and Late Iron Ages (Fig. 2). Although archaeological investigations are still ongoing, a comparable spatial relationship between burial grounds belonging to these two periods can also be observed at the nearby Fântânele–*Dealul Iuşului* cemetery (the topographical name of the second ‘Celtic’ cemetery appears in the literature both as *Dealul Iuşului* and *La Gâţa*). Farther south, in the Mureş valley, the cemetery at Gâmbaş and both La Tène period cemeteries at Aiud were likewise established in areas that had previously served as Early Iron Age burial grounds. Similar patterns are known from the Hungarian Plain and its northern periphery, for example at Hódmezővásárhely, Orosháza and Muhi, where the later cemeteries did not completely overlap the earlier sacred areas but reused only parts of the broader funerary landscape (BERECKI 2021a, 43–45).

In the case of the two cemeteries at Fântânele, the spatial relationship between the Early and Late Iron Age graves is particularly significant. Despite the considerable chronological gap separating the two funerary horizons, the communities that established the Late Iron Age cemeteries appear to have deliberately avoided disturbing the earlier graves. Moreover, they did not place their own dead within the areas already occupied by Early Iron Age burials. This spatial behaviour can hardly be regarded as entirely accidental. It may reasonably be assumed that visible anthropogenic elements inherited from the earlier funerary landscape were recognised and taken into consideration when the Late Iron Age cemeteries were established. The subsequent development of the burial grounds suggests that this spatial awareness was maintained throughout approximately two centuries of their use (BERECKI 2021a, 47).

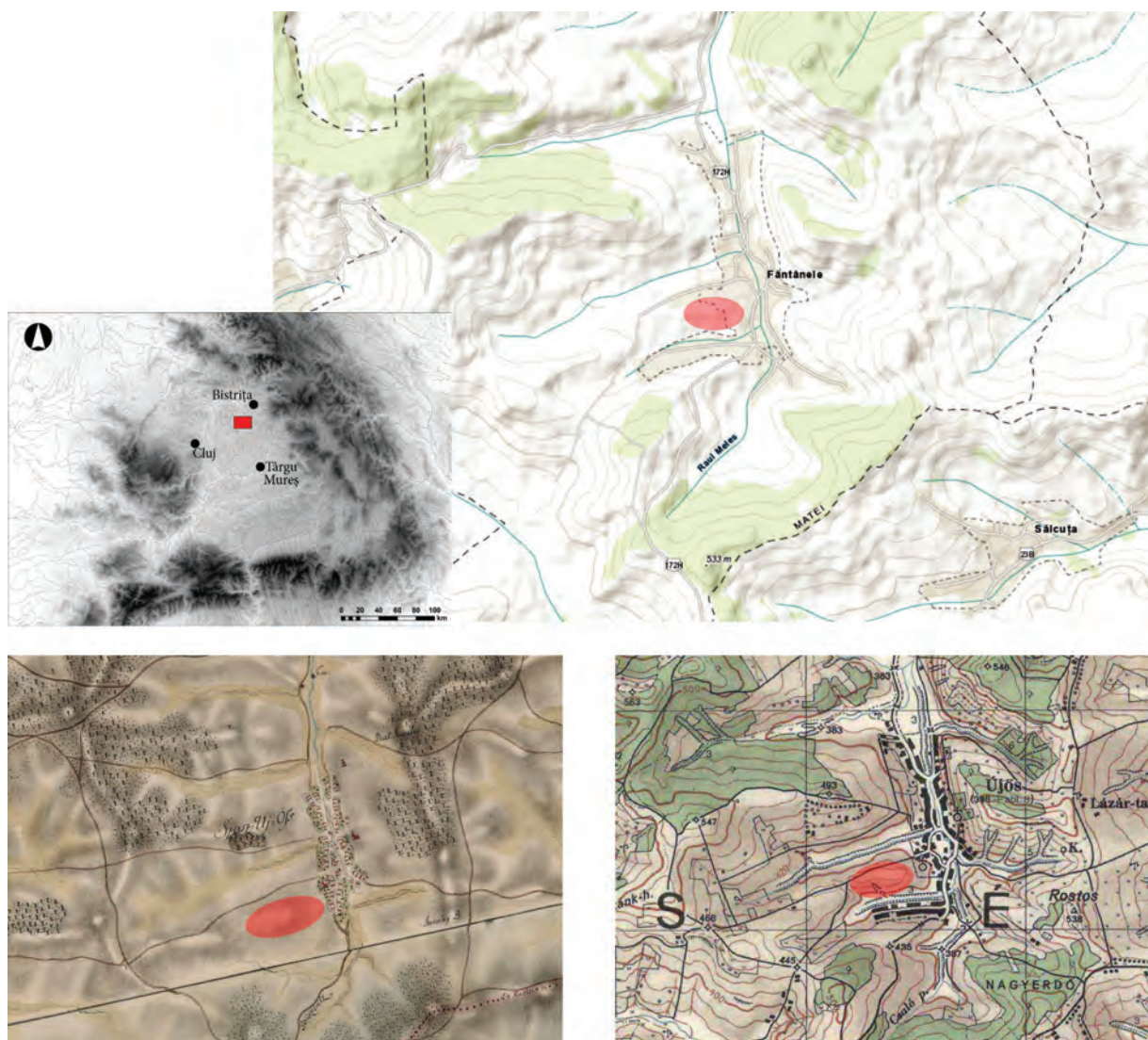


Fig. 1. The location of the Fântânele–Dâmbul Popii site in its present-day topographic setting (TWCC), on the First Austrian Military Survey (1763–1787), and on the Military Survey of Hungary from 1941.

The relationship between the successive burial grounds is therefore relevant for reconstructing the topographical development of the cemeteries and for understanding the ways in which communities perceived and appropriated an already culturally marked landscape. Earlier burial grounds may have functioned as places of memory integrated into local collective identities, serving as symbolic references to a distant or mythical past and providing a tangible connection with previous generations. Their later reuse – or, more precisely, the deliberate establishment of new burial grounds in their immediate vicinity – may reflect both the coexistence of newcomers and local populations and the willingness of the former to incorporate locally meaningful landmarks into the identity of the newly established communities. In this sense, the appropriation of an older funerary landscape could also have served as a means of legitimising the presence of the new communities and anchoring them symbolically within the local environment (RUSTOIU – EGRI 2020, 455).

The funerary landscape of Fântânele should consequently be understood not merely as the physical setting in which successive cemeteries happened to develop, but as a historically structured space whose earlier anthropogenic features could influence later choices concerning the location and organisation of burial grounds. The spatial relationship between the Early and Late

Iron Age cemeteries thus constitutes an important element in interpreting the development of the Fântânele–Dâmbul Popii cemetery and, more broadly, the social strategies adopted by the communities that used it.



Fig. 2. Aerial view of the Fântânele–Dâmbul Popii site showing the areas occupied by the Early Iron Age (blue) and Late Iron Age (green) cemeteries (photo: S. Berecki, September 2014).

In 2022, the authors decided to use the opportunity provided by the János Bolyai Research Scholarship of the Hungarian Academy of Sciences, awarded to Sándor Berecki, to undertake the systematic processing of the Fântânele–Dâmbul Popii cemetery and to prepare its monographic publication. The project represented the culmination of a much longer process of recovering, organising and reassessing the surviving archaeological material and documentation. Inevitably, this undertaking encountered a number of difficulties, most of them resulting from the long interval between the excavation of the cemetery and its comprehensive scholarly publication.

Following the death of Professor I. H. Crişan in 1994, the extensive body of unpublished archaeological documentation left by him, including the records relating to the cemetery at Fântânele–Dâmbul Popii, was entrusted to Florin Medeleş, a former student and collaborator of I. H. Crişan, and to Aurel Rustoiu, who had likewise been a student of the two scholars. A protocol concluded at that time between the management of the Institute of Archaeology and Art History in Cluj-Napoca, on the one hand, and F. Medeleş and A. Rustoiu, on the other, explicitly established their right to publish the archaeological information.

Florin Medeleş died in 2005. In his scientific will, drawn up approximately one month before his death, he specified, among other matters, that responsibility for the publication of the Late Iron Age cemetery at Fântânele–Dâmbul Popii was entrusted to A. Rustoiu. During the following years, the surviving documentation from the excavations was gradually recovered and reassessed. A. Rustoiu checked the archaeological drawings against the documentation preserved in the repository of the Institute of Archaeology and Art History and established that many of

them had never been prepared in a form suitable for publication. These drawings therefore had to be processed subsequently. At the same time, a series of human remains and metal artefacts originating from the excavations were recovered from the former restoration laboratory of the Institute, which had meanwhile ceased to operate.

The reconstruction of the archaeological record was consequently not a straightforward process. Although the surviving excavation documentation is generally detailed and was produced according to the professional standards of its time, it is nevertheless incomplete. Almost all of the original millimetre-paper field drawings are missing, and in most cases only the versions subsequently copied onto tracing paper have survived. Most of the profile drawings are likewise no longer available, although lines marked on several grave plans demonstrate that internal profiles were originally recorded. The absence of this primary documentation inevitably limits the extent to which certain details of the archaeological contexts can now be reconstructed.

For this reason, the preparation of the grave catalogue and, especially, the analysis of funerary practices required the systematic comparison of several independent categories of documentation. The graphic records had repeatedly to be checked against the excavation journals and the surviving lists of artefacts. These sources do not always correspond with one another and occasionally contain contradictory information. In a number of cases, it has therefore proved impossible to establish with certainty the original position of particular objects within the funerary assemblage, the precise type of certain ceramic vessels, or the orientation, dimensions and depth of individual grave pits. Similar problems affect the spatial documentation of the cemetery: graves no. 81 and 82, for example, are absent from the surviving topographical survey. Rather than attempting to reconstruct such missing information hypothetically, the present monograph indicates these uncertainties wherever they affect the archaeological interpretation.

The anthropological material presents a somewhat more favourable situation. Fortunately, the labels and notes accompanying the surviving human remains were generally well preserved, making it possible to identify the graves from which most of the material originated. Exceptions occur among some of the inhumation graves, for which either the accompanying documentation has not survived or the corresponding skeletal remains could no longer be identified in storage. Another part of the anthropological record has been irretrievably lost. In 1986, human remains from several graves were sent to Iași for analysis by the anthropologist Dan Botezatu. The packages were prepared by Aurel Rustoiu, at that time a second-year student at the Faculty of History and Philosophy of Babeș–Bolyai University in Cluj-Napoca. The remains subsequently disappeared without having been analysed.

The situation of the faunal material is different and considerably more problematic. The animal remains were no longer stored together with the other archaeological material from the cemetery and consequently could not be subjected to a new contextual analysis for the present monograph. As in the case of some of the human remains, animal bones from the grave inventories had been sent to Iași in 1986, in this instance to the palaeozoologist Sergiu Haimovici. Unlike the human remains, these were analysed and the results were subsequently published, although unfortunately without the detailed archaeological context required for their full integration into the present study (see HAIMOVICI 2006). This loss of contextual information has to be taken into consideration particularly when assessing animal offerings and their role within the funerary ritual.

Several fragments of charcoal and charred wood have also been identified among the surviving material. These derive especially from the beams and planks documented in a number of graves and discussed in the chapter devoted to funerary customs. Since this category of evidence requires specialised analysis beyond the scope of the present volume, the material will be

investigated separately and is intended to form the basis of a future interdisciplinary study. Such analyses may provide additional information concerning both the construction of individual graves and the broader sequence of activities associated with the funerary ritual.

The circumstances outlined above have inevitably influenced the methodology and scope of the present volume. The unusually rich character of the archaeological evidence frequently invited broader discussion when particular categories of artefacts, archaeological phenomena or funerary practices were considered. At the same time, the primary purpose of this monograph is to make the cemetery and its surviving documentation available in a systematic and critically assessed form. For this reason, although interpretative questions are addressed wherever they are necessary for understanding the archaeological evidence, some problems that would require substantially broader comparative discussion are only outlined here. More detailed analyses of several of these aspects will be developed in separate studies.

This distinction is particularly important because Fântânele–Dâmbul Popii is not simply another addition to the corpus of Late Iron Age funerary discoveries from Transylvania. With 94 known graves and a chronological development extending across the regional ‘Celtic horizon’, it constitutes one of the key archaeological assemblages for investigating funerary behaviour, material culture and community development in the eastern Carpathian Basin. Its significance is further enhanced by the possibility of examining the internal development of a single burial community over a long period and of relating this evolution to wider cultural and chronological processes within the Carpathian Basin.

The present book is the first monographic publication devoted to a Late Iron Age cemetery belonging to the ‘Celtic’ cultural-chronological horizon in Transylvania. Its principal aim is therefore to provide a coherent archaeological basis for future research by bringing together the surviving excavation documentation, the grave inventories, anthropological evidence, analyses of funerary practices and material culture, and the relative and absolute chronology of the cemetery. Despite the inevitable limitations imposed by the history of the documentation and the loss of part of the original material, the cemetery offers an exceptional body of evidence for the study of Late Iron Age communities in Transylvania. We hope that its publication will contribute to a more detailed understanding of the funerary phenomenon in the region, and to wider discussions concerning the social and cultural dynamics of the eastern Carpathian Basin during the La Tène period.

This book is dedicated to the memory of Ion Horațiu Crișan

II. HISTORY OF RESEARCH

The earliest finds from *Dâmbul Popii*, an elongated oval promontory oriented E–W in the south-western part of the centre of Fântânele, within Matei commune, Bistrița-Năsăud County, were recorded in the autumn of 1961. Agricultural activities brought to the surface the first artefacts from disturbed graves: two swords, one of them preserved in its scabbard, a knife, pieces of harness (?) and six or seven vessels (DĂNILĂ 1971, 59–60). According to information subsequently provided by the discoverer, the sheathed sword came from the western part of the cemetery, whereas the other objects were found in its central area. A sword, a knife and a vessel were entrusted by their discoverer, Ion Pop, to the local Reformed pastor and eventually entered the collection of the Bistrița museum (present-day Bistrița-Năsăud Museum Complex). In August 1965, Ștefan Dănilă conducted a field survey in the area, collecting several pottery fragments, a small bronze ring and another object, probably a bronze clasp, from *Dâmbul Popii*. He also recorded the presence of cremated human remains.

The first archaeological excavations were carried out on 25–26 October 1967, while agricultural work was still in progress (Fig. 3). Five trenches were opened and eight cremation graves were excavated in areas where archaeological remains were visible on the surface or where darker soil indicated the presence of archaeological features (DĂNILĂ 1978). These investigations confirmed the funerary character of the site and demonstrated that the finds recovered during agricultural work belonged to a more extensive cemetery.

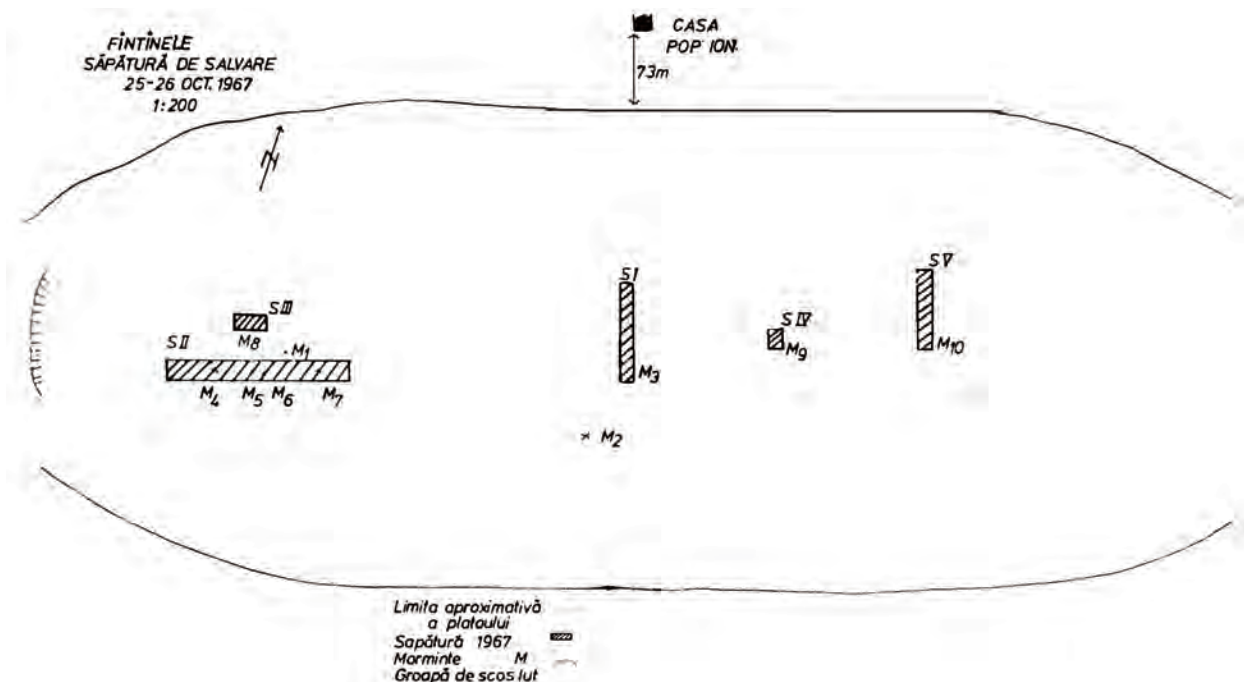


Fig. 3. Plan of the excavations from 1967 (after DĂNILĂ 1978, 258, fig. 1).

Systematic research resumed in 1969 under the auspices of the Institute of History and Archaeology in Cluj, in collaboration with the Museum of Bistrița. The first campaign was conducted between 13 and 25 October 1969, when the first ten graves of the new excavation series were investigated. Grave no. 7 was described in the excavation diary as *“the most intricate grave we have discovered so far”*, while grave no. 9, nicknamed “Dumitru” by the workers, was recovered *in situ* on 25 October, *“at the persistent urging of comrade Dănilă Ștefan, despite my repeated claims that it was not a grave worth recovering.”* Beyond their anecdotal character, such remarks provide valuable insight into the circumstances of the excavations and the way in which particular archaeological contexts were evaluated at the time.

The excavation diary, authored and signed by Ion Horațiu Crișan, Ștefan Dănilă, Tudor Soroceanu and Ovidiu Sîngeorzean, records the site under the name *Dealul Popii*. The fieldwork was organised through a system of long trenches. The first trenches opened that year were 1 m wide and 48 m long, separated by balks 0.30 m wide, while the final two trenches of the 1969 campaign, SIX and SX, were 13 m long.

The discoveries soon attracted attention beyond the archaeological community. On 18 October, a team from the Cluj studio of Romanian Television filmed a report at the site. By that date, five graves had been excavated and three more had been identified. Among the finds presented to the press were the human skull from grave no. 5, the large knife from grave no. 2, the bronze bracelets with knobs from grave no. 5, and a wheel-thrown vessel from grave no. 4. On 23 October, the excavation was visited by Ioan Retegan, first vice-president of the Bistrița-Năsăud County Council, who promised financial support for the continuation of the investigations. The beginning of the systematic research in 1969, together with the earlier discoveries made in 1967, was documented in the annual archaeological report (POPESCU 1970).



Fig. 4. Documenting grave no. 7 and recovering the objects from grave no. 28.

The following year, the first excavation campaign was conducted between 8 and 29 August, during which graves no. 11–29 were investigated. The team consisted of I. H. Crișan, Șt. Dănilă, T. Soroceanu and the student Gheorghe Marinescu. Grave no. 21, discovered during this campaign, was described in the excavation diary as *“one of the most spectacular graves of the Fântânele cemetery, evoking quite a few intense feelings”*. Such comments, unusual in formal archaeological

documentation, preserve something of the immediate impression made by particular funerary assemblages on the excavators.

Grave no. 12, which yielded only a few pottery fragments and animal bones, was considered to have been “*emptied by the researches of Șt. Dănilă*”. The same interpretation was proposed for grave no. 24, where similarly only a small number of pottery fragments and animal bones were recovered. In a brief summary of the investigations prepared at the end of the 1973 campaign, however, graves containing “*nothing or almost nothing*” were reinterpreted as cenotaphs. This change in interpretation illustrates one of the difficulties inherent in reconstructing the excavation history of the cemetery: observations made in the field were sometimes reassessed during later campaigns as the excavators accumulated a broader understanding of the funerary practices represented at the site.

Șt. Dănilă's perspective is absent from these later conclusions. Although he formally remained a member of the excavation team, he may not have been present when the graves in question were discovered, or differences of interpretation may have existed among the members of the team. The latter possibility is suggested by the quotation marks used in the excavation diary when referring to Șt. Dănilă's earlier investigations, apparently expressing a certain reservation regarding their archaeological methodology. Further indications are provided by the absence of his signature from the final page of the diary of the summer 1970 campaign and by his absence from the team that resumed the excavations in the autumn of the same year.

At the same time, the surviving evidence advises caution in interpreting these indications as evidence of a clear personal or professional conflict. At the beginning of 1970, I. H. Crișan and Șt. Dănilă were preparing a joint publication of the discoveries made before the Institute in Cluj became involved in the investigations at Fântânele, under the title “Celts in the territory of Bistrița-Năsăud county” (cf. CRIȘAN 1971a, fn. 30 and 99; CRIȘAN 1971b, fn. 13; CRIȘAN 1971c, fn. 1; CRIȘAN 1971d, fn. 23). Ultimately, the study dealing with these early discoveries appeared under Șt. Dănilă's name alone (DĂNILĂ 1978). The available documentation does not allow the circumstances behind this change to be reconstructed with certainty.

During the summer of 1970, further Late Iron Age discoveries were reported in the immediate surroundings of Fântânele. At the *Cireșul* point, on the hill east of the village towards Bungard, Balog Mihai (Mihály?) discovered two Late Iron Age vessels in a stony layer at a depth of more than 1 m, on a plateau measuring approximately 80 × 30–40 m. One of the vessels was handed over to the *Dâmbul Popii* excavation team, which carried out field reconnaissance on 9 and 15 August. The location is most probably identical with the second Late Iron Age cemetery at *Dealul Iușului* (Thanks are due to Dan-Lucian Vaida for locating *Cireșul* / *Cireșii*), and the finds appear to have originated from its northern part, on the NW–SE oriented promontory.

During the same summer campaign, Mihály Szikszay presented the *Dâmbul Popii* team with fragments of an anklet with large hollow knobs, which he had obtained from another local inhabitant. The findspot, known as *Livadă* and situated 3–4 km south of *Dâmbul Popii*, was subsequently shown to the team consisting of I. H. Crișan, T. Soroceanu and Șt. Dănilă (CRIȘAN 1975a, 41) by an inhabitant of the neighbouring village of Jimbor. The artefacts had been unearthed during spring ploughing, and most of them remained in the furrow until the archaeologists arrived during the summer. Although archaeological investigations at this newly identified site were planned, they were never carried out. The discovery nevertheless indicates that *Dâmbul Popii* formed part of a denser Late Iron Age funerary landscape around Fântânele, whose extent only gradually became apparent in the course of research.

A second excavation campaign was conducted between 14 and 22 October 1970, resulting in the discovery of graves no. 30–36. On this occasion, the team consisted of Ion Horațiu

Crişan, Tudor Soroceanu and the student Gheorghe Marinescu. The 26 graves identified during the two campaigns of 1970 are also mentioned in the annual report of archaeological research in Romania (BABEŞ 1971, 372). Because of unfavourable weather conditions, the autumn excavations were brought to an end relatively quickly.

Fieldwork resumed on 27 July 1971. By 19 August, the team of I. H. Crişan, T. Soroceanu and Gh. Marinescu had excavated graves no. 37–49. As in the preceding year, a second campaign was organised in the autumn, between 16 September and 9 October, during which graves no. 50–55 were investigated.

The earliest published references to *Dâmbul Popii* originating from members of the excavation team date to 1971. In the same year, Şt. Dănilă published a summary of the accidental finds and of his own excavations at the site (DĂNILĂ 1971). In his discussion of the chronology of the Ciumeşti finds, I. H. Crişan referred to the recent investigations at Fântânele and mentioned the ten graves excavated in 1969 (CRIŞAN 1971a, fn. 99). His synthesis on the “Celts in Transylvania” also included the site on the distribution map of discoveries (CRIŞAN 1971d, fig. 1). Further brief references subsequently appeared in the annual reports of archaeological research in Romania (MORINTZ 1972, 338). Thus, while the cemetery was still being excavated, information concerning its existence and archaeological significance had already begun to enter the specialist literature.

By the end of the campaign conducted between 7 September and 6 October 1972, the number of excavation trenches had reached 104, and graves no. 56–60 were discovered during that year. Florin Medeleţ joined the research team. The intention of the local Reformed parish to establish a new cemetery at the eastern end of the promontory during the following winter prompted additional archaeological investigations. Three trenches, measuring 34, 38 and 42 m in length and 1 m in width, were opened parallel to the high-voltage power line. The first Migration Period graves were identified in these trenches, revealing another chronological component of the funerary landscape. As in previous years, the results were briefly summarised in the annual report of archaeological investigations in Romania (MORINTZ 1973, 375).

The first campaign of 1973 was conducted between 28 July and 25 August. Graves no. 61–80 were discovered, together with further Migration Period burials. The research team, consisting of I. H. Crişan, T. Soroceanu, Fl. Medeleţ and Gh. Marinescu, was joined by the student Teodor Câmpan. Two excavation diaries survive from this campaign. Their contents are almost identical, although they were written by different hands, providing an unusual instance of duplicated field documentation from the excavations.

Research resumed on 13 October under I. H. Crişan and T. Soroceanu and continued until 24 October, when graves no. 81 and 82 were discovered. During this campaign, Professor Al. Săndulache carried out the topographical survey of the cemetery. This survey became particularly important for reconstructing the spatial development of the burial ground, although graves no. 81 and 82 were not included in the surviving version of the topographical plan (Fig. 5).

In 1973, I. H. Crişan published his repertory of Transylvanian sites containing early and middle La Tène finds (CRIŞAN 1973). The study refers to 55 graves from *Dâmbul Popii*, indicating that the manuscript was probably completed before the 1972 excavation campaign. The finds from *Livadă* are mentioned, whereas those from *Cireşul* are absent. The publication therefore provides an indirect indication of the stage reached in the investigation and documentation of the archaeological landscape around Fântânele at the time when the manuscript was prepared.

The final archaeological campaign involving Late Iron Age funerary contexts began on 4 August 1974 and was conducted by I. H. Crişan, T. Soroceanu and Fl. Medeleţ. Two additional graves, numbered 83 and 84, were discovered, while the total number of excavation trenches reached 179. With this campaign, the systematic excavation of the Late Iron Age cemetery effectively came to an end.

In the same year, I. H. Crişan published a study of the ‘Celtic’ artefacts preserved in the Arad County Museum. References to parallels from Fântânele indicate that the article had been written after the 1970 excavation campaign (CRIŞAN 1974, fn. 50). The gradual appearance of the Fântânele material in studies devoted to other archaeological assemblages illustrates how the cemetery began to serve as a comparative reference even before its excavation had been completed and long before the assemblage was comprehensively published.

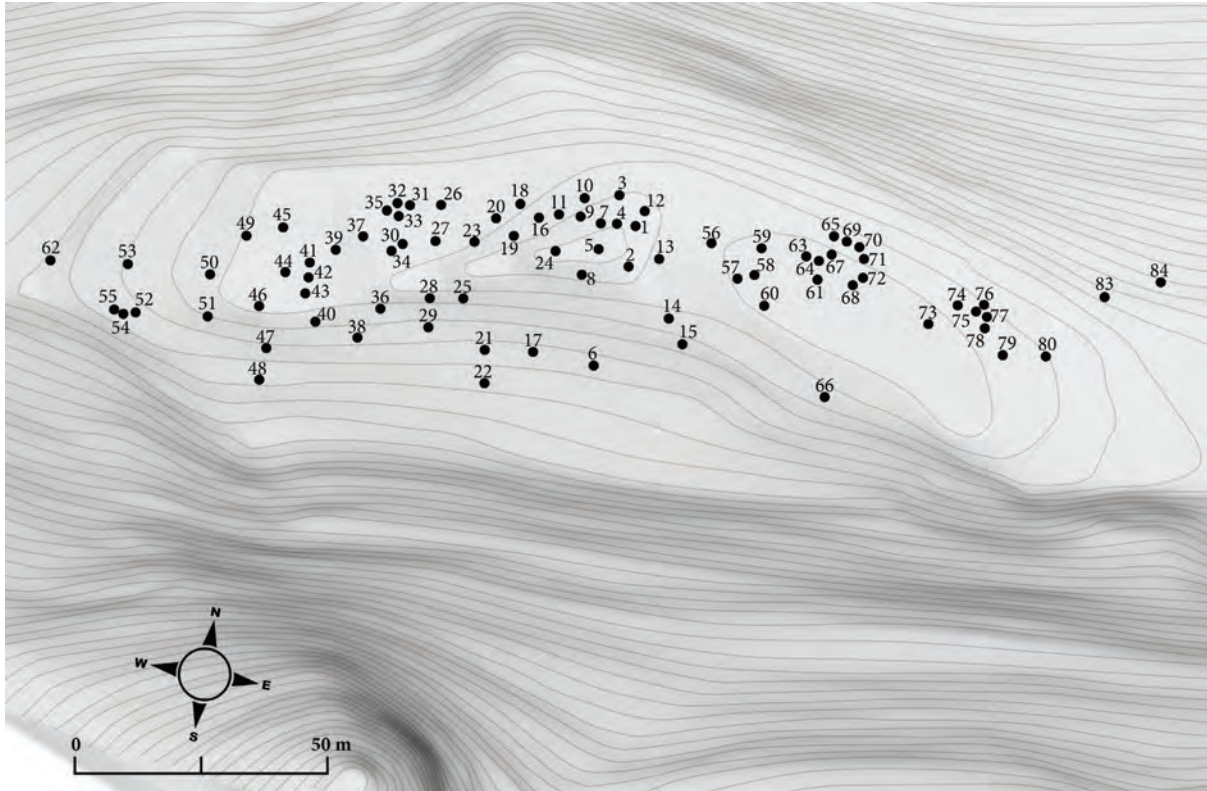


Fig. 5. Fântânele–Dâmbul Popii. Plan of the cemetery (base map: Loránt László Méder).

The year 1974 also marked the introduction of Fântânele–Dâmbul Popii to the wider European archaeological community. I. H. Crişan presented the results of the excavations at the conference “The Celts in Central Europe”, held in Székesfehérvár, Hungary. A brief contribution without illustrations appeared in the conference proceedings the following year (CRIŞAN 1975b). The cemetery thus acquired international visibility at a relatively early stage of its investigation, although a comprehensive publication of the site was still lacking.

During the following years, I. H. Crişan published several studies drawing on preliminary interpretations of the Fântânele discoveries. He emphasised the significant role of ‘Celtic’ influences in the formation of the ‘Dacian-Getic’ La Tène culture from the middle of the 4th century BC onwards. The presence of handmade pottery in the Late Iron Age graves at Dâmbul Popii was interpreted as evidence for the coexistence of indigenous populations and the newly arrived communities (CRIŞAN 1977a; 1978). These interpretations placed the cemetery within the broader contemporary debate concerning cultural interaction and population dynamics in Late Iron Age Transylvania.

After 1978, however, Crişan’s research priorities changed considerably. As preparations began for the “1980 celebration of the 2050th anniversary of the centralised and independent Dacian state established by Burebista”, his attention increasingly shifted towards the final La Tène period. As a consequence, the systematic analysis and publication of the cemetery at Fântânele–Dâmbul

Popii was postponed and remained unfinished for several decades. This interruption is particularly significant given the scale of the excavations and the international interest that the site had already generated during the 1970s.

Approximately three decades later, Aurel Rustoiu, who had inherited the Late Iron Age archaeological material and documentation, gradually reintroduced the Fântânele cemetery into international scholarly discussion. From 2008 onwards, individual funerary assemblages from the site were repeatedly incorporated into case studies and broader syntheses, where they provided comparative material for questions concerning chronology, funerary practices, social identity, mobility, craftsmanship and cultural interaction. Through these studies, the archaeological significance of the cemetery was progressively re-established despite the continued absence of a complete monographic publication.

Over the following years, comprehensive or partial analyses were devoted to grave no. 1 (RUSTOIU – BERECKI 2015a; RUSTOIU – BERECKI 2016, fig. 4/2; RUSTOIU – GÁL 2018; RUSTOIU 2019a; RUSTOIU – EGRI 2020, fig. 10/3), no. 7 (RUSTOIU – BERECKI 2016, fig. 4/1; RUSTOIU ET AL. 2017, fig. 10; RUSTOIU – EGRI 2020, fig. 10/2), no. 10 (RUSTOIU 2008a, fig. 35; RUSTOIU 2013a, fig. 6; RUSTOIU 2014a, fig. 4; RUSTOIU 2017a, 37, fig. 2; RUSTOIU ET AL. 2017, fig. 11; RUSTOIU 2018a, 24–25, fig. 19; RUSTOIU 2023, fig. 6), no. 17 (RUSTOIU 2014b; RUSTOIU 2015a, fig. 20; RUSTOIU – EGRI 2020, fig. 11/1), no. 28 (RUSTOIU 2014b), no. 34 (RUSTOIU 2008a, fig. 59; RUSTOIU 2009; RUSTOIU – EGRI 2010a; RUSTOIU – EGRI 2010b; RUSTOIU – BERECKI 2014, fig. 1, pl. 3; RUSTOIU – FERENCZ 2020, fig. 4/4), no. 40 (RUSTOIU 2014b), no. 41 (RUSTOIU 2014b), no. 42 (RUSTOIU 2014b), no. 49 (RUSTOIU 2008a, fig. 46; RUSTOIU 2015b; RUSTOIU 2020; RUSTOIU 2021a), no. 59 (RUSTOIU 2018b), no. 62 (RUSTOIU – MEGAW 2011; RUSTOIU 2013b), no. 73 (RUSTOIU 2021b, fig. 1–2), no. 79 (RUSTOIU 2008a, fig. 22; RUSTOIU 2008b, fig. 2; RUSTOIU 2011a, fig. 2; RUSTOIU 2011b, fig. 3; RUSTOIU 2015c, fig. 4; RUSTOIU 2021b, fig. 3–4).

The comprehensive processing of the archaeological material and the surviving documentation was ultimately made possible through the János Bolyai Research Scholarship of the Hungarian Academy of Sciences. The finds and documentation were transferred from the Institute of Archaeology and Art History in Cluj-Napoca to Târgu Mureş, where the artefacts underwent primary conservation and the assemblage was systematically re-documented. This work provided the basis for the preparation of the present monograph after several decades during which the cemetery had remained accessible primarily through preliminary publications and individual case studies.

During this process, selected artefacts from the cemetery were also presented to the public in temporary exhibitions in Târgu Mureş. Weapons from the cemetery were displayed in the 2023 exhibition “Epochs, Elites and Weapons”, while jewellery, weapons and pottery were included in the 2025 exhibition “Terracotta Soldiers: The Immortal Army of the First Chinese Emperor.” A selection of artefacts from Fântânele–*Dâmbul Popii* had previously been presented at the Museum in Bistrița in a temporary exhibition organised on the occasion of the national colloquium “Les Celtes et les Thraco-Daces de l’Est du Bassin des Carpates”, held on 16–17 October 1998; the proceedings of the meeting were published two years later (see GAIU – RUSTOIU 2000).

The publication of the present monograph therefore brings to completion a research and documentation process extending over more than six decades, from the first accidental discoveries in 1961 through the systematic excavations of 1967–1974 and the subsequent partial publication and reassessment of individual assemblages. Following the publication of the volume, the artefacts will return to the museum of the county in which they were discovered, where they will be stored, catalogued and made accessible to researchers and the wider public by the Bistrița-Năsăud Museum Complex.

III. CATALOGUE OF THE GRAVES

The following catalogue presents the funerary contexts investigated at Fântânele–Dâmbul Popii, based on the surviving excavation documentation and the archaeological material available for study. The graves are presented according to their original numbering, with separate entries for the funerary context and the associated grave goods, followed, where available, by references to the corresponding plates. Information concerning the location, dimensions and internal arrangement of the graves, as well as the position of individual artefacts, human remains and animal offerings, derives primarily from the original field documentation.

The catalogue also records objects mentioned in the excavation documentation but no longer available for examination. These are indicated as missing or unrecovered, as appropriate. Measurements and descriptions of preserved artefacts are based on the material examined during the preparation of the present volume, while information that could only be reconstructed from earlier records is retained wherever relevant. The graves discovered during the investigations conducted by Ștefan Dănilă before the systematic excavations are listed separately at the end of the catalogue and are identified by reference to his publication [D].

l. = length; h. = height; w. = width; Ø = diameter / mouth diameter; intØ = interior diameter; extØ = exterior diameter; ø = base diameter; maxØ = maximum diameter; inv. no. = inventory number at the Bistrița-Năsăud Museum Complex; [D] = Dănilă 1978

Cremation grave no. 1 (Pl. I)

– in S I, at a depth of 0.50 m from the present surface, the pit was not outlined and was only observed in profile. The metal artefacts and the rattle were among the cremated bones.

1. iron *brooch*, l. 81 mm (Pl. I/1);
2. iron *brooch*, l. 87 mm (Pl. I/2);
3. iron *brooch*, not recovered;
4. iron *knife* blade, l. 90 mm, 6 g (Pl. I/3; LXXII/17);
5. iron *knife* blade, l. 50 mm, 5 g (Pl. I/4; LXXII/11);
6. *rattle*, 27 clay balls have been preserved, l. 57 mm, 51 g (Pl. I/5; LXXII/3);
7. wheel-thrown small black *bowl*, annular base with omphalos, h. 60 mm, Ø 175 mm, ø 70 mm, maxØ 180 mm (Pl. I/6; LXXIX/3);
8. large *bowl*, wheel-thrown, h. 100 mm, Ø 240 mm, ø 108 mm (Pl. I/8);
9. handmade large *bowl*, h. 115 mm, Ø 240 mm, ø 95 mm, maxØ 260 mm (Pl. I/7);
10. large wheel-thrown *vessel*, black, unrecovered;
11. unrecovered *vessel*;
12. large quantities of burnt *human bones* with very little charcoal and ash.

Cremation grave no. 2 (Pl. II)

– in S II, the grave pit was outlined at a depth of 0.30 m from the present level and deepened to

0.80 m. The pit was oval in shape and measured 1.50 × 1.20 m. The bones were deposited in two heaps at the NW and SW ends of the pit. A fragment of an iron brooch was discovered among the cremated bones in the NW corner, while an iron tubular bracelet was discovered among the cremated bones in the SW corner.

1. fragment of an iron *brooch*, unrecovered;
2. burnt tubular iron *bracelet*, intØ 77 mm, 30 g (Pl. II/2; LXVII/3);
3. large iron *knife*, l. 310 mm (Pl. II/1);
4. wheel-thrown *jug* with one handle, grey, annular base with omphalos, h. 120 mm, Ø 125 mm, ø 58 mm (Pl. II/3);
5. medium wheel-thrown *vessel*, h. 174 mm, Ø 112 mm, ø 64 mm, maxØ 146 mm (Pl. II/4);
6. medium wheel-thrown *vessel*, h. 120 mm, Ø 128 mm, ø 58 mm, maxØ 155 mm (Pl. II/5; LXXXI/4);
7. wheel-thrown *bowl*, fragmentary, Ø 285 mm (Pl. II/6);
8. large wheel-thrown *vessel*, greyish brown, annular base with omphalos, h. 320 mm, Ø 190 mm, ø 115 mm, maxØ 290 mm (Pl. II/7; LXXXVII/4);
9. large wheel-thrown *vessel*, light brown, h. 370 mm, Ø 220 mm, ø 130 mm, maxØ 340 mm (Pl. II/8; LXXXVIII/4);
10. two heaps of cremated *human bones*;
11. *pig skeleton* on the S side of the pit.

Cremation grave no. 3 (Pl. III)

– in S II, disturbed by agricultural work, very shallow. The inventory was found at 0.40 m.

1. the base of a large, wheel-thrown *vessel*, ø 120 mm (Pl. III/2);
2. fragments of a large, bitronconical, handmade *vessel*, Ø 220 mm, ø 145 mm (Pl. III/1);
3. small wheel-thrown *vessel*, unrecovered;
4. fragments of a wheel-thrown *vessel*, unrecovered;
5. some burnt *human bone* fragments.

Cremation grave no. 4 (Pl. IV)

– in S IV, at a depth of 0.30 m from the present walking level, the shape of the burial pit was probably oval, with a maximum diameter of 1.50 m. The human bones were laid in the NW corner of the pit. The brooches were found among the cremated human bones. The bronze and silver bracelets were laid over the cremated bones, while a fragment of a silver bracelet was found among the animal bones.

- 1–2. two small burnt iron *brooches* (Pl. IV/1–2; LXIII/9–10);
3. silver *bracelet*, intØ 30 × 37 mm, 7 g (Pl. IV/3; LXVI/13);
4. silver *bracelet*, intØ 30 × 37 mm, 7 g (Pl. IV/4; LXVI/14);
5. bronze *bracelet*, intØ 45 × 54 mm, 17 g (Pl. IV/5; LXVI/6);
6. bronze *bracelet*, intØ 48 × 51 mm, 18 g (Pl. IV/6; LXVI/4);
7. fragment of a silver *bracelet*, missing;
8. bronze *chain* made of small bronze links and found near the bracelets, missing;
9. handmade small *cup* with one handle, brown to grey, unevenly fired, h. 50 mm, Ø 60 mm, ø 45 mm (Pl. IV/7; LXXIV/1);
10. small wheel-thrown *vessel*, brown-grey, rough appearance, h. 85 mm, Ø 80 mm, ø 65 mm (Pl. IV/8; LXXVI/3);
11. wheel-thrown *bowl*, black, annular base with omphalos, h. 60 mm, Ø 170 mm (Pl. IV/9; LXXIX/2);

12. lower part of a large wheel-thrown *vessel*, black, disturbed by agricultural work, ø 40 mm (Pl. IV/10);
13. lower part of a large wheel-thrown *vessel*, black, disturbed by agricultural work, ø 90 mm (Pl. IV/11);
14. medium-sized handmade *bowl*, brown-dark grey, with a straight-cut rim, h. 80 mm, Ø 200 mm, ø 90 mm (Pl. IV/12; LXXVII/5);
15. cremated *human bones*;
16. *animal bone* fragments.

Inhumation grave no. 5 (Pl. V)

– in S V, at a depth of 0.90 m, oriented N–S with 5°W. The height of the skeleton found *in situ* was approximately 1.65 m.

1. small bronze *brooch* with a spherical knot and bound foot, on the diaphysis of the right humerus, l. 52 mm (Pl. V/2; LXIV/4);
2. small iron *brooch*, on the left shoulder, l. 43 mm, 3 g (Pl. V/3; LXIV/12);
3. large iron *brooch*, on the diaphysis of the left humerus, l. 130 mm, 14 g (Pl. V/1; LXV/11);
4. fragmentary silver saddle-shaped *finger ring* on the left hand, intØ ≈ 18 mm (Pl. V/4; LXX/16);
5. fragments of a silver saddle-shaped *finger ring* on the left hand, intØ 17 × 18 mm (Pl. V/5);
6. bronze *bracelet* with small knots on the right forearm, broken into three fragments, intØ ≈ 45 × 53 mm, 25 g (Pl. V/6; LXVII/2);
7. bronze *bracelet* with small knots, on the right forearm, intØ 45 × 53 mm, 25 g (Pl. V/7; LXVII/1);
8. iron *bracelet* on the left arm, intØ 73 mm, 12 g (Pl. V/8; LXVII/14);
9. iron *bracelet* in two pieces, on the left arm, intØ 75 mm, 16 g (Pl. V/9; LXVII/13);
10. thin bronze *chain* in the cervical area, passing under the mandible and occiput, l. 1.513 m, 11 g (LXIX/3);
11. fragments of an iron *chain* with textile prints, found with the bronze chain (LXIX/4);
12. twisted iron *chain belt* consisting of a long and a short segment and a link, l. 485 mm / 131 mm, extØ of the link 31 mm, 195 g (Pl. V/10; LXIX/5);
13. *skeleton*.

Cremation grave no. 6 (Pl. VI)

– in S VI and S VII, an oval pit with a maximum diameter of 1.30 m, filled with black earth, deepened to 0.53 m. At 0.20–0.30 m above the bottom of the pit, traces of wooden beams were observed, framing the grave on two sides, and a third one that was not connected. The cremated bones were located in the centre of the pit, among them the two brooches. The animal offering was placed in the northern half of the pit.

1. small iron *brooch*, l. 61 mm, 4 g (Pl. VI/1; LXIV/13);
2. large iron *brooch*, l. 188 mm, 53 g (Pl. VI/2; LXV/9);
3. small *ceramic* fragments, unrecovered;
4. small traces of *charcoal*;
5. cremated *human bones*;
6. *animal bones*.

Cremation grave no. 7 (Pl. VII–VIII)

– in S V, S VI and S VII, the grave pit was quadrangular, measuring 1.40 × 1.90 m, with its long axis oriented E–W and a depth of 2 m. The pit was panelled and flanked with sandstone slabs on the edge, with a distance of about 5 cm between the pit wall and the stones. The bottom of the pit

was panelled in the NE corner, in a small area where the vessels were deposited. Small fragments of pottery, charcoal and adobe were found in the fill. At a depth of 0.60 m a first heap was discovered, consisting of charcoal, ashes, cremated bones, and among them was a large iron brooch. A second oval heap, approximately in the centre of the pit, also consisting of charcoal, ashes and cremated bones, was found at 1.20 m, where an iron blade (probably a razor) was discovered. At the bottom of the pit, towards its NW corner, cremated human bones were found together with a large quantity of ash and charcoal, and also an iron brooch. A trace of charcoal was observed at the bottom of the pit. The pots and animal offerings were deposited at the same depth.

1. medium-sized, fragmentary iron *brooch* found among the cremated bones at the bottom of the pit, l. 110 mm, 19 g (Pl. VIII/1; LXV/17);
2. large iron *brooch* found among cremated bones at a depth of 1.20 m, l. 126 mm, 17 g (Pl. VIII/2; LXV/4);
3. blade of an iron *razor* with a knobbed handle, found among the bone offerings, l. 108 mm, 11 g (Pl. VIII/4; LXXIII/1);
4. iron *spearhead*, in the NE corner of the bottom of the pit, l. 262 mm (Pl. VIII/5);
5. *whetstone*, found among cremated bones at a depth of 1.20 m (Pl. VIII/3);
6. small wheel-thrown *vessel*, h. 205 mm, Ø 105 mm, ø 80 mm (Pl. VIII/6);
7. large handmade *vessel*, dark grey to black, h. 400 mm, Ø 240 mm, ø 140 mm (Pl. VIII/9; LXXXIII/5);
8. medium handmade *vessel* with four knobs and four protuberances, brown-dark grey, unevenly fired, h. 340 mm, Ø 170 mm, ø 105 mm (Pl. VIII/10; LXXXV/3);
9. handmade *mug* with one handle, h. 102 mm, Ø 75 mm, ø 65 mm (Pl. VIII/7);
10. handmade *bowl*, h. 115 mm, Ø 285 mm, ø 108 mm (Pl. VIII/8);
11. three heaps of cremated *human bones*;
12. *pig bones*.

Cremation grave no. 8 (Pl. IX/a–b, 1–3)

– in S IX and S X, 0.25–0.30 m deep, disturbed by agricultural work, grave goods partially recovered. The metal artefacts were found among cremated human bones.

1. small bronze *brooch* with a knob, with the foot linked to the spring, l. 23 mm (Pl. IX/1; LXIV/8);
2. iron *bracelet*, poorly preserved, 6 g (Pl. IX/1; LXVII/7);
3. iron fragment, probably from a *knife*, l. 55 mm, 20 g (Pl. IX/2; LXXIII/6);
4. iron object, probably from a *belt* (Pl. LXX/21);
5. clay *spindle whorl*, Ø 21 mm, 5 g (LXXII/2);
6. lower part of a large, black, wheel-thrown *vessel*, ø 108 mm (Pl. IX/3);
7. cremated *human bones*;
8. *animal bones*.

Inhumation grave no. 9 (Pl. IX/c–e)

– in S VIII, 0.20–0.25 m deep, disturbed by agricultural works, S–N orientation with 5°W.

1. large iron *brooch* under the breastbone, missing;
2. small iron *brooch*, at the left shoulder, missing;
3. small iron *brooch*, at the right collarbone, missing;
4. bottom of a *vessel*, disturbed by agricultural works to the right of the pelvis, unrecovered;
5. *skeleton*.

Cremation grave no. 10 (Pl. X–XI)

– the grave pit was observed at a depth of 0.20–0.30 m and deepened to 1 m. It was oval, with a maximum diameter of 1.80 m. On the E wall of the pit, a compact layer of charcoal, 0.20 m wide and 0.02–0.04 m thick, was observed, from which other, less compact 0.04–0.05 m wide charcoal trails ran, framing the grave. These were deposited after the grave goods, with the bowl at the SW end of the pit lying below the charcoal layer. A similar charcoal streak was observed in the centre of the pit.

1. small bronze *brooch* with knobs on the free foot, discovered among the cremated bones, l. 38 mm (Pl. XI/1);
2. small bronze *brooch*, with knobs on the free foot, with incised decoration, discovered close to the vessels, l. 49 mm (Pl. XI/2);
3. small iron *knife* blade found among animal bones, l. 86 mm, 10 g (Pl. XI/3; LXXII/21);
4. handmade *bowl*, brown to dark grey, unevenly burnt, straight rim, found inside the larger vessel, h. 95 mm, Ø 230 mm, ø 115 mm (Pl. XI/4; LXXVIII/2);
5. handmade medium *vessel*, brown with black spots, with flattened protuberances, placed in the NE corner of the pit, h. 290 mm, Ø 190 mm, ø 153 mm (Pl. XI/5; LXXXIV/3);
6. large handmade *vessel*, brown-dark grey, unevenly burnt, with large flattened protuberances, found in the NE corner of the pit, next to the previous one, h. 350 mm, Ø 255 mm, ø 120 mm (Pl. XI/6; LXXXV/2);
7. a small quantity of cremated *human bones*, in the NW corner of the pit;
8. *animal bones* near the bowl, probably including *hen bones*.

Cremation grave no. 11 (Pl. XII)

– in S XII, between 8 and 10 m, the shape of the pit was oval, with a maximum diameter of 1.20 m and a depth of 0.42 m. The vessels were located at the eastern end of the pit.

1. *torc* of silver wire, bent in the shape of an 8, found near vessel no. 2, w. 82 mm, 20 g (Pl. XII/1; LXVI/1);
2. the melted ends of a silver *torc*, which was ritually cut before cremation, found among the cremated bones;
3. buffer-type bronze *bracelet*, fragmentary, found among the cremated bones, intØ ≈ 75 mm, 44 g (Pl. XII/2; LXVI/19);
4. fragment of an early LT Dux type bronze *brooch* (Pl. XII/3);
5. handmade *bowl*, brown, h. 85 mm, Ø 200 mm, ø 90 mm (Pl. XII/4; LXXVII/4);
6. medium-sized, handmade *vessel*, Ø 205 mm, ø 120 mm (Pl. XII/5);
7. medium-sized, handmade *vessel*, dark grey, h. 195 mm, Ø 155 mm, ø 120 mm (Pl. XII/6; LXXXIII/1);
8. cremated *human bones* in a heap at the SW end of the grave;
9. *pig and fowl bones*.

Cremation grave no. 12

– in S XIV, the grave pit was observed at 0.30–0.35 m, diam. 1.20 m. The grave had probably been emptied by Șt. Dănilă, with only a few wheel-thrown *ceramic* fragments left.

Cremation grave no. 13 (Pl. XIII–XIV)

– in S XV–S XVI, between 17 and 19 m, a roughly oval pit with a 1.30 m long axis. The vessels were on the east side of the pit. The drawing also depicts a charred beam or charcoal.

1. small bronze *brooch* with knobs, the foot attached to the spring, l. 34 mm (Pl. XIII/1; LXIV/10);
2. small bronze *brooch* with knobs, l. 33 mm (Pl. XIII/2; LXIV/11);
3. medium-sized iron *brooch*, the foot attached to the spring, found among the cremated bones, l. 59 mm (Pl. XIII/3; LXIV/15);
4. iron *buckle* (Pl. XIII/4; LXX/23);
5. wheel-thrown *vessel*, medium-sized, greyish brown with reddish-brown core, annular base with omphalos, h. 120 mm, Ø 130 mm, ø 85 mm (Pl. XIII/5; LXXXI/7);
6. wheel-thrown *vessel*, h. 325 mm, Ø 200 mm, ø 125 mm (Pl. XIV/2);
7. wheel-thrown *vessel*, h. 355 mm, Ø 215 mm, ø 110 mm (Pl. XIV/3);
8. handmade *vessel*, brown, with a rib with impressions under the rim and four protuberances on the maximum diameter, h. 355 mm, Ø 185 mm, ø 130 mm (Pl. XIV/1; LXXXIV/2);
9. cremated *human bones* in two heaps, one at the NW end of the pit, the other at the S side;
10. *pig* and other *animal bones*.

Cremation grave no. 14 (Pl. XV)

– the grave pit was outlined at a depth of 0.20–0.25 m and deepened to 0.70 m from the present walking level. It was oval, measured 1 × 1.20 m, and was partly paved with stone slabs.

1. poorly preserved iron *brooch* (Pl. XV/1);
2. iron *knife* placed on the animal offering, missing;
3. large, wheel-thrown *vessel*, h. 360 mm, Ø 205 mm, ø 155 mm (Pl. XV/2);
4. large wheel-thrown *vessel*, h. 385 mm, Ø 190 mm, ø 100 mm (Pl. XV/3);
5. wheel-thrown *bowl*, missing;
6. small *vessel*, discovered inside the first large vessel, missing;
7. cremated *human bones* in two heaps, one larger and one smaller, at the W end of the pit;
8. parts of a *pig skeleton*.

Cremation grave no. 15 (Pl. XVI/a)

– in S XIX, the grave pit was outlined at a depth of 0.25–0.30 m and deepened to 0.45 m, oval in shape, 0.60 × 0.85 m. The vessels, extremely friable and thus unrecovered, lay at the E end of the pit.

- 1–2. two medium-sized wheel-thrown *vessels*, missing;
3. small wheel-thrown *vessel*, missing;
4. a small quantity of cremated *human bone*;
5. *animal bone*.

Cremation grave no. 16 (Pl. XVI/b; 1–3)

– in S XXIII–XXIV, between 9–10 m, the grave pit was outlined at a depth of 0.25–0.30 m and deepened to 0.60–0.62 m, oval in shape.

1. small bronze *brooch* among the cremated bones, missing;
2. large wheel-thrown *vessel*, dark brown-grey, bottom with omphalos, h. 265 mm, Ø 210 mm, ø 120 mm (Pl. XVI/3; LXXXVIII/5)
3. handmade *bowl*, dark brown, annular bottom with omphalos, imitating wheel-thrown pottery, h. 120 mm, Ø 245 mm, ø 100 mm (Pl. XVI/2; LXXXVIII/4)
4. bottom of a handmade *vessel*, ø 80 mm (Pl. XVI/1)
- 5–6. two *vessels*, missing;
7. cremated *human bones* (according to the drawing, in two groups);
8. *animal bones*, including a *pig skeleton*.

Cremation grave no. 17 (Pl. XVII–XVIII)

– in S XXIV and S XXV, between 34 and 36 m, the oval pit was outlined 0.30 m deep and deepened to 1 m from the present level. Its bottom was covered in places with limestone marl slabs, especially in the NE corner of the pit. The vessels were clustered at the SE end of the pit.

1. iron *sword* in scabbard, with the hilt ending in a knob; the scabbard retains the attachment, the knob is angular and has a protuberance on both sides, weapon placed on the W side of the pit; l. scabbard 845 mm, w. scabbard 60 mm, l. hilt 140 mm, l. blade 690 mm (Pl. XVII/1);
2. iron *spearhead*, resting on the sword, l. 305 mm (Pl. XVII/2);
3. iron *umbo* and iron rim of an oval *shield* (shield not deposited whole), resting on the sword hilt, l. 290 mm, w. 158 mm (Pl. XVII/3);
- 4–5. two burnt iron *brooches*, found among cremated bones, missing;
6. iron *razor* with spoon handle, laid over cremated human bones, l. 237 mm, 94 g (Pl. XVII/4; LXXIII/8);
7. large iron *knife* with a massive rivet, found under the sword, l. 310 mm, 122 g (Pl. XVII/5; LXXIII/7);
8. burnt blade of a small iron *knife*, found among cremated bones, missing;
9. a small *whetstone*, found among the cremated bones, missing;
10. wheel-thrown *jug* with stamped rosettes, greyish, found with a small clay cork and filled with seepage water (?), h. 320 mm, Ø 130 mm, ø 115 mm, maxØ 220 mm (Pl. XVIII/1; LXXXVI/1);
11. large, bitronconical, wheel-thrown *vessel*, brown, incised and stamped, h. 300 mm, Ø 205 mm, ø 115 mm, maxØ 295 mm (Pl. XVIII/4; LXXXVIII/3);
12. wheel-thrown, stamped *cup* with one handle, annular base, h. 90 mm, Ø 75 mm, ø 50 mm, maxØ 95 mm (Pl. XVIII/2; LXXVI/4);
13. wheel-thrown *bowl*, dark greyish to brown, with annular base and omphalos, found partly overlapping the tip of the sword, h. 95 mm, Ø 270 mm, ø 110 mm (Pl. XVIII/3; LXXX/2);
14. cremated *human bones* in large quantity, placed roughly in the centre of the pit;
15. few *fowl bones* in the bowl; *pig skeleton* near the vessels.

Cremation grave no. 18 (Pl. XIX)

– the pit was outlined at a depth of 0.20–0.25 m, where the grave goods (pot rims) began to appear. The pit had an irregular oval shape, 1.60 × 2.20 m. The vessels were placed in a line approximately in the centre of the pit.

1. *object* made from a curved iron blade (Pl. XIX/1);
2. *arrowhead*, l. 53 mm, 6 g (Pl. XIX/2; LXXI/5);
3. large iron *knife* with a knob on the handle's end, discovered close to the vessels, the handle lying under a vessel, l. 290 mm, 135 g (Pl. XIX/3; LXXIII/9);
4. medium-sized wheel-thrown *vessel*, exfoliated surface, greyish with reddish-brown core, straight bottom, h. 110 mm, Ø 140 mm, ø 80 mm, maxØ 170 mm (Pl. XIX/4; LXXXI/2);
5. wheel-thrown *bowl*, h. 100 mm, Ø 245 mm, ø 110 mm (Pl. XIX/5);
6. medium-sized wheel-thrown *vessel*, h. 152 mm, Ø 89 mm, ø 50 mm, maxØ 135 mm (Pl. XIX/6);
7. large wheel-thrown *vessel*, greyish brown with brown spots, annular base with omphalos, h. 350 mm, Ø 170 mm, ø 107 mm, maxØ 290 mm (Pl. XIX/7; LXXXVIII/1);
8. large, wheel-thrown *vessel*, h. 308 mm, Ø 233 mm, ø 121 mm, maxØ 305 mm (Pl. XIX/8);
9. wheel-thrown *vessel*, missing;
10. cremated *human bones*;
11. *animal bones*.

Cremation grave no. 19 (Pl. XX)

– in S XXVII, between 11 and 13 m, a quadrangular pit measuring 1.10×1.60 m was found at a depth of 0.30–0.35 m. Charcoal and pieces of burnt adobe, all transported from the funeral pyre, were found over the entire surface of the grave. The vessels were located in the NE corner of the pit.

1. fragment of a small, heavily burnt bronze *brooch*, found between the cremated bones (Pl. XX/1);
2. iron *brooch* with a free foot, raised above the body, terminating in a small sphere, found among the cremated bones and the offering, in the W half of the pit, l. 33 mm, 4 g (Pl. XX/2; LXIII/13);
3. handmade small *cup* with one handle, dark brown to grey, h. 100 mm, Ø 75 mm, ø 55 mm (Pl. XX/3; LXXIV/8);
4. wheel-thrown *bowl*, grey to brown, annular base, h. 120 mm, Ø 320 mm, ø 120 mm (Pl. XX/4; LXXX/4);
5. medium-sized handmade *vessel* with two handles and protuberances, dark brown, h. 225 mm, Ø 160 mm, ø 90 mm (Pl. XX/5; LXXXIII/6);
6. large, bitronconical, wheel-thrown *vessel*, h. 355 mm, Ø 225 mm, ø 150 mm, maxØ 330 mm (Pl. XX/6);
7. cremated *human bones* scattered at the bottom of the pit, including in the bowl and cup;
8. *animal offering* in the W half of the pit, in disarray.

Cremation grave no. 20 (Pl. XXI/a–b, 1)

– The grave pit was irregularly oval in shape, outlined at 0.20 m, and deepened to 0.75 m from the present level, measuring 1.75×1.80 m.

1. small bronze *brooch*, found among the cremated bones, l. 53 mm (Pl. XXI/1);
2. iron blade of a small *knife*, placed over the animal offering, missing;
3. large, wheel-thrown, bitronconical *vessel*, placed in the NE corner of the pit, missing;
4. wheel-thrown, bitronconical *vessel*, placed in the NE corner of the pit, missing;
5. wheel-thrown *bowl*, placed in the middle of the S side of the pit, missing;
6. cremated *human bones*, found in a small heap in the N half of the pit;
7. skeleton of a *pig*, found close to the bowl.

Cremation grave no. 21 (Pl. XXI/c–d; XXII)

– The grave pit was outlined under the humus and deepened to 1.35 m from the present walking level. It was quadrangular in shape, and measured 1.55×1.32 m. At a depth of 0.65 m, three sandstone slabs were positioned outside the pit, forming a border around it. The two small bronze eight-shaped brooches, an iron tubular bracelet, and fragments of an anklet with large hollow knobs were found among the cremated human bones in the SW corner of the pit.

1. small eight-shaped bronze *brooch*, l. 30 mm (Pl. XXII/5);
2. small eight-shaped bronze *brooch*, l. 32 mm (Pl. XXII/6);
3. *brooch* found among the cremated bones in the vessel, l. 70 mm (Pl. XXII/2);
4. large iron *brooch* found among the cremated bones in the vessel, l. 110 mm (Pl. XXII/3; LXV/2);
5. large iron *brooch*, found among the cremated bones in the vessel, l. 115 mm (Pl. XXII/4; LXV/13);
6. bronze *brooch* found among the cremated bones in the vessel, l. 40 mm (Pl. XXII/8; LXIV/3);
7. *brooch* found among the cremated bones in the vessel, l. 45 mm (Pl. XXII/7);
8. *brooch* found among the cremated bones in the pot, l. 60 mm (Pl. XXII/9);
9. fragments of iron *brooches* found among the cremated bones in the vessel (Pl. XXII/1; LXIV/21),

10. tubular iron *bracelet*, intØ 80 mm, 54 g (Pl. XXII/10; LXVII/4);
11. fragment of an *anklet* with large hollow knobs (Pl. XXII/11);
12. burnt fragments of a large *anklet* with large hollow knobs, found among the cremated bones in the vessel, missing;
13. bronze *necklace*, found among the cremated bones in the vessel, missing;
14. fragment of an iron *knife* (Pl. XXII/12; LXXII/15);
15. iron *chain belt* preserved in several pieces, found among the cremated bones in the vessel, 158 g (Pl. XXII/13; LXIX/6);
16. wheel-thrown *bowl*, black, annular base with omphalos, placed in the SW corner of the pit, h. 120 mm, Ø 230 mm, ø 90 mm, maxØ 255 mm (Pl. XXII/14; LXXIX/6);
17. medium-sized, wheel-thrown *vessel*, placed between the bowls, h. 360 mm, Ø 165 mm, ø 110 mm, maxØ 290 mm (Pl. XXII/15);
18. large, bitronconical, wheel-thrown *vessel* in the NE corner of the pit, missing;
19. large, bitronconical, wheel-thrown *vessel* in the NW corner of the pit, missing;
20. *bowl* placed in the SE corner of the pit, missing;
21. cremated *human bones* inside the medium-sized vessel;
22. cremated *human bones*, placed in a large heap in the SW corner of the pit;
23. *fowl bones* found in one of the bowls and the *skeleton of a pig*, found near the vessel containing the cremated bones.

Cremation grave no. 22 (Pl. XXIII/a)

– The grave pit was outlined 0.40 m deep. It was square with rounded corners, measuring 0.90 × 1.20 m. Even on the surface, the fill contained isolated ceramic fragments, a few traces of burning and charcoal.

1. handmade *ceramic* fragments, red or brown in colour, missing;
2. a relatively large quantity of cremated *human bone* at the bottom of the pit in the NW corner.

Cremation grave no. 23 (Pl. XXIII/b–d, 1–2)

– The grave pit was outlined at 0.25 m and deepened to 0.64 m. It was quadrangular in shape with very rounded corners, and had the entire bottom lined with sandstone slabs. The vessels were grouped in the NE corner of the pit.

1. handmade *cup* with one handle, brown with black spots, h. 55 mm, Ø 85 mm, ø 80 mm (Pl. XXIII/1; LXXIV/4);
2. medium-sized wheel-thrown *vessel*, rough surface, brown, annular base with omphalos, poorly restored, h. 120 mm, Ø 160 mm, ø 100 mm, maxØ 195 mm (Pl. XXIII/2; LXXXII/2);
3. large, wheel-thrown *vessel*, missing;
4. large, wheel-thrown *vessel*, missing;
5. wheel-thrown *bowl*, missing;
6. cremated *human bones*, on the E side of the pit, in the continuation of the vessels;
7. a few *pig bones*.

Cremation grave no. 24

– in S XII, between 13 and 16 m, an oval grave pit measuring 1.80 × 2 m, probably emptied earlier by Șt. Dănilă.

1. small *ceramic* fragments;
2. fragments of *animal bone*.

Cremation grave no. 25 (Pl. XXIV)

– in S XXXIV and S XXXV, between 23 and 25 m, the grave pit was found at a depth of 0.20–0.25 m. It was quadrangular in shape, 0.85 × 1.30 m, excavated with a step, maximum depth 0.75 m from the present walking level.

1. iron *brooch*, extremely burnt, found near the large vessel, missing;
2. blade of an iron *knife*, damaged, found among the cremated bones, l. preserved: 21 mm (Pl. XXIV/1);
3. wheel-thrown medium *vessel*, found on the upper step, h. 125 mm, Ø 215 mm, ø 90 mm, maxØ 240 mm (Pl. XXIV/2);
4. small wheel-thrown *vessel*, h. 95 mm, Ø 115 mm, ø 50 mm, maxØ 125 mm (Pl. XXIV/3);
5. large, wheel-thrown *vessel*, in the deepened centre of the pit, h. 355 mm, Ø 230 mm, ø 145 mm, maxØ 375 mm (Pl. XXIV/4);
6. cremated *human bones*, in the W corner of the pit;
7. *pig skeleton*, found between the large and the medium vessel.

Cremation grave no. 26 (Pl. XXV/a–b, 1)

– the grave pit was outlined at a depth of 0.25 m, and deepened to 0.70 m for the most part and to 0.90 m towards the N end of the pit. It was oval and irregularly deepened, measuring 1.70 × 2.30 m.

1. large handmade *vessel* with protrusions, in the group from the pit centre, missing;
2. fragments of a handmade *jug* with a twisted handle, in the group from the pit centre, h. 135 mm, Ø 90 mm, ø 55 mm, maxØ 120 mm (Pl. XXV/1; LXXV/1);
3. *bowl*, in the group from the pit centre, missing;
4. medium-sized *vessel* in the group from the pit centre, missing;
5. cremated *human bones* on the surface of the grave.

Cremation grave no. 27 (Pl. XXV/c)

– in S XXXVIII, between 12 and 13 m, entirely destroyed by agricultural works, only 0.20–0.25 m deep.

1. *ceramic fragments*, missing;
2. cremated *human bones*.

Cremation grave no. 28 (Pl. XXVI)

– in S XL, between 23 and 25 m, the grave pit was found 0.20–0.25 m deep, oval in shape and slightly deepened, up to 0.45 m from the present surface. The vessels lay approximately in the centre of the pit.

1. *sword chain* with a staple and a knob at the end, the short part with two chains, on the W side of the pit, l. 457 + 100 mm (unfolded length of the long segment: 490 mm), w. 32 / 28 mm, 280 + 60 g (Pl. XXVI/2; LXIX/7);
2. *sword* with a spherical knob on the handle, in engraved *scabbard*, with high *chape-end* fitted with crossbar, with round-ended attachment, discovered below the sword chain, l. 905 mm, 836 g (Pl. XXVI/1; LXXI/1);
3. iron *spearhead*, discovered near the sword, missing;
4. small shield *umbo*, discovered near the sword, 70 × 75 mm, 32 g (Pl. XXVI/3; LXXI/4);
5. small bronze *brooch* discovered near the weapons, l. 45 mm (Pl. XXVI/4);
6. small wheel-thrown *bowl*, brown and light grey, annular base with omphalos, h. 80 mm, Ø 185 mm, ø 70 mm (Pl. XXVI/5; LXXIX/4);

7. large wheel-thrown *vessel*, brown, with stamped decoration, h. 340 mm, Ø 200 mm, ø 110 mm, maxØ 335 mm (Pl. XXVI/6; LXXXVII/5);
8. large wheel-thrown *bowl*, missing;
9. a few cremated *human bones*, some in the vessel;
10. a *pig's jaw*, found above the smaller-sized bowl.

Cremation grave no. 29 (Pl. XXVII)

- the grave pit was almost round, with a diameter of 1.25 m. It was found at a depth of 0.20–0.25 m and deepened to 0.50 m from the present walking level.
- 1. small bronze *brooch*, found among the cremated bones, l. 40 mm (Pl. XXVII/1);
- 2. wheel-thrown *bowl*, brown-reddish brown, annular base with omphalos, h. 140 mm, Ø 290 mm; ø 100 mm; maxØ 320 mm (Pl. XXVII/2; LXXX/3);
- 3. medium-sized wheel-thrown *vessel*, h. 160 mm, Ø 225 mm; ø 94.4 mm; maxØ 255 mm (Pl. XXVII/3);
- 4. large wheel-thrown *vessel*, decorated with stamped rosettes, missing;
- 5. cremated *human bones*;
- 6. *animal bones* between large vessel and the bowl.

Inhumation grave no. 30 (Pl. XXVIII/a–b, 1–2)

- in S XLIII between 12 and 14 m. The grave pit was found at a depth of 0.30 m and measured 0.80 × 1.70 m. It had been disturbed by agricultural work..
- 1. iron *bracelet* on the left forearm, intØ 53 mm, 5 g (Pl. XXVIII/1; LXVII/6);
- 2. fragments of an *anklet* made of thin bronze plate (Pl. XXVIII/2);
- 3. tubular *anklet*, decorated with geometric motifs, found towards the lower extremity of the tibiae and perineum, missing;
- 4. some *bones* of the thorax, including the two clavicles and parts of the humerus; part of the pelvis and the tibia.

Cremation grave no. 31 (Pl. XXVIII/c–d, 3–6)

- in S XLII–XLIII, the oval-shaped grave pit was found at a depth of 0.20 m, measuring 1.05 × 1.25 m, and deepened to 0.90 m from the present walking level.
- 1. iron *brooch*, l. 69 mm, 20 g (Pl. XXVIII/3; LXIV/16);
- 2. blade of an iron *knife*, placed under one of the vessels, l. 120 mm, w. 18 mm, 15 g (Pl. XXVIII/4; LXXII/18);
- 3. medium wheel-thrown *vessel*, grey with reddish-brown core, annular bottom, h. 140 mm, Ø 120 mm; ø 85 mm; maxØ 185 mm (Pl. XXVIII/5; LXXXII/1);
- 4. large wheel-thrown *vessel*, dark grey, with omphalos, h. 265 mm, Ø 250 mm; ø 130 mm; maxØ 325 mm (Pl. XXVIII/6; LXXXVIII/6);
- 5. wheel-thrown *bowl*, missing;
- 6. cremated *human bones*, covered with a ceramic fragment from a wheel-thrown vessel;
- 7. *pig bones*.

Cremation grave no. 32 (Pl. XXIX/a, 1–3)

- in S XLIV, between 4 and 6 m, and XLV, the grave pit was found 0.30 m deep, deepening to 0.60–0.70 m from the present walking level.
- 1. large iron *brooch*, discovered near a heap of cremated human bones, l. 116 mm (Pl. XXIX/1; LXIV/22);

2. handmade *mug* with one handle, brown, h. 105 mm, Ø 80 mm; ø 60 mm; maxØ 95 mm (Pl. XXIX/2; LXXV/2);
3. wheel-thrown *deep bowl*, uneven firing, brown to dark grey, annular base with omphalos, h. 170 mm, Ø 210 mm; ø 100 mm; maxØ 265 mm (Pl. XXIX/3; LXXXII/3);
4. three small heaps of cremated *human bones*;
5. *animal bones*.

Cremation grave no. 33 (Pl. XXIX/b)

– The pit of the grave was outlined at 0.30–0.35 m and deepened to 1.10–1.20 m from the present walking level. It was oval in shape, measuring 1.45 × 1.90 m.

1. small wheel-thrown *pot* at the bottom of the pit, missing;
2. three small heaps of cremated *human bones* at different levels, two at 0.30–0.40 m, the third at the bottom of the pit;
3. *fowl bones*.

Cremation grave no. 34 (Pl. XXX/a, 1–8)

– located in S XLIV and especially in XLV, the rounded-cornered, quadrangular pit measuring 1.15 × 1.40 m was not outlined on the surface and became visible only during excavation. Its bottom lay 0.30–0.40 m below the present level. The cremated human bones were placed in the W part of the pit.

1. small iron *brooch*, found among cremated bones, l. 32 mm (Pl. XXX/1; LXIII/19);
2. iron *rivet* with hemispherical head, l. 20 mm, w. 19 mm (Pl. XXX/2; LXXII/7);
3. small iron *hammer*, l. 80 mm, w. 11 mm, 51 g (Pl. XXX/3; LXXII/6);
4. handmade clay *lamp*, brown, h. 45 mm, l. 110 mm, w. 75 mm (Pl. XXX/4; LXXII/4);
5. wheel-thrown *deep bowl*, h. 105 mm, Ø 145 mm; ø 70 mm; maxØ 180 mm (Pl. XXX/5; LXXXI/5);
6. handmade *bowl*, dark brown, h. 120 mm, Ø 235 mm; ø 95 mm; maxØ 265 mm (Pl. XXX/6; LXXVIII/3);
7. medium handmade *vessel*, h. 210 mm, Ø 160 mm; ø 80 mm; maxØ 175 mm (Pl. XXX/7; LXXXIII/2);
8. large handmade *vessel*, dark brown with light brown spots, shiny, h. 280 mm, Ø 180 mm; ø 120 mm; maxØ 255 mm (Pl. XXX/8; LXXXIII/4);
9. cremated *human bones*;
10. *animal bones*.

Inhumation grave no. 35 (Pl. XXX/b, 9–12)

– in S XLVII, the grave pit deepened to 0.30–0.35 m.

1. fragment of a small iron *brooch* (Pl. XXX/9; LXIII/20);
2. fragment of a medium iron *brooch* (Pl. XXX/10; LXIII/21);
3. three small iron *links*, Ø 14 mm (Pl. XXX/11; LXX/11–13);
4. fragments of an iron *buckle* (Pl. XXX/12; LXX/22);
5. almost completely destroyed *human bones*.

Cremation grave no. 36 (Pl. XXXI/a, 1)

– in S XLV, between 25 and 27 m, the grave pit was quadrangular with rounded corners.

1. large wheel-thrown *vessel*, brown, annular base with omphalos, h. 395 mm, Ø 195 mm; ø 90 mm; maxØ 270 mm (Pl. XXXI/1; LXXXVI/5);

2. cremated *human bones*.**Cremation grave no. 37** (Pl. XXXI/b)

– in S XLIX and S L, between 10 and 12 m, the grave pit was quadrangular with rounded corners, measuring 1.50×1.70 m, and deepened about 0.30 m from the present level. It had been destroyed by agricultural work or ‘recovered’ in 1967 by Șt. Dănilă.

1. *ceramic* fragments from a large handmade pot with flattened protrusions;
2. fragments of cremated *human bones*.

Inhumation grave no. 38 (Pl. XXXII/a, 1–6)

– in S XLIX, between 31 and 32 m, an oval pit with a maximum diameter of 1.50 m, deepening to 0.65 m. The *in situ* skeleton measured 0.80 m from the cephalic end to the calcaneal end, but the dentition was not that of a child, possibly indicating a case of dwarfism.

1. bronze *brooch* with the foot secured and a square plate, on the right shoulder, l. 42 mm, 3 g (Pl. XXXII/1; LXIV/6);
2. bronze *brooch* with the foot secured and a square plate on the left shoulder, l. 59 mm, 6 g (Pl. XXXII/2; LXIV/7);
3. blade of a small iron *knife*, at the level of the right hand, l. 84 mm, 10 g (Pl. XXXII/3; LXXII/16);
4. small wheel-thrown *vessel*, bitronconical, brown, annular base with omphalos, used as a lid for the large vessel, h. 80 mm, Ø 70 mm; ø 50 mm; maxØ 100 mm (Pl. XXXII/4; LXXVI/2);
5. medium wheel-thrown *vessel*, h. 132 mm, Ø 145 mm; ø 84 mm; maxØ 188 mm (Pl. XXXII/5);
6. large wheel-thrown bitronconical *vessel*, greyish brown, annular base with omphalos, h. 295 mm, Ø 120 mm; ø 90 mm; maxØ 225 mm (Pl. XXXII/6; LXXXVI/3);
7. very poorly preserved *skeleton*, with only the skull and the facial bones.

Cremation grave no. 39 (Pl. XXXII/b)

– in S LIII, between 13 and 15 m, the pit was observed on the surface and deepened to 0.35–0.40 m, oval in shape, maximum diameter 1.50 m.

1. wheel-thrown *vessel*, missing;
2. handmade *bowl*, missing;
3. a few cremated *human bones*, approximately in the centre of the pit;
4. *animal bones*, found in the bowl.

Cremation grave no. 40 (Pl. XXXIII)

– between S LV and LVI, between 28 and 29 m, a quadrangular-shaped pit with rounded corners, measuring 1×1.50 m, deepened to 0.60–0.70 m. The metal artefacts were located close to the cremated human bones.

1. fragment of a thin bronze *chain* (Pl. XXXIII/1; LXIX/1);
2. bronze *ring*, intØ 19 mm (Pl. XXXIII/2);
3. bronze *brooch*, l. 42 mm (Pl. XXXIII/3);
4. bronze *brooch*, l. 43 mm (Pl. XXXIII/4);
5. bronze *brooch*, l. 43 mm (Pl. XXXIII/5);
6. three fragments of an iron *plate*, 14 g (Pl. XXXIII/6);
7. fragments of an iron *bracelet*, poorly preserved, 11 g (Pl. XXXIII/7; LXVII/8);
8. fragments of an iron *bracelet*, poorly preserved, 15 g (Pl. XXXIII/8; LXVII/9);
9. burnt fragments of an *anklet* with large hollow knobs, 109 g (Pl. XXXIII/9; LXVIII/4);
10. *anklet* with four large hollow knobs, whole, intØ 70 mm (Pl. XXXIII/10);

11. iron *chain belt*, 196 g (Pl. XXXIII/11; LXIX/8);
12. small wheel-thrown *vessel*, dark grey, with omphalos, h. 55 mm, Ø 75 mm; ø 45 mm; maxØ 100 mm (Pl. XXXIII/12; LXXVI/1);
13. large wheel-thrown *bowl*, h. 165 mm, Ø 345 mm; ø 90 mm (Pl. XXXIII/13);
14. wheel-thrown *vessel*, brown with black spots, decorated with a circular stamp, annular base with omphalos, h. 260 mm, Ø 130 mm; ø 100 mm; maxØ 220 mm (Pl. XXXIII/14; LXXXVI/4);
15. towards the N corner of the pit, in a heap, cremated *human bones*;
16. *pig and fowl bones*.

Cremation grave no. 41 (Pl. XXXIV)

– in S LVI and LVII, between 15 and 17 m, a quadrangular pit with rounded corners, 1.70 × 1.80 m, up to 2 m deep from the present surface.

1. small iron *brooch*, l. 72 mm (Pl. XXXIV/1; LXIV/18);
2. large iron *brooch*, found among cremated bones, l. 126 mm (Pl. XXXIV/2; LXV/5);
3. large iron *brooch*, found among cremated bones, l. ≈ 126 mm (Pl. XXXIV/3; LXV/12);
4. blue glass *bracelet* inlaid with white paste, found among the cremated bones, Ø 68 × 71 mm, 21 g (Pl. XXXIV/4; LXX/24);
5. iron *sword* with *scabbard*, placed near the cremated human bones, l. 885 mm, handle l. 140 mm, blade w. 40 mm, 402 g, scabbard l. 835 mm, scabbard 294 g (restored and completed with resin) (Pl. XXXIV/5; LXXI/3);
6. fragments of a large wheel-thrown *vessel*, stamped with concentric circles, h. ≈ 250 mm, Ø 120 mm; ø 82 mm; maxØ ≈ 230 mm (Pl. XXXIV/6);
7. fragments of a wheel-thrown *deep bowl*, stamped with concentric circles, h. ≈ 80 mm, Ø 250 mm; ø 85 mm (Pl. XXXIV/7);
8. fragments of a wheel-thrown *bowl*, brown, h. ≈ 120 mm, Ø 170 mm; ø 70 mm; maxØ 190 mm (Pl. XXXIV/8);
9. wheel-thrown *mug* with one handle, dark grey, annular bottom, decorated with Xs on the neck, h. 80 mm, Ø 75 mm; ø 40 mm; maxØ 95 mm (Pl. XXXIV/9; LXXVI/5);
10. cremated *human bones*, located towards the W side of the pit, mixed with ashes and charcoal;
11. *pig bones*, some under the ceramic vessels, probably a whole animal.

Cremation grave no. 42 (Pl. XXXV)

– in S LVII, the grave pit was spotted already on the surface. It was quadrangular in shape, 1.50 × 1.60 m, deepened to 1.10 m from the present level. The jewellery lay among the cremated bones; the vessels were placed close to the W edge of the pit.

1. fragments of an iron *brooch* (Pl. XXXV/1; LXV/16);
2. large iron *brooch*, l. 117 mm (Pl. XXXV/2);
3. large iron *brooch*, l. 146 mm (Pl. XXXV/3);
4. fragmentary iron *anklet*, intØ ≈ 90 mm (Pl. XXXV/4);
5. tubular iron *anklet*, intØ 80 mm (Pl. XXXV/5);
6. iron *anklet* with overlapping ends, intØ 80 mm (Pl. XXXV/6);
7. large wheel-thrown *vessel* with three groups of stamped motifs, h. 330 mm, Ø 165 mm; ø 115 mm; maxØ 310 mm (Pl. XXXV/7);
8. wheel-thrown *mug* with one handle, h. 115 mm, Ø 85 mm; ø 55 mm; maxØ 120 mm (Pl. XXXV/8);
9. wheel-thrown *vessel*, brown to dark grey, annular base with omphalos, h. 305 mm, Ø 135 mm; ø 95 mm; maxØ 235 mm (Pl. XXXV/9; LXXXVI/6);

10. cremated *human bones*;
11. *pig bones* found among the vessels.

Cremation grave no. 43 (Pl. XXXVI)

– in S LVII and LVIII, a quadrangular-shaped pit with rounded corners, 1.50×1.80 m, deepened to 1.10–1.20 m. The metal artefacts were found among cremated human bones.

1. unrecovered fragments of iron *brooches* discovered in the hollow of the iron umbo, only the spring of one iron brooch is preserved (Pl. XXXVI/1);
2. fragment of a decorated iron *object* (Pl. XXXVI/2);
3. iron object, probably the fragment of a *bracelet* (Pl. XXXVI/3);
4. fragments of a decorated iron *bracelet*, intØ ≈ 70 mm (Pl. XXXVI/4);
5. bronze *belt link*, extØ 40 mm (Pl. XXXVI/5);
6. bronze *belt link*, extØ ≈ 45 mm (Pl. XXXVI/6);
7. iron plate *object* (Pl. XXXVI/7);
8. fragment of an iron *knife*, l. 78 mm (Pl. XXXVI/8);
9. iron *arrowhead*, l. 62 mm (Pl. XXXVI/9);
10. fragment of a poorly preserved *spearhead*, l. 85 mm (Pl. XXXVI/10);
11. iron shield *umbo*, poorly preserved, found among cremated human bones, missing;
12. fragments of a large, wheel-thrown *vessel*, h. 305 mm, Ø 125 mm; ø 80 mm; maxØ 250 mm (Pl. XXXVI/11);
13. medium *vessel*, wheel-thrown, h. 130 mm, Ø 155 mm; ø 70 mm; maxØ 190 mm (Pl. XXXVI/12);
14. cremated *human bones*, deposited near the N wall, mixed with ashes and charcoal;
15. *animal bones*.

Cremation grave no. 44 (Pl. XXXVII)

– in S LX and LXI, between 17 and 19 m, at the W extremity of the promontory, in the slope of an extraction pit, the grave pit was irregular in shape, measuring 1.45×1.80 m.

1. large wheel-thrown *vessel*, light grey and brown with black core, h. 300 mm, Ø 165 mm; ø 110 mm; maxØ 250 mm (Pl. XXXVII/1; LXXXVII/3);
2. cremated *human bones*;
3. *pig bones*.

Cremation grave no. 45 (Pl. XXXVIII)

– in S LXI, partially disturbed, the metal pieces lay among cremated human bones.

1. bronze *brooch*, l. 41 mm (Pl. XXXVIII/1; LXIV/9);
2. bronze *brooch*, l. 42 mm (Pl. XXXVIII/2; LXIV/5);
3. fragments of a bronze *brooch* (Pl. XXXVIII/3);
4. fragmentary iron *bracelet*, made from a bent iron plate, intØ 78 mm, 19 g (Pl. XXXVIII/4; LXVII/5);
5. saddle-shaped iron *bracelet*, Ø 67×72 mm, 24 g (Pl. XXXVIII/5; LXVII/15);
6. iron *chain belt* consisting of two segments (Pl. XXXVIII/6; LXIX/9);
7. fragments of a wheel-thrown *vessel*, h. ≈ 345 mm, Ø 160 mm; ø 125 mm; maxØ 270 mm (Pl. XXXVIII/7);
8. wheel-thrown *vessel*, missing;
9. cremated *human bones*.

Cremation grave no. 46 (Pl. XXXIX)

– in S LXIII and LXIV, between 20 and 21 m, the pit, which was already outlined on the surface, was quadrangular in shape with rounded corners, measuring 1 m on the surface and 0.60×0.80 m at the bottom. The smaller pit was lined on the sides, mostly with sandstone slabs. The bottom of the pit lay 1.02 m below the present surface.

1. fragment of a poorly preserved iron *brooch* found among cremated human bones (Pl. XXXIX/1);
2. small, short, wheel-thrown *vessel*, h. 90 mm, Ø 120 mm; ø 70 mm; maxØ 155 mm (Pl. XXXIX/2; LXXXI/3);
3. wheel-thrown *bowl*, grey, annular base with omphalos, h. 100 mm, Ø 265 mm; ø 90 mm; maxØ 285 mm (Pl. XXXIX/3; LXXXI/1);
4. large wheel-thrown *vessel*, h. 330 mm, Ø 120 mm; ø 100 mm; maxØ 225 mm (Pl. XXXIX/4; LXXXVI/2);
5. cremated *human bones*;
6. *fowl and pig bones* deposited in the bowl.

Cremation grave no. 47 (Pl. XL)

– in S LXIII, the grave pit was outlined on the surface. It was quadrangular in shape, slightly irregular, measuring 1.40×1.50 m, and deepened to 1 m from the present walking level. Vessels lay in the SE corner of the pit; human bones were in the N part.

1. iron *brooch*, found between the large vessel and the bowl, missing;
2. fragments of the blade and the knobbed handle of an iron *razor*, found near the cremated bones, l. 145 mm (Pl. XL/1; LXXIII/4);
3. wheel-thrown *jug* with one handle, black, decorated lower half, annular bottom, h. 105 mm, Ø 85 mm; ø 55 mm; maxØ 110 mm (Pl. XL/2; LXXVI/6);
4. fragments of a wheel-thrown *bowl*, h. 92 mm, Ø 250 mm; ø 75 mm (Pl. XL/3);
5. large wheel-thrown *vessel*, h. 375 mm, Ø 190 mm; ø 120 mm; maxØ 325 mm (Pl. XL/4);
6. cremated *human bones*;
7. *pig bones*, scattered on the W side of the pit

Cremation grave no. 48 (Pl. XLI)

– in S LXIV, the grave pit was outlined on the surface. It was quadrangular in shape, measuring 1.40×1.70 m, and was 0.90 m deep from the present level. At 0.15 m from the edges of the pit, a strong scorch streak was observed, marking off a quadrangle on three sides.

1. fragmentary small iron *brooch* (Pl. XLI/1; LXIV/19);
2. fragments of a large iron *brooch* found among cremated human bones (Pl. XLI/2);
3. wheel-thrown *bowl*, dark greyish to black, annular bottom, h. 50 mm, Ø 115 mm; ø 55 mm; maxØ 120 mm (Pl. XLI/3; LXXIX/1);
4. large wheel-thrown *vessel*, dark brown to grey, annular base with omphalos, h. 380 mm, Ø 170 mm; ø 110 mm; maxØ 310 mm (Pl. XLI/4; LXXXVII/2);
5. wheel-thrown *bowl*, missing;
6. cremated *human bones* in a heap in the NW corner;
7. many *animal bones*.

Cremation grave no. 49 (Pl. XLII)

– the grave was located in the slope of the large clay extraction pit. The grave pit was rectangular, 1.35×2 m, and deepened to 0.75 m from the present walking level.

1. fragmentary small *brooch* (Pl. XLII/1);

2. small *brooch*, l. 60 mm (Pl. XLII/2);
3. large iron *brooch*, l. 125 mm (Pl. XLII/3);
4. large iron *brooch*, l. 131 mm (Pl. XLII/4; LXV/10);
5. iron *belt link*, Ø 43 mm (Pl. XLII/8);
6. iron *rivet* with round head, Ø 50 mm (Pl. XLII/5);
7. fragment of an iron *plate* with rivet (Pl. XLII/6);
8. iron *linchpin*, l. 122 mm (Pl. XLII/9; LXXII/5);
9. iron *umbo*, found on the N side of the pit, l. 285 mm (Pl. XLII/10; LXXI/5);
10. iron *spearhead*, found under the umbo, l. 345 mm (Pl. XLII/11; LXXI/11);
11. iron *sleeve* from the base of the spearhead socket (Pl. XLII/7);
12. cremated *human bones*;
13. *pig bones* placed over cremated human bones.

Cremation grave no. 50 (Pl. XLIII/a, 1–4)

– In S LXXII, the oval grave pit was discovered 0.35 m deep. The brooches were among the cremated bones.

1. the spring of a poorly preserved iron *brooch* (Pl. XLIII/1; LXIV/20);
2. spring and body parts of a poorly preserved iron *brooch* (Pl. XLIII/2);
3. small wheel-thrown *vessel*, dark grey, decorated, annular bottom, discovered inside the large vessel, h. 80 mm, Ø 105 mm; ø 55 mm; maxØ 120 mm (Pl. XLIII/3; LXXXI/1);
4. fragmentary large *vessel*, wheel-thrown, neck and rim of the vessel missing, h. preserved 250 mm, ø 110 mm; maxØ 315 mm (Pl. XLIII/4);
5. wheel-thrown *bowl*, missing;
6. cremated *human bones*.

Cremation grave no. 51 (Pl. XLIII/b, 5–8)

– in S LXXIII, between 27 and 30 m, the grave pit was quadrangular and was discovered at a depth of 0.66–0.70 m.

1. large iron *brooch* found among cremated human bones, l. 135 mm, 28 g (Pl. XLIII/5; LXV/3);
2. *whetstone*, l. 130 mm, 85 g (Pl. XLIII/6; LXXII/1);
3. iron *knife*, discovered under the sandstone, close to the animal offering, l. 147 mm, 22 g (Pl. XLIII/7; LXXIII/5);
4. wheel-thrown *bowl*, reddish-brown, annular base with omphalos, h. 110 mm, Ø 245 mm; ø 75 mm; maxØ 255 mm (Pl. XLIII/8; LXXIX/5);
5. large wheel-thrown *vessel*, missing;
6. cremated *human bones*;
7. *animal bones*.

Inhumation grave no. 52 (Pl. XLIV/a–b, 1–2)

– The grave pit was observed at 0.25–0.30 m, irregular in shape, with one edge straight and the opposite edge semicircular. The semicircular side was excavated in steps: the first step was 0.73 m deep, the second 1 m, and the third 1.30 m. Near the right edge, a skeleton was discovered, of which only the calcaneus was preserved of the right foot, and the left foot ended with the distal (lower) end of the tibia and brooch, without the foot bones. A few carpal bones were found in the area of the clavicle, and the left calcaneus was at the base of the thorax. The arms were outstretched beside the body with the hands placed under the pelvis. At the base of the pubic symphysis there was a (human?) calvarium, which could not be lifted in one piece. The mandible and

upper jaw were relatively well preserved and dentition appeared to be complete. In the region of the mouth and just above the oral cavity three large vertebrae were discovered, which appeared to be animal. Other animal bones were located to the left of the skull. The two brooches were in the middle of the rib cage.

1. small iron *brooch* with two knots, well preserved, l. 68 mm (Pl. XLIV/1);
2. small iron *brooch* with two knots, poorly preserved, l. preserved 53 mm (Pl. XLIV/2);
3. *skeleton*;
4. *animal bones*.

Cremation grave no. 53 (Pl. XLIV/c, 3–8)

– in S LXXXIV, between 15 and 16 m, a round pit, deepened to 0.60 m from the present walking level.

1. large iron *brooch*, well preserved, found among cremated bones, l. 158 mm, 43 g (Pl. XLIV/3; LXV/8);
2. small iron *brooch*, poorly preserved, found among the cremated bones, l. preserved: 69 mm (Pl. XLIV/4; LXIV/17);
3. iron *shears*, found under the knife, near the animal bones, l. 190 mm, w. 40 mm, 54 g (Pl. XLIV/5; LXXII/10);
4. fragment of the blade of an iron *razor* with ornamented handle, near the animal bones, l. preserved 135 mm, 20 g (Pl. XLIV/6; LXXIII/2);
5. wheel-thrown *bowl*, only a few fragments could be recovered, h. $\approx$ 100 mm, Ø 220 mm; ø 80 mm (Pl. XLIV/7);
6. large, wheel-thrown *vessel*, h. $\approx$ 370 mm, Ø 225 mm; ø 145 mm; maxØ 365 mm (Pl. XLIV/8);
7. small, short, wide-mouthed, wheel-thrown *vessel*, sunken 0.25 m below the grave level, unrecovered;
8. cremated *human bones* on the E side of the pit;
9. *animal bones*, probably pig.

Cremation grave no. 54 (Pl. XLV/a)

– in S LXXXIV, between 25 and 27 m, oval pit, deepened to 0.30–0.35 m from the present surface.

1. cremated *human bones*.

Cremation grave no. 55 (Pl. XLV/b)

– in S LXXXIV–LXXXV, between 25 and 27 m, deepened to 0.30–0.35 m.

1. small *vessel*, missing;
2. cremated *human bones*.

Cremation grave no. 56 (Pl. XLV/1–6)

– The grave pit was observed at 0.20 m; it was oval in shape with the long axis oriented E–W. The six vessels were found clustered at the E end of the pit, with the cremated human bones deposited in the W part of the pit.

1. pin of an iron *brooch*, found near the cremated human bones (Pl. XLV/1);
2. large iron *knife* with a curved handle and thin blade, lying under the bowl, l. 115 mm, 15 g (Pl. XLV/2; LXXII/19);
3. wheel-thrown *mug* with one handle, h. $\approx$ 65 mm, Ø 62 mm; ø 40 mm (Pl. XLV/3);
4. handmade *bowl*, brown with greyish spots, h. 80 mm, Ø 145 mm; ø 70 mm (Pl. XLV/4; LXXVII/2);
5. large, wheel-thrown *vessel*, h. $\approx$ 310 mm, Ø 205 mm; ø 125 mm (Pl. XLV/5);

6. large, wheel-thrown *vessel*, h. $\approx$ 315 mm, Ø 190 mm; ø 125 mm; maxØ 295 mm (Pl. XLV/6);
7. small wheel-thrown *vessel*, missing;
8. *bowl*, missing;
9. few cremated *human bones*;
10. *animal bones*, including pig jaw.

Cremation grave no. 57 (Pl. XLVI/a)

– in S XCIV, between 13 and 14 m, the grave was visible on the surface, with its bottom at a depth of 0.18 m.

1. cremated *human bones*.

Cremation grave no. 58 (Pl. XLVI/b, 1–10)

– between S XCVI and XCVII, between 12 and 14 m, the grave pit was quadrangular in shape, with one of the corners strongly rounded, deepened to 0.40 m from the present level.

1. iron *brooch* found near the spearhead, l. 75 mm (Pl. XLVI/1);
2. bronze *brooch* found among cremated bones, l. 90 mm (Pl. XLVI/2);
3. iron *knife* lying isolated in the grave, l. 130 mm, w. 22 mm (Pl. XLVI/3);
4. iron *knife* discovered near the cremated human bones, l. 105 mm, w. 16 mm (Pl. XLVI/4);
5. iron *spearhead*, l. 278 mm, w. 40 mm, 110 g (Pl. XLVI/5; LXXI/9);
6. handmade *bowl*, h. 90 mm, Ø 245 mm, ø 120 mm (Pl. XLVI/6);
7. handmade *cup*, greyish brown, unevenly burnt, h. 130 mm, Ø 105 mm; ø 85 mm (Pl. XLVI/7; LXXV/4);
8. medium-sized wheel-thrown *vessel*, h. $\approx$ 140 mm, Ø 165 mm; ø 85 mm; maxØ 215 mm (Pl. XLVI/8);
9. large handmade *pot*, fragmentary, unevenly burnt, brown-black, ø 110 mm; maxØ 200 mm (Pl. XLVI/9; LXXXIII/3);
10. large wheel-thrown *vessel*, h. $\approx$ 260 mm, Ø 205 mm; ø 140 mm; maxØ 340 mm (Pl. XLVI/10);
11. cremated *human bones* in the N end of the pit;
12. *animal bones*.

Cremation grave no. 59 (Pl. XLVII)

– The grave pit was quadrangular in shape, and deepened to 1.50 m. Traces of charred beams were observed at the bottom of the pit.

1. iron *brooch*, found among the cremated bones, l. 95 mm (Pl. XLVII/1);
2. fragmentary *bracelet* made of bent iron wire found among the cremated bones (Pl. XLVII/2);
3. iron *knife*, lying on the pig's ribs (animal bones were not shown in drawing), l. 154 mm, w. 45 mm, 44 g (Pl. XLVII/3; LXXIII/3);
4. large wheel-thrown *vessel*, brown, annular bottom, h. 230 mm, Ø 170 mm; ø 95 mm; maxØ 220 mm (Pl. XLVII/4; LXXXVIII/2);
5. wheel-thrown *mug* with one handle, light brown and light grey, decorated with stamped motifs, annular base with omphalos, h. 100 mm, Ø 70 mm; ø 50 mm; maxØ 95 mm (Pl. XLVII/5; LXXXVI/7);
6. fragments of a medium-sized wheel-thrown *vessel*, h. $\approx$ 105 mm, Ø 145 mm; ø 80 mm; maxØ 170 mm (Pl. XLVII/6);
7. wheel-thrown *bowl*, h. 120 mm, Ø 295 mm; ø 130 mm; maxØ 300 mm (Pl. XLVII/7);
8. fragments from a large wheel-thrown *vessel*, h. $\approx$ 330 mm, Ø 205 mm; ø 120 mm; maxØ 270 mm (Pl. XLVII/8);
9. cremated *human bones*;

10. *pig* jaw and ribs, towards the NW corner of the pit;
11. *mollusc shell*, found among the cremated bones.

Cremation grave no. 60 (Pl. XLVIII/a, 1)

– in S XCVII and XCVIII, between 18 and 20 m, it was up to 0.36 m deep. Of the five vessels, four could not be lifted.

1. iron *knife* placed over the animal offering, missing;
2. handmade *cup* with one handle, brown with black spots, ornamented with knobs, h. 85 mm, Ø 80 mm; ø 80 mm; maxØ 100 mm (Pl. XLVIII/1; LXXIV/5);
- 3–6. four wheel-thrown *vessels*, unrecovered;
7. cremated *human bones*;
8. *animal bones*.

Cremation grave no. 61 (Pl. XLVIII/b, 2–8)

– in S I–II/1973, between 13 and 15 m, very close to the present surface, a circular pit that deepened to 0.35 m from the present surface.

1. small bronze *brooch*, discovered among cremated human bones, l. 34 mm, 4 g (Pl. XLVIII/2; LXIII/7);
2. undetermined iron *object* found among cremated human bones, missing;
3. fragments of a handmade *bowl*, h. ≈ 125 mm, Ø 245 mm; ø 90 mm; maxØ 255 mm (Pl. XLVIII/3);
4. fragments of a medium-sized, wheel-thrown *vessel*, h. ≈ 140 mm, Ø 120 mm; ø 70 mm; maxØ 175 mm (Pl. XLVIII/4);
5. small, conical, handmade *vessel* with knobs under the rim, placed on the cremated bones, h. 65 mm, Ø 90 mm; ø 60 mm (Pl. XLVIII/5);
6. fragments from a large wheel-thrown *vessel*, h. ≈ 365 mm, Ø 175 mm; ø 100 mm (Pl. XLVIII/6);
7. bottom of a large wheel-thrown *vessel*, ø 120 mm (Pl. XLVIII/7);
8. fragments from a large wheel-thrown *vessel*, h. ≈ 365 mm, Ø 185 mm; ø 100 mm (Pl. XLVIII/8);
9. cremated *human bones* in the N part of the pit;
10. *pig* and *fowl bones*.

Cremation grave no. 62 (Pl. XLIX, L)

– The 1.40 × 2 m oval grave pit was observed at 0.28 m and deepened to 0.40–0.55 m. The bronze bracelets and chain belts were located at the E end of the pit; the vessels were placed in a line towards the W end of the pit.

1. small bronze *brooch*, with knobs, l. 45 mm (Pl. XLIX/1; LXIV/1);
2. small bronze *brooch*, with knobs, l. 46 mm (Pl. XLIX/2; LXIV/2);
3. small bronze *brooch*, with plate, l. 40 mm (Pl. XLIX/3);
4. small bronze *brooch*, with plate, l. 40 mm (Pl. XLIX/4);
5. fragment of a small iron *brooch* (Pl. XLIX/5; LXV/14);
6. fragment of a small iron *brooch* (Pl. XLIX/6; LXV/15);
7. fragment of a medium-sized iron *brooch* (Pl. XLIX/7; LXIV/14);
8. pin of an iron *brooch* (Pl. XLIX/8);
9. large iron *brooch*, l. 124 mm, 31 g (Pl. XLIX/9; LXV/7);
10. large iron *brooch*, l. 118 mm, 21 g (Pl. XLIX/10; LXV/1);
11. large iron *brooch*, l. 120 mm, 22 g (Pl. XLIX/11; LXV/6);
12. iron *bracelet* with a mobile part, with an S-shaped decoration, l. 48 mm, 23 g (Pl. XLIX/12; LXVII/12);

13. iron *bracelet*, intØ 70 mm, 10 g (Pl. XLIX/13; LXVII/10);
14. wavy iron *bracelet*, intØ 78 mm, 20 g (Pl. XLIX/14; LXVII/11);
15. bronze *anklet* with four large hollow knobs, intØ 66 mm, 220 g (Pl. L/1; LXVIII/2);
16. bronze *anklet* with four large hollow knobs, Ø 68 mm, 250 g (Pl. L/2; LXVIII/1);
17. 22 fragments of a melted bronze *anklet* with large hollow knobs, 153 g (Pl. L/3; LXVIII/3);
18. iron *chain belt* with eight-shaped links, l. 600 mm, 146 g (Pl. L/4; LXIX/10);
19. *chain belt* made of twisted iron wire, l. 1.20 m, 407 g (Pl. L/5; LXIX/11);
20. fragments of a wheel-thrown *bowl*, Ø 230 mm; ø 70 mm (Pl. L/6);
21. fragments of a wheel-thrown *vessel*, Ø 145 mm; ø 100 mm (Pl. L/7);
22. large wheel-thrown *vessel*, h. ≈ 365 mm, Ø 175 mm; ø 105 mm; maxØ 315 mm (Pl. L/8);
23. wheel-thrown *bowl*, missing;
24. cremated *human bones*, mixed with ashes and charcoal, scattered all over the pit and at various depths;
25. skeleton of a *pig* on the N side of the pit.

Grave no. 63 – cenotaph (Pl. LI/a)

– oval pit, 0.85 m deep.

Cremation grave no. 64 (Pl. LI/b, 1–3)

– In S II–III/1973, at metres 9–10, the grave pit was oval in shape, outlined at 0.20–0.24 m, and measured 1.80 × 1.55 m. The grave goods were located in the E side of the pit at a depth of 0.40–0.45 m. The W side of the pit was deepened to 0.80 m.

1. small *mug* with one handle, handmade, grey-brown, h. 100 mm, Ø 70 mm; ø 60 mm (Pl. LI/1; LXXV/3);
2. small wheel-thrown *bowl*, h. ≈ 50 mm, Ø 145 mm; ø 60 mm (Pl. LI/2);
3. medium, wheel-thrown *vessel*, h. 270 mm, Ø 180 mm; ø 95 mm; maxØ 235 mm (Pl. LI/3);
4. a few cremated *human bones*.

Cremation grave no. 65 (Pl. LII/a–b, 1–4)

– in S III–IV/1973, between metres 5–7. The grave pit was outlined at 0.20–0.24 m. It was round, 1.60 m in diameter, and stepped down to a depth of 1.10 m. The grave goods were placed at the periphery of the pit, while the deeply excavated central part remained empty.

1. small iron *knife*, discovered among cremated human bones, l. 77 mm (Pl. LII/1);
2. iron *spear butt*, l. 43 mm, 12 g (Pl. LII/2; LXXI/7);
3. iron *spearhead*, l. 260 mm, 100 g (Pl. LII/3; LXXI/10);
4. the rim of a handmade *vessel*, decorated with knobs and an impressed rib, Ø 200 mm (Pl. LII/4);
5. cremated *human bones*, arranged in a heap on the first step, starting from the centre of the pit to the S.

Grave no. 66 – cenotaph (Pl. LII/c)

– in S II–III/1973, between metres 37–39, the pit was outlined at a depth of 0.20–0.25 m and deepened to 0.60 m. It was oval in shape, measuring 1.60 × 1.90 m, with no grave goods and no traces of disturbance.

Grave no. 67 – cenotaph (?) (Pl. LII/d)

– in S IV–V/1973, between metres 9–11, the pit was outlined at a depth of 0.30 m and deepened to 1.36 m. It was round with a diameter of 1.36 m.

1. two fragments of *animal bones*.

Cremation grave no. 68 (Pl. LII/e, 5)

– in S VI–VII/1973, between metres 17 and 19, the grave pit was oval, outlined at 0.30 m and deepened in steps to 1.09 m.

1. small iron *rivet*, Ø 8 mm, l. 7.5 mm (Pl. LII/5; LXXII/8);
2. *ceramic* fragments from several vessels, found at various depths in the pit fill, missing;
3. a few cremated *human bones*.

Cremation grave no. 69 (Pl. LIII)

– In S VI, between metres 7–9. The outline of the grave pit could not be determined. It was up to 0.50 m deep.

1. iron *brooch*, found among cremated human bones, under the sword, l. 80 mm, 8 g (Pl. LIII/1; LXIII/22);
2. iron *knife*, l. 150 mm (Pl. LIII/2; LXXII/22);
3. *sword* stuck into the ground above the heap of bones, together with the lower part of the *scabbard*, l. sword 660 mm, 366 g (Pl. LIII/3; LXXI/2);
4. handmade *cup* with slightly raised handle, dark brown-grey, h. 55 mm, Ø 65 mm; ø 60 mm (Pl. LIII/4; LXXIV/2);
5. fragments of a wheel-thrown *bowl*, h. ≈ 85 mm, Ø 205 mm; ø 85 mm (Pl. LIII/5);
6. bottom of a handmade *vessel*, ø 110 mm (Pl. LIII/6);
7. large handmade *vessel*, black, with four flattened protuberances, h. 310 mm, Ø 200 mm; ø 140 mm; maxØ 315 mm (Pl. LIII/7; LXXXIV/1);
8. short *vessel*, missing;
9. cremated *human bones*;
10. *animal bones*.

Grave no. 70 – cenotaph (?) (Pl. LIV/a)

– a round pit containing only animal bones, including a *pig* mandible.

Cremation grave no. 71 (Pl. LIV/b, 1–8)

– in S VIII–IX/1973, between metres 12–13, the pit was outlined at 0.20–0.25 m and deepened to 0.60 m from the present walking level. It was quadrangular, slightly trapezoidal, measuring 1 × 1.25 m. The metal items were found among the cremated bones.

1. small bronze *brooch* with knobs, l. 28 mm (Pl. LIV/1; LXIII/6);
2. fragment of a small bronze *brooch* (Pl. LIV/2; LXIII/8);
3. notched iron *bracelet*, Ø 44 × 50 mm, 8 g (Pl. LIV/3; LXVI/5);
4. wheel-thrown *cup* with one handle, fragmentary, Ø 60 mm; maxØ 65 mm (Pl. LIV/4);
5. fragments of a medium wheel-thrown *bowl* found near the animal bones, h. ≈ 55 mm, Ø 185 mm; ø 80 mm (Pl. LIV/5);
6. a small wheel-thrown *vessel* with a wide mouth, found on the E side of the pit, h. ≈ 115 mm, Ø 165 mm; ø 80 mm; maxØ 185 mm (Pl. LIV/6);
7. fragments of a large wheel-thrown *vessel*, from the E side of the pit, Ø 205 mm; ø 125 mm (Pl. LIV/7);
8. fragments of a large wheel-thrown *vessel*, from the E side of the pit, Ø 210 mm; ø 120 mm (Pl. LIV/8);
9. fragments of a medium-sized *bowl*, missing;

10. cremated *human bones*, placed in the middle of the N side of the pit;
11. *pig skeleton*, towards the W end of the pit.

Cremation grave no. 72 (Pl. LV/a, 1–4)

– The pit was outlined 0.20–0.25 m deep and deepened to 0.40–0.43 m from the present level. It was oval and oriented with its long axis in an N–S direction, measuring 1 × 1.50 m.

1. iron *spearhead*, placed in the bowl, l. 145 mm, 40 g (Pl. LV/1; LXXI/8);
2. blade of an iron *knife*, placed in the bowl, l. 110 mm, 14 g (Pl. LV/2; LXXII/20);
3. handmade *cup* with one handle, brown, unevenly burnt, with grey parts, h. 80 mm, Ø 85 mm; ø 60 mm; maxØ 90 mm (Pl. LV/3; LXXIV/6);
4. handmade *bowl*, brown with black spots, h. 110 mm, Ø 220 mm; ø 65 mm; maxØ 230 mm (Pl. LV/4; LXXVIII/1);
5. large *vessel* of which the lower part has been preserved, missing;
6. short *vessel* with wide mouth, missing;
7. few cremated *human bones*, partly also in the large vessel;
8. *fowl* and other *animal bones*.

Cremation grave no. 73 (Pl. LV/b, 5–10; LVI)

– in S XX–XXI/1973, between metres 10–12, the grave pit was outlined at 0.30 m and deepened to 0.60 m. It was oval in shape, with its long axis oriented E–W, measuring 1.45 × 1.70 m. Two bronze brooches and a fragment of a bracelet were found among the cremated bones at 0.40 m. The other two bronze brooches, joined by a chain, were found among the human bones in the second heap together with five bronze and one iron bracelet and the bronze beaded neck ring.

1. fragmentary bronze *brooch*, l. 35 mm (Pl. LV/5; LXIII/5);
2. fragmentary bronze *brooch* (Pl. LV/6; LXIII/1; LXVI/11);
3. fragmentary bronze *brooch*, missing, only the pin and a fragment of the body are preserved, l. 32 mm (Pl. LV/7);
4. fragmentary bronze *brooch*, l. 30 mm (Pl. LV/8; LXIII/4);
5. links from the bronze *chain* connecting two brooches (Pl. LV/9; LXIX/2);
6. fragments of a bronze wire *neck ring*, intØ ≈ 120 mm, 3 g (Pl. LV/10);
7. small glass *bead*, Ø 12 mm (Pl. LV/11);
8. bronze *bracelet* with overlapping ends, Ø 60 × 68 mm, 15 g (Pl. LVI/1);
9. bronze *bracelet* with knots in three fragments, intØ ≈ 65 mm, 38 g (Pl. LVI/2; LXVI/18);
10. bronze *bracelet* with knots, intØ 80 mm (Pl. LVI/3);
11. fragmentary bronze *bracelet*, intØ ≈ 60 mm, 9 g (Pl. LVI/4; LXVI/3);
12. fragment of a bronze *bracelet* with Steckverschluss-type fastening, intØ 46 mm, 7 g (Pl. LVI/5; LXVI/10);
13. iron *bracelet*, intØ 70 mm, 10 g (Pl. LVI/6; LXVI/8);
14. fragment of an iron *bracelet* (Pl. LVI/7);
15. fragment from the blade of an iron *knife* resting on a larger bone, l. preserved 58 mm (Pl. LVI/8; LXXII/12);
16. bent iron *needle*, l. 78 mm (Pl. LVI/9; LXXII/9);
17. brown, handmade *vessel*, deposited bottom up over the other vessels, h. 225 mm, Ø 210 mm; ø 105 mm; maxØ 250 mm (Pl. LVI/10);
18. large bell-shaped *vessel*, handmade, brown, with four rounded and four flattened protuberances, found in the group placed in the centre of the pit, h. 355 mm, Ø 300 mm; ø 170 mm; maxØ 375 mm (Pl. LVI/11; LXXXV/4);

19. large bell-shaped *vessel* with flattened protuberances, handmade, missing;
20. short, wide-mouthed, wheel-thrown *vessel*, missing;
21. wheel-thrown *bowl*, missing;
22. small heap of cremated *human bones* at a depth of 0.40 m;
23. cremated *human bones* deposited in the NW corner of the pit, mixed with ashes;
24. two large *animal bones*, *fowl bones* and ribs, probably of a pig.

Cremation grave no. 74 (Pl. LVII)

– the grave pit deepened to 0.30–0.35 m. The brooches and the bracelet were among the cremated human bones.

1. fragmentary bronze *brooch* (Pl. LVII/1; LXIII/16);
2. fragmentary bronze *brooch*, l. 27 mm (Pl. LVII/2; LXIII/17);
3. fragments of a bronze *brooch* (Pl. LVII/3; LXIII/12);
4. bronze *brooch*, missing;
5. buffer-type bronze *bracelet*, fragmentary (Pl. LVII/4; LXVI/20);
6. two fragments of a bronze *object*;
7. fragment of the blade of an iron *knife*, found beside the animal bones, l. preserved 65 mm (Pl. LVII/5; LXXII/14);
8. handmade *deep bowl*, h. 65 mm, Ø 115 mm; ø 70 mm; maxØ 120 mm (Pl. LVII/6; LXXVII/3);
9. fragments of a wheel-thrown *bowl*, h. ≈ 140 mm, Ø 105 mm; ø 95 mm; maxØ ≈ 175 mm (Pl. LVII/7);
10. wheel-thrown *vessel*, h. 145 mm, Ø 170 mm; ø 95 mm; maxØ 210 mm (Pl. LVII/8);
11. large handmade *vessel*, dark brown, with protuberances, h. 315 mm, Ø 250 mm; ø 140 mm; maxØ 310 mm (Pl. LVII/9; LXXXIV/4);
12. cremated *human bones*;
13. *animal bones*.

Cremation grave no. 75 (Pl. LVIII/a)

– in S XXVII–XXVIII/1973, between metres 7 and 9, the grave pit had a quadrangular shape with rounded corners.

1. a few cremated *human bones*, placed in the centre of the pit along with remains of charcoal and ash.

Cremation grave no. 76 (Pl. LVIII/b, 1–2)

– in S XXIX–XXX/1973, between metres 6 and 9 The quadrangular pit measured 0.72 × 1.60 m and was outlined at 0.25–0.27 m. A large amount of charcoal was discovered across the entire surface of the grave, and a beam was identified at its southern end. The walls and bottom of the grave were more compact, suggesting that they had probably been lined.

1. fragments of a poorly preserved iron *brooch* (Pl. LVIII/1);
2. iron *brooch*, l. 90 mm (Pl. LVIII/2);
3. tubular bronze *bracelet* with protrusions, missing;
4. cremated *human bones* scattered across the entire surface of the grave.

Cremation grave no. 77 (Pl. LVIII/c, 3–7)

– in S XXX–XXXI, between metres 8 and 10, the grave pit was round and deepened to 0.32 m, having been mostly disturbed.

1. large iron *brooch*, l. 80 mm (Pl. LVIII/3);

2. the pin of an iron *brooch* (Pl. LVIII/4);
3. fragment from the blade of a small iron *knife*, l. 75 mm (Pl. LVIII/5);
4. fragmentary iron *knife* (Pl. LVIII/6);
5. handmade *mug*, the bottom was preserved, $\varnothing$ 60 mm (Pl. LVIII/7).
6. fragments of a large *vessel* with knobs, handmade, located approximately in the centre of the pit, $\varnothing$ 140 mm (Pl. LVIII/8);
7. wheel-thrown *vessel*, missing.

Cremation grave no. 78 (Pl. LIX/a, 1–7)

– in S XXX–XXXI, between metres 10 and 12. The grave pit was oval in shape with the long axis oriented E–W, measuring 1.28×1.90 m, and deepened to 0.30 m from the present surface.

1. fragments of a small bronze *brooch* (Pl. LIX/1; LXIII/2);
2. small bronze *brooch*, l. 30 mm (Pl. LIX/2; LXIII/3);
3. bronze *ring*, int $\varnothing$ 20 mm (Pl. LIX/3; LXX/17);
4. iron *ring*, missing;
5. iron *bracelet*, int $\varnothing$ 47 mm, 5 g (Pl. LIX/4; LXVI/2);
6. fragment of a bronze *bracelet* with knots, int $\varnothing$ 52 mm, 20 g (Pl. LIX/5; LXVI/17);
7. remains of an undetermined iron *object* (Pl. LIX/6);
8. wheel-thrown *bowl*, approximately at the centre of the pit, h. 70 mm, $\varnothing$ 255 mm; $\varnothing$ 135 mm; max $\varnothing$ 270 mm (Pl. LIX/7);
9. red *vessel*, wheel-thrown, could not be recovered;
10. fragment of a flat, elliptical object made of a material that appears glassy in section, black in colour, probably *bitumen*;
11. cremated *human bones*, some slightly charred, scattered across the entire surface of the grave;
12. *pig* mandible and bones, found among the vessels.

Inhumation grave no. 79 (Pl. LIX/b, 8–37)

– in S XXXIII–XXXIV/1973, the grave pit was quadrangular with rounded corners, outlined at 0.30 m and deepened to 0.56 m, measuring 0.86×2.05 m. The skeleton was laid on its back with the head towards the S; the skull lay on its right side. The right humerus and scapula were missing; the clavicle was displaced by agricultural work.

1. kaolin *beads*, $\varnothing$ 4 mm (Pl. LIX/8; LXX/1);
2. bronze wire *beads* (Pl. LIX/9; LXX/2);
3. amber *bead*, $\varnothing$ 7 mm (Pl. LIX/10; LXX/5);
4. thin bronze plate *bead*, $\varnothing$ 7 mm (Pl. LIX/11);
5. *bead* made of thin bronze plate, with overlapping ends, $\varnothing$ 6 mm (Pl. LIX/12);
6. *bead* made of thin bronze plate, with overlapping ends, $\varnothing$ 8 mm (Pl. LIX/13);
7. light green glass *bead*, $\varnothing$ 4 mm (Pl. LIX/14);
8. light green glass *bead*, $\varnothing$ 4.5 mm (Pl. LIX/15; LXX/4);
9. blue glass *bead*, $\varnothing$ 5 mm (Pl. LIX/16; LXX/3);
10. blue glass *bead*, $\varnothing$ 14 mm (Pl. LIX/17);
11. blue glass *bead*, $\varnothing$ 11.5 mm (Pl. LIX/18; LXX/6);
12. blue glass *bead*, $\varnothing$ 12.5 mm (Pl. LIX/19);
13. amphora-shaped yellow glass *bead*, l. 14 mm; w. 7 mm (Pl. LIX/20; LXX/7);
14. bronze *pendant* with a small loop, l. 13 mm (Pl. LIX/21; LXX/8);
15. bronze *earring*, ext $\varnothing$ 13 mm (Pl. LIX/22; LXX/9);
16. bronze *earring*, ext $\varnothing$ 15 mm (Pl. LIX/23; LXX/10);

17. *finger ring* made of wavy silver wire, intØ 15 mm (Pl. LIX/24; LXX/15);
18. bronze *finger ring* with overlapping ends, Ø 16 × 18 mm (Pl. LIX/25; LXX/20);
19. bronze *finger ring*, intØ 18 mm, extØ 21 mm (Pl. LIX/26; LXX/18);
20. bronze *finger ring*, intØ 15 mm, extØ 19 mm (Pl. LIX/27; LXX/19);
21. iron *finger ring*, extØ ≈ 20 mm (Pl. LIX/28; LXX/14);
22. bronze *bracelet* with open ends, Ø 46 × 53 mm, 7 g (Pl. LIX/29; LXVI/12);
23. bronze *bracelet* with ends finished in protrusions, Ø 47 × 53 mm, 6 g (Pl. LIX/30; LXVI/15);
24. bronze *bracelet* with ends finished in protrusions, Ø 50 × 53 mm, 6 g (Pl. LIX/31; LXVI/16);
25. numerous *brooch* fragments (Pl. LIX/32; LXIII/18);
26. small bronze *brooch*, l. 31 mm, 7 g (Pl. LIX/33; LXIII/14);
27. Thracian-type bronze *brooch*, l. 35 mm, 6 g (Pl. LIX/34; LXIII/11);
28. fragment from the blade of a small iron *knife* found at the left elbow, l. 55 mm (Pl. LIX/35; LXXII/13);
29. handmade *mug* with one handle, light brown, h. 80 mm, Ø 60 mm; ø 50 mm; maxØ 85 mm (Pl. LIX/36; LXXIV/7);
30. small handmade *vessel*, brown with grey spots, h. 65 mm, Ø 125 mm; ø 90 mm (Pl. LIX/37; LXXVII/1);
31. *skeleton*.

Cremation grave no. 80 (Pl. LX/a, 1–7)

– The rectangular pit with rounded corners could only be delineated at its bottom; it deepened to 0.40 m below the present walking level and measured 1.80 × 2 m.

1. iron *brooch* found among the cremated bones, l. 96 mm, 10 g (Pl. LX/1; LXIII/23);
2. the blade of an iron *knife*, placed on the animal bones, l. 144 mm, 24 g (Pl. LX/2; LXXII/23);
3. fragmentary handmade *cup* with one handle, h. ≈ 60 mm, Ø 55 mm; ø 35 mm (Pl. LX/3);
4. fragments from a wheel-thrown *bowl*, Ø 205 mm; ø 105 mm (Pl. LX/4);
5. fragments from a wheel-thrown *bowl*, Ø 335 mm (Pl. LX/5);
6. the bottom of a large, wheel-thrown *vessel*, ø 95 mm; maxØ 250 mm (Pl. LX/6);
7. the lower part of a black *vessel*, with protrusions, handmade, ø 140 mm; maxØ 265 mm (Pl. LX/7);
8. cremated *human bones* placed in the western half of the pit, near the northern wall;
9. *animal bones*.

Inhumation grave no. 81 (Pl. LX/b, 8)

– the grave pit deepened to only 0.25 m from the present surface and was oriented E–W. The grave was disturbed; only part of the left coxal, the right femur and a few ribs were preserved in their original position.

1. large wheel-thrown *vessel*, dark grey, annular base with omphalos, placed in the coxofemoral region, h. 370 mm, Ø 165 mm, ø 100 mm, maxØ 280 mm (Pl. LX/8; LXXXVII/1);
2. bones from the *skeleton*.

Cremation grave no. 82 (Pl. LXI/a)

– the grave was deepened to 0.15–0.20 m from the present surface.

- 1–4. four *vessels*, missing;
5. wheel-thrown *bowl*, missing.

Cremation grave no. 83 (Pl. LXI/b, 1–8; LXII/1–2)

– in S CLXX–CLXXI, at metres 20–22, the grave pit was outlined at 0.15–0.20 m and deepened to 0.45 m from the present level, being quadrangular with one side rounded. The metal objects were found among the cremated human bones at the W end of the pit, while the vessels were placed at the E end of the pit.

1. small bronze *brooch*, l. 40 mm, 14 g (Pl. LXI/1; LXIII/15);
2. small iron *brooch*, 75 mm long (Pl. LXI/2);
3. fragments of an iron *object* made of thin plate, with slightly bent edges (Pl. LXI/3);
4. fragments from a bronze *bracelet* with knots, some pieces were attached to an iron object (Pl. LXI/3, 4; LXVI/9);
5. tubular *bracelet*, with ornamented knots, intØ 60 × 63 mm, 15 g (Pl. LXI/5; LXVI/21);
6. iron *bracelet* with overlapping ends, intØ 70 mm, 33 g (Pl. LXI/6; LXVI/7);
7. handmade *mug* with one handle, brownish to grey, h. 75 mm, Ø 70 mm; ø 60 mm; maxØ 85 mm (Pl. LXI/7; LXXIV/3);
8. handmade *bowl*, unevenly fired, colour ranging from brown to dark grey, towards black, straight rim, h. 95 mm, Ø 230 mm; ø 105 mm (Pl. LXI/8; LXXVII/6);
9. handmade *mug* with one handle, missing;
10. large handmade *vessel* with four knobs, fragmentary, the upper part is missing, ø 155 mm; maxØ 270 mm (Pl. LXII/1; LXXXV/1);
11. large handmade *vessel*, fragmentary, the upper part is missing, ø 145 mm; maxØ 300 mm (Pl. LXII/2);
12. a small heap of cremated *human bones* deposited at the W end of the pit;
13. cremated *human bones* in the N corner of the pit, mixed with ash and charcoal;
14. the bones of a young *pig*.

Cremation grave no. 84 (Pl. LXII/3–6)

– in S CLXXXVIII–CLXXXIX, between metres 13 and 14, very close to the present surface, therefore largely destroyed.

1. iron *object*, l. 15 mm (Pl. LXII/3);
2. fragment of an iron *buckle*, l. 65 mm (Pl. LXII/4);
3. small wheel-thrown *vessel*, h. 140 mm, Ø 105 mm; ø 70 mm; maxØ 150 mm (Pl. LXII/5; LXXXI/6);
4. handmade *jug* with broken handle, brown with dark grey spots, h. 130 mm, Ø 100 mm; ø 70 mm; maxØ 130 mm (Pl. LXII/6; LXXV/5);
5. cremated *human bones*.

Grave no. 1/1961, 1967 [D] (Pl. LXXXIX/4–7)

– discovered accidentally during agricultural work

1. iron *sword* with mid-rib, handle broken off, l. 650 mm, w. 45 mm, inv. no. 4002 (Pl. LXXXIX/4);
2. fragments of *scabbard* (Pl. LXXXIX/5);
3. fragmentary *chape-end* (Pl. LXXXIX/6);
4. iron *link*, hollow inside (Pl. LXXXIX/7).

Grave no. 2/1961 [D] (Pl. LXXXIX/8–9)

– found accidentally during agricultural work

1. iron *knife*, decorated with an incised line, 340 mm long (Pl. LXXXIX/9);
2. wheel-thrown *bowl*, grey, annular bottom with omphalos, h. 45 mm, Ø 170 mm (Pl. LXXXIX/8).

Cremation grave no. 3/1967 [D] (Pl. LXXXIX/a, 10–11)

– in S I, upper part disturbed by agricultural work, the outline of the grave pit could not be identified.

1. medium wheel-thrown *vessel*, grey, bottom with omphalos, unrecovered;
2. handmade *cup*, with one handle, reddish-brown, h. 70 mm, Ø 78 mm; ø 54 mm (Pl. LXXXIX/10);
3. large handmade *vessel*, fragmentary, bitronconical, with protuberances, black, h. 320 mm, maxØ 280 mm (Pl. LXXXIX/11);
4. cremated *human bones* towards the centre of the pit.

Cremation grave no. 4/1967 [D] (Pl. XC/a, 1–9)

– in S II oriented E–W, the upper part disturbed by agricultural work, the outline of the grave pit could not be identified.

1. iron *brooch*, l. 78 mm, inv. no. 4237 (Pl. XC/1);
2. iron *brooch*, l. 91 mm, inv. no. 4236 (Pl. XC/2);
3. two fragments of a bronze *bracelet* with knots, inv. no. 4240 (Pl. XC/3);
4. a *bracelet* of twisted silver wire, with overlapping ends, intØ 70 mm, inv. no. 4241 (Pl. XC/4);
5. bronze *bracelet* with Steckverschluss-type fastening, decorated with two incised lines, intØ 56 mm, inv. no. 4238 (Pl. XC/5);
6. bronze *bracelet* with Steckverschluss-type fastening, deformed, inv. no. 4239 (Pl. XC/6);
7. small handmade *bowl*, reddish-brown, inv. no. 5366, h. 57 mm, Ø 152 mm; ø 100 mm (Pl. XC/7);
8. wheel-thrown *bowl*, grey, annular bottom, inv. no. 5367, h. 60 mm, Ø 170 mm; ø 70 mm (Pl. XC/8);
9. large wheel-thrown *vessel*, black, annular bottom, h. 320 mm, Ø 130 mm; ø 110 mm; maxØ 260 mm (Pl. XC/9);
10. few cremated *human bones*, placed between the funerary vessels and the metal items.

Cremation grave no. 5/1967 [D] (Pl. XC/b, 10–12)

– in S II, 6 metres E of M4, slightly disturbed, the outline of the grave pit could not be identified.

1. iron *brooch*, l. 53 mm, inv. no. 4243 (Pl. XC/10);
2. bronze *bracelet* with Steckverschluss-type fastening, Ø 56 mm, inv. no. 4242 (Pl. XC/11);
3. wheel-thrown *deep bowl*, black, bottom with omphalos, h. 100 mm, Ø 160 mm; ø 70 mm; maxØ 170 mm (Pl. XC/12);
4. fragments of a large wheel-thrown *vessel*, red, unrecovered;
5. traces of a large wheel-thrown *vessel*, unrecovered;
6. cremated *human bones*.

Cremation grave no. 6/1967 [D]

– in S II, 1.5 metres SE of M5, largely destroyed.

1. red *vessel*, unrecovered;
2. cremated *human bones*.

Cremation grave no. 7/1967 [D]

– in S II, largely destroyed.

1. larger *vessel*, wheel-thrown, unrecovered;
2. wheel-thrown *vessel*, unrecovered;
3. cremated *human bones*.

Cremation grave no. 8/1967 [D] (Pl. XCI/a, 1–2)

– In S III, the grave pit was oval-trapezoidal, with a burn stain and charcoal debris to the W of the large vessel.

1. fragments of a medium wheel-thrown *vessel*, red, h. $\approx$ 100 mm, Ø 150 mm; ø 60 mm; maxØ 170 mm (Pl. XCI/1);
2. large handmade *vessel*, covered with black angobe, with four protuberances, h. 340 mm, Ø 190 mm; ø 120 mm; maxØ 260 mm (Pl. XCI/2);
3. small *vessel*, probably a cup, handmade, black, unrecovered;
4. cremated *human bones*, including fragments of the calvarium;
5. *animal bones* in the southwest part of the pit.

Cremation grave no. 9/1967 [D] (Pl. XCI/b, 3)

– in S IV, at a depth of 0.35–0.40 m, the vessels were arranged along a N–S axis.

1. iron *knife*, l. 96 mm, inv. no. 4246 (Pl. XCI/3);
2. large handmade *vessel*, black, unrecovered;
3. handmade *cup*, brown, unrecovered;
- 4–5. two small wheel-thrown *vessels*, unrecovered;
6. cremated *human bones*;
7. *pig bones* in the SW part of pit.

Cremation grave no. 10/1967 [D] (Pl. XCI/c, 4–5)

– in S V, at a depth of 0.35–0.40 m, the pit had an irregular contour. In the SE corner red soil and burnt remains were observed.

1. fragment of an iron item, probably a *belt buckle* prong, unrecovered;
2. bitronconical clay *spindle whorl*, Ø 25 mm (Pl. XCI/4);
3. medium wheel-thrown *vessel*, grey, in the NW part of the pit, annular bottom, inv. no. 5368, h. 240 mm, Ø 160 mm; ø 98 mm; maxØ 220 mm (Pl. XCI/5);
4. large reddish handmade *vessel*, in the NE side of the pit, unrecovered;
5. small red wheel-thrown *vessel*, unrecovered;
6. cremated *human bones*.

from the territory of the cemetery, isolated finds [D]

1. buffer-type *bracelet* with a solid body, decorated with incised and relief carving, intØ 68 mm, inv. no. 4248 (Pl. LXXXIX/3);
2. similar bronze *bracelet*, lost;
3. oval *applique* of thin bronze plate, decorated, hollow inside, with fastening hook, Ø 58 mm;
4. small bronze *chain link*, Ø 18 mm;
5. *sword*, lost;
6. pieces of iron *harness*, lost;
7. seven *vessels*, lost.

Fieldwalking 1965 [D]

1. bronze *chain link* (Pl. LXXXIX/1);
2. bronze oval *applique*, probably clasp buckle (Pl. LXXXIX/2).

grave nr.	rite	age	sex	chronology	weapons							jewellery								utensils							pottery			food offering
					sword / scabbard	spearhead	butt	arrowhead	shield/umbo	sword chain	linchpin	brooch	bracelet	torques, necklace	earring, pendant	glass jewellery, beads	finger ring	buckle	chain link	chain	chain belt	knife, razor	shear	hammer	needle, rivet	rattle	lamp	whetstone	spindle whorl	
27	c			?	1	1			1																		3		f	+
28	c			4	1				1																		3			+
29	c			4																							3			+
30	h			?											3															
31	c			3															1							3				+
32	c			1																						1	1			+
33	c			?																						1	1			+
34	c	I?		2																						1	3			+
35	h			4											1	3														
36	c			?																						1				
37	c			?																								f		
38	h			4															1							3				
39	c			?																							1	1		+
40	c	A/ II		4											3	4										1	3			+
41	c			4	1										3												4			+
42	c	A/ I2	42A: M	4											3	3											3			+
43	c	A		3											?	2										2	2			+
44	c	A	F	?																							1			+
45	c			4											3	2											2			+
46	c	I		?																							3			+
47	c			?																							3			+
48	c	A	F	4											2												3			+
49	c	A		4																										+
50	c	A		4											2												3			+
51	c	A	F	4											1												2			+

grave nr.	rite	age	sex	chronology	weapons							jewellery								utensils										pottery			food offering
					sword / scabbard	spearhead	butt	arrowhead	shield/umbo	sword chain	linchpin	brooch	bracelet	torques, necklace	earring, pendant	glass jewellery, beads	finger ring	buckle	chain link	chain	chain belt	knife, razor	shear	hammer	needle, rivet	rattle	lamp	whetstone	spindle whorl	undetermined object	wheel-thrown	hand made	
52	h	A	M	4														2															+
53	c			4														2															+
54	c	II		?																													
55	c			?																													
56	c			?														1															+
57	c	II		?																													
58	c	A	M	3		1						2						2															+
59	c			3								1	1					1															+
60	c	A		?														1															+
61	c	A	F	1								1																					+
62	c	II		4								11	6																				+
63	Ø			?																													
64	c	I?		?																													
65	c	J		2																													
66	Ø			?																													
67	c			?																													
68	c			?																													+
69	c	A/ I2-J	69a: M	2	1													1				1											+
70	Ø			?																													+
71	c	I2		1																													+
72	c	II		3?		1												1															+
73	c			1																													+
74	c			1																													+
75	c			?																													+
76	c			?																													+
77	c			2																													+

grave nr.	rite	age	sex	chronology	weapons							jewellery								utensils										pottery			food offering
					sword / scabbard	spearhead	butt	arrowhead	shield/umbo	sword chain	linchpin	brooch	bracelet	torques, necklace	earring, pendant	glass jewellery, beads	finger ring	buckle	chain link	chain	chain belt	knife, razor	shear	hammer	needle, rivet	rattle	lamp	whetstone	spindle whorl	undetermined object	wheel-thrown	hand made	
78	c	J		1								2	2					2								1	2			+			
79	h	A		2								2+	3															2					
80	c	A	M	3								1																3	2		+		
81	h			?																								1					
82	c			?																								1					
83	c	A		3								2	3																1		+		
84	c			2																								1	1				
1[D]	c			2	1																								1				
2[D]	c																												1				
3[D]	c																												1	2			
4[D]	c			1								2	4																2	1			
5[D]	c											1	1																3				
6[D]	c																														1		
7[D]	c																											2					
8[D]	c																												1	2		+	
9[D]	c																												2	2		+	
10[D]	c																												2	1			
X	-				1							2																				7	

Fig. 6. Table of grave goods.

IV. ANTHROPOLOGICAL ANALYSIS

Anthropological analysis provides an important source of information for reconstructing the biological profile of the population represented in a cemetery and, in conjunction with the archaeological evidence, contributes to a more detailed understanding of funerary practices and palaeodemographic patterns. The preservation and analytical potential of the human remains from Fântânele–Dâmbul Popii differ considerably according to funerary rite. Inhumation graves generally preserve a broader range of morphological characteristics, whereas the interpretation of cremated remains is constrained by fragmentation, incomplete recovery, and the structural and chemical transformations caused by exposure to high temperatures.

The anthropological examination therefore followed different methodological approaches for inhumed and cremated individuals. In the case of the inhumations, the skeletal remains were examined macroscopically using standard morphological and morphometric methods (MARTIN – SALLER 1957). Sex determination was based on the sexually dimorphic characteristics of the skull, pelvis and long bones (ÉRY ET AL. 1963; ACSÁDI – NEMESKÉRI 1970), while age at death was estimated using a combination of skeletal and dental indicators (MEINDL – LOVEJOY 1985; BERNERT ET AL. 2007). Stature was reconstructed from the dimensions of the preserved long bones according to the methods proposed by SJØVOLD (1990) and BERNERT (2005). Dental morphology and dental health were assessed following BUDAI (2007) and SCHEID – WEISS (2012), while pathological alterations were evaluated according to the criteria outlined by ORTNER (2003). The demographic classification of the individuals followed the system employed by BERNERT (2005).

The anthropological assessment of cremated remains presents a different set of methodological challenges. Burning alters the colour, dimensions, mechanical properties and chemical composition of bone, while fragmentation during cremation, collection from the pyre and subsequent deposition further reduces the number of diagnostically useful traits. Consequently, the analysis began with the macroscopic examination of the burnt surfaces and colour changes (SHIPMAN ET AL. 1984), followed, whenever preservation permitted, by the weighing of the recovered human remains (TROTTER – HIXON 1974). The total weight of the preserved bone assemblage is especially relevant when assessing the completeness of the remains deposited in the grave, although it must be interpreted cautiously because archaeological recovery conditions and post-depositional processes may have substantially affected the surviving quantity.

Sex and age estimations for the cremated individuals followed the criteria developed by M. DOKLÁDAL (1970). Dental crown development and wear were assessed according to LOVEJOY (1985) and SIMPSON ET AL. (1990), while unfused epiphyses and the state of cranial suture closure were evaluated using several complementary methods (MEINDL – LOVEJOY 1985; MASSET 1989; KEY ET AL. 1994). Whenever possible, age and sex estimations were based on several independent morphological indicators. In many graves, however, the quantity and degree of fragmentation of the surviving remains allowed only a broad age classification, while sex determination remained impossible.

Exposure to fire produces substantial changes in the structure and composition of bone. During heating, the organic component, particularly collagen, is progressively destroyed, while dehydration and combustion leave an increasingly mineralised skeletal matrix (MAYS 1998; Cox – MAYS 2001). Changes in colour provide an approximate indication of the temperature reached during cremation, although colour may also be influenced by the duration of exposure, oxygen supply, the location of particular bones within the pyre and subsequent depositional conditions. The experimental observations of SHIPMAN ET AL. (1984) were used as a comparative framework for estimating the approximate temperature range represented by the cremated remains from Fântânele–Dâmbul Popii (Fig. 8).

Age groups	Average weight of bones (gram)
0–6 months	54
6 months–3 years	185
3–13 years	661
13–25 years	2191
adult female	1550 (952–2278)
adult male	1919 (1530–3600)

Fig. 7. Weight of the human skeleton (after TROTTER – HIXON 1974).

Results of P. Shipman	
°C	colour
under 285 °C	white or yellow
285–525 °C	red-brown, red-yellow, dark grey-brown or dark grey
525–645 °C	black, blue or red-yellow
645–940 °C	white, light grey or light blue-grey

Fig. 8. Colours observed after heating fresh goat bone (after SHIPMAN ET AL. 1984).

Cremation grave no. 1

A total of 184 cremated bone fragments were identified, ranging in size from 2 to 38 mm and weighing 313 g. Their colour varied between grey, grey-white and blue-white, indicating exposure to temperatures within the range of approximately 525–645 °C.

A considerable part of the skeleton was absent from the recovered assemblage. The identifiable remains included fragments of the mandible, including part of the right ramus; small fragments of the calvarium, with a cortical thickness of 2–3 mm; a fragment of the distal epiphysis of a humerus; the proximal epiphysis of a radius; and fragments of a fibular diaphysis. The size and morphology of the long bones are consistent with a female individual. The dimensions of the long bones, together with the state of the ectocranial and endocranial sutures, indicate a young adult over 20 years of age.

Cremation grave no. 2

Twenty-two cremated bone fragments were identified, ranging in size from 2 to 30 mm and weighing only 21 g. Their colour varied from yellowish-white and brown to brownish-black, although white-brown fragments predominated. This colour pattern is consistent with exposure to approximately 525–645 °C.

The very low weight of the surviving assemblage indicates that most of the skeleton was absent. The identifiable elements included fragments of the skull, particularly a parietal fragment bearing traces of iron oxides, and a few small fragments of the postcranial skeleton, including diaphyseal fragments of the upper limbs, possibly belonging to the ulna or radius. The dimensions

of the preserved long-bone fragments indicate an individual belonging to the *Infans I* age group, approximately 4–6 years old.

Cremation grave no. 4

Fifty-three cremated bone fragments were identified, ranging in size from 2 to 35 mm and weighing 30 g. Their colour ranged from white-brown to blackish-brown, with white-brown fragments predominating, suggesting exposure to approximately 525–645 °C.

Only a small proportion of the skeleton was represented. Identifiable cranial remains included fragments of the parietal, occipital and frontal bones, as well as part of the internal auditory canal. The postcranial remains consisted mainly of small fragments of the long-bone diaphyses, ribs and upper limbs. The state of the ectocranial and endocranial sutures and the dimensions of the long bones are consistent with an *Infans I* individual aged approximately 3–7 years.

Inhumation grave no. 5

The human skeleton was preserved only fragmentarily. Elements of both the calvarium and facial skeleton were identified. Dental pathology included caries affecting M2/3 on the buccal surface and deposits of dental calculus.

D.	S.
M3, M1	PM2, M1, M2, M3
D.	S.
-	PM1, PM2, M1, M2, M3

The preserved postcranial skeleton included fragments of the long-bone diaphyses of the upper and lower limbs, together with the left humerus, left femur and left tibia. One of the finger rings was found on the proximal phalanges of the index finger. The bones are robust, and the *linea aspera* is strongly developed.

The condition of the dentition and the state of the ectocranial and endocranial sutures suggest a young adult aged approximately 23–30 years. The morphology of the skull, including the glabella, frontal bone and mandible, together with the dimensions of the long bones, is consistent with a male individual. Based on the dimensions of the preserved long bones and the formulae proposed by RÖSING (1988) and SJØVOLD (1990), the estimated living stature was approximately 1.63 m, calculated from a femur measuring 432 mm.

Cremation grave no. 6

A total of 91 cremated bone fragments were identified, ranging in size from 2 to 37 mm and weighing 168 g. Most fragments were grey-white or blue-white, indicating exposure to approximately 525–645 °C.

Most of the skeleton was absent from the recovered assemblage. No cranial remains could be identified, while the postcranial skeleton was represented by fragments of the diaphyses of the upper and lower limbs. The dimensions of the long bones, including a femoral head measuring 41 mm, suggest a young adult female.

Cremation grave no. 7

A total of 183 cremated bone fragments were identified, ranging in size from 2 to 51 mm and weighing 411 g. Their colour varied from grey-white and grey-brown to blue-white, with blue-white and grey fragments predominating, suggesting exposure to approximately 525–645 °C.

The identifiable cranial remains included fragments of the parietal and frontal bones, the latter preserving a cortical layer 2–3 mm thick, as well as a mandibular fragment without teeth. Postcranial remains included fragments of the diaphyses of the upper and lower limbs, hand phalanges and a fragment of a thoracic vertebra. The surviving remains do not provide sufficient evidence for sex determination. The dimensions of the long bones and the state of the ectocranial and endocranial sutures indicate an adult aged approximately 23–35 years.

Cremation grave no. 8

Thirty-eight cremated bone fragments were identified, ranging in size from 2 to 41 mm and weighing 50 g. Their colour varied from grey-white to predominantly grey and blue-white, indicating exposure to approximately 525–645 °C.

Only postcranial remains could be identified, including fragments of a radius, clavicle and rib diaphysis. The available evidence is insufficient for sex determination. The dimensions of the long bones indicate a young adult over 20 years of age.

Inhumation grave no. 9

The skeleton was fragmentarily preserved. The incomplete skull was represented by fragments of the frontal, parietal and occipital bones, while the facial skeleton included portions of the maxilla and mandible. The dentition exhibited considerable wear and deposits of dental calculus.

D.	S.
PM1	-
D.	S.
PM2, C	PM1, M1, M2

The postcranial skeleton included fragments of the upper limbs, particularly the humerus, elements of the lower limbs, including the femur and tibia, and fragments of the pelvic bones, including the ilium and ischium.

The morphology of the skull, dimensions of the long bones and characteristics of the pelvis indicate a female individual. Dental wear and the condition of the ectocranial and endocranial sutures are characteristic of an individual over 60 years of age. According to estimates based on the long bones (RÖSING 1988; SJØVOLD 1990), her living stature was approximately 1.51 m, calculated from a femur measuring 334 mm.

Cremation grave no. 10

Twenty-nine cremated bone fragments were identified, ranging in size from 2 to 42 mm and weighing 47 g. Their colour varied from grey-white to predominantly blue-white, indicating exposure to approximately 525–645 °C.

The identifiable remains included a fragment of the frontal bone and small fragments of the postcranial skeleton. The pronounced glabella and morphology of the frontal bone are consistent with a male individual. The state of the ectocranial and endocranial sutures and the dimensions of the long bones indicate an adult over 30 years of age.

Cremation grave no. 11

Thirty-seven cremated bone fragments were identified, ranging in size from 2 to 41 mm and weighing 92 g. Their colour varied from grey-white to predominantly grey and blue-white, indicating exposure to approximately 525–645 °C.

Fragments of the frontal and parietal bones were identified together with diaphyseal fragments of the upper and lower limbs. The available evidence is insufficient for sex determination. The dimensions of the long bones indicate an *Infans II* individual aged approximately 7–14 years.

Cremation grave no. 13 (A)

Twenty-seven cremated bone fragments were identified, ranging in size from 2 to 10 mm and weighing 13 g. The remains were predominantly grey and blue-white, indicating exposure to approximately 525–645 °C.

Only small fragments of the calvarium and postcranial skeleton were identifiable. The dimensions of the long bones indicate an individual belonging to the *Infans I* age group.

Cremation grave no. 13 (B)

Fourteen cremated bone fragments were identified, ranging in size from 2 to 47 mm and weighing 21 g. Their colour varied between grey-white and blue, indicating exposure to approximately 525–645 °C.

The identifiable postcranial remains included fragments from the lower limb, possibly the femur, together with other diaphyseal fragments. The available evidence is insufficient for sex determination. The dimensions of the long bones indicate an adult over 30 years of age.

The presence of remains belonging to two individuals of markedly different ages in grave no. 13 is particularly noteworthy. Although the surviving anthropological material is limited, the separation into assemblages A and B indicates that the grave contained the remains of at least two individuals, an *Infans I* and an adult. The archaeological implications of this multiple deposition are discussed in the chapter devoted to funerary practices.

Cremation grave no. 14

Forty-nine cremated bone fragments were identified, ranging in size from 2 to 42 mm and weighing less than 200 g. Their colour varied from grey-white to predominantly grey and blue-white, indicating exposure to approximately 525–645 °C.

The identifiable remains included fragments of the diaphyses of the upper and lower limbs and part of the ischium. The available evidence is insufficient for sex determination. The dimensions of the long bones indicate an adult individual.

Cremation grave no. 15

Fifty-one cremated bone fragments were identified, ranging in size from 2 to 14 mm and weighing 55 g. Their colour varied from grey-white to blue-brown, indicating exposure to approximately 525–645 °C.

Only small fragments of the postcranial skeleton were identifiable. The quantity and diagnostic value of the surviving remains are insufficient for reliable sex or age estimation.

Cremation grave no. 16

Thirty-four cremated bone fragments were identified, ranging in size from 2 to 41 mm. Many survived only as impressions within clods of soil, making the total weight unsuitable for meaningful comparison.

The remains were predominantly white-brown, with some brown-blue fragments, indicating exposure to approximately 525–645 °C. Cranial remains included small fragments of the parietal bone. The postcranial skeleton was represented by small diaphyseal fragments of the ribs and upper and lower limbs. The surviving material is insufficient for either sex or age determination.

Cremation grave no. 17

Forty-eight cremated bone fragments were identified, ranging in size from 2 to 41 mm and weighing less than 290 g. Their colour ranged from grey-white to predominantly blue-white and grey, indicating exposure to approximately 525–645 °C.

The identifiable remains included diaphyseal fragments of the upper and lower limbs, part of a femoral head and a robust pedal phalanx, possibly belonging to the great toe. The robustness of the latter and the dimensions of the long bones are consistent with an adult male.

Cremation grave no. 18

A total of 210 cremated bone fragments were identified, ranging in size from 2 to 51 mm and weighing 632 g. Their colour ranged from grey-white to predominantly blue-white and grey, indicating exposure to approximately 525–645 °C.

Possible fragments of the frontal bone and orbital margin were identified in the facial region, together with small fragments of the parietal bone, which preserved a cortical layer approximately 2–3 mm thick. The postcranial skeleton was represented by diaphyseal fragments of the upper and lower limbs. The surviving remains are insufficient for sex determination. The dimensions of the long bones and the state of the ectocranial and endocranial sutures indicate a young adult over 20 years of age.

Cremation grave no. 19

Thirty-two cremated bone fragments were identified, ranging in size from 2 to 12 mm and weighing 19 g. Their colour ranged from grey-white to predominantly blue-white and grey, indicating exposure to approximately 525–645 °C.

Small fragments of the parietal bone and diaphyseal fragments of the postcranial long bones were identified. The remains are insufficient for sex determination. Their dimensions indicate that the individual was a child.

Cremation grave no. 20

Seventy-three cremated bone fragments were identified, ranging in size from 2 to 37 mm and weighing 390 g. Their colour ranged from grey-brown to predominantly blue-white, indicating exposure to approximately 525–645 °C.

The cranial remains included fragments of the frontal and parietal bones with a cortical thickness of approximately 2–3 mm. The postcranial skeleton was represented by long-bone diaphyseal fragments, the proximal part of the axis and small fragments of cervical vertebrae. The available evidence is insufficient for sex determination. The dimensions of the long bones indicate an adult individual.

Cremation grave no. 21

A total of 176 cremated bone fragments were identified, ranging in size from 2 to 56 mm and weighing 465 g. Their colour ranged from grey-brown and blue to predominantly blue-white, indicating exposure to approximately 525–645 °C.

The cranial remains included fragments of the frontal, parietal and occipital bones and part of the internal auditory canal; the cortical layer measured approximately 2–3 mm. The postcranial remains included rib fragments, part of the axis, fragments of thoracic vertebral bodies, the proximal epiphysis of the right femur and diaphyseal fragments of the femur and tibia.

The morphology of the skull and dimensions of the long bones indicate a male individual.

The state of skeletal development and cranial sutures suggests a *Juvenis* individual aged approximately 18 years.

Cremation grave no. 22

A total of 92 cremated bone fragments were identified, ranging in size from 2 to 35 mm and weighing 460 g. Their colour ranged from grey-brown and blue to predominantly blue-white, indicating exposure to approximately 525–645 °C.

Fragments of the calvarium, with a cortical thickness of approximately 2–3 mm, were identified. Postcranial remains included fragments of the ribs and long-bone diaphyses. The available evidence is insufficient for sex determination. The dimensions of the long bones and the state of the ectocranial and endocranial sutures indicate a young adult.

Cremation grave no. 23

A total of 150 cremated bone fragments were identified, ranging in size from 2 to 37 mm and weighing 219 g. Their colour ranged from grey-brown and blue to predominantly blue-white, indicating exposure to approximately 525–645 °C.

Fragments of the calvarium with a cortical thickness of approximately 2–3 mm were identified, while the postcranial skeleton included fragments of a calcaneus and small fragments of the rib diaphyses. The available evidence is insufficient for sex determination. The dimensions of the long bones and state of the ectocranial and endocranial sutures indicate an adult.

Cremation grave no. 26

A total of 114 cremated bone fragments were identified, ranging in size from 2 to 32 mm and weighing 128 g. Their colour ranged from grey-brown to blue, with blue-white fragments predominating, indicating exposure to approximately 525–645 °C.

The postcranial remains consisted primarily of fragments of the upper- and lower-limb diaphyses and small fragments of the ribs. The surviving material is insufficient for sex determination. The dimensions of the long bones and the state of the cranial sutures indicate an adult.

Cremation grave no. 34

Thirty-five cremated bone fragments were identified, ranging in size from 2 to 32 mm. Their total weight cannot be regarded as representative because small bone fragments and bone impressions were preserved together with adhering soil.

The remains ranged in colour from grey-brown to blue, although white-brown predominated, indicating exposure to approximately 525–645 °C. Only fragments of postcranial long-bone diaphyses could be identified. The available evidence is insufficient for sex determination. The dimensions of the bones suggest that the individual was probably a child.

Cremation grave no. 40A

Ninety-six cremated bone fragments were identified, ranging in size from 2 to 37 mm and weighing 230 g. Their colour ranged from grey-brown to blue, with blue-white fragments predominating, indicating exposure to approximately 525–645 °C.

The cranial remains included part of the frontal bone with a cortical thickness of approximately 2–3 mm. The postcranial skeleton was represented by fragments of the femur and calcaneus and small fragments of the ribs. The surviving remains are insufficient for sex determination. The dimensions of the long bones and the state of the ectocranial and endocranial sutures indicate an adult over 40 years of age.

Cremation grave no. 40B

Thirty-one cremated bone fragments weighing 39 g were identified. Their colour ranged from grey-brown to blue, indicating exposure to approximately 525–645 °C.

The identifiable remains belonged to the postcranial skeleton. Their dimensions suggest an *Infans I* individual approximately 4–6 years old.

The presence of adult and juvenile remains in grave no. 40 therefore indicates another multiple deposition, although the marked difference in the quantity of remains attributed to the two individuals should be taken into account when interpreting the funerary context.

Cremation grave no. 42A

A total of 290 cremated bone fragments were identified, ranging in size from 2 to 79 mm and weighing 1002 g. This is one of the largest quantities of cremated human remains preserved from the cemetery. Their colour ranged from white to predominantly white-brown, indicating exposure to approximately 525–645 °C.

The identifiable postcranial remains included fragments of the distal epiphysis of an ulna, scapular fragments, long-bone diaphyses, proximal and distal humeral epiphyses and fragments of thoracic vertebral bodies. The dimensions of the long bones, particularly the femoral head, indicate an adult male aged approximately 25–40 years.

Cremation grave no. 42B

A second individual could be distinguished among the cremated remains from the grave. Several fragments, including the proximal epiphysis and head of the right femur, display a degree of epiphyseal fusion consistent with an *Infans II* individual approximately 7–9 years old.

The anthropological evidence therefore indicates that grave no. 42 contained the cremated remains of at least two individuals, an adult male and a child.

Cremation grave no. 43

Eighty-seven cremated bone fragments were identified, ranging in size from 2 to 45 mm and weighing 250 g. Their colour ranged from white-brown to predominantly white, indicating exposure to approximately 525–645 °C.

The identifiable remains included fragments of long-bone diaphyses, part of the zygomatic bone and several small fragments of the ribs. The available evidence is insufficient for sex determination. The dimensions of the long bones indicate an adult.

Cremation grave no. 44

A total of 213 cremated bone fragments were identified, ranging in size from 2 to 81 mm and weighing 636 g (Fig. 9). Their colour ranged from white-brown to predominantly white, indicating exposure to approximately 525–645 °C.

The cranial remains included fragments of the parietal bone, while the postcranial skeleton was represented by fragments of the scapulae, long-bone diaphyses and the distal epiphysis of an ulna. The dimensions of the long bones and the state of the ectocranial and endocranial sutures indicate an adult female.



Fig. 9. Grave no. 44.

Cremation grave no. 46

Sixty-three cremated bone fragments were identified, ranging in size from 2 to 32 mm. Their total weight cannot be considered representative because most of the material survives only as bone impressions in clods of soil accompanied by a small number of actual fragments.

The remains ranged from blue-brown to predominantly white-brown, indicating exposure to approximately 525–645 °C. Small fragments of the calvarium were identified. The available evidence is insufficient for sex determination, while the dimensions of the bones indicate a child.

Cremation grave no. 48

A total of 196 cremated bone fragments were identified, ranging in size from 2 to 58 mm and weighing 251 g. Their colour ranged from grey-brown to predominantly blue-white, indicating exposure to approximately 525–645 °C.

Cranial remains included fragments of the parietal and temporal bones, part of the internal auditory canal and the root of a molar. The cortical layer measured approximately 2–3 mm. The postcranial skeleton was represented by small fragments of the ribs and long-bone diaphyses.

The dimensions of the long bones and morphology of the skull indicate a female individual. The long-bone dimensions and state of the ectocranial and endocranial sutures suggest an adult over 25 years of age.

Cremation grave no. 49

Fifty-seven cremated bone fragments were identified, ranging in size from 2 to 70 mm and weighing 110 g. Their colour ranged from black-blue to predominantly white-brown, indicating exposure to approximately 525–645 °C.

No cranial remains were identified. The postcranial skeleton was represented by fragments of the proximal right scapula, rib diaphyses, parts of the coxal bone including the ischium and acetabular region, and fragments of the lower-limb diaphyses, possibly from the femur. The surviving material is insufficient for sex determination. The dimensions of the long bones indicate an adult.

Cremation grave no. 50

A total of 110 cremated bone fragments were identified, ranging in size from 2 to 57 mm and weighing 210 g. Their colour ranged from brownish-blue to predominantly white-brown, indicating exposure to approximately 525–645 °C.

Only postcranial remains could be identified, consisting mainly of long-bone diaphyseal fragments with cortical thicknesses ranging between approximately 2 and 6 mm. No cranial remains were identified. The surviving assemblage is insufficient for sex determination. The dimensions of the long bones indicate an adult.

Cremation grave no. 51

A total of 175 cremated bone fragments were identified, ranging in size from 2 to 86 mm and weighing 570 g. Their colour ranged from blue-brown to predominantly white-brown, indicating exposure to approximately 525–645 °C.

The cranial remains included a fragment of the edentulous mandible and small fragments of the parietal, occipital and temporal bones. Postcranial remains included long-bone diaphyseal fragments, with cortical thickness ranging from approximately 2 to 7 mm, as well as the body of a cervical vertebra.

The dimensions of the long bones and morphology of the skull are consistent with a female individual. The state of the ectocranial and endocranial sutures and dimensions of the long bones indicate an adult.

Inhumation grave no. 52

The human skeleton was very poorly preserved, and the skull was absent. The surviving postcranial remains included three thoracic vertebrae and elements of the lower limbs: the left calcaneus, measuring 77 mm in length, both tali, metatarsals, tarsals and a large phalanx.

The size of the skeletal elements and robust morphology of the calcaneus indicate an adult male. The available remains are insufficient for reliable stature estimation.

Cremation grave no. 54

Seventy-six cremated bone fragments were identified, ranging in size from 2 to 40 mm. Their total weight could not be reliably determined because most of the remains survived as impressions mixed with soil.

The fragments ranged from blue-white to predominantly white-brown, indicating exposure to approximately 525–645 °C. Cranial remains included fragments of the parietal and frontal bones. The postcranial skeleton was represented by small fragments of the ribs and diaphyses of the upper and lower limbs. The state of the ectocranial and endocranial sutures indicates an *Infans I* individual approximately 5–7 years old.

Cremation grave no. 57

Thirty-two cremated bone fragments were identified, ranging in size from 2 to 10 mm and weighing 17 g. Their colour ranged from greyish-white to predominantly grey and blue-white, indicating exposure to approximately 525–645 °C.

Only small fragments of the postcranial skeleton were identifiable. Their dimensions indicate a young child belonging to the *Infans I* age group.

Cremation grave no. 58

A total of 174 cremated bone fragments were identified, ranging in size from 2 to 40 mm and weighing 260 g. Their colour ranged from blue to predominantly white-brown, indicating exposure to approximately 525–645 °C.

The cranial remains included fragments of the parietal, occipital and sphenoid bones and part of the mandible; no teeth were preserved. The postcranial remains included fragments of

the humerus, scapulae and ribs, together with fragments of the coxal bone, including the ischium and acetabular region.

The dimensions of the long bones and the morphology of the skull, particularly the occipital protuberance, are consistent with a male individual. The dimensions and internal structure of the long bones and the state of the ectocranial and endocranial sutures indicate a young adult approximately 23–30 years old.

Cremation grave no. 60

A total of 210 cremated bone fragments were identified, ranging in size from 2 to 51 mm and weighing 632 g. Their colour ranged from grey-white to predominantly grey and blue-white, indicating exposure to approximately 525–645 °C.

Possible fragments of the frontal bone and orbital margin were identified together with small fragments of the parietal bone, which preserved a cortical thickness of approximately 2–3 mm. The postcranial skeleton included fragments of the diaphyses of the upper and lower limbs. The available evidence is insufficient for sex determination. The dimensions of the long bones and state of the ectocranial and endocranial sutures indicate a young adult over 20 years of age.

Cremation grave no. 61

A total of 63 cremated bone fragments were identified, ranging in size from 2 to 63 mm and weighing 190 g. Their colour ranged from brown-black to predominantly white-brown, indicating exposure to approximately 525–645 °C.

Fragments of the parietal and occipital bones were identified, although no teeth were preserved. Postcranial remains included small fragments of the ribs and upper-limb diaphyses. The dimensions of the long bones and the state of the ectocranial and endocranial sutures indicate an adult female aged approximately 25–40 years.

Cremation grave no. 62

Eleven cremated bone fragments were identified, ranging in size from 2 to 24 mm and weighing less than 19 g. Their colour ranged from white to grey, with grey-white fragments predominating, indicating exposure to approximately 525–645 °C.

Only small fragments of the postcranial skeleton were identified, including fragments of the ribs and upper- and lower-limb diaphyses. Their dimensions indicate an *Infans I* individual approximately 6–7 years old.

Cremation grave no. 64

A total of 81 cremated bone fragments were identified, ranging in size from 2 to 75 mm and weighing 118 g. Their colour ranged from blue-brown to predominantly white-brown, indicating exposure to approximately 525–645 °C.

Small fragments of the parietal bone and diaphyseal fragments of the ribs and upper and lower limbs were identified. The available evidence is insufficient for sex determination. The dimensions of the remains suggest that the individual was probably a child.

Cremation grave no. 65

A total of 152 cremated bone fragments were identified, ranging in size from 2 to 53 mm and weighing 210 g. Their colour ranged from grey-white to blue-brown, with grey-brown fragments predominating, indicating exposure to approximately 525–645 °C.

Possible fragments of the frontal and parietal bones were identified together with fragments

of the upper- and lower-limb diaphyses. The surviving remains are insufficient for sex determination. The dimensions of the long bones and state of the ectocranial and endocranial sutures indicate a *Juvenis* individual approximately 14–17 years old.

Cremation grave no. 69A

A total of 97 cremated bone fragments were identified, ranging in size from 2 to 80 mm and weighing 710 g. Their colour ranged from brown-black to predominantly white-brown, indicating exposure to approximately 525–645 °C.

The cranial and facial remains included fragments of the parietal, occipital, sphenoid and zygomatic bones and part of the right orbital region. The postcranial skeleton was represented by fragments of the ribs and thoracic vertebrae, the proximal part of a humerus, upper-limb diaphyseal fragments, the proximal epiphysis of a radius, part of the proximal epiphysis of a fibula and a phalanx, possibly from the hand.

The dimensions of the long bones are consistent with a male individual. Long-bone dimensions, cranial suture closure and the morphology of the proximal humeral epiphysis indicate an adult over 25 years of age.

Cremation grave no. 69B

A second individual was represented by several fragments of the proximal epiphysis of a tibia, the proximal epiphysis of the left femur and small fragments of long-bone diaphyses.

The degree of epiphyseal fusion in the femur and tibia indicates a young individual belonging to the *Infans II* or *Juvenis* age group, approximately 14–19 years old. The available remains are insufficient for sex determination.

Grave no. 69 therefore represents another multiple deposition, containing the cremated remains of an adult male together with those of a younger individual.

Cremation grave no. 71

Fifty-two cremated bone fragments were identified, ranging in size from 2 to 18 mm and weighing 70 g. Their colour ranged from grey-white to brown-blue, with blue-white and brown fragments predominating, indicating exposure to approximately 525–645 °C.

The identifiable postcranial remains included a patella and fragments of the lower-limb diaphyses. The available evidence is insufficient for sex determination. The dimensions of the long bones indicate an *Infans II* individual aged approximately 7–14 years.

Cremation grave no. 72

Thirty-two cremated bone fragments were identified, ranging in size from 2 to 10 mm and weighing 17 g. Their colour ranged from grey-white to predominantly grey and blue-white, indicating exposure to approximately 525–645 °C.

Only small fragments of the postcranial skeleton were identified. Their dimensions indicate a young child belonging to the *Infans I* age group.

Cremation grave no. 73

Twenty-one cremated bone fragments were identified, ranging in size from 2 to 30 mm and weighing 24 g. Their colour ranged from blue-white to predominantly white-brown, indicating exposure to approximately 525–645 °C.

Only small fragments of the postcranial skeleton were identifiable. The quantity and diagnostic value of the surviving remains are insufficient for reliable sex or age determination.

Cremation grave no. 78

Thirty-four cremated bone fragments were identified, ranging in size from 2 to 31 mm and weighing 40 g. Their colour ranged from blue-white to predominantly white-brown, indicating exposure to approximately 525–645 °C.

Only small fragments of the postcranial skeleton were identified. The available evidence is insufficient for sex determination. The dimensions of the long bones indicate a *Juvenis* individual aged approximately 16–21 years.

Inhumation grave no. 79

The human skeleton itself is no longer available for anthropological examination. A single preserved premolar indicates an adult over 40 years of age. Caries was observed on the mesial surface of the tooth. Because the surviving evidence consists of a single dental element, no further biological assessment of the individual is possible.

Cremation grave no. 80

A total of 135 cremated bone fragments were identified, ranging in size from 2 to 37 mm and weighing 215 g. Their colour ranged from brown-black to predominantly white-brown, indicating exposure to approximately 525–645 °C.

Cranial remains included fragments of the parietal, occipital and frontal bones. The postcranial skeleton was represented by small fragments of the ribs and upper-limb diaphyses. The morphology of the skull, particularly the occipital and frontal bones, is consistent with a male individual. The dimensions of the long bones and state of the ectocranial and endocranial sutures indicate an adult over 25 years of age.

Cremation grave no. 83

Seventy-five cremated bone fragments were identified, ranging in size from 2 to 41 mm and weighing 145 g. Their colour ranged from grey-brown to predominantly blue-white, indicating exposure to approximately 525–645 °C.

Cranial remains included fragments of the parietal and occipital bones, with a cortical thickness of approximately 2–3 mm. The postcranial skeleton was represented by small fragments of the rib and long-bone diaphyses. The available evidence is insufficient for sex determination. The dimensions of the long bones and the state of the ectocranial and endocranial sutures indicate an adult over 30 years of age.

The anthropological assemblage from Fântânele-Dâmbul Popii is characterised by marked variation in the quantity and preservation of the human remains. This is particularly evident among the cremation graves, where the recovered weight ranges from only a few grams to more than 1 kg. In several cases, the low weight reflects the incomplete preservation or recovery of the cremated remains, while in others part of the material survives only as bone impressions incorporated into the surrounding soil. The quantity of bone recovered from individual graves should therefore not be interpreted directly as an indication of the amount originally deposited without taking these taphonomic and excavation-related factors into account.

Despite these limitations, the assemblage includes individuals from a broad range of age categories, from young children to elderly adults. Both males and females could be identified among the adult graves, although sex determination was impossible in a considerable proportion of cremation burials because diagnostic skeletal elements were absent or too fragmented.

Children and adolescents are represented in several chronological horizons of the cemetery, indicating that access to formal burial within the cemetery was not restricted to adults. The presence of individuals belonging to different age categories in graves no. 13, 40, 42 and 69 demonstrates that multiple deposition also formed part of the funerary practices represented at the site.

The colour of the cremated remains is remarkably consistent throughout the cemetery. Most assemblages fall within the grey, blue-white, white-brown and related colour ranges, which, according to the experimental framework employed here, correspond broadly to temperatures of approximately 525–645 °C. This uniformity suggests relatively comparable thermal conditions during cremation, although the colour variation observed within individual graves indicates that the different parts of the body were not necessarily exposed to identical temperatures or combustion conditions. The anthropological evidence consequently complements the archaeological observations concerning pyre treatment and the subsequent selection and deposition of cremated remains, questions that are examined in greater detail in the discussion of funerary practices.

Grave no.	Rite	Horizon	Sex	Age	grams / height	length of the largest fragment
1	crem	1	F	<i>Adultus</i> >20	313	38
2	crem	3		<i>Infans</i> I (4–6)		
4	crem	1		<i>Infans</i> I 3–7	30	35
5	inhum	4	M	<i>Adultus</i> 23–30	1.63 m	
6	crem	4	F	<i>Adultus</i>	168	37
7	crem	4		<i>Adultus</i> 23–35	411	51
8	crem	4		<i>Adultus</i> >20	50	41
9	inhum		F	<i>Senilis</i> >60	1.51 m	
10	crem	2	M	<i>Adultus</i> >30	47	42
11	crem	2		<i>Infans</i> II 7–14	92	41
13A	crem	2 (4?)		<i>Infans</i> I	13	10
13B	crem			<i>Adultus</i> >30	21	47
14	crem			<i>Adultus</i>	<200	42
15	crem			?	55	14
16	crem			?		41
17	crem	4	M	<i>Adultus</i>	<290	41
18	crem			<i>Adultus</i> >20	632	51
19	crem	2		<i>Infans</i>	19	12
20	crem	3		<i>Adultus</i>	390	37
21	crem	4	M	<i>Juvenis</i> ≈ 18	465	56
22	crem			<i>Adultus</i>	460	35
23	crem			<i>Adultus</i>	219	37
26	crem			<i>Adultus</i>	128	32
34	crem	3		<i>Infans</i> ?		32
40A	crem	4		<i>Adultus</i> >40	230	37
40B	crem			<i>Infans</i> I 4–6	39	37
42A	crem	4	M	<i>Adultus</i> 25–40	1002	79
42B	crem			<i>Infans</i> II 7–9		
43	crem	3		<i>Adultus</i>	250	45
44	crem		F	<i>Adultus</i>	636	81
46	crem	4		<i>Infans</i>		32
48	crem	4	F	<i>Adultus</i> >25	251	58
49	crem	4		<i>Adultus</i>	110	70

Grave no.	Rite	Horizon	Sex	Age	grams / height	length of the largest fragment
50	crem	4		<i>Adultus</i>	210	57
51	crem	4	F	<i>Adultus</i>	570	86
52	inhum	4	M	<i>Adultus</i>		
54	crem			<i>Infans</i> I 5–7		40
57	crem			<i>Infans</i> I	17	10
58	crem	3	M	<i>Adultus</i> 23–30	260	40
60	crem			<i>Adultus</i> >20	632	51
61	crem	1	F	<i>Adultus</i> 25–40	190	63
62	crem	4		<i>Infans</i> I 6–7	<19	24
64	crem			<i>Infans</i> ?	118	75
65	crem	2		<i>Juvenis</i> 14–17	210	53
69A	crem	3	M	<i>Adultus</i> >25	710	80
69B	crem			<i>Infans</i> II / <i>Juvenis</i> 14–19		
71	crem	1		<i>Infans</i> II 7–14	70	18
72	crem	3?		<i>Infans</i> I	17	10
73	crem	1		?	24	30
78	crem	1		<i>Juvenis</i> 16–21	40	31
79	inhum	2		<i>Adultus</i> >40		
80	crem	3	M	<i>Adultus</i> >25	215	37
83	crem	2		<i>Adultus</i> >30	145	41

Fig 10. Anthropological data of the Fântânele–Dâmbul Popii cemetery.

V. PALEODEMOGRAPHY

Of the 84 graves excavated between 1969 and 1974, four were interpreted as possible cenotaphs. Four further graves contained the remains of two individuals and can therefore be regarded as double burials. No anthropological information is available for the ten cremation graves discovered by Șt. Dănilă in 1961 and 1967. Among the 84 graves excavated under the supervision of I. H. Crișan, human remains from 31 graves were either not preserved or were no longer available for analysis. This situation may have resulted from several factors, including funerary practices that involved the selective deposition of cremated remains, post-depositional processes, incomplete recovery during excavation and the subsequent loss or deterioration of osteological material during storage.

The palaeodemographic analysis is consequently based on 53 individuals, comprising four inhumed and 49 cremated individuals. This sample represents only part of the population originally buried in the cemetery and must therefore be interpreted with caution. The limitations are particularly significant in the case of cremation burials, where the small quantity and high degree of fragmentation of the surviving bones frequently prevented more precise age or sex determination. For three individuals, the preserved remains were insufficient even for a reliable estimation of age.

A further limitation derives from the long period during which the cemetery was in use. The burial ground served several successive generations and thus does not represent a single contemporaneous population. The palaeodemographic profile reflects demographic processes accumulated over approximately a century and a half rather than the structure of the community at any particular moment. Accordingly, the resulting figures are best understood as broad tendencies in mortality and demographic composition rather than as a precise reconstruction of population structure.

Thirty individuals reached adulthood, while only one individual survived beyond the age of 60 (Fig. 11). A comparable pattern was observed in the neighbouring cemetery at Fântânele-Dealul Iușului (BERECKI ET AL. 2022, 54, chart 1). The available evidence indicates a relatively high proportion of deaths before adulthood: approximately 32% of the anthropologically analysed individuals died before adolescence, while around 62% reached adulthood. Mortality among subadults was highest in the *Infans I* category and somewhat lower during *Infans II*, whereas deaths attributed to the *Juvenis* category were considerably less frequent.

The spatial distribution of graves according to age indicates that children and adolescents were integrated into the same funerary areas as adults rather than being consistently segregated within a separate sector of the cemetery (Fig. 12). This pattern is important for understanding the social position of younger members of the community and suggests that access to the formal burial ground was not restricted by age. Only a few subadult graves occupied more peripheral positions.

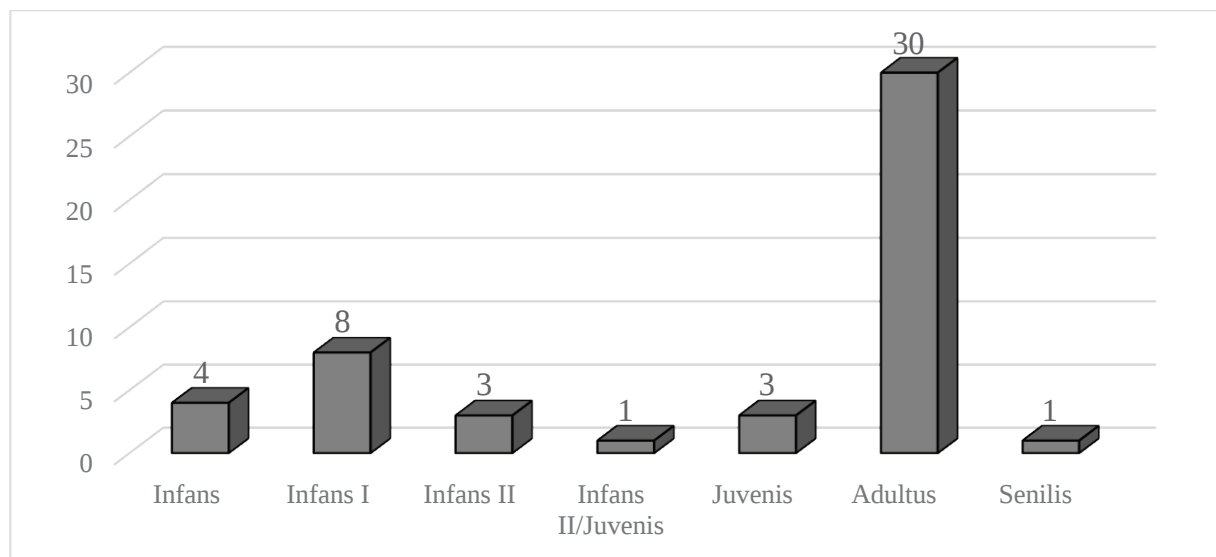


Fig. 11. Age distribution of individuals at Fântânele-Dâmbul Popii.

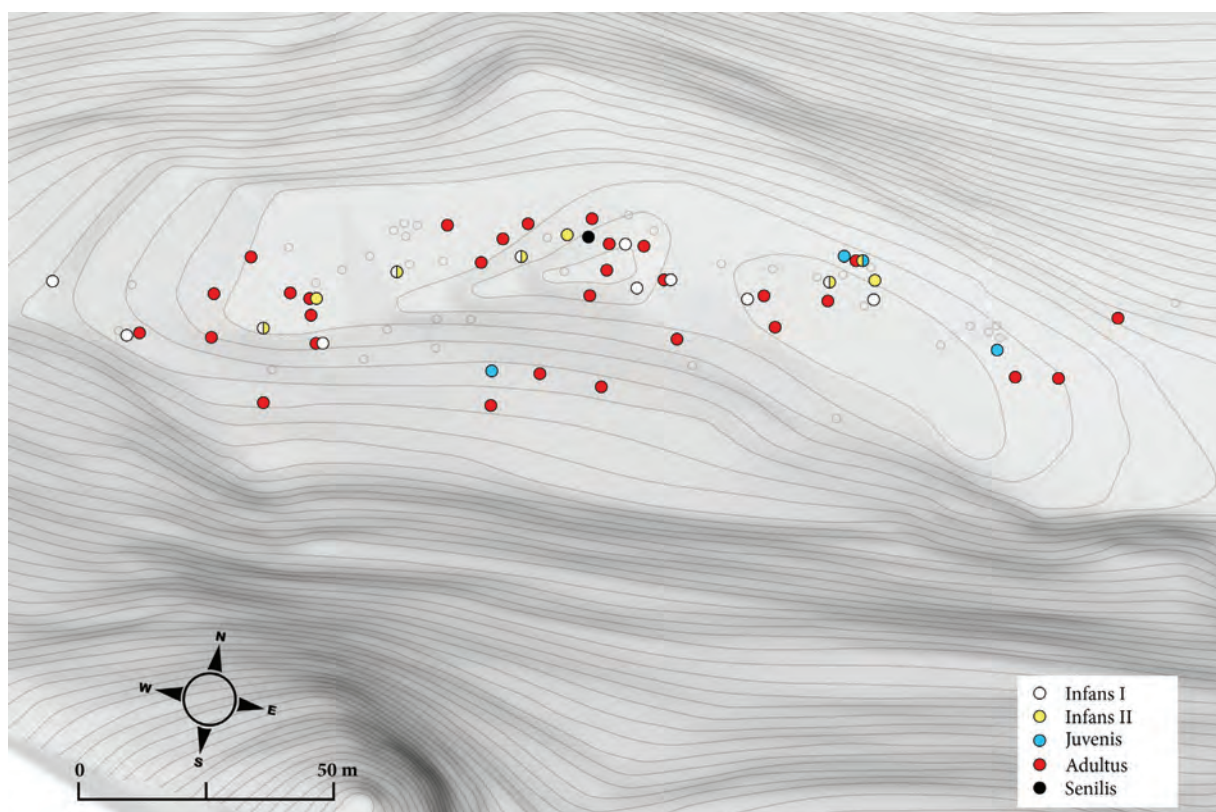


Fig. 12. Age distribution of graves in the cemetery at Fântânele-Dâmbul Popii.

Based on the available anthropological data, estimated life expectancy at birth falls within the range of approximately 24–30 years. After correction according to the mortality curves, the corresponding estimate is approximately 19–24 years (Fig. 13–15). These values should be regarded as approximate because of the limited sample, the high proportion of cremation graves and the large number of adult individuals whose sex could not be determined.

Among males, the principal mortality interval appears to have been between approximately 24 and 40 years, and a considerable proportion did not survive beyond the age of 40–45. The female mortality pattern appears more complex, with two apparent peaks: the first between

approximately 24 and 34 years and the second between 59 and 65 years. The earlier peak may be related, at least in part, to risks associated with pregnancy and childbirth, although the small number of sexed adult females makes any such interpretation necessarily tentative. Female survivorship appears to improve after the main reproductive years, and the oldest securely identified individual in the cemetery was a woman aged over 60.

The uncertainty surrounding almost half of the adult individuals is particularly important in this respect. Sex could not be determined for approximately 48% of the adults, meaning that mortality curves calculated separately for males and females rest on comparatively small samples. Differences between the sexes therefore indicate possible tendencies rather than statistically robust demographic patterns.

At Fântânele–Dealul Iușului, estimated life expectancy was 30–65 years for males and approximately 24–25 years for females (BERECKI ET AL. 2022, 54, chart 2). At Hegyfalú, the corresponding estimates were 23.2 years for males and 18.7 years for females (BALÁZS ET AL. 2015, 7), while at Chotín they were 21.8 and 13.3 years respectively (TÓTH 2015a, 115). Direct comparison between these values requires caution because the composition and preservation of the anthropological samples, as well as the methods used to calculate demographic parameters, differ from cemetery to cemetery.

Mortality associated with the reproductive period has been proposed for females aged approximately 15–20 years at Hegyfalú (BALÁZS ET AL. 2015, 7) and 20–24 years at Chotín (TÓTH 2015a, 115). Among males, mortality peaks between 30 and 40 years have been observed at Fântânele–Dealul Iușului and Hegyfalú, and have been considered characteristic of several Late Iron Age populations (BALÁZS ET AL. 2015, 7). At Chotín, by contrast, a lower peak occurred between 20 and 24 years, followed by a more pronounced one between 40 and 44 years. The survivorship curve from Fântânele–Dealul Iușului likewise indicates that a substantial proportion of individuals died between 30 and 40 years, while only one individual survived beyond the age of 60.

The relatively high proportion of subadult burials at Fântânele–Dâmbul Popii can be placed within a broader regional context. In the neighbouring cemetery at Fântânele–Dealul Iușului, anthropological analysis was possible for 27 individuals from a total of 56 graves, of whom approximately 63% reached adulthood (BERECKI ET AL. 2022, 54, chart 1). Three of the 16 graves from the unpublished cemetery at Sălcuța–Coasta Oilor – graves no. 8, 9 and 10 – belonged to children, although their more precise ages could not be determined.

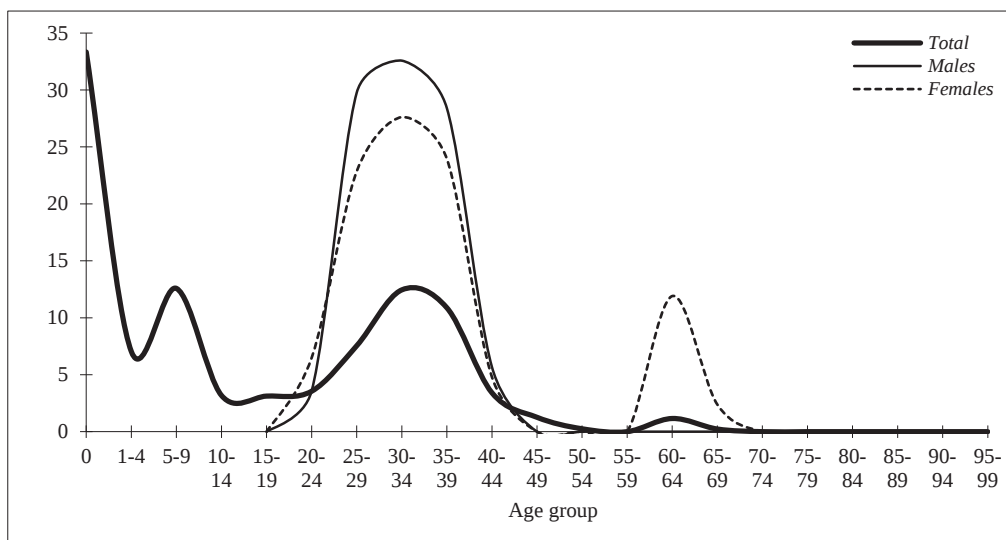


Fig. 13. Mortality curves.

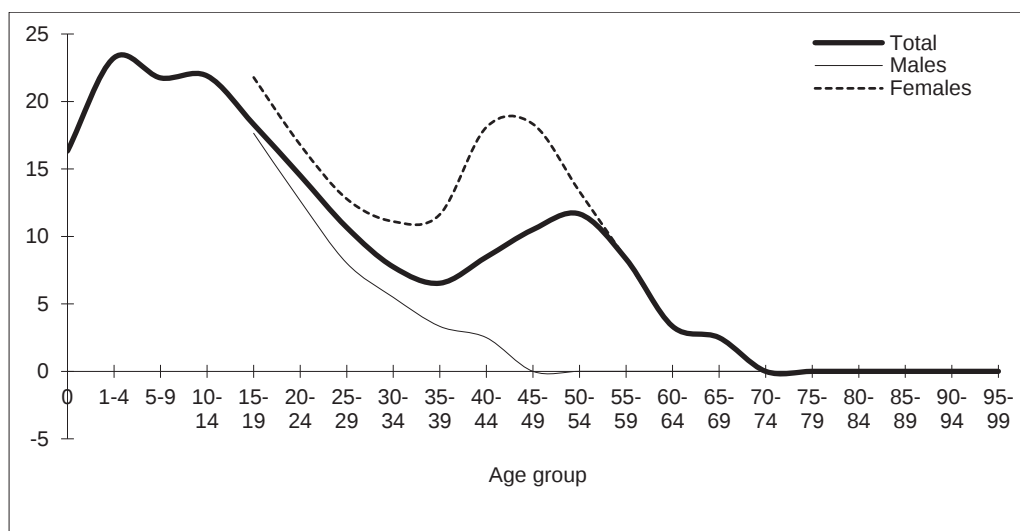


Fig. 14. Life expectancy curves.

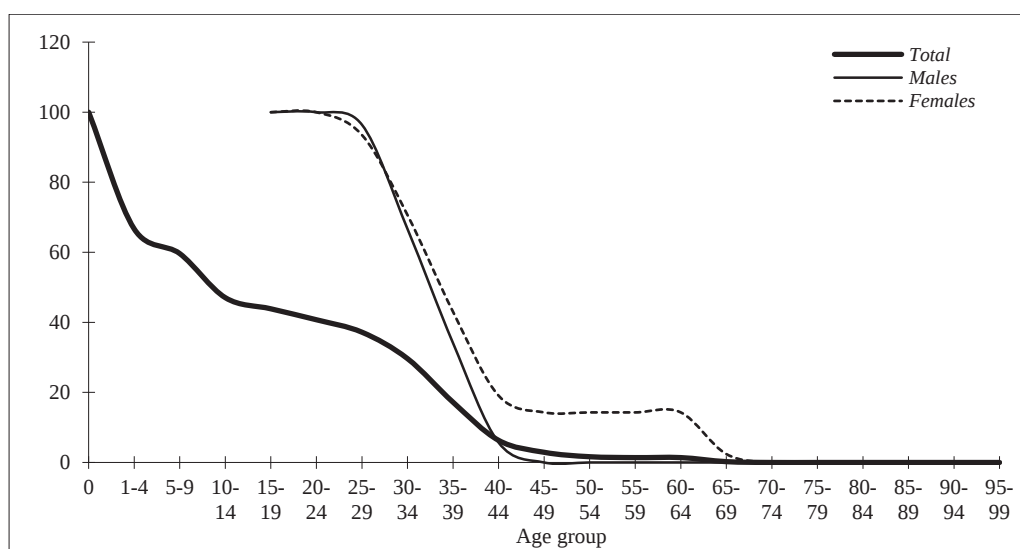


Fig. 15. Survivorship curves.

A similarly high proportion of children and adolescents was recorded at Ordacsehi, where 13 of 41 graves, more than 31%, belonged to subadults (K. ZOFFMANN 2012, table 1). At Pilismarót–Basaharc, 28 of 58 graves, approximately 48%, belonged mainly to children represented by inhumation burials (GYENESEI ET AL. 2024, 29). Lower proportions were observed elsewhere: at Sajópetri, 22 of 93 individuals, approximately 20%, were children and adolescents (BÓZSING 2018, fig. 189, 192), while the corresponding proportion at Ludas was around 19% (TANKÓ 2012, 212–213, fig. 219, 221). Even lower proportions have been recorded in the cemeteries at Chotín and Dubník in south-western Slovakia (TÓTH 2015a, 114; TÓTH 2015b, 19).

Within the community that used the cemetery at *Dâmbul Popii*, *Infans* and *Juvenis* graves formed an integral part of the funerary landscape. They were generally interspersed among adult graves, with grave no. 62, belonging to an *Infans I*, providing the clearest example of a somewhat isolated child burial on the western periphery of the cemetery (Fig. 12). The absence of a distinct children's burial sector suggests that age alone did not determine access to particular parts of the cemetery.

The treatment of children and adolescents also resembles that of adults in terms of grave goods. Only two *Infans I* graves lacked funerary inventories. Other subadult graves contained

jewellery, pottery, animal offerings and, in some cases, implements or weapons. Their inclusion within the same system of material display indicates that social identity was expressed funerarily from an early age and was not acquired exclusively upon reaching adulthood.

A somewhat different pattern can be observed at the neighbouring cemetery of Fântânele–Dealul Iușului. Most *Infans I* graves there either lacked pottery entirely or contained only fragments of a vessel, while animal remains indicating food offerings were absent. Other child graves contained one or two brooches or bracelets. By contrast, every *Juvenis* grave included animal offerings, and all three cremation graves contained pottery, whereas pottery was absent from inhumation grave no. 18 (BERECKI *fc*).

Two graves at Fântânele–Dâmbul Popii are especially relevant to discussions of childhood, inherited status and warrior identity. Grave no. 65 belonged to a *Juvenis* aged approximately 14–17 years, while grave no. 72 contained an *Infans I* younger than seven years. Both burials date to LT B2 and contained an iron knife and spearhead in addition to pottery; grave no. 65 also included a spear butt.

Spearheads have occasionally been placed in the graves of children or adolescents elsewhere in the La Tène world. Such burials have been interpreted as expressing a symbolic or anticipated association with warrior status rather than evidence of actual participation in warfare. Examples are known from Monte Biele (LEJARS 2008, 158; VITALI 2008, 30, 32, fig. 22–23, 26; RUSTOIU – BERECKI 2015b, 132), while grave no. 882 at Ludas, belonging to an *Infans I*, likewise contained a spear. In this perspective, the presence of weapons in subadult burials at Fântânele may indicate that aspects of social status, including affiliation with families associated with the warrior elite, could be inherited or ascribed from childhood.

Three graves at Fântânele–Dâmbul Popii can securely be attributed to the *Juvenis* category. In grave no. 69B, the anthropological evidence permits a broader classification as either late *Infans II* or *Juvenis*, corresponding to an estimated age of 14–19 years. From a wider Carpathian Basin perspective, securely identified adolescent burials remain comparatively uncommon (BERECKI 2026).

At Sajópetri, only one of 85 graves contained a cremated individual aged approximately 10–15 years (BÓZSING 2018, 263). Grave no. 19 at Mátraszőlős belonged to an individual of late *Infans II* or early *Juvenis* age (ALMÁSSY 2012, 89). At Gencsapáti, feature no. 837 contained a juvenile aged 12–16 years, while the younger individual in the double burial of feature no. 912 was a female aged 10–14 years (ILON – NAGY 2010, 88–89). Cremation burials KE8 and KE119 at Hegyfalú may also belong to this transitional age group (BALÁZS ET AL. 2015, 5), as does cremation grave no. 184 at Ordacsehi (K. ZOFFMANN 2012, table 3). In grave no. 2 at Dubník, a 40–50-year-old male was buried together with an *Infans III* aged 12–13 years (JAKAB – VONDRÁKOVÁ 1989), while the younger male in grave LT12 at Zvonimirovo was approximately 10–14 years old (ŠLAUS – NOVÁK 2013, 517).

Sex determination was considerably more problematic than age estimation at Fântânele–Dâmbul Popii, primarily because the majority of the anthropologically analysed individuals had been cremated. Reliable morphological sex determination is generally impossible for children and adolescents, while cremation substantially reduces the number of diagnostic characteristics available in adults. Among the 31 adult and *Senilis* individuals, sex could be determined in only 16 cases: seven females and nine males (Fig. 16–17).

The resulting slight predominance of males should therefore be interpreted cautiously. Sex is a fundamental variable in palaeodemographic reconstruction (BURMEISTER – GEBÜHR 2018), but nearly half of the adult sample at Fântânele remains unsexed. The observed ratio may consequently reflect preservation and methodological limitations as much as the actual demographic composition of the buried population.

Nevertheless, a modest predominance of anthropologically identified males has also been recorded in several other cemeteries in the Carpathian Basin. At Fântânele–*Dealul Iușului*, males likewise outnumber females among the sexed individuals (BERECKI ET AL. 2022, 54). At Mátraszőlős, anthropological analysis identified 13 males and ten females among the burials (ALMÁSSY 2012). At Vác–*Gravel pit*, ten of the 19 analysed individuals were male and seven female (KÖHLER 2023, 12, tables 1–2), while at Ménfőcsanak 11 males and eight females were identified among 24 individuals (KÖHLER 2020, 568). At Chotín, 40 of the 43 inhumation graves and four cremation graves were anthropologically examined, resulting in the identification of 16 males and 13 females (TÓTH 2015a, table 1).

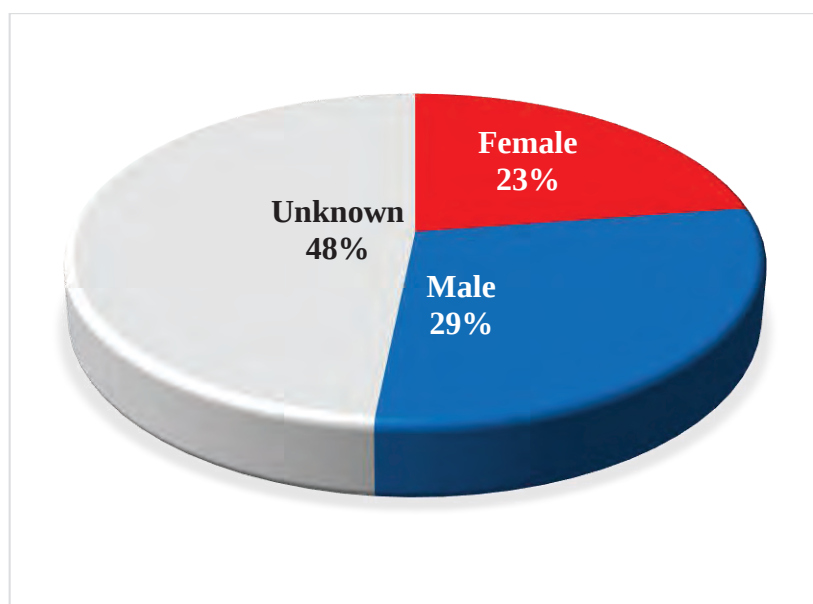


Fig. 16. Sex distribution of the anthropologically analysed individuals at Fântânele–*Dâmbul Popii*.

Other cemeteries display the opposite tendency. At Sajópetri–*Homoki-szőlőskert*, anthropological analysis of 85 graves containing 93 individuals identified approximately 18 females and seven males (BÓZSING 2018, fig. 183). At Ludas, 59 individuals from 82 graves were examined anthropologically; 20 were classified as female, 15 as male, while sex remained undetermined in 25 cases (TANKÓ 2012, fig. 221). At Hegyfalú, 27 individuals were identified in 22 graves, including six females and four males for whom sex could be established from the human remains (BALÁZS ET AL. 2015). At Ordacsehi, 18 of the 41 graves belonged to females and six to males (K. ZOFFMANN 2012, table 1). Among the 22 individuals from Győr–*Kálvária domb*, ten were female and seven male (GYENESEI ET AL. 2023, 209, fig. 9). At Dubník, 13 of 30 analysed individuals were female and eight male (JAKAB – VONDRÁKOVÁ 1989, 361). An equal sex ratio was recorded at Brežice–*Sejmišče*, where 27 of the 62 individuals were female and 27 male (HINCAK – GUŠTIN 2011, 243), and at Zvonimirovo, where seven males and seven females were identified among 15 analysed individuals (ŠLAUS – NOVAK 2013, 518).

These comparisons demonstrate substantial variation between cemeteries and further caution against interpreting the slight male predominance at Fântânele as evidence for a particular demographic or funerary selection mechanism. Differences in funerary rite, preservation, excavation history and the proportion of individuals suitable for anthropological sex determination can all influence the resulting ratios.

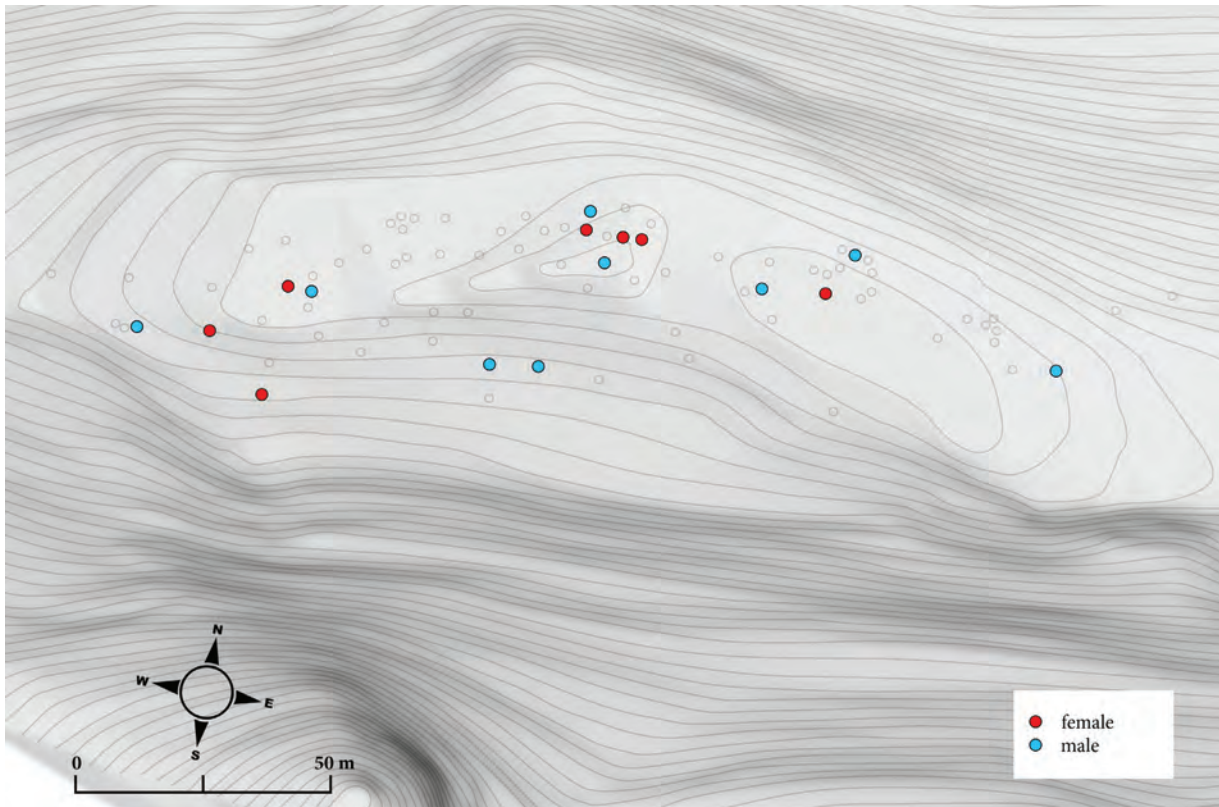


Fig. 17. Distribution of anthropologically identified female and male graves at Fântânele–Dâmbul Popii.

Estimation of living stature is possible primarily from sufficiently preserved long bones, which restricts meaningful reconstruction almost entirely to inhumation graves. Of the 94 known graves at Fântânele–Dâmbul Popii, only a small proportion were inhumations, and preserved human remains suitable for anthropological examination were available from only four of them. Among these, graves no. 5 and 9 provided sufficient long-bone measurements for stature estimation (Fig. 18).

Two additional skeletons labelled as originating from Fântânele were identified among the osteological material in storage. One carried a label bearing the year 1970, although the excavation diary records no inhumation grave discovered during that campaign. The second skeleton was labelled ‘Asterix’. Attempts to correlate the preserved bones and their anthropological descriptions with the excavation journals, grave plans and illustrations failed to produce a secure identification.

The skeleton labelled ‘Asterix’ was fragmentarily preserved and lacked the skull. The postcranial remains included the right humerus, left tibia and fragments of long-bone diaphyses. Their dimensions indicate an adult, while the robust morphology of the preserved elements suggests a male of medium to relatively tall stature, estimated at approximately 1.71 m. Since neither this skeleton nor the individual labelled 1970 can be attributed securely to a specific grave at Fântânele–Dâmbul Popii, both were excluded from the palaeodemographic analysis and from subsequent interpretations of funerary practice.

The *Senilis* female buried in grave no. 9 had an estimated living stature of approximately 1.51 m. This is below the Carpathian Basin average calculated by ÉRY (1998), approximately 1.58 m for females and 1.67 m for males. She was nevertheless taller than the 1.36 m female from grave no. 18 at Fântânele–Dealul Iușului (BERECKI ET AL. 2022, 56, fig. 9). Comparatively taller females are known from Ludas, where values of 1.57 and 1.62 m were recorded (TANKÓ 2012,

205, T.951), from Hegyfalú, with values of 1.54 and 1.57 m (BALÁZS ET AL. 2015), Ordacsehi, where two females measured approximately 1.55 and 1.53 m (K. ZOFFMANN 2012, table 7), Győr, with an estimated stature of 1.60 m (GYENESEI ET AL. 2023, 210), and Chotín, where the female average was approximately 1.57 m (TÓTH 2015a, 115).

The adult male from grave no. 5 had an estimated living stature of approximately 1.63 m and was likewise slightly below the broader Carpathian Basin male average. He was taller than the 1.58 m male from grave no. 46 at Fântânele–Dealul Iușului (BERECKI ET AL. 2022, 56, fig. 9), although shorter than the approximately 1.71 m male from grave no. 49 at the same cemetery. Mean male stature has been estimated at approximately 1.70 m at Győr (GYENESEI ET AL. 2023, 210), between 1.60 and 1.70 m at Brežice in Slovenia (HINČAK – GUŠTIN 2011), and approximately 1.72 m for five males at Chotín (TÓTH 2015a, 115).

Given the extremely small number of individuals from Fântânele for whom stature could be reconstructed, these comparisons should not be interpreted as representing the average stature of the community. They serve primarily to situate the two measurable individuals within the broader range documented for Late Iron Age populations in the Carpathian Basin.

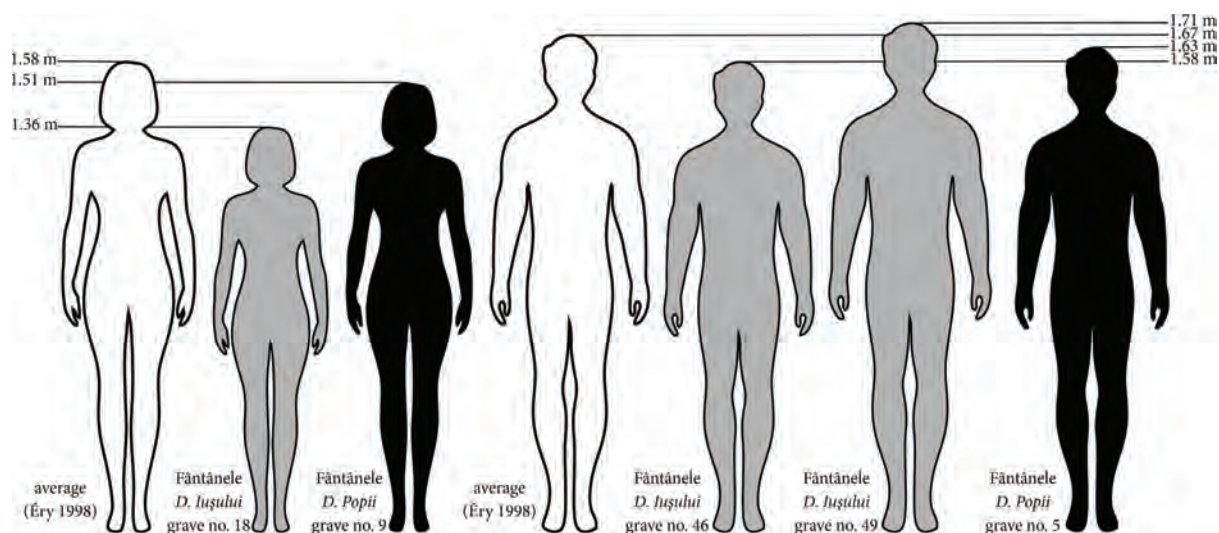


Fig. 18. Estimated living stature of the individuals from graves no. 5 and 9 at Fântânele–Dâmbul Popii, compared with selected individuals from the neighbouring cemetery at Fântânele–Dealul Iușului.

According to the excavation diary grave no. 38 might have been a case of dwarfism: „[The skeleton] was very poorly preserved, except for the skull and maxilla. The bones show a pronounced granulation, and the length of the skeleton in situ from the cephalic extremity to the calcaneal extremity measures only 80 cm. However, the dentition does not seem to be that of a child, and therefore we assume that we are in the presence of a case of dwarfism.”

Unfortunately, the skeletal remains from grave no. 38 could not subsequently be identified among the surviving osteological material, and the field observation can therefore neither be confirmed nor rejected by modern anthropological analysis. The interpretation should consequently remain provisional. Nevertheless, the observation is worth recording because it was made directly during excavation and was based on the apparent discrepancy between the very short skeleton and the adult characteristics of the dentition. I. H. Crișan had also completed several years of medical studies, which may have informed his observations, although this cannot substitute for a specialist palaeopathological diagnosis.

The palaeopathological information available from the cemetery is otherwise limited and relates primarily to dental health. No extensive spectrum of skeletal pathological conditions

could be documented, partly because cremation and poor preservation severely restricted observation. Dental caries and calculus were recorded exclusively in the better-preserved inhumation remains.

In grave no. 5, belonging to a male aged approximately 23–30 years, caries affected the M2/3 region and dental calculus was also recorded. The *Senilis* female from grave no. 9 displayed pronounced dental wear together with calculus. A single preserved premolar from grave no. 79, belonging to an adult over 40 years of age, showed caries on its mesial surface.

Comparable dental pathology has been recorded in the neighbouring cemetery at Fântânele–Dealul Iușului. Grave no. 38, belonging to a male aged 30–40 years, showed dental caries, while calculus was observed on the remains from grave no. 46 (BERECKI ET AL. 2022, 56). Dental caries results from a complex interaction of diet, oral hygiene, age and individual susceptibility and should therefore not be treated as a direct indicator of nutritional deficiency. Its frequency generally increases with age, and substantial levels of caries have likewise been reported at Győr–Kálvária domb (GYENESEI ET AL. 2023, 215–216) and Chotín (TÓTH 2015a, 115).

A pilot study investigating diet among Early Iron Age and Early and Middle La Tène communities in Transylvania applied an ultramicrochemical (UMC) procedure to dental calculus, using Harzalith IA acidic reagent and B alkaline reagent (BERÉNYI – FRANG 1989; POROWSKI ET AL. 2008; BUCKLEY ET AL. 2014). The results suggested differences between the dietary profiles of the two periods. The Early Iron Age samples produced higher calcium-phosphate ratios, interpreted as reflecting a comparatively greater contribution of animal products, whereas Late Iron Age samples showed higher carbonate-apatite ratios, interpreted as indicating a stronger cereal component in the diet. Although the available sample remains small, this interpretation is broadly compatible with the still limited archaeobotanical evidence from the region (BERECKI 2021a, 27–28). The results should nevertheless be treated as preliminary until they can be tested against a larger and more representative dataset.

The skeleton from grave no. 5 provides an additional indication of habitual physical activity. The long bones are robust, and the *linea aspera* on the posterior surface of the femur is strongly developed. The morphology of the *linea aspera* can be influenced by muscular activity and mechanical loading associated with locomotion. In this individual, its pronounced development may therefore reflect sustained physical activity involving considerable loading of the lower limbs, potentially including frequent or prolonged walking. This interpretation remains suggestive rather than diagnostic, since the morphology of enthesal and muscular attachment areas is influenced by several biological and biomechanical factors.

The spatial and chronological development of the cemetery provides a further perspective on the demographic history of the community (see chapter VIII). During the first three chronological horizons, the three funerary groups identified on the hilltop and interpreted as corresponding to the founding families or clans were represented in broadly comparable numbers. From the third phase onwards, and especially during the final phase, the western group expanded markedly in both spatial extent and number of graves, while the other two groups became progressively less prominent (RUSTOIU 2016a, 240–244).

Because the cemetery at Fântânele–Dâmbul Popii appears to have been investigated in its entirety, it provides an unusually useful basis for estimating the approximate demographic scale of the community, although such calculations necessarily remain hypothetical. The 94 known graves span approximately 150 years, corresponding to an average of about 0.63 burials per year, or roughly two burials every three years. This figure represents the long-term average for the entire period of use and does not imply a constant mortality rate throughout the cemetery's existence.

Further estimates can be obtained by considering the number of generations represented by the burial ground. In demographic and genealogical studies, generation length is generally defined as the mean interval between the birth of parents and the birth of their offspring (HAUPT – KANE 2006). Earlier studies often employed conventional values of approximately 25 years for modern populations and around 20 years for ancient communities (e.g. INGMAN ET AL. 2000, 712; THOMSON ET AL. 2000, 7362). For certain La Tène cemeteries in Central Europe, an even shorter generation length of approximately 16–18 years was proposed (KRUTA 1979, 82).

More recent demographic, sociological and genetic research has demonstrated that mean generation length frequently exceeds 25 years and differs between male and female lines. Studies encompassing populations ranging from hunter-gatherer communities in Botswana and Namibia to historical and modern populations in Canada and Iceland have often produced mean paternal generation intervals above 30 years and somewhat shorter maternal intervals (TREMBLAY – VÉZINA 2000; HELGASON ET AL. 2003; DEVINE 2005, with further references). Devine (2005, 52–53), for example, proposed an average of approximately 33 years for paternal generations and 29 years for maternal generations.

For the purpose of an approximate demographic model, a mean generation interval of 31 years may therefore be applied to the community represented at Fântânele–Dâmbul Popii. Over approximately 150 years, this would correspond to around 4.8 generations. Dividing the 94 known graves by this number produces an average of approximately 19.5 burials per generation.

This figure should not be understood as the actual number of individuals alive simultaneously within the community. Rather, it provides a simplified indication of the number of individuals represented archaeologically within an average generational interval. If the three main funerary groups identified in the cemetery broadly corresponded to three extended families or social groups, each would on average account for around six or seven burials per generation. The demographic reality was undoubtedly more dynamic, with differences in fertility, mortality, mobility and family size over time.

A second approach, proposed by J. P. SUTER (1984, 88–89) for the Swiss Plateau, estimates population size from the total number of graves, the duration of cemetery use and an assumed annual mortality rate of approximately 4–5%. Applied to Fântânele–Dâmbul Popii, this model produces an estimated living community of approximately 13–16 individuals at any given time. Although the result differs conceptually from the calculation based on generational representation, both approaches point towards a relatively small community.

Comparable estimates have been proposed for other rural Late Iron Age settlements. R. KARL (2015, 90) suggested a population of approximately 10–25 individuals living in two or three farmsteads at Göttlesbrunn in Lower Austria. The physical extent of that settlement is broadly comparable with rural sites such as Ciumești or Cicir.

The cemetery at Münsingen provides another instructive comparison (HODSON 1968). Its approximately 230 graves cover the period from the end of LT A to the beginning of LT C2, approximately 420–180 BC. Applying the same generational calculation used for Fântânele produces an average of around 29–30 burials per generation. Suter independently estimated a living population of approximately 20–25 individuals belonging to two or three families (SUTER 1984, 89). More recent anthropological research has suggested that the cemetery may originally have been established by two large groups or families, each numbering approximately one or two dozen individuals. These analyses also identified patterns interpreted as repeated endogamy over several generations, associated with the transmission of certain congenital traits, while exogamy has also been proposed, particularly for males (ALT ET AL. 2005).

These comparisons suggest that the apparently substantial number of graves at Fântânele–Dâmbul

Popii accumulated through the long-term use of the cemetery by a relatively small rural community. Such demographic dimensions are compatible with the dispersed settlement pattern characteristic of the eastern Carpathian Basin during the 4th–3rd centuries BC.

Comparable funerary communities may be represented by the cemeteries at Ludas–*Varjú-dűlő* and Sajópetri–*Homoki-szőlőskertek*. At Ludas, 82 graves were identified, together with another eleven destroyed by modern agricultural activity, while the original number of destroyed graves was probably somewhat higher. The cemetery at Sajópetri contained approximately 90 graves. Both burial grounds began around the end of LT B2a and developed through LT B2b and LT C1 (Fig. 19).

Chronology	Mátraszőlős	Ludas	Sajópetri	Pișcolt-North	Pișcolt-South	Fântânele–Dâmbul Popii
LT B1/B2						
LT B2a						
LT B2b						
LT C1						
No. graves	63+(10/15)	92+	90	116+	69	94+

Fig. 19. Chronology and number of graves from each of the cemeteries discussed in text (after RUSTOIU 2016a).

The cemetery at Pișcolt, with approximately 184 known graves and an additional, unknown number destroyed before systematic archaeological investigation began, is frequently described as the largest Late Iron Age cemetery in the eastern Carpathian Basin. Its demographic development, however, differs from that of the other burial grounds discussed above. The spatial and chronological evidence indicates that two interacting communities used separate but related funerary areas.

The northern cemetery, comprising approximately 116 graves, was used between LT B1/B2 and LT C1, while the southern cemetery, with approximately 69 graves, developed between LT B2b and LT C1. Considered separately, the latter is comparable in size to Mátraszőlős, with 63 documented graves and several others known to have been destroyed, and both functioned broadly within the same chronological interval (ALMÁSSY 2012). When the duration of each funerary area is taken into account, the demographic scale of the communities represented at Pișcolt appears broadly comparable with that inferred for other rural communities in the eastern Carpathian Basin.

The relatively small demographic scale suggested by these cemeteries is consistent with the limited number of buildings documented in excavated rural settlements. Six houses were identified at Cicir, eight at Ciumești and seven at Polgár. These figures should not automatically be interpreted as the total number of contemporaneous households, since settlement phases and incomplete excavation can distort such counts, yet they nevertheless reinforce the impression of comparatively small rural communities.

Sajópetri represents a more complex case. The cemetery at Sajópetri–*Homoki-szőlőskertek* (SZABÓ – TANKÓ 2018) lies near the settlement at Sajópetri–*Hosszú-dűlő*, a craft-production centre associated with a rural settlement considerably larger than the more typical agricultural sites

of the period (SZABÓ 2007). The comparatively modest size of the known cemetery may therefore indicate that the settlement was served by more than one burial ground, or that the cemetery at *Homoki-szőlőskertek* belonged to another nearby community within an area characterised by a high density of La Tène sites (CZAJLIK – TANKÓ 2007). Otherwise, the relatively small number of burials is difficult to reconcile with the apparent size and duration of the settlement, which was occupied from LT B2 to LT C1.

Unfortunately, the settlement associated with the cemetery at *Fântânele–Dâmbul Popii* has not yet been identified. Repeated field surveys were undertaken first by the archaeological team led by I. H. Crişan and subsequently by the team of D. L. Vaida, which has investigated the second Late Iron Age cemetery in the area of modern *Fântânele* at *Dealul Iuşului*. More recent aerial surveys carried out by Z. Czajlik and S. Berecki have likewise failed to locate the settlement.

One possible explanation is that the associated habitation lies beneath the modern village, where later occupation has obscured or destroyed its archaeological traces. Other explanations remain possible, including dispersed settlement forms that are difficult to identify through conventional fieldwalking or aerial reconnaissance. Until settlement evidence is discovered, the demographic model derived from the cemetery cannot be tested directly against the size and organisation of the corresponding inhabited area.

The demographic estimates proposed above should therefore be regarded as heuristic models rather than precise reconstructions. They do not incorporate rates of immigration and emigration, changes in fertility and mortality through time, variation in age structure, or natural and socially induced demographic growth and decline. Nor can it be assumed that every individual belonging to the community was necessarily buried in the excavated cemetery.

The chronological distribution of graves nevertheless suggests a meaningful long-term trend. In *Fântânele–Dâmbul Popii*, as in several of the comparative cemeteries, the number of burials increased during LT C1. This pattern may indicate demographic expansion, although the causes cannot be established from funerary evidence alone. Possible contributing factors include increased fertility, the arrival of individuals or family groups from elsewhere, changes in cemetery access, or the return and permanent settlement of people belonging to groups that had previously participated in migrations, raids or military campaigns.

Such processes may have been particularly relevant during and after the population movements and military expeditions of the first half of the 3rd century BC. Any connection, however, must remain hypothetical unless supported by independent archaeological, isotopic or genetic evidence. An increase in the number of graves may reflect actual population growth, changes in funerary behaviour, or a combination of demographic and social factors.

Finally, the three principal groups identified within the cemetery should not automatically be equated with strictly biological descent groups. Extended families or ‘clans’ may have incorporated individuals who were not genealogically related to their dominant members. Dependants, clients, servants or people of different local origins could have been integrated into the same social units and may therefore have gained access to the same funerary areas.

Comparable processes have been proposed at *Muhi–Kocsmadomb*, where members of indigenous communities may have been incorporated into newly established social groups following the arrival of La Tène populations (HELLEBRANDT 1999b, 99–102, 233–236, fig. 99, 192; ALMÁSSY 2010). Such individuals may have occupied different social positions while nevertheless forming part of the same household or broader corporate group.

The distinction between biological kinship and social membership is particularly relevant in this context. As KARL (2006) has emphasised, concepts corresponding to ‘kin-group’ and ‘household’ need not describe identical social units. The funerary groups at *Fântânele–Dâmbul Popii*

should therefore be understood as socially constituted communities whose internal cohesion may have rested on a combination of descent, marriage, dependency, clientage and shared residence. Differences between their members could be expressed through the treatment of the body, the selection and arrangement of grave goods, and other elements of funerary practice. The spatial organisation and demographic evolution of the cemetery thus provide an important framework for examining the changing structure of the community across successive generations.

VI. BURIAL CUSTOMS

The funerary practices documented at Fântânele–*Dâmbul Popii* reveal a complex and internally differentiated set of rituals that developed over the entire period during which the cemetery was in use. Although cremation clearly predominated, the coexistence of cremation and inhumation, the occurrence of double and symbolic burials, the selective deposition and spatial arrangement of cremated remains, and the varied treatment of grave goods demonstrate that burial practice cannot be reduced to a single normative rite. Rather, the archaeological evidence reflects a sequence of choices made during different stages of the funerary process, from the treatment of the body and the cremation ceremony to the collection of the remains, their deposition in the grave and the final arrangement of the funerary assemblage.

The following analysis therefore considers the burial as the material outcome of a longer sequence of ritual actions. Particular attention is paid to recurring practices and deviations from them, since both are relevant to understanding the social and symbolic organisation of the community. The unusually detailed excavation documentation, combined with anthropological observations, makes it possible in several cases to reconstruct aspects of this sequence and to distinguish between practices related to the treatment of the deceased, the deposition of grave goods and the organisation of the grave itself.

VI.1. Funerary rite

Of the 94 graves investigated at Fântânele–*Dâmbul Popii*, four were probably cenotaphs, while anthropological analysis indicates that four cremation graves contained the remains of two individuals and can therefore be classified as double burials. Preliminary field surveys conducted before systematic excavations began in 1969 also suggest that several graves had already been destroyed by modern agricultural activity. Consequently, more than 98 individuals were buried – or, in the case of the presumed cenotaphs, symbolically represented – in the Late Iron Age cemetery at Fântânele–*Dâmbul Popii*.

The cemetery was biritual. Of the 98 individuals represented by the excavated graves, eight were inhumed and 86 were cremated, while the funerary rite could not be determined in four cases (Fig. 20). Cremation therefore overwhelmingly predominated, accounting for nearly nine-tenths of the identifiable burials. This pattern corresponds closely to the funerary practices documented in Late Iron Age Transylvania, where cremation was generally the dominant rite. In some partially or completely excavated cemeteries, including Bratei, Șeica Mică, Galații Bistriței, probably Apahida (BERECKI 2006, 55; BERECKI 2015, 75; RUSTOIU ET AL. 2017, 250, 256, fig. 7), and Viștea (COCIȘ 2015), cremation was apparently the exclusive rite. At Gâmbaș, only one of the 89 graves was an inhumation (BĂLAN ET AL. 2015).

The same predominance of cremation can be observed within the immediate micro-region of Fântânele. At the neighbouring cemetery of Fântânele–*Dealul Iușului*, 34 of the 43 individuals for

whom the funerary rite could be established were cremated and nine were inhumed (BERECKI ET AL. 2022, 48). At Orosfaia, three of the twelve excavated graves were inhumations and eight were cremations, while the rite of one burial could not be determined (VAIDA 2000; BERECKI 2006, 57). Of the 15 graves excavated so far at Sălcuța, twelve were cremations and three inhumations (VAIDA – MARINESCU 2017; 2020). Taken together, these cemeteries indicate that biritualism was firmly embedded in regional funerary practice, although cremation remained overwhelmingly dominant.

A somewhat different pattern characterises cemeteries farther west, particularly in the Tisza region and on the Great Hungarian Plain. At Pișcolt (NÉMETI 1993; 2012, 296, fig. 1), Ciumești (ZIRRA 1967, 7) and Curtuișeni (TELEAGĂ 2008, 87), inhumation formed a considerably larger component of the funerary record, although cremation graves still outnumbered inhumations. At Tărian, seven of the twelve graves were inhumations and five cremations (CHIDIOȘAN – IGNAT 1972, 554). Considerable variation is also apparent in north-eastern Hungary: inhumations account for approximately 36% of the burials at Sajópetri, but only 6% at Ludas and 2% at Mátraszőlős, while the known cemeteries at Kistokaj, Radostyán and Bodroghalom contained exclusively cremation graves (SZABÓ – TANKÓ 2018, 136–137, fig. 98).

The spatial distribution of the inhumations at Fântânele–*Dâmbul Popii* is particularly significant. They occur throughout the cemetery, interspersed among groups of cremation graves, and do not form a separate spatial unit (Fig. 21). Although most inhumations belong to the final and most densely represented chronological horizon, the rite was already practised during the second and third horizons. Inhumation should therefore not be interpreted as a late innovation replacing cremation, but as an alternative funerary treatment that coexisted with the dominant rite during much of the cemetery's use.

The available anthropological and archaeological evidence likewise provides no convincing indication that the choice between cremation and inhumation was determined by sex, age or social position. Although only a limited number of the inhumed individuals could be analysed anthropologically, both males and females are represented. The grave inventories also vary considerably. Some inhumations were comparatively modest, such as graves no. 9, 30 and 35, and some lacked pottery altogether, whereas graves no. 5 and 79 contained rich and diverse assemblages. The funerary rite therefore cannot readily be correlated with a particular level of wealth or social status.

This observation has broader implications for the interpretation of biritualism in Transylvania. Rather than reflecting a straightforward division of the population according to biological or socio-economic categories, the coexistence of cremation and inhumation is more plausibly understood within the sphere of ritual choice, religious conceptions and perhaps family or group traditions. The two rites may have represented alternative, socially recognised ways of treating the dead within the same community rather than markers of distinct populations. Particularly significant in this respect is double burial 46/46A at the neighbouring Fântânele–*Dealul Iușului* cemetery, where two individuals sharing the same grave were treated differently: one was cremated and the other inhumed, the burials being superimposed within the same funerary feature (BERECKI ET AL. 2022, 52).

This example cautions against interpreting funerary rite as a direct indicator of ethnic identity. The coexistence of different treatments of the body within the same burial community – and even within a single grave – indicates that cremation and inhumation could form part of the same funerary system. The choice between them may instead have depended on circumstances that are archaeologically difficult to reconstruct, including beliefs concerning the deceased, family traditions, the circumstances of death or decisions made during the funerary ceremony.

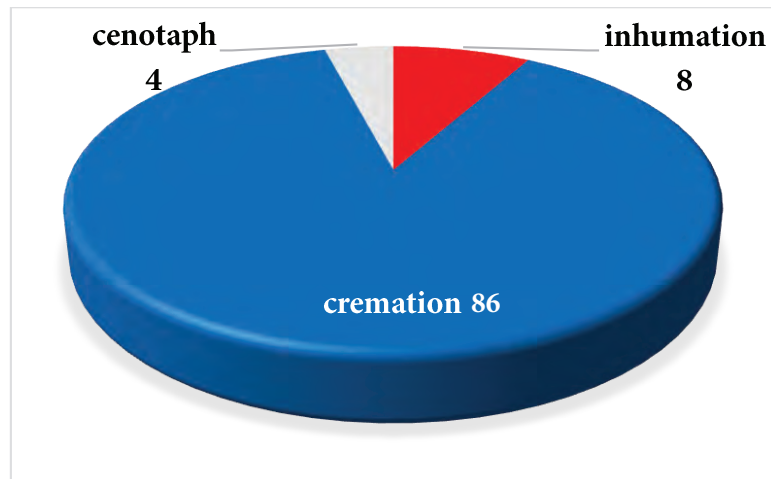


Fig. 20. Funerary rite at Fântânele–Dâmbul Popii.

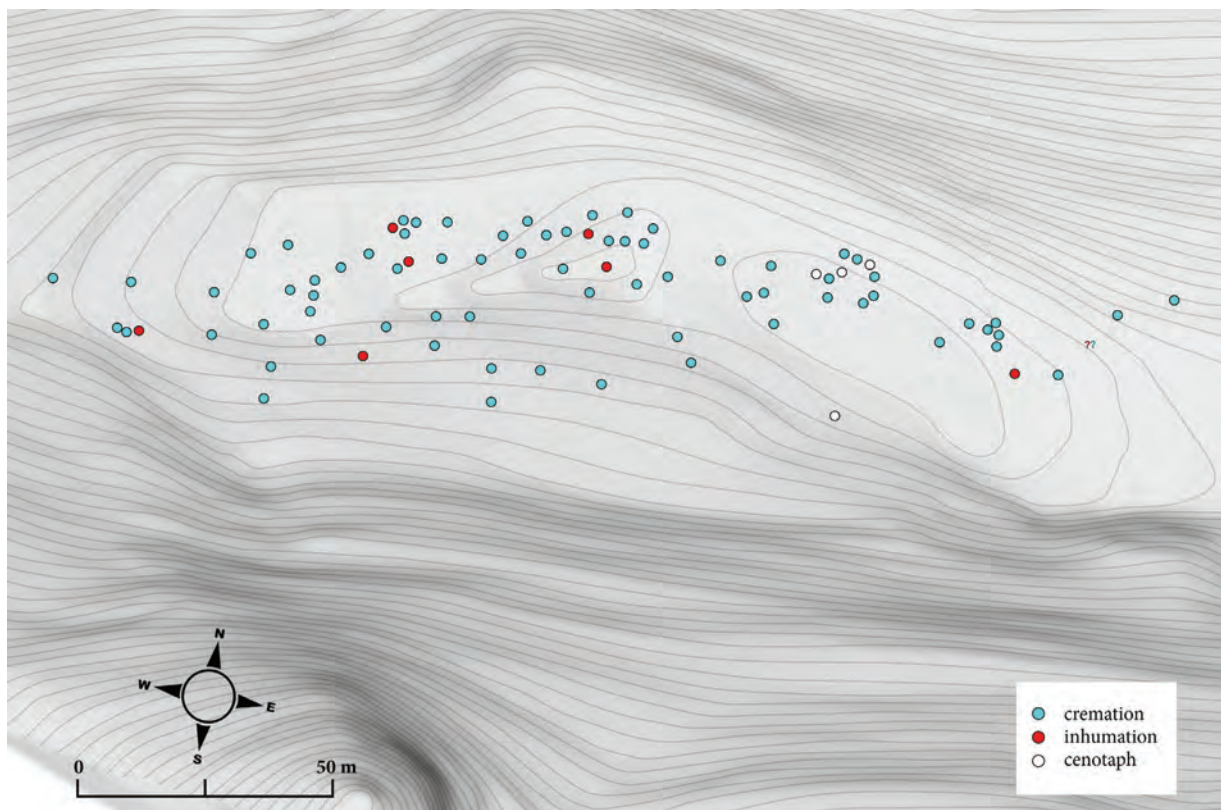


Fig. 21. Distribution of cremation and inhumation graves and cenotaphs.¹

Three of the presumed cenotaphs – graves no. 63, 67 and 70 – were located within one of the eastern grave groups, while the fourth, grave no. 66, lay in the same general part of the cemetery but in an isolated position south of the main grave clusters (Fig. 21). No finds were recovered from graves no. 63 and 66, whereas graves no. 67 and 70 contained animal bones. Their morphology corresponds broadly to that of the cremation grave pits: the features were oval or circular, with recorded depths between 0.60 and 1.36 m. Grave no. 66 measured 1.60 × 1.90 m, while grave no. 67 had a maximum diameter of approximately 1.36 m.

¹ Graves no. 81 and 82 were not marked on the excavation map, therefore their location is only hypothetically indicated between graves 80 and 83.

The presence of animal remains in graves no. 67 and 70 is particularly noteworthy, since such remains are otherwise associated with food offerings deposited in ordinary cremation graves. Their inclusion suggests that the absence of human remains did not necessarily imply the absence of funerary ritual. On the contrary, at least some of these features appear to have received elements of the same ritual treatment as graves containing a body. Their position within established grave groups reinforces this interpretation.

The identification of these features as cenotaphs must nevertheless remain cautious. The absence of human remains may result from several processes, including differential preservation, incomplete recovery or funerary practices in which no human remains were ultimately deposited. Their morphology, location and, in two cases, the presence of animal offerings nevertheless make an interpretation as symbolic burials plausible. If this interpretation is correct, the cenotaphs demonstrate that a socially meaningful burial could be created even in the physical absence of the deceased. The grave was thus capable of commemorating and incorporating an absent individual into the funerary landscape.

Cenotaphs are relatively uncommon in the documented Late Iron Age cemeteries of the Carpathian Basin. Grave no. 40 at Mátraszőlős provides one of the more convincing parallels: it contained three vessels, a pair of bronze *à brandebourg* brooches and food offerings, but no human remains (ALMÁSSY 2012, 111). A cenotaph was also recorded among the 22 graves at Hegyfalú (BALÁZS ET AL. 2015, 2), while grave no. 6 at Ménfőcsanak may represent another symbolic burial (Uzsóki 1987, 29). The large feature at Sopron–*Bécsi-domb*, measuring 3.65×2.55 m and containing a wild boar together with three vessels, a pair of shears and an iron knife, has likewise been interpreted as a possible symbolic grave (SÁGI 1957). In the latter case, however, an animal burial remains an equally plausible explanation, given comparable discoveries at Sopron (JEREM 2003, 545–546), Mátraszőlős (ALMÁSSY 2012; VÖRÖS 2012) and Szeged–Kiskundorozsma (PILLING – UJVÁRI 2012).

The presumed cenotaphs at Fântânele are therefore best regarded as part of a broader spectrum of funerary and commemorative practices rather than as a rigidly defined archaeological category. Their significance lies precisely in the ambiguity between burial, symbolic burial and ritual deposit. This ambiguity illustrates how the cemetery functioned as a setting for practices concerned with memory and social representation as well as with the physical disposal of the dead.

VI.2. Double burials (Fig. 22)

Four cremation graves at Fântânele–*Dâmbul Popii* contained the remains of two individuals according to anthropological analysis: graves no. 13, 40, 42 and 69. Although the internal arrangement of the cremated remains differs between these burials, all four share one striking characteristic: an adult was buried together with a child or young person. The recurrence of this association deserves particular attention, since it suggests that these graves resulted from specific social circumstances rather than from the accidental incorporation of additional human remains.

In grave no. 13, the cremated human bones were deposited in two separate heaps. The larger concentration occupied the north-western end of the grave pit, while a smaller concentration lay on its southern side. Two brooches were associated with the larger heap and one with the smaller. The grave also contained one handmade and three wheel-thrown vessels, food offerings, an iron belt buckle and a fragment of a charred beam. Anthropological analysis identified an adult aged over 30 years and an *Infans I*.

Grave no. 40 contained the remains of an adult over 40 years of age and an *Infans I* aged approximately 4–6 years. The adult was probably female, as suggested by the anklet with large hollow knobs. The funerary assemblage included several pieces of jewellery, among them three bronze brooches, three wheel-thrown vessels and animal remains (pl. XXXIII). In contrast to grave no. 13, the cremated remains of the two individuals were deposited together in a single heap.

A similar arrangement was documented in grave no. 42, where anthropological analysis identified an *Infans II* aged approximately 7–9 years and an *Adultus* male aged between 25 and 40 years. Their cremated remains were placed together in a single heap. The assemblage comprised three iron brooches, three iron bracelets, three wheel-thrown vessels and food offerings (pl. XXXV).

Grave no. 69 contained an *Adultus* male aged over 25 years and a younger individual aged approximately 14–19 years, classified as *Infans II/Juvenis*. The assemblage included an iron brooch, an iron knife, a sword, fragments of a scabbard and five handmade and wheel-thrown vessels. Unlike graves no. 40 and 42, the graphic documentation records two distinct concentrations of cremated human bones (pl. LIII). Since the outline of the grave pit was not identified, the possibility that these concentrations belonged to two adjacent burials cannot be excluded entirely. Their treatment as a single double burial nevertheless remains the more plausible interpretation in the context of the surviving excavation documentation.

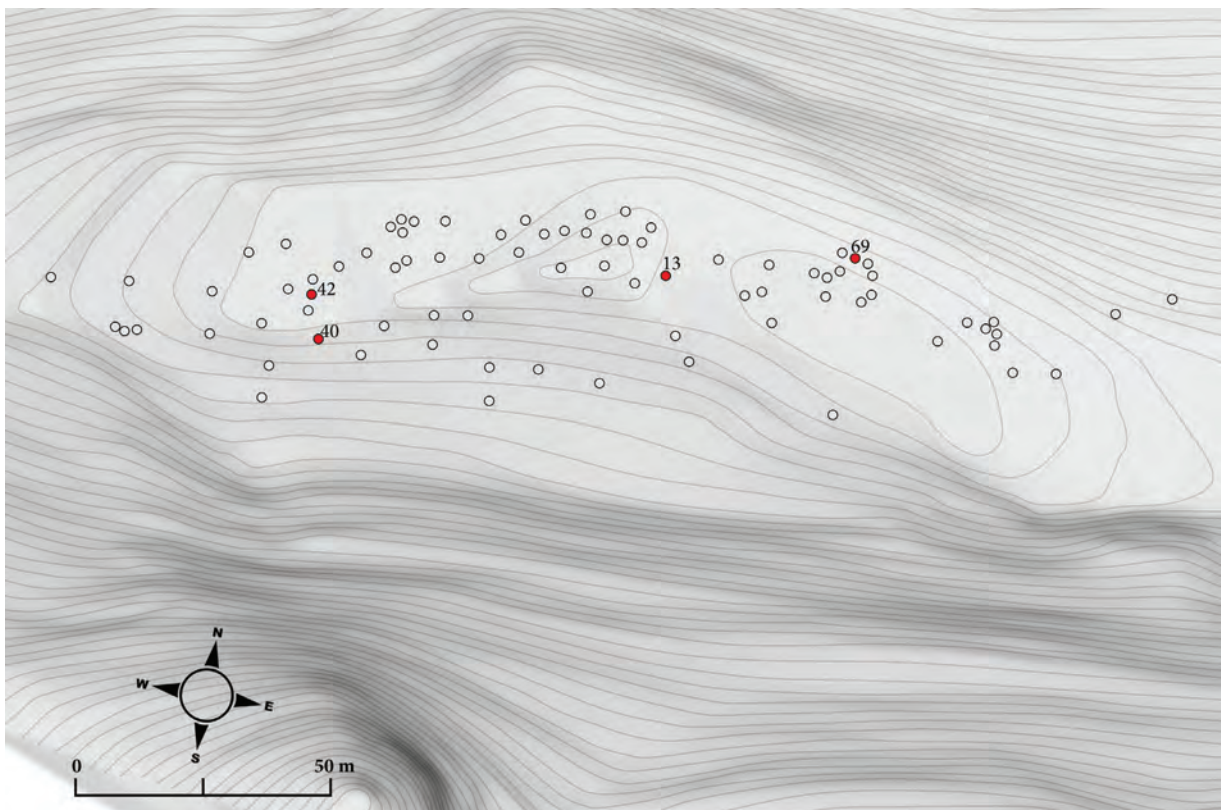


Fig. 22. Double burials.

Multiple burials are well documented in Late Iron Age cemeteries throughout the Carpathian Basin and occur in a variety of forms. At Fântânele–Dâmbul Popii, all securely identified double burials are cremations, whereas elsewhere double burials may consist of two inhumations or combine cremation and inhumation within the same grave (BERECKI – VAIDA 2017).

Anthropologically confirmed examples are known from Ludas (TANKÓ 2012; TANKÓ – TANKÓ 2012), Sajópetri (BÓZSING 2018), Szeged–Kiskundorozsma (PILLING – UJVÁRI 2012), Mátraszőlős (ALMÁSSY 2012), Ordacsehi–Kécsimező (HONTI ET AL. 2007, 62; K. ZOFFMANN 2012), Hegyfalú (BALÁZS ET AL. 2015; TÓTH 2015b), Gencsapáti (ILON – TÓTH 2022), Vác–Kavicsbánya (KÖHLER 2023, 11) and Malé Kosihy (JAKAB 1995).

From a demographic perspective, double burials can broadly be divided into those involving at least one child and those containing two adults (BERECKI – VAIDA 2017, 22, 34). The Fântânele assemblage belongs entirely to the first category. Two of the associated adults were male and one probably female, while the sex of the fourth could not be established; every grave nevertheless contained a child or adolescent together with the adult. This consistency distinguishes Fântânele from the neighbouring Fântânele–Dealul Iușului cemetery, where the two known double burials contained adults (BERECKI – VAIDA 2017; BERECKI ET AL. 2022, 51).

Adult–child double burials are widely distributed across the Late Iron Age Carpathian Basin. Women accompanied by children are known from Szeged–Kiskundorozsma, Muhi, Ludas, Sajópetri, Mátraszőlős, Budapest–Csepel Island, Tatabánya, Dubník, Malé Kosihy, Maňa, Zvonimirovo and Mannersdorf, while male–child combinations occur at Szeged–Kiskundorozsma, Jászberény, Sajópetri, Kóny, Dubník and Mannersdorf (BERECKI – VAIDA 2017, 16–17, 28–29). Particularly relevant are grave no. 62 at Mátraszőlős (ALMÁSSY 2012, 134) and grave LT 11 at Zvonimirovo (DIZDAR 2004), where children were buried together with armed adult males, paralleling the association represented by grave no. 69 at Fântânele. Triple burials, although less common, further demonstrate the variability of collective burial: grave LT 12 at Zvonimirovo contained an adult and two children (ŠLAUS – NOVAK 2013, 517), while at Sajópetri grave no. 65/140 contained two adults and a child and grave no. 82/156 three adult women (BÓZSING 2018, 266).

The interpretation of adult–child double burials is necessarily difficult. Their most straightforward explanation is the simultaneous or closely successive death of members of the same household or kin group, followed by their incorporation into a shared funerary ceremony. Such circumstances could have resulted from disease, accident, violence or other events affecting more than one member of a community. Biological kinship, however, cannot be demonstrated from the archaeological evidence alone, and the shared grave should primarily be understood as evidence of a socially meaningful relationship between the deceased.

A more radical interpretation proposed previously is that in certain cases an orphaned child may have been deliberately killed following the death of an adult caregiver when the community was unwilling or unable to assume responsibility for the child's upbringing (BERECKI – VAIDA 2017, 22–23, 34). The archaeological evidence from Fântânele cannot independently demonstrate such a practice, and this possibility should therefore remain explicitly hypothetical. The recurring adult–child association nevertheless shows that the deaths and funerary treatment of these individuals were socially linked.

The internal arrangement of the cremated remains adds another dimension to the interpretation. In graves no. 40 and 42, the bones of the two individuals were deposited together in a common heap, whereas in graves no. 13 and 69 they were placed in separate concentrations. These different arrangements imply that collective burial did not require the physical mixing of the deceased. In some cases their bodily identities were maintained through separate deposits; in others the cremated remains were deliberately combined within the same concentration.

Comparable variation occurs at Sajópetri. Of the nine double burials, cremated remains were placed together in graves no. 9/55, 20/75, 57/127, 49/117, 21/77 and 65/140, whereas separate concentrations were recorded in graves no. 27/89, 40/107 and 82/156 (BÓZSING 2018, 263–266).

Common deposition was also more frequent at Ludas, particularly in adult-child burials, although two graves contained ashes scattered over the bottom of the pit and one contained two separate heaps (TANKÓ 2012). At Mátraszőlős, three double burials contained the cremated remains in a single concentration, whereas the adult warrior and minor in grave no. 62 were represented by distinct heaps (ALMÁSSY 2012).

The distinction between common and separate deposits may therefore have carried ritual significance. Separate heaps preserved the physical individuality of the deceased within a shared grave, whereas the deliberate mixing of cremated remains created a materially inseparable deposit. Whether this difference expressed kinship, the circumstances of death, the sequence of cremation, or particular conceptions of the relationship between the deceased cannot be established. It nevertheless demonstrates that the double burial was itself structured internally and that the relationship between the individuals could be expressed through the treatment and spatial organisation of their remains.

VI.3. Individuals in multiple heaps

In several graves, the written or graphic documentation records the deposition of cremated human remains in two or more separate heaps. In three of these cases, no anthropological analysis is available. Graves no. 32 and 33 each contained three documented concentrations of cremated bones. The occurrence of multiple heaps, however, cannot in itself be taken as evidence for multiple burial. Where anthropological analysis was possible, the remains frequently proved to belong to a single individual.

In grave no. 2, two concentrations of cremated human bones were identified at the north-western and south-western ends of the grave pit. Anthropological examination nevertheless indicated the presence of only one individual, an *Infans I*. The most plausible interpretation is therefore that the cremated remains of the same child were deliberately divided between two deposits. It cannot be entirely excluded that some bones from one of the concentrations were not recovered and consequently remained unavailable for anthropological analysis.

A comparable situation was documented in grave no. 21. A small quantity of calcined human bones was deposited inside a medium-sized vessel, while further cremated human remains were placed in a large heap in the south-western corner of the grave. Anthropological analysis identified only one individual. The two adjacent concentrations in grave no. 60 likewise belonged to a single person. In grave no. 73, one small heap of cremated human bones was recorded at a depth of 0.40 m, while additional remains mixed with ash were deposited in the north-western corner of the pit. Despite the limited quantity of preserved material, anthropological analysis again suggests a single individual. Two concentrations are also mentioned in grave no. 83, and these too were attributed anthropologically to one individual.

In a number of cases, the surviving excavation documentation is internally inconsistent. In grave no. 7, the written description refers to three concentrations of cremated remains, whereas neither the photograph nor the drawing confirms such an arrangement; anthropological analysis identified only one individual. Similarly, the field journal for grave no. 14 records one large and one small heap in the western part of the pit, while the drawing shows only a single concentration. The cremated remains were again assigned to one individual.

The opposite discrepancy occurs in grave no. 16, where the graphic documentation shows two heaps, although the written description does not mention them. The anthropological analysis nevertheless indicates a single individual. Grave no. 26 presents a comparable case: the journal states that the cremated remains, distributed across the surface of the grave, were arranged

in two heaps, as also shown in the drawing, yet the analysed bones belong to one person. Two closely positioned concentrations were documented in grave no. 74, although the field journal does not mention them and the anthropological evidence again points to a single individual. In graves no. 76 and 78, the drawings indicate two and three heaps respectively, while the written descriptions state that the cremated bones were scattered across the bottom of the grave.

These discrepancies are important methodologically. They show that the spatial organisation of cremated remains cannot always be reconstructed from a single category of excavation record. Written descriptions, drawings and photographs must be evaluated together, and the anthropological evidence provides an essential independent control. The surviving documentation also reflects the difficulty of recording cremation burials in the field, where concentrations of fragmented bone may have been irregular, overlapping or only partially distinguishable.

The deposition of cremated human remains in two or more concentrations is also documented elsewhere in the Late Iron Age Carpathian Basin. Grave no. 15 at Apahida may represent such a case (KOVÁCS 1911, 45–48, fig. 62), as may several burials at Pişcolt (NÉMETI 1993, 119), although in the absence of anthropological analysis double burial cannot be excluded. The phenomenon is particularly well documented at Mátraszőlős, where graves no. 8, 13, 14, 19, 23, 30, 38, 44 and 52 contained two concentrations of cremated remains. Anthropological analysis demonstrated that the bones from graves no. 19, 23, 30, 38, 44 and 52 belonged to a single individual (ALMÁSSY 2012, 79, 85–86, 89, 94, 101, 108, 115, 122–123). At Sajópetri, the cremated remains from burial 40/107 were likewise placed in two heaps (SZABÓ – TANKÓ 2018, 70).

The evidence from Fântânele therefore strongly suggests that the division of the cremated remains of a single individual into several spatially distinct deposits formed part of the funerary ritual. The four double burials established anthropologically should be distinguished from this practice. In the remaining graves with multiple concentrations, the most likely explanation is the deliberate separation of the cremated remains of one deceased individual within the grave pit.

Such partitioning may reflect distinct stages in the collection or deposition of the remains. It is possible that separate portions of cremated bone were selected from different parts of the pyre, deposited sequentially, or assigned to different areas of the grave in relation to particular grave goods. The available documentation does not allow these possibilities to be distinguished with certainty, but the recurrent nature of the practice suggests that the spatial separation of the bones was meaningful rather than accidental.

VI.4. Graves with scattered cremated remains

A different mode of deposition is represented by graves in which cremated human remains were scattered across the bottom or fill of the grave pit rather than concentrated in one or more discrete heaps.

In grave no. 19, the cremated remains were dispersed across the bottom of the pit and were also partly present inside vessels. The graphic documentation shows several denser concentrations of bone, but these appear to represent localised clusters within a generally scattered deposit. Anthropological examination of the 19 g of preserved cremated bone identified a single child.

The description of grave no. 57 in the excavation journal is brief, but the graphic documentation shows that the cremated remains of an *Infans* were dispersed throughout the grave at different depths. The burial contained no funerary inventory, making the scattered distribution of the human remains the principal archaeologically visible element of the funerary treatment.

In grave no. 62, cremated human bones mixed with ash and charcoal were scattered over the entire surface of the pit and occurred at several depths. The drawings also show a number

of denser concentrations, including human bones deposited inside a vessel. The small quantity of surviving material – less than 19 g – is striking, particularly because anthropological analysis identified an *Infans I*, while the dimensions and typological characteristics of the grave goods appear more consistent with an adult female. This discrepancy is difficult to explain securely. It may reflect incomplete recovery or preservation of the human remains, the deposition of only a highly selected fraction of the cremated skeleton, or a complex relationship between the biological identity of the deceased and the funerary assemblage. A comparable mismatch is known from grave no. 10 at Tiszavasvári, where a grinding stone, a clay figurine, a vessel and an adult-sized bracelet were deposited together with the skull of a child (ALMÁSSY 1998, 75).

Scattered cremated remains were also recorded in grave no. 68. In graves no. 76 and 78, the documentation is contradictory: the drawings show concentrations of cremated human bones, whereas the written descriptions state that the remains were scattered over the bottom of the pit. Grave no. 78 contained a *Juvenis*. Among the graves with scattered cremated remains that could be analysed anthropologically, younger individuals predominate. The sample is too small to establish an age-specific funerary practice, but the observation is worth retaining as a possible pattern requiring comparison with other cemeteries.

Comparable burials are known from Gâmbaş (BĂLAN ET AL. 2015, 140), Tărian (CHIDIOȘAN – IGNAT 1972, 569–570), Pișcolt (NÉMETI 1993, 119) and graves no. 3, 51 and 58 at Mátraszőlős. In the latter cemetery, anthropological analysis confirmed that the scattered cremated remains belonged to single individuals (ALMÁSSY 2012, 76, 122, 130). At Ludas, scattered human bones were recorded in graves no. 693, 695, 1009, 1156, 1157, 1267, 1282 and 1290 (SZABÓ – TANKÓ 2012, 31–32, 60, 75–76, 78, 81, 85), while burial 57/127 at Sajópetri contained a comparable deposit (SZABÓ – TANKÓ 2018, 88).

The distinction between scattered deposition and deposition in heaps should probably not be understood as a simple binary opposition. Several graves contain both dispersed remains and denser clusters, indicating a continuum of practices. The final arrangement visible archaeologically may have resulted from several successive actions: the initial placement of selected cremated remains, subsequent scattering of additional fragments, and the deposition of portions of bone in relation to vessels or other grave goods. These patterns reinforce the impression that the collection and burial of cremated human remains was a selective and structured process rather than the straightforward transfer of all material from the pyre into the grave.

VI.5. Human bones in vessels

In five graves at Fântânele–Dâmbul Popii, cremated human bones were recorded inside ceramic vessels (Fig. 23), while in one additional grave human remains were covered with pottery fragments. In none of these cases, however, were all the cremated remains deposited inside a vessel. The majority of the bones were generally located elsewhere within the grave pit. These burials should therefore be distinguished from true urn burials.

In grave no. 19, belonging to an *Infans*, human bones were scattered throughout the grave, including inside one of the vessels. Given the dispersed character of the deposit, the presence of bones within the vessel may have resulted from the same act of scattering rather than from deliberate placement. In grave no. 21, however, a small quantity of calcined human bone was deposited inside a medium-sized vessel, while the remainder of the cremated remains was placed in a large concentration in the south-western corner of the grave. Anthropological analysis identified a single *Juvenis*, suggesting the intentional division of the remains between different depositional contexts.

In warrior grave no. 28, part of the limited quantity of cremated bone was deposited close to the weapons, while another portion was placed inside a vessel. According to the graphic documentation, one of the vessels in grave no. 62, situated on the western periphery of the cemetery, also contained human remains. Grave no. 72, belonging to an *Infans*, contained a small quantity of cremated bone, part of which was deposited inside one of the larger vessels. In grave no. 31, cremated human remains were instead covered with a fragment of a wheel-thrown vessel.

None of these graves can be classified as an urn burial in the strict sense, since cremated remains were also deposited outside the vessel and often constituted the majority of the preserved human bones. In graves no. 19 and 62, accidental incorporation during the scattering or deposition of the cremated remains cannot be excluded. In graves no. 21, 28 and 72, however, the distribution of the bones is more consistent with deliberate placement, while the pottery fragment covering the remains in grave no. 31 likewise suggests intentional treatment.

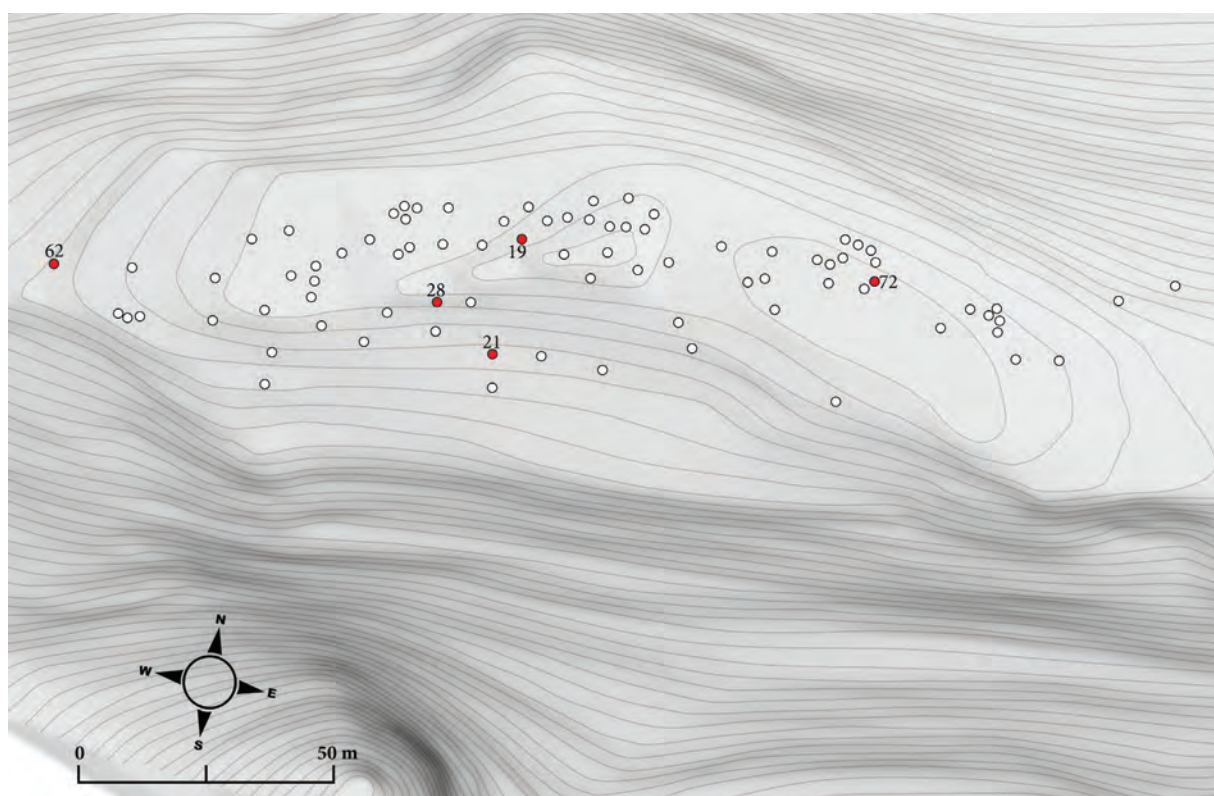


Fig. 23. Cremated human bones deposited in vessels and elsewhere within the same grave.

Comparable combinations of different modes of deposition are widely documented. At Pișcolt, graves no. 40, 75 and 203 contained cremated remains both in a concentration and inside a vessel, whereas graves no. 1 and 31 were true urn burials (NÉMETI 1993, 120, fig. 8). At Ciumești, graves no. 10 and 14 contained heaps of cremated bone together with four or five fragments deposited inside vessels (ZIRRA 1967, 13). In grave no. 18 at Tărian, human remains were deposited in three locations and apparently during two separate stages, with one portion placed inside a bowl interpreted as a possible container used to transport the bones from the pyre (CHIDIOȘAN – IGNAT 1972, 570).

At Sajópetri, burials 3/3, 20/75 and 27/89 contained cremated human remains both inside and outside vessels (SZABÓ – TANKÓ 2018, 24, 45, 52). A similar pattern is known from graves no. 658, 685 and 729 at Ludas (SZABÓ – TANKÓ 2012, 90). At Mátraszőlős, grave no. 25 contained the cremated remains of a single individual divided between a heap and a vessel (ALMÁSSY 2012, 96).

True urn burials are also present in several cemeteries of the region, demonstrating that the partial placement of human bones in vessels formed only one element within a broader range of cremation practices. At Mátraszőlős, the cremated remains from grave no. 50 were deposited in two vessels (ALMÁSSY 2012, 120–121). Numerous urn graves are known from Gâmbaş (BĂLAN ET AL. 2015, 140), and an urn burial has also been documented at Fântânele–Dealul Iușului (VAIDA ET AL. 2009, 111; BERECKI 2015, 125). At Curtuiuşeni, graves no. 16 and 18 were urn burials (TELEAGĂ 2008, 87), while four of the 35 burials at Ciumeşti belonged to the same category (ZIRRA 1967, 7). Further examples are known from Tiszavasvári, Ludas, Sajópetri, Hegyfalu and Vác–Kavicsbánya.

The Fântânele evidence therefore demonstrates considerable flexibility in the use of ceramic vessels during the deposition of cremated remains. Vessels could serve as containers for part of the bones without functioning as urns in the conventional sense, and pottery could also be used to cover human remains. This suggests that the relationship between pottery and cremated bone was not governed by a single technical requirement. Rather, vessels could acquire temporary or situational roles within the funerary ceremony, including the collection, transport, separation, containment or symbolic covering of selected portions of the deceased.

VI.6. Cremation and disposal

The anthropological analysis indicates that the bodies cremated at Fântânele–Dâmbul Popii were generally exposed to temperatures of approximately 525–645 °C. Comparable ranges have been recorded in other Late Iron Age funerary contexts in Transylvania, including Fântânele–Dealul Iușului (BERECKI ET AL. 2022, 57) and Fântânele–Livadă (BERECKI 2026). Somewhat lower temperatures have been proposed for the burial at Apahida (BERECKI 2021b, 118) and for the graves at Vác–Kavicsbánya (KÖHLER 2023, 14). Cremations at Zvonimirovo (ŠLAUS – NOVAK 2013) and Sajópetri (BÓZSING 2018, 268) produced broadly comparable thermal alterations, while wider ranges between approximately 200 and 800 °C have been recorded at Ludas (TANKÓ 2012, 212), Hegyfalu (BALÁZS ET AL. 2015) and Dobova (HINCAK – GUŠTIN 2011).

The relatively consistent thermal alteration observed at Fântânele suggests broadly comparable cremation conditions across the cemetery, although temperature estimates derived from bone colour should not be interpreted as precise measurements of pyre temperature. The appearance of cremated bone is influenced by several variables, including duration of exposure, oxygen supply, position within the pyre and the differential burning of individual parts of the body. The results are therefore better understood as indicating a broadly shared cremation technology rather than a narrowly standardised thermal regime.

Of the 49 cremated individuals subjected to anthropological analysis, measurable remains were available for 44 individuals from 42 graves. These amounted to a total of 9968 g, excluding fragments smaller than 2 mm. The mean surviving weight was therefore approximately 240 g per individual. This represents only a fraction of the expected weight of a fully cremated skeleton, both for adults and for younger individuals (TROTTER – HIXON 1974; see Fig. 7).

The variation between graves is considerable. Fifteen graves contained less than 100 g of human bone, including three adult graves. Seven graves contained between 101 and 200 g, all but one belonging to adults. Nine graves contained between 201 and 300 g, while only eleven yielded more than 300 g. The largest quantities were recorded in double graves no. 42 (1002 g) and 69 (710 g), and in adult graves no. 18, 44 and 60, each containing approximately 632–636 g.

These figures must be treated cautiously. The surviving weight reflects the original funerary practice together with excavation, recovery, conservation and subsequent storage history.

The methods used during the original collection of cremated human remains are insufficiently documented, and some material may have been lost after excavation. Absolute weights therefore cannot be taken as precise measures of the quantity originally deposited. Nevertheless, the consistently low values across the cemetery and the marked differences between graves remain archaeologically significant.

The evidence strongly suggests that only selected portions of the cremated skeleton were normally transferred from the pyre to the grave. Partial deposition of cremated human remains is widely documented in Late Iron Age funerary practice. At Tărian, an approximately 0.60 m thick cremation platform measuring 1.65×1.75 m was investigated, with substantial quantities of ash and burnt human bone concentrated around its edges, suggesting that only part of the remains was collected for burial (CHIDIOȘAN – IGNAT 1972, 554, fig. 1). At Apahida, six gravel-built stone platforms were recorded among the graves, one of which contained cremated human bone (KOVÁCS 1911, 22–25).

Low quantities of deposited cremated bone are also characteristic of Fântânele–*Dealul Iușului* (BERECKI ET AL. 2022, 58), Bucsu (TÓTH 2010, 133–134), Vác (KÖHLER 2023, 10), Győr–*Kálvária* (GYENESEI ET AL. 2023) and the analysed burial at Apahida (BERECKI 2021b), where most graves contained less than 100 g. At Fântânele–*Livadă* (BERECKI 2026) and Ludas, average quantities were between approximately 100 and 200 g (TANKÓ 2012, 215, fig. 213), while values around 300 g were recorded at Mátraszőlős and Hegyfalú (ALMÁSSY 2012; BALÁZS ET AL. 2015).

The fragment size of the cremated remains provides further evidence concerning collection and deposition. At Fântânele–*Dâmbul Popii*, adult bone fragments generally ranged between 32 and 86 mm, with an average maximum dimension of approximately 50 mm. In *Infans* and *Juvenis* graves, fragments ranged between 10 and 53 mm, with an average of approximately 32 mm. By comparison, the average size of cremated bone fragments at Ludas (TANKÓ 2012, 210–211) and Sajópetri (BÓZSING 2018, 263) was approximately 10 mm, while fragments from Ciumești generally ranged between 10 and 40 mm (ZIRRA 1967, 14).

The comparatively large fragments at Fântânele may indicate that the cremated remains were not systematically crushed before burial. Fragmentation probably resulted primarily from the cremation process itself, the collapse and manipulation of the pyre, collection of the remains and subsequent handling. The relatively large surviving fragments also suggest that selection from the pyre could have been carried out visually and manually, allowing particular skeletal elements or larger fragments to be chosen for deposition.

Anthropological examination shows that, despite the small overall quantities placed in most graves, fragments from several anatomical regions were usually represented. Cranial remains, elements of the upper body and lower limbs often occurred together, suggesting that the selected material was drawn from different parts of the skeleton. At the same time, cranial bones were absent from a substantial number of graves, including graves no. 8, 14, 15, 17, 26, 34, 42A and B, 49, 50, 57, 62, 69B, 71, 72, 73 and 78. Both children and adults are represented in this group. In grave no. 46, by contrast, only cranial fragments were identified.

In several cases, the absence of cranial remains can readily be explained by the very small quantity of bone recovered. Graves no. 8, 34, 57, 62, 72, 73 and 78 each contained less than approximately 50 g. Other burials, however, yielded substantially larger quantities without preserving identifiable cranial fragments: grave no. 14 contained less than 200 g, grave no. 17 less than 290 g, grave no. 50 approximately 210 g, grave no. 69 approximately 710 g and grave no. 42 as much as 1002 g. In these cases, purely quantitative explanations become less convincing, and selective collection or differential treatment of body parts must be considered as a possibility.

Comparable patterns have been documented elsewhere. Cranial bones were present in the

analysed grave at Apahida (BERECKI 2021a, 118) and at Fântânele–*Livadă* (BERECKI 2026), whereas their apparent absence from several graves at Fântânele–*Dealul Iușului* has been interpreted as potentially intentional (BERECKI ET AL. 2022, 54). Cranial elements are also absent from some child graves at Ludas (TANKÓ 2012, 213), while skull and limb fragments are among the most frequently represented elements at Gencsapáti (ILON – NAGY 2010), Bucsú (TÓTH 2010) and Vác (KÖHLER 2023, 15). At Hegyfalú, the absence of vertebral and pelvic bones was interpreted as resulting from stronger thermal exposure of the trunk region, which may have caused those elements to fragment more extensively or become unrecognisable (BALÁZS ET AL. 2015, 7).

The evidence from Fântânele does not permit a definitive distinction between differential preservation and deliberate selection. Nevertheless, the recurrent absence of particular anatomical regions from otherwise substantial assemblages raises the possibility that the cremated body was treated selectively after burning. Such practices may have included the preferential collection of particular skeletal elements, the omission of others, or the division of the cremated remains between several destinations (REBAY-SALISBURY 2015, 24–26). The very small quantity of human bone placed in many graves suggests that the burial represented only one stage in a broader sequence of post-cremation practices.

The relationship between cremated human remains and pyre debris provides further insight into these practices. In most graves, human bones appear to have been separated from the burnt wood and charcoal of the pyre before deposition. In graves no. 1, 7, 41, 43, 62 and 83, however, cremated human remains were mixed with charcoal. Charcoal or wood ash was also recorded in the fills of graves no. 6, 7, 10, 13, 19, 22 and 8/1967.

At Fântânele–*Dealul Iușului* (BERECKI ET AL. 2022, 58–59) and Sajópetri (BÓZSING 2018, 248), the pyre debris was generally separated from the human remains before deposition. Elements of the pyre have nevertheless been recorded at Pișcolt (NÉMETI 1993, 119), Tărian (CHIDIOȘAN – IGNAT 1972, 569) and Ludas (TANKÓ – TANKÓ 2012, 254); at the latter site, the archaeological evidence has been interpreted as indicating that the pyre may have stood close to the grave.

The presence or absence of pyre debris at Fântânele therefore reflects another level of variability within the funerary process. In some graves, the bones were carefully selected and separated from the charcoal before burial, whereas in others portions of pyre material were intentionally or incidentally transferred together with the human remains. This variation suggests that the post-cremation treatment of the deceased was not governed by a completely uniform procedure.

The excavation journal originally raised the possibility that graves no. 12, 24 and 37 corresponded to burials previously excavated by Șt. Dănilă in 1967, since only pottery fragments were recovered from their fills. Comparison with Dănilă's schematic excavation plan (Fig. 3), however, makes direct overlap unlikely. It is more plausible that these features reflect later interventions into existing graves, either through ritual reopening or through looting. Comparable disturbances have been documented at Apahida (KOVÁCS 1911, 50), Hegyfalú (BALÁZS ET AL. 2015, 2), Győr–*Kálvária* (GYENESEI ET AL. 2023, 207), Vác–*Kavicsbánya* (HELLEBRANDT 1994, 22), Bajč–*Vlkanovo* (BENADIK 1960, 412), Maňa (BENADIK 1978, 400), Dubník (BUJNA 1989, 293–295), Bezi (BÍRÓ – MOLNÁR 2011), Hegyfalú (HORNOK – TÓTH 2016, 120) and Budapest–*Csepel Island* (HORVÁTH M. 2019, 15).

The distinction between ritual reopening and looting is difficult to establish archaeologically. Both may produce displaced or missing grave goods and disturbed grave fills. In a funerary context, however, reopening need not have been destructive or illicit. It could form part of post-burial commemorative practices, the retrieval of objects or remains, or later interaction with the grave by members of the community. The possibility of such secondary interventions

should therefore remain open where the archaeological evidence does not permit a more precise interpretation.

In several graves, the superposition of grave goods and human or animal remains allows parts of the depositional sequence to be reconstructed. In grave no. 1, one unrecovered vessel partly overlay the cremated human bones. In grave no. 10, wooden beams overlapped a vessel and animal bones. In grave no. 17, the grave was partly covered with stone slabs; one vessel was placed over the tip of the sword, the spearhead lay over the upper part of the sword, and some vessels were positioned above the animal offering. In grave no. 53, the knife was placed over the shears, while in grave no. 56 the large iron knife lay beneath a bowl. In grave no. 69, the sword had been inserted obliquely into the soil above the cremated remains, and in grave no. 72 the spearhead was deposited inside a vessel.

Animal offerings were deposited before the ceramic vessels in graves no. 41, 48 and 61. In grave no. 73, a handmade vessel was placed upside down over the other vessels. Grave no. 19 preserves an especially informative sequence: the animal offering and grave goods were first placed in the grave, after which the cremated human remains were scattered over them. In graves no. 43 and 49, the sequence was reversed: the cremated human remains were deposited first and the animal offering subsequently placed above them, partially overlapping the bones. Comparable mixing of animal and cremated human remains has been recorded at Apahida and Gâmbaş.

These superpositions demonstrate that the construction of the funerary deposit was a staged process. Human remains, animal offerings, weapons, tools and pottery were not deposited simultaneously or according to a single fixed order. The grave assemblage visible archaeologically is therefore the cumulative result of a sequence of ritual actions. In some burials, the order of deposition appears to have been carefully structured and may have expressed relationships between particular categories of objects, food offerings and the deceased.

Taken together, the evidence from cremation temperature, bone weight, anatomical representation, fragment size, pyre debris and depositional sequence indicates that cremation at Fântânele–Dâmbul Popii involved considerably more than the burning of the corpse followed by burial. The body was transformed on the pyre, its remains were collected selectively, sometimes separated spatially or placed inside vessels, and only a fraction of the cremated skeleton was normally incorporated into the grave. The final funerary deposit was then assembled through a succession of actions involving human remains, food offerings, pottery and other grave goods. The archaeological grave therefore represents the final material stage of a much longer funerary process whose earlier phases took place largely outside the grave itself.

VI.7. The grave pits and their orientation

From a geomorphological perspective, the cemetery was established on a promontory characterised by a layer of yellow marl. On the upper part of the hill this geological deposit occurs at a depth of approximately 0.35–0.40 m, while towards the northern end it lies at depths of 1 m or more. In S XXXIV, an ancient humus horizon, identified as intensely coloured black lenses, was recorded approximately 0.90 m below the present surface. These observations suggest that a dark soil layer originally covered much of the promontory but was subsequently reduced or removed in several areas through erosion and agricultural activity. Soil displaced from the upper surface accumulated particularly along the margins and slopes, whereas at the western end erosion was sufficiently severe for marl-coloured deposits to become visible close to the modern surface. This differential erosion explains why some graves were encountered at depths of only 0.20–0.25 m despite having originally been dug considerably deeper (Fig. 24).

The morphology of the grave pits can be reconstructed from the excavation drawings in combination with the descriptions preserved in the field journal. Cremation grave pits display considerable formal diversity. Circular, oval and quadrangular forms with rounded corners predominate, but transitional forms are also common, particularly pits combining one approximately straight side with an otherwise oval or rounded outline. Such graves cannot always be assigned unequivocally to a single geometric category and are therefore best understood as part of a morphological continuum rather than as rigidly standardised types.

The pits of inhumation graves were generally rectangular with rounded corners, although one oval and one irregular example were also documented. Their width was at least 0.80 m and most frequently around 1 m, while their length ranged from approximately 1.50 to 2.05 m. Recorded depths were usually modest, commonly around 0.50 m from the contemporary excavation surface, although one grave reached 0.90 m and the deepest approximately 1.30 m.

Cremation graves display a wider range of dimensions. The smallest documented pit measured approximately 0.60 × 0.72 m, while the largest reached 1.70 × 2.30 m. Most fell within a range of approximately 1.20–1.50 × 1.40–1.80 m. The dimensions of the grave pits do not appear to correlate straightforwardly with the age of the deceased. Graves belonging to children were not consistently smaller and measured between approximately 1–1.55 × 1.15–1.60 m. This suggests that grave size was governed by factors other than the physical dimensions of the body alone, including the quantity and arrangement of grave goods, the structure of the funerary ceremony and perhaps social conventions concerning the construction of the burial space.

The depth of cremation graves varied equally markedly. The shallowest examples survived to depths of only approximately 0.20–0.40 m, while grave no. 7 reached 2 m. Most graves were approximately 1 m deep. Although erosion certainly affected the surviving depth of individual features, topography alone cannot account for the variation. Grave no. 7, the deepest burial in the cemetery, was situated close to the highest point of the central part of the promontory, whereas nearby grave no. 9 survived to a depth of only approximately 0.40 m. The depth and dimensions of individual graves therefore appear to reflect funerary choices alongside subsequent geomorphological processes.

grave no.	rite	shape	dimension	depth
1	cremation	irregular	?	0.50 m
2	cremation	oval	1.20 × 1.50 m	outline: 0.30 m / bottom: 0.80 m
3	cremation	?	?	outline: 0.40 m
4	cremation	oval	Ømax 1.50 m	outline: 0.30 m
5	inhumation	rectangular	1 × 2 m	bottom: 0.90 m
6	cremation	oval	Ømax 1.30 m	bottom: 0.53 m
7	cremation	rectangular	1.40 × 1.90 m	level 1 0.60 m / level 2 1.20 m / bottom: 2 m
8	cremation	?	?	outline: 0.25–0.30 m
9	inhumation	rectangular	1 × 1.70 m	outline: 0.20–0.25 m
10	cremation	oval	Ømax 1.80 m	outline: 0.20–0.30 m / bottom: 1 m
11	cremation	oval	Ømax 1.20 m	bottom: 0.42 m
12	cremation		Ømax 1.20 m	outline: 0.30–0.35 m / bottom: 0.60 m
13	cremation	oval	Ømax 1.30 m	
14	cremation	rectangular-oval	1 × 1.20 m	outline: 0.20–0.25 m / bottom: 0.70 m
15	cremation	oval	0.60 × 0.85 m	outline: 0.25–0.30 m / bottom: 0.45 m
16	cremation	oval	0.85 × 1.55 m	outline: 0.25–0.30 m / bottom: 0.60–0.62 m
17	cremation	rectangular-oval	1.20 × 1.70 m	outline: 0.30 m / bottom: 1 m
18	cremation	oval	1.60 × 2.20 m	outline: 0.20–0.25 m

grave no.	rite	shape	dimension	depth
19	cremation	rectangular	1.10 × 1.60 m	outline: 0.30–0.35 m
20	cremation	rectangular-oval	1.75 × 1.80 m	outline: 0.20 m / bottom: 0.75 m
21	cremation	rectangular	1.55 × 1.32 m	outline: surface / bottom: 1.35 m
22	cremation	rectangular	0.90 × 1.20 m	outline: 0.40 m
23	cremation	rectangular	1.25 × 1.80 m	outline: 0.25 m / bottom: 0.64 m
24	cremation	?	1.80 × 2 m	
25	cremation	rectangular	0.85 × 1.30 m	outline: 0.20–0.25 m / bottom: 0.75 m
26	cremation	oval	1.70 × 2.30 m	outline: 0.25 m / bottom: 0.70/0.90 m
27	cremation	oval	1 × 1.50 m	outline: 0.20–0.25 m
28	cremation	circular	Ø 1.50 m	outline: 0.20–0.25 m / bottom: 0.45 m
29	cremation	circular	Ø 1.25 m	outline: 0.20–0.25 m / bottom: 0.50 m
30	inhumation	rectangular	0.80 × 1.70 m	outline: 0.30 m
31	cremation	oval	1.05 × 1.25 m	outline: 0.20 m / bottom: 0.90 m
32	cremation	irregular	1.30 × 1.50 m	outline: 0.30 m / bottom: 0.60–0.70 m
33	cremation	oval	1.45 × 1.90 m	outline: 0.30–0.35 m / bottom: 1.10–1.20 m
34	cremation	rectangular-oval	1.15 × 1.40 m	bottom: 0.30–0.40 m
35	inhumation	rectangular	1.00 × 1.50 m	bottom: 0.30–0.35 m
36	cremation	rectangular	0.90 × 1.25 m	
37	cremation	oval	1.50 × 1.70 m	bottom: 0.30 m
38	inhumation	oval	Ømax 1.50 m	
39	cremation	oval	Ømax 1.50 m	outline: surface / bottom: 0.35–0.40 m
40	cremation	rectangular-oval	1 × 1.50 m	bottom: 0.60–0.70 m
41	cremation	rectangular	1.70 × 1.80 m	bottom: 2 m
42	cremation	rectangular	1.50 × 1.60 m	outline: surface / bottom: 1.10 m
43	cremation	rectangular	1.50 × 1.80 m	bottom: 1.10–1.20 m
44	cremation	irregular	1.45 × 1.80 m	
45	cremation	?	?	
46	cremation	rectangular	1/0.60 × 0.80 m	outline: surface / bottom: 1.02 m
47	cremation	rectangular	1.40 × 1.50 m	outline: surface / bottom: 1 m
48	cremation	rectangular	1.40 × 1.70 m	outline: surface / bottom: 0.90 m
49	cremation	rectangular	1.35 × 2 m	bottom: 0.75 m
50	cremation	oval	1.25 × 1.40 m	bottom: 0.35 m
51	cremation	rectangular	1.30 × 1.70 m	bottom: 0.66–0.70 m
52	inhumation	irregular	1 × 1.10 m	outline: 0.25–0.30 m / bottom: 1.30 m
53	cremation	circular	0.95 × 1.15 m	bottom: 0.60 m
54	cremation	oval	1.15 × 1.60 m	bottom: 0.30–0.35 m
55	cremation	rectangular	1.20 × 2 m	bottom: 0.30–0.35 m
56	cremation	oval	?	outline: 0.20 m
57	cremation	triangular	1.05 × 1.15 m	bottom: 0.18 m
58	cremation	rectangular-irregular	1.40 × 1.70 m	outline: surface / bottom: 0.40 m
59	cremation	rectangular	1.50 × 1.90 m	bottom: 1.50 m
60	cremation	oval	1 × 1.25 m	bottom: 0.36 m
61	cremation	oval	1.40 × 1.60 m	bottom: 0.35 m
62	cremation	rectangular-oval	1.40 × 2 m	outline: 0.28 m / bottom: 0.40–0.55 m
63	cenotaph	oval	?	bottom: 0.85 m
64	cremation	oval	1.55 × 1.80 m	outline: 0.20–0.24 m / bottom: 0.80 m
65	cremation	circular	Ø 1.60 m	outline: 0.20–0.24 m / bottom: 1.10 m
66	cenotaph	circular	1.60 × 1.90 m	outline: 0.20–0.25 m / bottom: 0.60 m
67	cremation	circular	Ø 1.35 m	outline: 0.30 m / bottom: 1.20 m
68	cremation	oval-irregular	1.30 × 1.45 m	outline: 0.30 m / bottom: 1.09 m
69A/69B	cremation	?	?	bottom: 0.50 m

grave no.	rite	shape	dimension	depth
70	cenotaph?	circular	1.25 × 1.40 m	
71	cremation	rectangular	1 × 1.25 m	outline: 0.20–0.25 m / bottom: 0.60 m
72	cremation	oval	1 × 1.50 m	outline: 0.20–0.25 m / bottom: 0.40–0.43 m
73	cremation	rectangular-oval	1.45 × 1.70 m	outline: 0.30 m / bottom: 0.60 m
74	cremation	square	1.40 × 1.40 m	bottom: 0.30–0.35 m
75	cremation	square	0.90 × 0.90 m	
76	cremation	rectangular	0.72 × 1.60 m	outline: 0.25–0.27 m
77	cremation	oval	1.70 × 1.80 m	bottom: 0.32 m
78	cremation	oval	1.30 × 1.90 m	bottom: 0.30 m
79	inhumation	rectangular	0.85 × 2.05 m	outline: 0.30 m / bottom: 0.56 m
80	cremation	rectangular	1.80 × 2 m	outline: 0.40 m
81	inhumation	?	?	bottom: 0.25 m
82	cremation	?	?	bottom: 0.15–0.20 m
83	cremation	rectangular	1.20 × 1.55 m	outline: 0.15–0.20 m / bottom: 0.45 m
84	cremation	?	?	

Fig. 24. Metric data of the grave pits.

Information concerning orientation is less complete. The principal evidence derives from the excavation journal because orientation was not systematically recorded in the graphic documentation. This limitation is particularly significant for cremation graves, where the orientation of the grave pit and the position of the cremated remains may represent separate aspects of the funerary arrangement.

Where the position of the cremated remains can be reconstructed, they were most frequently deposited in the north-western quarter of the grave pit, occasionally closer to the north-north-western or west-north-western margins. Less frequently they occurred in the centre, while deposits near the eastern, south-western or southern margins were uncommon. This repeated preference for the north-western part of the grave is noteworthy. Although the surviving documentation does not allow a rigid orientation rule to be reconstructed, the recurrence suggests that the internal arrangement of cremation graves was spatially structured rather than random.

Among oval graves for which orientation could be established, pits with a N–S longitudinal axis slightly outnumber those aligned E–W, although minor deviations from the principal cardinal directions occur frequently. For four inhumation graves, orientation is unknown. Graves no. 5, 9 and 35 contained individuals with the head towards the north, while the deceased in grave no. 79 was oriented with the head towards the south. The small sample prevents the identification of a uniform rule for inhumation.

Comparable variability is characteristic of other Late Iron Age cemeteries. At Gâmbaş, the single inhumation was oriented with the head towards the south-east (BĂLAN ET AL. 2015, 139). At Pişcolt, among the 186 graves of the biritual cemetery, 21 inhumations were oriented towards the north-west, ten towards the north and another ten towards the west (NÉMETI 1993, 117). At Tărian, both cremation and inhumation graves generally followed N–S or SE–NW axes (CHIDIOŞAN – IGNAT 1972, 569), whereas the seven inhumations at Ciumeşti displayed seven different orientations (ZIRRA 1967, 8).

The longitudinal axes of cremation graves at Sajópetri were predominantly NW–SE (SZABÓ – TANKÓ 2018, 139). At Ludas, inhumed individuals were generally placed with the head towards the south-south-east (SZABÓ – TANKÓ 2012, 87), while at Sajópetri the head was normally oriented towards the south-east, with two exceptions towards the south-west (SZABÓ – TANKÓ 2018, 139). At Tiszavasvári, orientations varied around a NW–SE axis, with two individuals facing

north-west and two south-east, while child graves followed a different pattern (ALMÁSSY 1998, 75). The single male inhumation at Mátraszőlős was oriented towards the south-east (ALMÁSSY 2012, 104), while the three measurable inhumations at Bernecebaráti followed a NW–SE orientation (HELLEBRANDT 1999a, 99). At Palárikovo, orientations towards the south, south-east and south-west were documented (BENADIK 1975, 97).

The variability evident both at Fântânele and elsewhere suggests that grave orientation was unlikely to have been governed by a universal La Tène funerary prescription. Local topography, the arrangement of pre-existing graves, the internal organisation of burial plots and possibly symbolic references to landscape features may all have played a role. At Ludas, for example, the longitudinal axes of graves have been related to prominent peaks of the Mátra Mountains (SZABÓ – TANKÓ 2012, 87). Whether comparable visual relationships structured the cemetery at Fântânele cannot presently be demonstrated, but the possibility should remain open when considering the relationship between funerary space and landscape.

VI.8. The placement of the grave goods

The arrangement of grave goods constitutes one of the most informative aspects of the funerary ritual at Fântânele–*Dâmbul Popii*. In 37 graves, some or all of the artefacts were found among the cremated human remains. In certain cases, traces of burning demonstrate that objects had accompanied the deceased on the pyre and were subsequently collected together with the bones. In others, unburnt artefacts were deliberately introduced among the cremated remains during the construction of the grave assemblage.

Jewellery was the most common category associated directly with human remains. Brooches predominate, while bracelets, chains and beads occur less frequently. Knives were found among the cremated bones in graves no. 1, 7, 8, 17, 25 and 65, a whetstone in grave no. 17, and weapons in graves no. 43 and 65. These associations indicate that the human remains themselves constituted a focal element around which particular objects could be arranged. Their placement among or immediately above the bones may have preserved a symbolic relationship between artefacts, bodily identity and the social persona of the deceased.

In several graves, a distinction can be made between artefacts deposited among the human bones and others placed above them. In grave no. 4, two bronze and two silver bracelets were laid over the cremated remains. A knife occupied a similar position in grave no. 17, animal bones in grave no. 49 and a small vessel in grave no. 61. In grave no. 69, a sword had been inserted obliquely into the soil above the cremated remains. Such arrangements demonstrate that vertical position within the grave could carry meaning and that grave goods were introduced during successive stages of deposition.

Knives show a particularly close relationship with animal offerings. At Fântânele–*Dâmbul Popii*, approximately 20% of the graves contained knives placed on, among or, most frequently, beside animal bones. In graves no. 7, 10, 14, 20, 59, 60, 73, 74 and 80, knives were directly associated with animal remains, while in graves no. 2, 17, 18, 31, 47, 51, 53, 56, 58 and 69 they were located beside or close to the food offering (BERECKI *fc*).

The same association is visible elsewhere in the micro-region. At Fântânele–*Dealul Iuşului*, six knives are known from 43 Late Iron Age graves, four of them connected with animal offerings. At Orosfaia, the knife from grave no. 10 lay close to animal bones (VAIDA 2000, 138–139). At Sălcuța–*Coasta Oilor*, knives were placed directly on animal offerings in graves no. 4 and 10, while in warrior grave no. 11 the knife lay close to the bones. Grave no. 14 contained a knife despite the absence of preserved animal remains (VAIDA – MARINESCU 2017; 2020).

The number of knives from Apahida is comparatively low. Only two of the 21 graves excavated systematically contained knives, although approximately five additional examples can be identified among the finds of the Orosz collection (ZIRRA 1976; BERECKI ET AL. 2017, 192–196). At Iclod–*AFI Trucks*, in the Someşul Mic valley, feature no. 8 contained a knife placed directly on a food offering, probably pig (PUPEZĂ ET AL. 2022, pl. III/6). At Pişcolt, apart from three inhumation graves, knives were likewise found predominantly in association with animal remains in cremation graves (NÉMETI 1993, 120).

Comparable patterns occur in northern Hungary. At Mátraszőlős, 23 of the 56 graves containing animal offerings also contained knives, including the cemetery's only inhumation; unidentified iron fragments in several other graves may represent additional examples (ALMÁSSY 2012). Twelve cremation graves at Sajópetri (MÉNIEL 2018, 309) and six at Ludas (SZABÓ – TANKÓ 2012) contained knives together with animal remains. Knives also occur in graves without preserved animal bones, and in some such cases boneless food offerings have been proposed (RUSTOIU 2016b, 201).

Large knives (*Hiebmesser*) are treated here separately from weapons. Although they occasionally occur in warrior graves, they are not restricted to armed males and show a much stronger association with animal offerings (RUSTOIU 2016b, 201). Their appearance in comparatively rich funerary assemblages has led to suggestions that they were associated with individuals of elevated social standing and with participation in collective feasting (SCHÖNFELDER 2010, 229; RUSTOIU 2016b, 201). Within such contexts, an everyday cutting implement could acquire a ceremonial function through its incorporation into practices of slaughter, food preparation, distribution and communal consumption (MÉNIEL 2018, 309).

This ceremonial dimension is supported by finds outside graves. A 3rd-century BC pit at Sajópetri contained a large knife together with a substantial grinding stone, shears, a chain and a socketed axe (SZABÓ 2007, 226, fig. 44). Another *Hiebmesser* was found in the unpublished Late Iron Age settlement at Cluj-Napoca–*Câmpului Street*, beside a dwelling and close to animal bones (DIMA 2008). Such contexts reinforce the connection between large knives, food processing and socially meaningful communal practices.

Eleven of the 84 graves excavated by the team led by I. H. Crişan can be identified as warrior burials, while two swords were also recorded among the discoveries made by Şt. Dănilă in 1967. The position of weapons within these graves varies considerably.

In grave no. 7, a spear was deposited in the northern part of the grave, north of the vessels, with its tip pointing east. In grave no. 17, the cremated human remains occupied the central part of the pit. The sword in its scabbard lay to their west, with the spearhead placed over the upper part of the sword and the shield fittings farther north. In grave no. 28, the sword in its scabbard, sword chain, spear and shield boss were likewise deposited in the western part of the pit, west of the human remains; the sword and spear pointed south.

Grave no. 41 contained a single sword, again west of the cremated remains, with its tip directed south. In grave no. 43, an arrowhead, spearhead and shield boss were deposited together with the cremated bones in the northern part of the pit. The shield boss in grave no. 49 overlay a spearhead pointing south-east. Grave no. 58 contained a spearhead directed west. In grave no. 65, a spearhead pointing south-west and a spear butt were deposited among the cremated bones in the southern part of the grave. The sword in grave no. 69 was inserted obliquely into the soil above the cremated remains. In grave no. 72, the spearhead was placed inside a bowl, pointing north-west, together with the blade of an iron knife and some cremated human bones.

No single rule governed the placement of weapons. They could lie beside, above or among the cremated remains, and in one case a spearhead was deposited within a vessel. Nevertheless,

swords show a tendency to occupy the western side of the cremated bone deposits. This recurrent positioning may have structured the relationship between the deceased and their weaponry within the grave, although the limited number of examples advises caution.

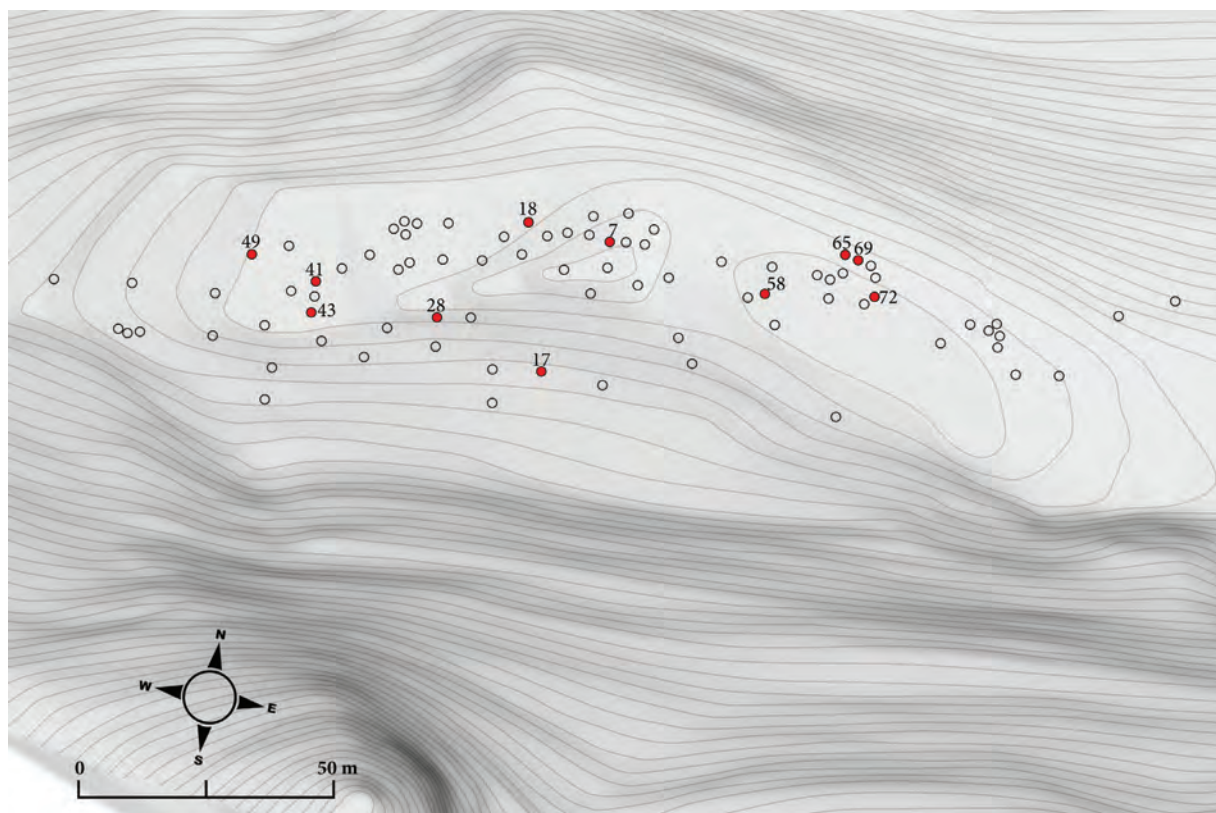


Fig. 25. Graves with weapons.

The surviving graphic and photographic documentation also indicates that the spears in graves no. 17 and 28, and probably in additional burials, were deposited without complete wooden shafts or with shafts deliberately shortened or damaged before deposition. The unusual placement of the spearhead inside a bowl in grave no. 72 strongly supports the idea that a complete functional spear could not have been present in the grave.

In graves no. 17 and 49, spearheads were found beneath shield bosses. This relationship suggests that shields may have been dismantled before burial and represented in the grave primarily through selected metal fittings. Such selective deposition is comparable to the use of a linchpin *pars pro toto*, whereby a single component could stand for a larger object or vehicle that was not physically placed in the grave (BERECKI 2018, 146, 150–151, with further bibliography).

The weapon assemblages should therefore be understood as constructed funerary representations rather than as straightforward deposits of complete military equipment. Objects could be dismantled, shortened, selected or placed in unusual positions. These actions transformed functional equipment into ritualised grave goods while preserving its association with the martial identity of the deceased.

Artefacts deliberately inserted into the ground are comparatively rare. The sword from grave no. 69 represents one such example. A knife inserted vertically or obliquely into the soil was also documented in burial 28/90 at Sajópetri (SZABÓ – TANKÓ 2018, fig. 101). Such placements suggest deliberate gestures performed during the final arrangement of the grave rather than the simple laying down of objects.

VI.9.1. The ceramic inventory. General evaluation

Pottery represents the most frequent category of grave goods at Fântânele–Dâmbul Popii. A total of 251 vessels are documented from the 94 graves and the territory of the cemetery. Of these, 160 were wheel-thrown and 66 handmade, while the manufacturing technique of 25 vessels could not be established (Fig. 26). Vessels were generally deposited side by side, sometimes grouped into several clusters or arranged in rows.

Nine graves contained only ceramic fragments rather than complete or substantially preserved vessels. Two of these fragments were recorded as wheel-thrown and two as handmade, while the manufacturing technique of the remaining examples is unknown. In several cases, vessels were too poorly preserved to be recovered, and information concerning their manufacture was consequently lost.

Thirty-one graves contained exclusively wheel-thrown pottery, whereas only five contained exclusively handmade vessels. Significantly, all five belong to the second chronological horizon and include both children and adults. Graves containing only wheel-thrown pottery are concentrated particularly in the western sector of the cemetery, corresponding to the part that developed latest (Fig. 27). This distribution reflects a chronological shift in ceramic technology and funerary selection rather than a simple division between separate cultural or social groups.

The contrast between cremation and inhumation graves is particularly pronounced. Four of the eight inhumations – graves no. 5, 30, 35 and 52 – contained no pottery. Grave no. 9 contained a single vessel beside the right side of the pelvis, grave no. 38 three vessels to the right of the skeleton, grave no. 79 two vessels at the left side of the feet, and grave no. 81 one vessel in the coxofemoral region. Inhumation graves therefore never contained more than three ceramic vessels, considerably fewer than cremation graves.

Cremation graves no. 49, 54, 57, 75 and 76 contained no ceramic vessels. Graves no. 54, 57 and 75 lacked grave goods altogether; graves no. 54 and 57 belonged to *Infans I* individuals. The presumed cenotaphs no. 63, 66, 67 and 70 likewise contained no complete vessels, although ceramic fragments occurred in some cases.

The maximum number of vessels deposited in a single grave was six, a quantity recorded in six graves. In graves no. 2 and 18, all six vessels were wheel-thrown; the remaining assemblages combined handmade and wheel-thrown wares. The same maximum of six vessels is documented at Ciumești, where cremation graves contained up to six vessels while inhumations contained no more than two (ZIRRA 1967, 14). At Gâmbaș, by contrast, individual graves could contain as many as twelve vessels (BĂLAN ET AL. 2015, 140), while at Pișcolt only one of the 83 cremation graves lacked pottery and the largest assemblage comprised nine vessels (NÉMETI 1993, 119–120).

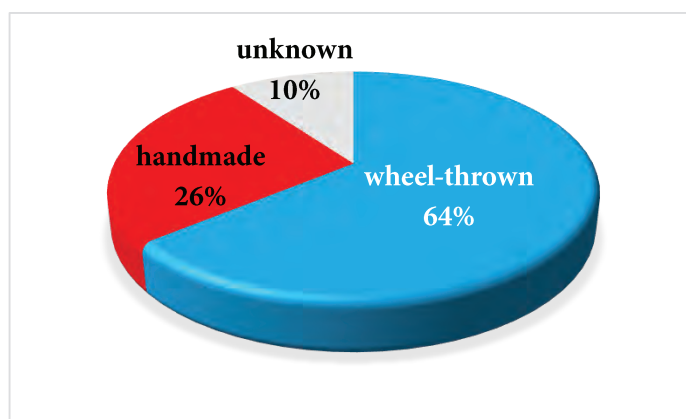


Fig. 26. Proportions of handmade and wheel-thrown pottery in the graves.

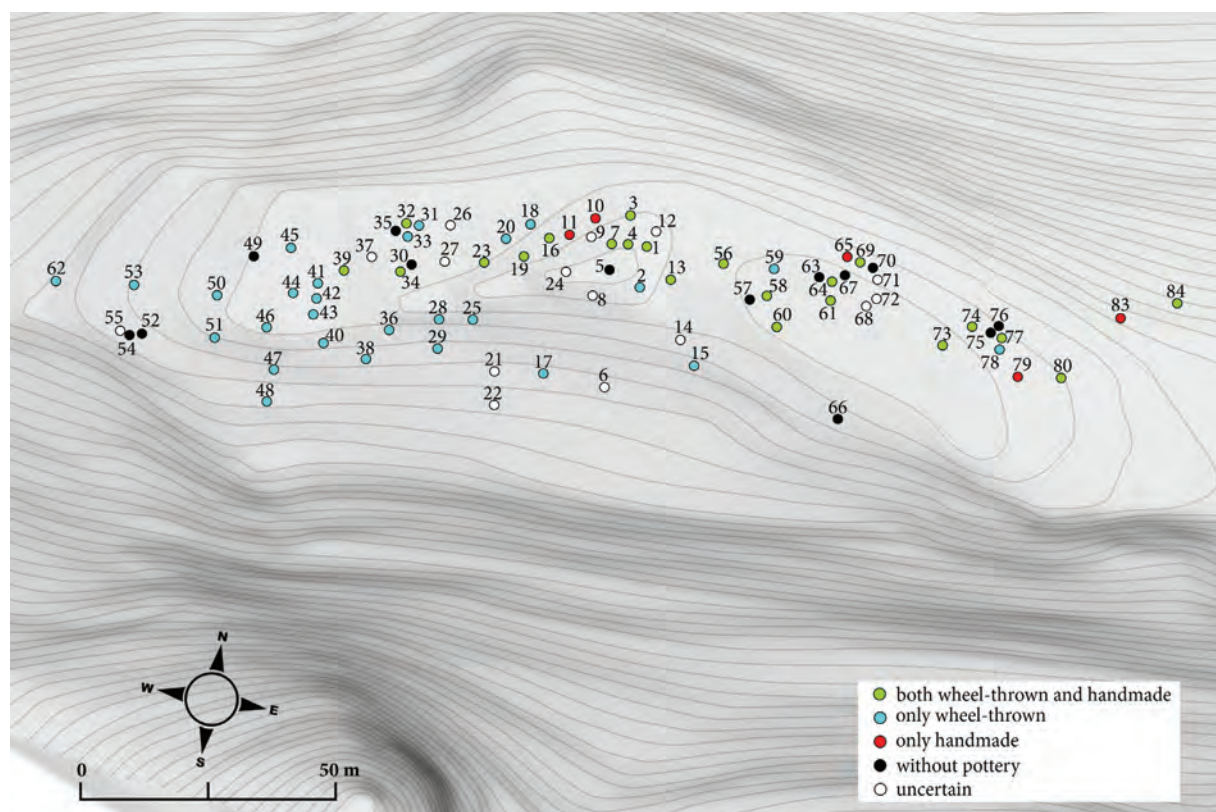


Fig. 27. Distribution of pottery in the graves.

The frequency of pottery and the contrast between cremation and inhumation indicate that ceramic deposition was closely connected with the performance of particular funerary rites. Vessels were therefore more than general indicators of wealth. Their number, function, manufacturing technique and arrangement formed part of the structure of the burial ceremony and changed through time.

VI.9.2. Pottery offerings: customs of deposition; indigenes and colonists

In his analysis of the Pișcolt cemetery, I. Némethi observed a chronological transformation in ceramic offerings. Early graves frequently contained relatively large numbers of vessels, whereas during later phases, particularly the Middle La Tène period, a recurring triad became common: a storage vessel, a vessel associated with eating, and a drinking vessel.

The pattern at Fântânele–Dâmbul Popii is more complex. No grave contains more than six vessels, while five-vessel assemblages are comparatively frequent. When selected chronologically diagnostic graves are examined according to vessel function – graves no. 4, 71 and 74 from LT B1/B2, graves no. 18 and 69 from LT B2a, graves no. 2, 58 and 59 from LT B2b, and graves no. 7 and 17 from LT C1 – the apparent numerical diversity resolves into a more coherent set of recurring functional combinations (Fig. 28).

Thus, in grave no. 2 of a child (*Infans* I), we had to deal with the deposition of six vessels. However, upon closer inspection, it becomes evident that two distinct sets of vessels were deposited in the grave, each consisting of a triad: a storage vessel, made on a potter's wheel, accompanied by a dining vessel and a drinking vessel, one handmade and the other wheel-thrown. As a result, the notion of a 'vessel deposit' loses its coherent ritual significance. The deposition of these two sets of vessels likely carries a specific ritual connotation. This situation evokes a grave located

in Csobaj, which is dated to LT C1, where a triad of vessels designated for the deceased was interred, alongside six sets of vessels, each including a storage vessel and a dining vessel. These offerings were presumably provided by the attendees of the funeral ceremony (see RUSTOIU – EGRI 2010c; 2011).

grave no.	storage vessels	tableware	drinking vessels	total	observations
LT B1/B2					
4	2 wheel-thrown	2 1- handmade 1- wheel-thrown	2 1- handmade 1- wheel-thrown	6	<i>Infans I</i>
71	2 wheel-thrown	2 wheel-thrown	1+1? wheel-thrown	6	<i>Infans II</i> , 7–14
74	2 1- handmade 1- wheel-thrown	2 1- handmade 1- wheel-thrown	1?	5?	?
LT B2a					
18	4 wheel-thrown	2 wheel-thrown	0	6	adult, >20
69 A+B	1 A 1 B handmade	1 A 1 B wheel-thrown	1 A handmade	5	double grave: A – adult, >25 B – <i>Infans II</i> / <i>Juvenis</i> , 14–19
LT B2b					
2	3 wheel-thrown	1 wheel-thrown	2 wheel-thrown	6	<i>Infans I</i> , 4–6
58	2 1- handmade 1- wheel-thrown	2 1- handmade 1- wheel-thrown	1 handmade	5	adult, male, 23–30
59	2 wheel-thrown	2 wheel-thrown	1 wheel-thrown	5	?
LT C1					
7	3 2 – handmade 1- wheel-thrown	1 handmade	1 handmade	5	adult 23–25
17	2 wheel-thrown	1 wheel-thrown	1 wheel-thrown	4	adult, male

Fig. 28. Functional associations of pottery deposited as offerings.

The other grave selected from the first horizon of the cemetery, also belonging to a child, this time an *Infans II*, seems to illustrate the same rule. The deposition of two triads of vessels, all wheel-made. Grave no. 74, likewise belonging to the first horizon, appears to follow the same principle. One set contained a storage vessel and a handmade dining vessel, while the second mirrored this composition with wheel-thrown vessels. A drinking vessel, which has not been preserved, could have belonged to either set.

Among the selected graves belonging to phase LT B2a, grave no. 69 is particularly notable, as it serves as a double burial site for both an adult and a juvenile. In this case, the two sets of vessels, one for each deceased, are well separated within the grave pit. One of the sets contains the triad of vessels (storage vessel, dining vessel, drinking vessel), while the second consists only of a storage vessel and a dining vessel. Naturally, one might question whether wooden containers were also included among the vessels, which would imply that one of the sets could have featured such a drinking vessel. On the other hand, for graves that lack any vessels, which are relatively

common, it is plausible to consider the possibility of wooden vessels. This interpretation is further supported by other archaeological findings. For instance, in the settlement of Solotvino, located in Transcarpathian Ukraine, a variety of ceramic vessels intended for cooking, storage, and consumption were uncovered; however, the quantity of drinking vessels was notably limited. Consequently, the researchers speculated whether these might have been wooden containers (VASILIEV ET AL. 2002), in an area where forests were extensive at that time (RUSTOIU 2019b).

Grave no. 18 likewise contained two sets of pottery forming the funerary offering, represented by two storage vessels (probably containing different liquids) and one eating vessel. The same situation is observed in grave no. 58 from horizon LT B2b. Graves no. 2 and 59 also seem to illustrate the same arrangement of vessels in two sets, with a varying number of storage vessels.

As for the graves from the LT C1 phase, graves no. 7 and 17, they seem to contain a large number of vessels, but in reality, there is only one set that includes a drinking vessel and a dining vessel, alongside more than one storage vessel. In the case of grave no. 17, one of the two storage vessels is a carafe. This situation suggests a particular manner of consuming the liquid it holds, potentially an alcoholic drink.

As suggested above, the larger number of storage vessels could be due to the different liquids that were deposited in the grave. For the 'Celtic horizon' in our area, we lack palynological or lipid analyses to determine the contents of the vessels. However, palynological analyses were conducted in the 'Scythian' cemetery at Sâncrai, revealing that certain vessels held water that was merely sourced from the marshes adjacent to the nearby Mureş River, which accounts for the presence of algae and animal waste in the water (RUSTOIU – DRĂGAN 2022; see also GRINDEAN ET AL. 2023).

Returning to the sets of vessels from the selected 'diagnosis' graves, it is quite clear that the appearance of 'vessel deposits' in some burial complexes is determined by the rituals practised during the burial, which included, among other things, the deposition of several 'individual' sets of vessels. In some cases, we are dealing with double graves. In other cases, however, we can interpret the deposition of sets as offerings made by other participants in the ceremony, as is observed in a conspicuous manner at Csobaj, previously discussed.

The traditional practice of presenting two distinct 'individual' sets may carry an additional significance. One set is designated for the deceased in the afterlife, while the other is used during the funeral banquet to imply the symbolic involvement of the deceased in the feast. Subsequently, the latter set was removed, thus eliminated from the realm of the living, and interred with the deceased.

Finally, another hypothesis could be put forward. The deceased, as messengers of mortals to the afterlife, could be vehicles for the transfer of offerings to the ancestors, specifically to the deceased relatives of those attending the funeral. These offerings were placed in graves alongside the usual offerings for the deceased. Tablets from the Mediterranean area inscribed with curses and magic spells were often sent through the deceased to the afterlife (see RUSTOIU 2019a with the bibliography). The concept of a messenger to the gods is also recorded in ancient sources, as is the case, for example, with the envoy sent by the Getae to Zalmoxis (see Herodotus IV, 94).

Concerning the triad of vessels, which, as previously discussed, has been found in graves since the beginning of the cemetery (refer to grave no. 25, which exclusively holds a triad of vessels designated for storage, consumption, and drinking), it is distinguished as a singular set placed in graves, particularly from the LT B2b and LT C1 phases, as noted by I. Némethi in relation to the Pişcolt cemetery. In this context, we highlight graves no. 28, 29, 31, 38, 40, 42, 46, 47, 48, 53, and 64. It is generally observed that these collections consist solely of wheel-thrown vessels.

A significant topic of discussion during the 1960s to 1980s was the importance of handmade pottery originating from the 'Celtic' cemeteries and settlements of the early to middle La Tène

period (see especially CRIȘAN 1966; 1969, etc.). It was widely accepted that hand-crafted pottery was associated with the indigenous population, often referred to as the ‘Dacians’, and that it illustrated the interaction between the ‘Dacians’ and the ‘Celts’. By the 2nd century BC, this interaction was believed to have led to the integration of the ‘Celtic’ community into the ‘Dacian’ population.

However, the examination of the cemetery at Fântânele–Dâmbul Popii reveals that hand-made pottery is more prevalent during the initial phases, whereas in the subsequent phases, wheel-thrown vessels gain greater prominence. Consequently, it is clear that there is no evidence to support the notion of the ‘Celts’ being assimilated by the local population.

But who were they? The period between the 4th century and the first quarter of the 3rd century BC witnessed intense human mobility across temperate Europe, from west to east, but also southwards, first to the Italian Peninsula, then to the Balkans and Asia Minor. The Carpathian Basin was also affected by these population movements. It was not a mass invasion, but a gradual advance of ‘Celtic’ groups. In the eastern part of the Carpathian Basin, this occupation of the territory took the form of a gradual colonisation, in successive stages that spanned the second half of the 4th century and the first quarter of the 3rd century BC. The advance of ‘Celtic’ groups along the northern region of the Great Hungarian Plain, then southward along the Western Carpathians to Banat and the Belgrade area, including incursions into Transylvania, was marked by cemeteries that began to exist during that period (RUSTOIU 2008a; 2014a etc). The cultural and social contacts established between the newcomers and the local communities soon resulted in a culturally hybridised landscape that is archaeologically evident. While the first generations maintained a local identity, as evidenced by the preservation of specific funerary practices, over time, the local populations began to embrace the characteristics of La Tène culture (RUSTOIU 2008a; 2014a; RUSTOIU – BERECKI 2016).

In the cemetery at Fântânele–Dâmbul Popii, no graves have been found that can be attributed to the indigenous population. The degree of cultural hybridisation is illustrated by a series of specific situations within the cemetery. Thus, grave no. 10 contains a set of handmade pots. However, the ritual elements, the deposition of cremated remains and offerings in a wooden ‘box’, and the costume elements are all of La Tène origin and find analogies in Central Europe (see RUSTOIU – BERECKI 2016). The presence of local pottery indicates, however, the coexistence of indigenous people and newcomers, as well as a blending of culinary traditions. Analysis of the pottery has revealed that in the early phases, the technical and morphological repertoire of hand-made vessels is similar to that of the area beyond the Carpathians where ancient literary sources position the Getae. Moreover, the presence of this local pottery also indicates that the indigenous people benefited from the services of potters familiar with the production of these types of vessels. Most of the time, however, these items were integrated into La Tène pottery ensembles (as demonstrated by the composition of the sets of vessels deposited in graves), being used according to the norms of the newcomers.

We can trace the fate of the indigenous population in the intramountainous depressions in the north and east of this region. Thus, in Maramureș and in the eastern Transylvanian depressions, areas that were not affected and ‘contaminated’ culturally by ‘Celtic’ colonisation, the local population continued to exist according to their own cultural and social models, which were connected mainly to the extra-Carpathian and Lower Danube models. This explains the emergence of fortified settlements in Maramureș and the presence of cremation cemeteries in the eastern Transylvanian regions, which are attributed to the indigenous communities, all of which exhibit parallels in the ‘Getic’ territory situated beyond the mountains (RUSTOIU 2008a; 2014a).

Finally, the ‘Celtic’ settlers established and cultivated a series of social networks involving both the indigenous people of the occupied areas and the Getae elites from beyond the Carpathians

(RUSTOIU 2012a; 2017a). These interactions resulted in noticeable individual mobility, which was evident in inter-community marriages and the movement of craftsmen who had previously been active in the east. Grave no. 79 likely exemplifies the mobility of a woman who came to Fântânele through exogamous practices, while the craftsman's grave no. 34 further illustrates the extensive mobility of artisans within Iron Age societies.

VI.10. Animal offerings

Animal remains were documented in 56 of the 94 known graves at Fântânele–*Dâmbul Popii*, corresponding to approximately 59% of the burials. This figure is reconstructed from Șt. Dănilă's publication together with I. H. Crișan's excavation journals and graphic documentation and therefore provides a considerably more complete picture than the published archaeozoological analysis alone.

The frequency of animal offerings varies considerably between cemeteries in the region. At neighbouring Fântânele–*Dealul Iușului*, 19 of the 43 excavated Late Iron Age graves, approximately 44%, can securely be identified as containing animal offerings, while seven certainly lacked animal bones; information is unavailable for the remainder (Berecki *fc*). At Sălcuța–*Coasta Oilor*, three of the 15 excavated graves were inhumations and none contained animal remains. Apart from grave no. 14 and grave no. 15, both affected by landslides, every cremation burial contained animal offerings (VAIDA – MARINESCU 2017; 2020). At Orosfaia, animal remains were identified in four cremation graves (VAIDA 2000).

The evidence from Apahida demonstrates how strongly excavation and collection methods can influence apparent frequencies. The early investigations conducted by Endre Orosz paid little attention to archaeozoological material, whereas the 21 cremation graves excavated by I. Kovács were documented according to considerably more systematic standards. Twenty of these 21 graves contained animal bones (KOVÁCS 1911).

At the opposite extreme, none of the 18 excavated graves at Bodroghalom contained animal remains (HELLEBRANDT 1999b, 198). At Pișcolt, 67 of the 186 graves, approximately 36%, contained animal offerings (NÉMETI 1988a; 1989; 1992). At Sajópetri, animal bones were recorded in 47 of the 58 cremation graves and six of the 32 inhumations (MÉNIEL 2018). At Ludas, 36 of 82 graves, approximately 44%, contained animal bones (MÉNIEL 2012), while at Mátraszőlős the proportion reached approximately 89%, with animal remains documented in 56 of the 63 known graves (VÖRÖS 2012, 217).

At Fântânele, animal offerings are overwhelmingly associated with cremation graves. Only one inhumation, grave no. 52 from LT C1, contained animal remains: three large vertebrae placed around the mouth of the deceased. The grave contained only two brooches and no pottery, suggesting that the vertebrae themselves constituted the principal preserved food offering.

The same pattern occurs elsewhere in the micro-region. No animal remains were documented in the inhumations at Sălcuța or Orosfaia. At Fântânele–*Dealul Iușului*, only one of nine inhumations, grave no. 18/2005 belonging to a female aged 15–17 years, contained animal bones (BERECKI *fc*). At Pișcolt, nine of the 76 inhumations contained animal remains, none dating to the final LT C1 horizon (NÉMETI 1993, 117). Six of the 32 inhumations at Sajópetri contained animal remains (MÉNIEL 2018), while the single inhumation at Mátraszőlős contained pig bones (ALMÁSSY 2012, 104–105). At Ludas, animal bones occurred in only one of five inhumations (MÉNIEL 2012).

The close relationship between cremation and animal offerings at Fântânele is therefore unlikely to be accidental. Food deposition appears to have formed a particularly important

component of the cremation rite, perhaps connected with the sequence of activities surrounding the pyre, funeral banquet and final deposition of the remains.

The animal bone assemblage from Fântânele–Dâmbul Popii has unfortunately been analysed only partially. The published archaeozoological study covered material from the first 53 graves (HAIMOVICI 2006), but several aspects reduce its usefulness for reconstructing grave-by-grave funerary practice. The study refers exclusively to cremation graves, although six of the first 53 burials were inhumations. Furthermore, while the excavation documentation records animal offerings in 38 of these graves, only material from 26 graves was included in the archaeozoological analysis, and the finds were grouped primarily by species rather than by archaeological context.

Three principal categories were identified: pig, fowl and ovicaprids. Cattle remains were interpreted as modern contamination. Pig and fowl occasionally occurred together in the same grave. Only two pig bones showed traces of burning, while the majority of animal remains were deposited unburnt. Most pigs were slaughtered between approximately 12 and 24 months of age (HAIMOVICI 2006, 236).

The field documentation provides more detailed contextual information, although species identifications are frequently imprecise. For 21 graves, the records mention only ‘animal bone’. Pig is identified explicitly in a substantial number of graves, while fowl occurs in graves no. 10 and 33. Pig and fowl were deposited together in graves no. 11, 17, 21, 40, 46, 61 and 73. In graves no. 13 and 56, pig was associated with an ‘other animal’, while grave no. 72 contained fowl together with another unidentified species. Sheep, recorded in the archaeozoological analysis, does not appear explicitly in the excavation journal and was presumably either unrecognised during excavation or included among unidentified animal remains.

The prevalence of pig is consistent with patterns observed in other La Tène cemeteries, where selected portions of meat were deposited as food offerings. The almost complete absence of burning on these remains is significant. It implies that animal portions were generally not cremated together with the deceased but were introduced separately into the grave, presumably after the cremation itself. This distinction further supports the reconstruction of the funeral as a sequence of differentiated ritual actions.

Two of the features interpreted as possible cenotaphs contained animal bones as their only grave goods. This raises the possibility that these features were not symbolic graves in a narrow sense but deposits created during ceremonies performed within the cemetery. If no human remains were ever intended for deposition, the pits may represent commemorative or sacrificial practices associated with the funerary landscape. Comparable activities have been proposed for ditched or otherwise delimited areas without burials in Late Iron Age cemeteries elsewhere in the Carpathian Basin (BERECKI 2021a, 64).

Animal offerings should therefore be approached as evidence for both the treatment of the deceased and the participation of the living. Meat deposited in the grave may represent a provision for the deceased, the material residue of food shared during the funeral, or both. The recurrent association between animal bones, knives and pottery further indicates that food preparation, consumption and deposition formed interconnected components of the funerary ceremony.

VI.11. The arrangement of the grave pits’ interiors

The internal structure of several grave pits reveals that the funerary deposit was constructed in stages and that graves could contain architecturally differentiated spaces. Differences in depth, stepped profiles, wooden installations and stone arrangements demonstrate that the grave pit

itself formed an active component of the funerary ritual rather than merely a container for human remains and objects.

Several graves contained deposits arranged on more than one vertical level. Grave no. 7 provides the most complex example. At a depth of approximately 0.60 m, one concentration of cremated human remains was recorded together with pyre debris and a brooch. A second comparable concentration occurred at approximately 1.20 m, while the remainder of the grave goods was deposited at the bottom of the pit, which was partly lined with stone slabs. Grave no. 33 likewise contained three concentrations of cremated human remains distributed across two levels: a lower deposit at approximately 1.10–1.20 m and another at 0.20–0.30 m.

Other grave pits were deliberately excavated in steps. Grave no. 25 contained one such step, on which a vessel was placed, while the remainder of the assemblage occupied the bottom of the grave. In grave no. 46, three sides of the pit were stepped and part of the step was covered with stone slabs, whereas the grave goods were concentrated in the deeper central section.

Inhumation grave no. 52 had an irregular outline composed of one straight and one semi-circular side. The semicircular part was excavated in steps, while the skeleton lay comparatively close to the upper level of the grave pit (pl. XLIV/b). A similar arrangement has been documented in grave no. 36 at Tiszavasvári (ALMÁSSY 1998, 64). In the case of grave no. 52, however, it remains possible that the apparent complex shape resulted from the overlap of a rectangular grave with an earlier circular or oval feature.

Grave no. 64 was also constructed on two levels. The grave goods occupied the eastern part at a depth of approximately 0.40–0.45 m, while the western part of the pit reached approximately 0.80 m. Grave no. 65 was circular and stepped down to a depth of approximately 1.10 m. Its grave goods were arranged around the shallower periphery, whereas the deeper central area remained empty. Grave no. 68 displayed another configuration: its oval pit was first recognised at a depth of approximately 0.30 m and descended in several steps to 1.09 m, while cremated human remains and ceramic fragments were scattered across the pit at several levels.

Stepped graves are well documented elsewhere in the Carpathian Basin. Numerous examples occur at Malé Kosihy (BUJNA 1995, Abb. 26a, 31b, 55, 61, 63, 64, 74, 77, 78, 80, 92, 97b, 100), while comparable forms are known from Tiszavasvári (ALMÁSSY 1998, 60), Alsónyék–Bátaszék (GALLINA ET AL. 2010, 32), Ménfőcsanak (Uzsóki 1987, 29) and Palárikovo (BENADIK 1975). At Ciumeşti, slightly inclined steps were occasionally used to support vessels (ZIRRA 1967, 13), closely paralleling the arrangement in grave no. 25 at Fântânele.

The recurrence of such constructions indicates that stepped grave pits were intentional architectural elements rather than incidental irregularities. They created differentiated depositional zones within the same grave and could determine the relative position of human remains and grave goods. In this respect, vertical organisation complemented the horizontal arrangement discussed above.

Wooden structures provide another important component of the internal architecture (Fig. 29). The best-preserved example occurs in grave no. 10, where shaped wooden beams divided the pit into two distinct compartments. Cremated human remains, two handmade vessels and two bronze brooches were placed in the north-western section of this funerary ‘box’, while a handmade bowl with an inverted rim and a meat offering occupied the opposite compartment.

A simpler, single-compartment structure was recorded in graves no. 6 and 48. In both cases, the cremated human remains and grave goods were contained within the area delimited by the wooden construction. Grave no. 76 contained abundant charcoal over the entire surface and a beam at its southern end.

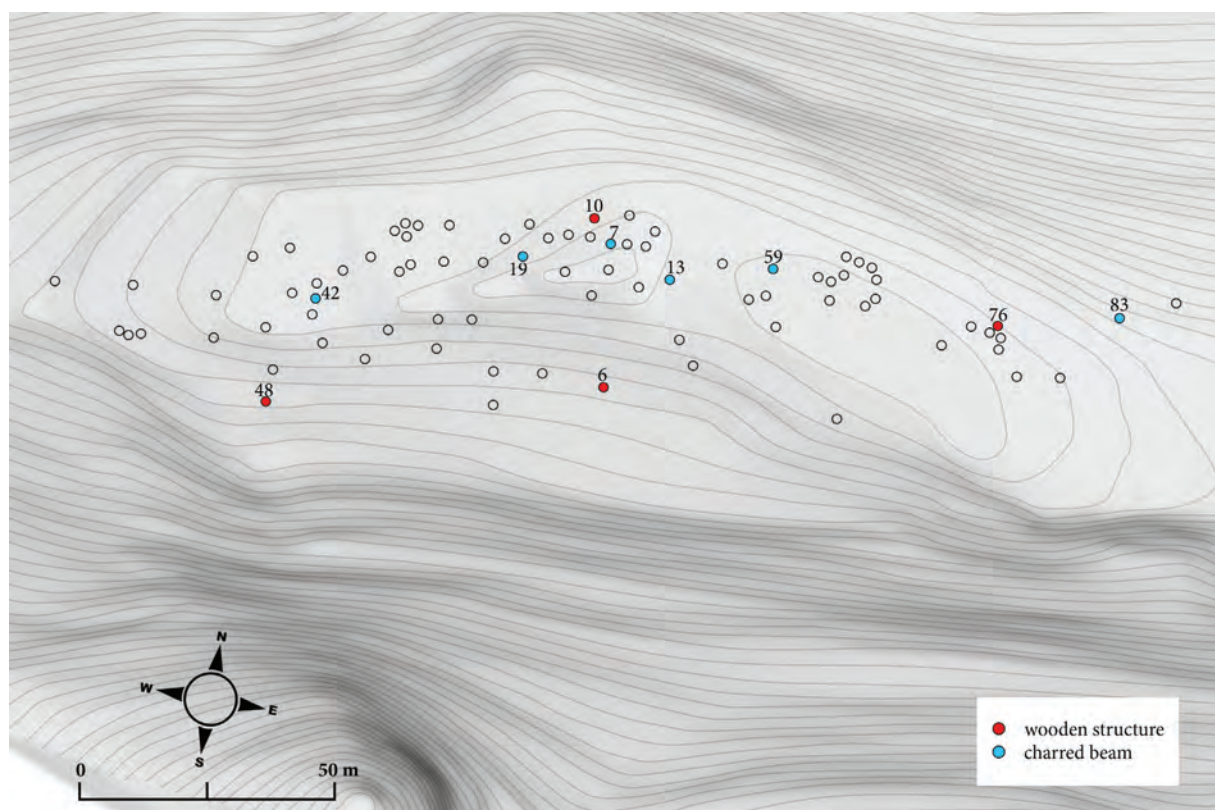


Fig. 29. Graves with wooden structures and charred beams.

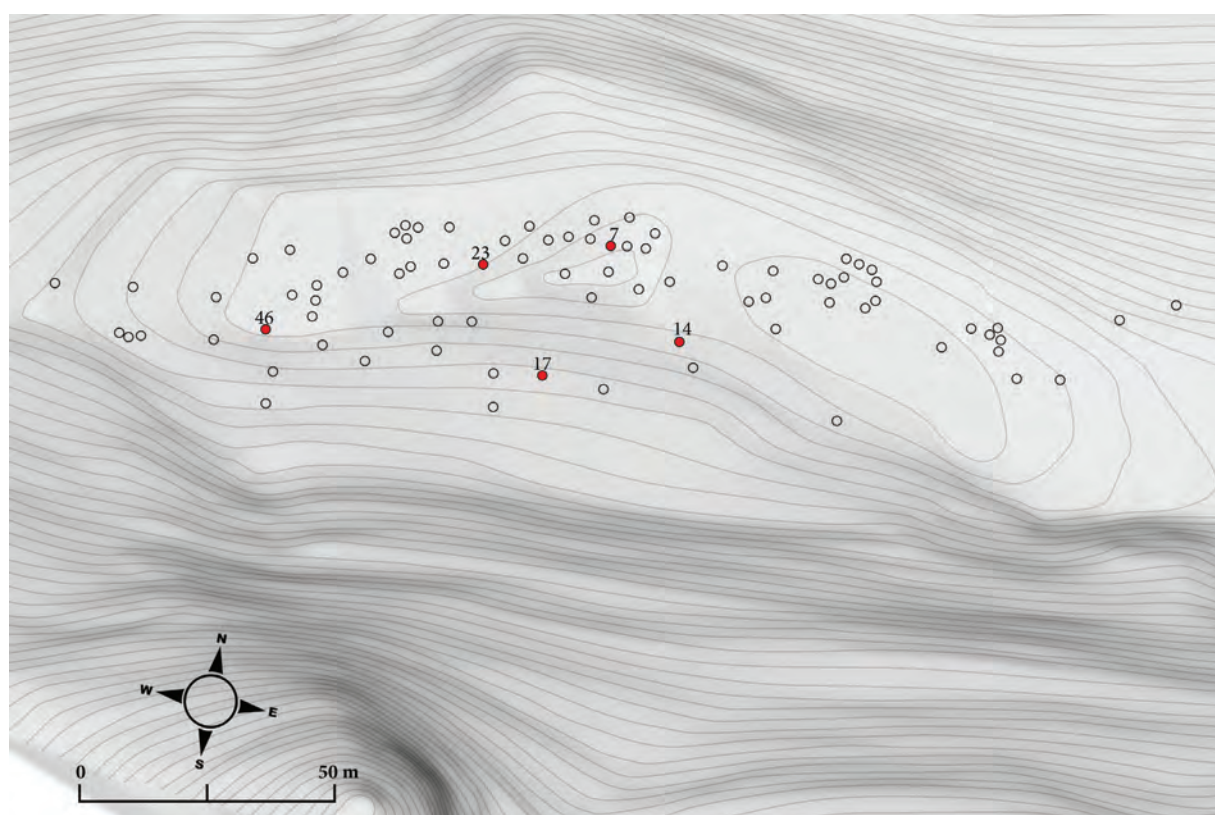


Fig. 30. Graves with stone structures.

Burnt beams or planks were also recorded in graves no. 7, 13, 19, 42, 59 and 83. In these cases, however, the surviving elements do not define coherent internal structures and are more

plausibly interpreted as pieces of the pyre transferred into the grave. The distinction between purpose-built wooden grave architecture and redeposited pyre debris is therefore essential. Similar archaeological traces may derive from very different stages of the funerary process.

Wooden installations within grave pits are documented widely in Late Iron Age cemeteries. They include timber linings, planks, structural elements derived from the pyre and wooden containers constructed specifically for the deceased or the grave goods. Examples are known from Ciumești (ZIRRA 1967, 13–14), Hegyfalú (BALÁZS ET AL. 2015, 3), Alsónyék–Bátaszék (GALLINA ET AL. 2010, 32), Novajidrány–Sárvár-erdésház (VASS – SÖRÖS 2021, 17), Bajč–Vlkanovo (BENADIK 1960, 408), Maňa (BENADIK 1978, 396–397), Palárikovo (BENADIK 1975, 98), Dubník (BUJNA 1989, 247, 288–290) and Malé Kosihy (BUJNA 1995, 86, Abb. 78). The structure in grave no. 734 at Ludas, interpreted as a wooden container for grave goods, closely resembles those in graves no. 6 and 48 at Fântânele (TANKÓ – TANKÓ 2012, fig. 7).

Stone constructions were likewise incorporated into several grave pits at Fântânele–*Dâmbul Popii* (Fig. 30). Grave no. 7 was lined and flanked on three sides with sandstone slabs, leaving a gap of approximately 50 mm between the stones and the wall of the grave pit. Part of the bottom in the north-eastern corner was also paved, precisely in the area where the vessels were deposited.

In grave no. 14, part of the bottom of the oval pit, measuring approximately 1 × 1.20 m, was paved with sandstone slabs arranged in a semicircle along the northern and eastern sides. Warrior grave no. 17 contained patches of limestone paving in the north-eastern corner and further stone slabs to the south-west, close to an offering vessel and the tip of the sword.

In grave no. 23, the entire bottom of the quadrangular pit was lined with sandstone slabs, and the grave goods were deposited above them, concentrated in the north-eastern part. Grave no. 46 was dug in two levels, and along one side of the deeper central pit the step was paved with stone slabs. These examples show that stone was used selectively to emphasise or physically structure particular areas of the grave.

Comparable arrangements are known from several Late Iron Age cemeteries. At Apahida, two large stones marked opposite ends of graves no. 9, 19 and 20, while the long sides of child grave no. 12 were lined regularly with stones. Other stone arrangements occurred in graves no. 11 and 15 (KOVÁCS 1911). The bottom of the warrior grave at Almașu Sec–*Valea Lupului* was similarly paved (FERENCZ 2022, 256, fig. 6). At Jucu de Sus, four slabs placed around an oval grave pit defined the corners of an implied rectangle (OROSZ 1912, 172). Grave no. 53 at Mátraszőlös contained stones and traces of timber in its fill (ALMÁSSY 2012, 124).

More extensive stone packing is also known from Gâmbaș (BĂLAN ET AL. 2015, 140, 144), Mátraszőlös (ALMÁSSY 2012, 104), Sopron–*Bécsidomb* (MÁRTON 1934, 108, Taf. XXXVII/1–2; XLI; XLIII), Rezi–*Rezicseri* (HORVÁTH 1987, 101–102, 114, fig. 36–37, 40), Bernecebaráti (HELLEBRANDT 1999b, 13–14), Csővár–*Sportpálya* (HELLEBRANDT 1999a, 100), Vác (HELLEBRANDT 1994, 19, 29) and Kamenín (BENADIK ET AL. 1957, 98, 108). Such practices also have antecedents in the later Early Iron Age (BERECKI 2021a, 64–65).

Stone and timber constructions at Fântânele should consequently be understood as part of the architecture of the funerary deposit. They could delimit internal spaces, support or separate grave goods, line the floor or walls, or create a distinct container within the grave. Their selective use indicates that the physical construction of the burial itself could contribute to the differentiation of individual funerary ceremonies.

Evidence concerning the organisation of the cemetery surface is considerably more limited. At the northern end of the excavated area, between S XXXII and S XXXVI, alternating smaller and larger sandstone slabs created the appearance of a paved surface at a depth of approximately 0.25–0.30 m. Whether these remains represent deliberate landscaping of the cemetery cannot be

established securely. A comparable arrangement of river stones was recorded across a 4 m-long area between two graves at Tărian (CHIDIOȘAN – IGNAT 1972, 554).

Post-holes provide additional evidence for activities conducted within the cemetery beyond the burial of individual deceased persons. Several features approximately 0.45–0.55 m in diameter and 0.77–0.86 m deep were recorded in trenches near the centre of the promontory. Their fills contained charcoal and traces of burning. The excavators proposed that offerings may have been suspended from posts erected in these features, while explicitly rejecting an interpretation as a building: “it is likely that offerings were hung on these pillars. In any case, it is not a building”.

The interpretation cannot now be verified, but the post-holes clearly indicate activities that were not directly associated with individual grave pits. Comparable pits, ditches, post settings and areas without burials have been identified at Hegyfalú (BALÁZS ET AL. 2015, 2; HORNOK – TÓTH 2016, 121) and Ménfőcsanak (Uzsóki 1987, 30).

Such features are especially important for understanding the cemetery as a place repeatedly visited by the living. Empty areas, pits, ditches, post structures and possible paved surfaces suggest that funerary activity extended beyond the construction of individual graves. Periodic ceremonies, commemorative gatherings and offerings may have taken place within defined areas of the burial ground.

Seen in this broader perspective, the graves at Fântânele-Dâmbul Popii represent only one component of a more extensive ritual landscape. The funerary process began before the final deposition of the body or cremated remains and could continue after the grave had been closed. The arrangement of pits, internal structures, possible ceremonial installations and open spaces indicates that the cemetery was repeatedly created and re-created through the actions of successive generations. Its spatial organisation was therefore both the product and the setting of collective memory, social relationships and recurrent ritual practice.

VII. GRAVE GOODS

VII.1. Jewellery and dress accessories

The clothing accessories and body adornments discovered in the graves of the Fântânele–*Dâmbul Popii* cemetery are representative of types commonly found in the Carpathian Basin region and, therefore, do not present significant challenges in terms of typological determination and chronological classification. There are, of course, some exceptions, such as pieces originating from other cultural contexts, modified pieces that reflect a distinct cultural narrative, or pieces with their own ritual and magical significance. All these examples will be discussed as necessary, and some will benefit from brief digressions (excursions) in order to be emphasized more clearly. Although detailed typologies have been established for the Carpathian Basin as a whole, as well as for several key cemeteries in this area, we have chosen to outline a typology specific to the analysed cemetery. This choice is driven by practical considerations, as it allows for an easier tracking of the evolution of these minor discoveries.

VII.1.1. Brooches (Fig. 31)

The brooches from the cemetery at Fântânele–*Dâmbul Popii* have been classified into 16 basic types, which are chronologically divided into four phases, each corresponding to a stage in the cemetery's evolution: LT B1/B2, B2a, B2b, C1. Also, in terms of their design, the fibulae from Fântânele–*Dâmbul Popii* belong to both the early La Tène (Dux) type, with a free foot, and the middle La Tène (Dux) type, with the foot attached to the bow.

Type 1. Small iron brooches with bilateral springs, (probably) external cord, equal arched bow ('rectangular'), and the foot resting on the end of the bow. It is unclear whether it is welded to the bow. The foot is flattened and has an oval disc shape. It is quite clear that the intention was to imitate a Münsingen-type fibula, but the general shape is also reminiscent of the zoomorphic fibulae from the Carpathian Basin found mainly in LT B1 (RUSTOIU 2008a; GEORGESCU 2020). Dating: LT B1/B2. They were worn in pairs. Grave no. 4 (Pl. IV/1–2). We do not know of any exact analogies.

Type 2. Bronze brooches, more rarely iron ones, of the early Dux type with a bilateral spring of 3+3 (sometimes 2+2) coils, an equal arched or semicircular bow, a small sphere on the foot that is resting on the end of the bow. Two variants have been identified:

2a: brooches with a simple, smooth bow;

2b: brooches with a bow shaped like a 'crab tail'.

Dating: LT B1/B2–B2. They were worn either individually or in pairs, sometimes linked together with a bronze or iron chain with small links. 2a: grave no. 4/1967 (Pl. XC/1); grave no. 10 (Pl. XI/1); grave no. 73 (Pl. LV/6); grave no. 74 (Pl. LVII/1–3). 2b: grave no. 61 (Pl. XLVIII/2); grave no. 71 (Pl. LIV/1); grave no. 73 (Pl. LV/5). Analogies: NÉMETI 1988a, 65, Type A2–A3; BUJNA 2003, Type A1/2–A/B.

A type 2a brooch was discovered in a later context, dating from LT B2b. It had been modified,

with the tip of the fibula's foot bent and attached to the bow, similar to the middle La Tène type fibulae: grave no. 13 (Pl. XIII/3). This artefact provides further evidence that, despite conventional typologies, a number of pieces remain in use for a long time for various reasons: because they are functional; for sentimental reasons; because they have magical value, etc. For this reason, their dating must take into account the context in which they appeared.

Type 3. Iron fibulae similar to the previous ones, the difference being the length of the bow, which is greater. Dating: LT B1/B2. It was worn individually. Grave no. 32 (Pl. XXIX/1). Analogies: NÉMETI 1988a, 65, Type A2; BUJNA 2003, Type A1a.

Type 4. Bronze brooches, more rarely iron ones, with a bilateral spring of 1–3+1–3 coils, outer cord, semicircular arched bow, folded leg equipped with a sphere, extending to the middle of the bow. Three variants have been identified:

4a: brooches with a simple, smooth bow;

4b: brooches with the bow shaped like a 'crab tail';

4c: brooches featuring flattened bows designed in the form of three successive squares.

Dating: LT B2. They were worn individually or in pairs. 4a: Grave no. 1 (Pl. I/1–2); Grave no. 69 (Pl. LIII/1). 4b: Grave no. 34 (Pl. XXX/1); Grave no. 73 (Pl. LV/7–8); Grave no. 78 (Pl. LIX/2). Analogies: NÉMETI 1989, 103, Type A6; BUJNA 2003, Type A2A–B.

Type 5. *Paukenfibel* or timpani-type fibulae. Made of bronze, with a bilateral spring of 2+2 or 3+3 coils, an outer cord, the bow shaped like timpani (a musical instrument used in orchestras), and a folded leg with a sphere extending to the end of the bow. This type of fibula is one of the most characteristic of the LT B2 phase, also reaching neighbouring areas, as is the case with an example discovered in the settlement of Răcățău, on the Siret River (see CĂPITANU 1984). Two variants have been identified:

5a: brooches with a notched bow, probably decorated with enamel (or coral?);

5b: brooches with an 'S'-shaped bow.

Dating: LT B2. They were worn individually. 5a: Grave no. 79 (Pl. LIX/33); 5b: Grave no. 19 (Pl. XX/2). Analogies: NÉMETI 1988a, 65, Type A5; BUJNA 2003, Type E-a/b. See also RUSTOIU 2008a; RUSTOIU 2011a; HAUSCHILD ET AL. 2013, 348, fig. 3.

Type 6. Thracian-type fibula discovered in grave no. 79 (Pl. LIX/34). An unusual find in the Late Iron Age environment of Transylvania. According to the typology of the Thracian brooches, established by V. V. Zirra (who wrongly includes the brooch from Fântânele in the sub-variant Ic: ZIRRA 1998, 38), the piece under discussion belongs to the sub-variant IIb, dated to the first half of the 3rd century BC (LT B2). Together with an amphora-shaped bead and a pair of earrings, discovered in the same grave, all these items suggest the connections of some members of the community from Ciumești with the northern Balkans and Lower Danube region (see RUSTOIU 2008a; 2011a). In this case, individual mobility must have played an important role in the distribution of culturally specific artefacts over wider areas.

Type 7. Bronze fibulae with bilateral springs consisting of 2+2 or 3+3 coils and an outer cord, a semicircular arched bow, and a foot with two spheres, one fixed in front of the bow (sometimes decorated in a plastic style) and the other at the end of the foot, the latter resting on the middle of the bow. Three variants have been identified:

7a: fibulae with a simple, smooth bow;

7b: fibulae featuring bows decorated with perpendicular incisions;

7c: fibulae with decorations on the foot's sphere and on the spring.

Dating: LT B2b. They were worn individually. 7a: grave no. 57 (Pl. XLVI/1); grave no. 59 (Pl. XLVII/1); grave no. 83 (Pl. LXI/2). 7b: grave no. 20 (Pl. XXI/1). 7c: grave no. 83 (Pl. LXI/1). Analogies: NÉMETI 1989, Type A7; BUJNA 2003, Type C2–3.

Type 8. Bronze brooches with bilateral springs consisting of 2+2 or 3+3 coils and an outer cord, a semicircular arched bow, a foot fitted with a sphere of variable dimensions, and the end of the foot attached with a collet to the middle section of the bow. Dating: LT B2b. They were worn individually. grave no. 8 (Pl. IX/1); grave no. 31 (Pl. XXVIII/3), graves no. 8, 19, 31. Analogies: NÉMETI 1992, 104, Type A11; BUJNA 2003, Type Hx1, C10a.

Type 9. Fibulae of the Pottenbrunn–Horný Jatov type. The spring is bilateral, 1+1 coils, usually with a large diameter (local variants, with small diameters, also occur, as in our cemetery), the bow is short and unevenly arched, the foot is long, turns over and is free, either stepping on or being attached to the bow. A small sphere is placed on the leg. This type of fibula, first defined by P. C. Ramsel (RAMSEL 2003, 255–256; etc.), chronologically covers LT B2b and LT C1. Its spread between Bavaria and the Carpathian Basin (including Transylvania), as suggested by P. C. Ramsel, indicates inter-community connections over long distances, on a West-East communication ‘boulevard’ that crossed Bavaria, the Middle Danube basin, reaching eastward to the Carpathian Basin area. Dating: LT B2b. They were worn individually. Grave no. 57 (Pl. XLVI/2); grave no. 80 (Pl. LX/1). Analogies: RAMSEL 2003; NÉMETI 1992, 104–105, Type A18.

Type 10. Bronze and iron fibulae with bilateral springs of 2+2 or 3+3 coils, outer cord, elongated arched or unevenly arched bow, folded leg with a sphere of variable size, attached to the bow in the middle or towards the spring, the attachment collet sometimes forming a small sphere. Four variants have been identified:

10a: fibulae with a simple bow, smooth, the sphere on the foot is small;

10b: fibulae having a flattened, disc-shaped sphere on its foot;

10c: fibulae with a larger sphere on the foot, and the end of the foot is provided with fine incisions perpendicular to the axis;

10d: fibulae with a foot provided with a large sphere and the spring provided with an internal cord.

They were worn either individually or in pairs. Dating: LT C1. 10a: graves no. 5, 21, 29, 45, 62 (Pl. V/3; XXII/7–8; XXXVII/1; XXXVIII/1; XLIX/1–2). 10b: graves no. 28, 45 (Pl. XXVI/4; XXXVIII/2). 10c: graves no. 5, 40 (Pl. V/2; XXXIII/3–5). 10d: graves no. 6, 21 (Pl. VI/1; XXII/9). Analogies: NÉMETI 1992, 104, Type A12; BUJNA 2003, Type Lx-A.

Type 11. Large bronze or iron brooches, with a bilateral spring of 2+2 coils, a long and slightly raised bow, a long foot, decorated with incised or enamelled motifs, the leg being attached to the bow in the middle. Two variants have been identified:

11a: unevenly arched bow and the foot ornamented with a sphere;

11b: evenly arched bow and the foot ornamented with enamel.

One of these brooches, the one decorated with enamel, had an obvious magical role, which is why we will return to it in a short digression. It was worn individually. Dating: LT C1. Graves no. 5 (Pl. V/1) and 49 (Pl. XLII/4). Analogies: NÉMETI 1992, 105, Type A19; BUJNA 2003, 81, fig. 60/A; RUSTOIU 2020.

Type 12: Small bronze fibulae with a bilateral spring of 2+2 coils, inner (variant 12a) or outer (variant 12b) cord, elongated slightly raised bow, foot fitted with a rectangular plate, sometimes decorated with incisions, sometimes with enamel, foot attached to the bow in the middle. Worn individually, but especially in pairs, sometimes joined by fine chain links. Dating: LT C1. Graves no. 38, 62 (Pl. XXXII/1–2; XLIX/3–4). Analogies: BUJNA 2003, Type Hy2; SZABÓ – TANKÓ 2012, 144, fig. 186/3; SZABÓ – TANKÓ 2018, fig. 172/w.

Type 13: Large bronze and especially iron brooches with a bilateral spring of 2+2 coils, an elongated, slightly raised bow, and a foot fitted with a sphere of varying sizes and attached to the

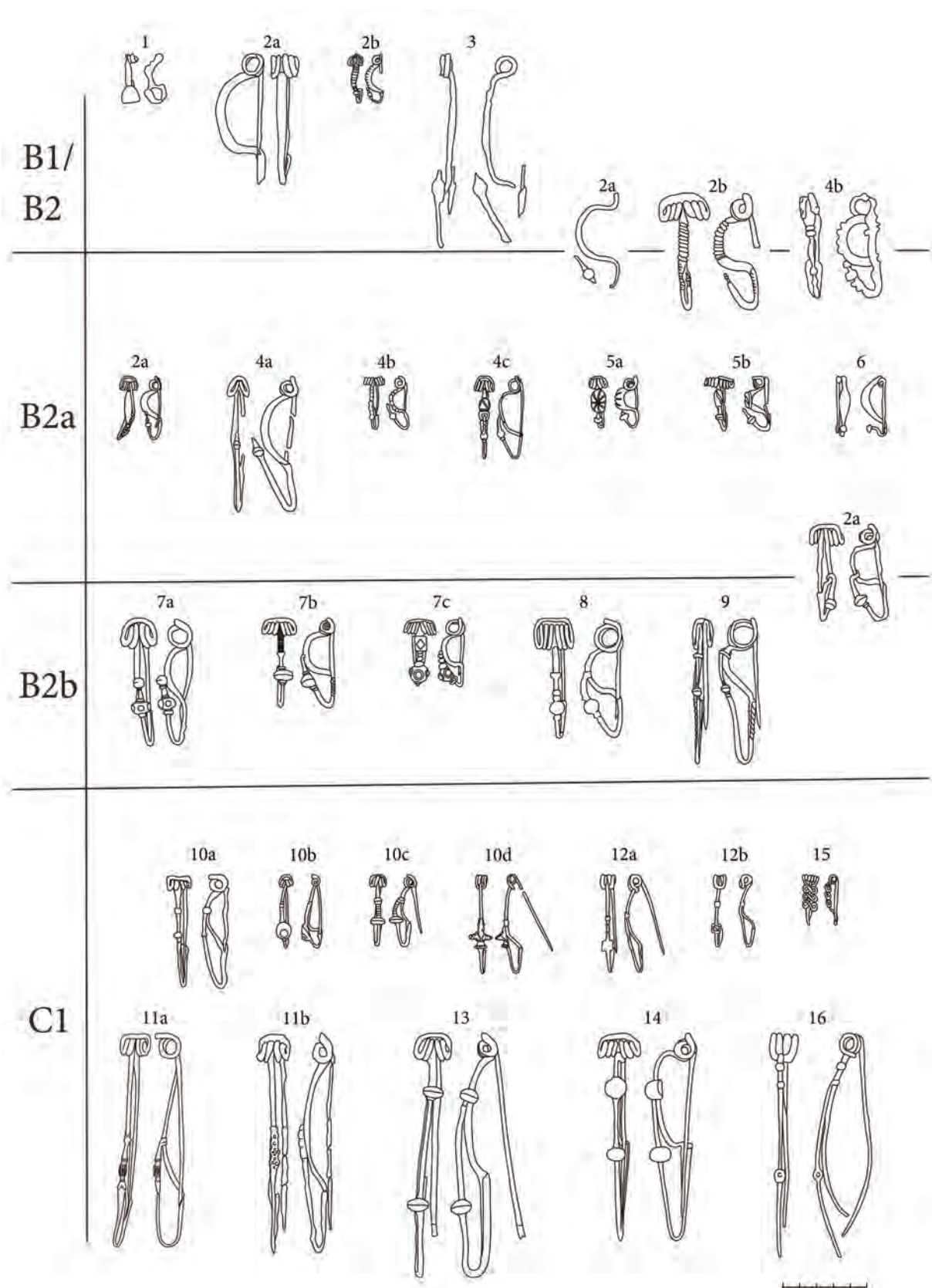


Fig. 31. The chronology of the brooches.

bow in its middle with a collet. Worn individually or in pairs. Dating: LT C1. Graves no. 41, 42 (Pl. XXXIV/2–3; XXXV/2–3). Analogies: BUJNA 2003, Type Lx.

Type 14. Large bronze and, especially, iron brooches, similar to those above. The difference lies in the large size of the sphere at the foot and the one positioned at the end of the foot, which is a means of attachment to the bow. Dating: LT C1. Graves no. 49, 62 (Pl. XLII/3; XLIX/9). Analogies: NÉMETI 1992, 105, Type A20; BUJNA 2003, 81, type EF-K-A; POPOVIĆ 1994, 54, map 1, for the Scordiscian area.

Type 15. Brooches with figure–8 spirals (*À brandebourg; Pestrup; Fibeln mit Achterschleifen*). Small bronze brooches with bilateral springs consisting of 2+2 or 3+3 coils, inner cord, slightly raised bow, folded leg with eight-shaped spirals, attached to the bow in the middle. Worn individually or in pairs. Dating: LT C1. Grave no. 21 (Pl. XXII/5–6). Analogies: NÉMETI 1992, 104, Type A17; BUJNA 2003, Type H3-A; SZABÓ – TANKÓ 2012, 144, fig. 186/2; SZABÓ – TANKÓ 2018, fig. 172/ab.

Type 16. Large bronze or iron brooches with a bilateral spring consisting of 2+2 coils, an outer cord, an elongated bow, and a foot turned over and through the bow towards the end where the spring is. These fibulae already herald the transition to late La Tène-type brooches. Dating: LT C1/C2. Graves no. 21, 51 (Pl. XXII/3; XLIII/5). Analogies: BUJNA 2003, Type Ly2.

VII.1.2. Brooch chains

In graves no. 4, 5, 40, and 73, small, finely crafted bronze chain mail necklaces were found (Pl. LXIX/1–4). In inhumation grave no. 5, it was placed around the neck. Such chains were worn together with pairs of fibulae, and their presence in all four graves confirms this hypothesis. However, the idea that some of them were worn around the neck cannot be ruled out. Close analogies are known from burials no. 107, 109, and 115 from Pişcolt (NÉMETI 1992).

Magical brooches

The brooch which is discussed below (type 11b) comes from the cremation grave no. 49 with weapons. The grave displays a series of particularities of the funerary ritual which are less common in the Carpathian Basin. Among these is the presence of one iron linchpin and an enamel-decorated big iron brooch, which is the subject of this discussion (see further RUSTOIU 2019a; 2020).

According to existing analogies, the weapons and other elements of the military equipment can be dated to the middle La Tène period (RAPIN 1988; LEJARS 1994; DIZDAR 2013). The four brooches found among the grave goods are important elements of dating. The small iron brooch belongs to the series of finds specific to LT B1/B2, but it was used for a long period and its foot was transformed like that of a LT C1 brooch (see the type 2a). The large iron brooch with large spheres on the foot (type 14) belongs to a type that was frequently encountered throughout the entire Carpathian Basin and was dated to LT C1. Lastly, the small bronze brooch is too fragmentary to be classified typologically. It belongs more likely to one of the small variants that are specific to the middle La Tène period (see the comments in BUJNA 2003). It has to be therefore noted that the brooches from grave no. 49 at Fântânele–Dâmbul Popii, as well as the remaining grave goods, date the archaeological context to the LT C1 phase.

Returning to the fragmentary decorated iron brooch in question, it has to be said that it belongs to the middle La Tène scheme type (11b in our typology). The bilateral spring consists of four coils with an external holding wire. The fragmentary foot (the part that was attached to the bow is missing) is flattened on the upper side and decorated with punched dots that form a vegetal decoration, which was probably enamelled. Its total length is 132 mm.

Typologically, the artefact belongs to the series of iron brooches having large dimensions (over 100–150 mm), specific to the LT C1 (BUJNA 2003, 81, fig. 60/A). Such iron brooches, usually having different types of spheres on the foot, are commonly discovered in a poor state, fragmented and heavily corroded, so a detailed typology is difficult to make (NÉMETI 1992, 105, type A19).

The brooch from Fântânele–*Dâmbul Popii* stands out among the majority of the finds of this type due to the flattened, decorated foot. The ornamentation consists of punched eight-shaped, curved motifs. One pair of motifs form a lyre in the middle and other motifs are arranged in a row perpendicularly to this central element. The entire decoration was probably enamelled.

Analogies for this vegetal decoration can be found in the same cemetery at Fântânele–*Dâmbul Popii*. In grave no. 62, without weapons, one iron bracelet was almost similarly decorated (see below, armrings type 11), including the enamelling (RUSTOIU – MEGAW 2011, 229–233, fig. 6–7. J. V. S. Megaw analysed the bracelet from a decorative point of view). The finds from Fântânele–*Dâmbul Popii*, together with other artefacts decorated in the same manner, like the disk of the chain-mail from Ciumești (RUSU 1969; RUSTOIU 2008a, 14, fig. 1/4) or the beaker from the grave with a helmet found at Apahida (ZIRRA 1976; RUSTOIU 2008a, 48, fig. 17/8; RUSTOIU – BERECKI 2019), raise some questions regarding the survival of this style in the eastern periphery of the ‘Celtic area’ until the middle La Tène.

As already discussed on another occasion (RUSTOIU 2016a, 238), some of the communities established in Transylvania around the middle or the end of the 4th century BC preserved certain practices and elements of material culture from their homeland over a longer period of time as a way of connecting with their ancestral identity. These habits could explain the perpetuation of certain funerary practices in Transylvania long after they were abandoned in their homeland, or the persistence of some visual symbols, for example elements of the Vegetal Style, in LT C1 contexts. This is how the persistence of burials containing two-wheeled chariots in the LT C1 can also be explained (FERENCZ 1996; RUSTOIU 2015b; BERECKI 2018). The longer use of the two-wheeled chariots in comparison with Western and Central Europe was also noted in other peripheral areas of the ‘Celtic world’, for example in the British Isles or Asia Minor. Their use is attested in ancient literary sources, as well as on figurative representations like the so-called ‘frieze of arms’ from Pergamum, or in archaeological discoveries. The incorporation of some LT B jewellery in costume assemblages of the LT C1 also belongs to the same phenomenon (RUSTOIU – MEGAW 2011; RUSTOIU 2013b).

Returning to the decorated iron brooch from the Fântânele–*Dâmbul Popii* cemetery, its general features and decoration could also be interpreted from the perspective of symbolic visual language. In this context, it has to be noted that bodily ornamentation is a significant symbolic means of social communication that allows the visual expression of ethnic or social belonging (see, for example, EICHER 1995; ALDHOUSE-GREEN 2004a, 40–53; ALDHOUSE-GREEN 2004b; ARNOLD 2008, 375–379; WELLS 2008, 64–84). T. S. Turner has remarked that “Man is born naked but is everywhere in clothes (or their symbolic equivalents)... The surface of the body, as the common frontier of society, the social self, and the psychobiological individual, becomes the symbolic stage upon which the drama of socialisation is enacted, and bodily adornment (in all its culturally multifarious forms, from body-painting to clothing and from feather head-dresses to cosmetics) becomes the language through which it is expressed” (TURNER 2012, 486).

Accordingly, jewellery and decorated costume accessories, and especially those worn on the chest or torso, are meant to be easily observed in order to convey a certain message (see more on this subject in WELLS 2008). However, in the case of the brooch in question, the elusive vegetal motif is too small to be observed at a distance. One had to be very close to the wearer to see the decoration properly. It can therefore be presumed that the motif actually had

a 'hidden' meaning which was mainly relevant for the owner of the brooch and was perhaps destined to be 'seen' by entities beyond the world of the mortals. This might suggest that the motif more likely had a magical or apotropaic meaning, offering protection against the malevolent beings, who were able to actually 'see' it.

It can therefore be concluded that grave no. 49 from the Fântânele-Dâmbul Popii cemetery has revealed, aside from the funerary rite and rituals specific to the middle La Tène period in the Carpathian Basin, a series of practices belonging to the magical domain. On the one hand, the linchpin included in the inventory of the grave had a magical purpose, as already demonstrated (RUSTOIU 2019a). On the other hand, the miniature decoration of the brooch discussed above suggests that such costume accessories bearing 'hidden messages' were invested with apotropaic qualities. These artefacts point to the domain of spiritual manifestations of the communities from the Carpathian Basin, dealing with the magical practices and beliefs, a subject which has been largely neglected in archaeological literature so far (see RUSTOIU 2019a).

Brooches with figure-8 spirals

Fibulae of this type enjoyed great popularity in the eastern 'Celtic area'. The antecedents can be traced to the early Iron Age in the Balkan area, but the items that form the foundation for the development of these artefacts are the Čurug-type fibulae. The latter, characteristic of the end of the Early Iron Age in the north-western Balkan Peninsula, also spread to the early 'Celtic' La Tène environment, as is the case with the pieces discovered at Pilismarót-Basaharc, Hungary (SZABÓ 1971; BOGNÁR-KUTZIÁN 1975) and Mikulčice in Moravia (PESCHEL 1972). The type of fibulae with figure-8 spirals became fully established towards the end of LT B2, but reached their peak during LT C1. In absolute terms, the first examples appear as early as the second quarter of the 3rd century BC, with most pieces being in use (according to the contexts of their discovery) during the second half of the 3rd century BC and the beginning of the following century (PESCHEL 1972). The main area of use is located in the Middle Danube region (Moravia, Slovakia, Hungary), in the Scordiscian area (Serbia and eastern Croatia) and in the eastern Carpathian Basin (Transylvania). This fact illustrates, once again, that these are specific to the Eastern 'Celtic area'. From these areas, a number of pieces reached the Dalmatian region, the Getic environment south of the Carpathians, and the southernmost piece comes from the island of Delos (SZABÓ 1971).

Therefore, fibulae with figure-8 spirals enjoyed great popularity in the Carpathian Basin due to their ancestral symbolic significance, originating from the Illyrian culture in this area. The prominence of these fibulae and their decoration led to their adaptation onto other types of artefacts, such as earrings, but also other types of fibulae. The ornament survived thus well into the late Iron Age, demonstrating significant mobility across regions, extending from the Carpathian Basin to the northern Balkans and the northern Pontic area (see RUSTOIU 2000).

VII.1.3. Bracelets (Fig. 32)

Bracelets are the most numerous items of jewellery, following brooches. They are found in all phases of the cemetery. They were made of bronze, iron, and glass.

Type 1. Bronze bar bracelet with open ends, flattened and decorated with incised dots. Only one example is known from grave no. 4 (Pl. IV/5), where it is associated with a pair of type 1 fibulae and other type 2 silver and bronze bracelets. Such bracelets are also known in the Getic space in the 4th century BC (VULPE – TEODOR 2003, fig. 118/2–6). Dated to LT B1/B2. Analogies: BUJNA 2005, fig. 2–3, Type A1-Aa-b.

Type 2. Silver or bronze bar bracelets with open ends fitted with spherical buttons. Three variants have been identified:

2a: with a simple, smooth body;

2b: with the body equipped with a sphere in the middle area;

2c: with the body equipped with multiple, symmetrically arranged spheres.

They were worn in pairs or even in threes. Dating: type 2a–2b pieces belong to phases LT B1/B2 and B2, while variant 2c is documented in phase LT B2b. Graves no. 4, 79, 83 (Pl. IV/3–4, 6; LIX/30–31; LXI/3–4). Analogies for type 2a: BUJNA 2005, fig. 3, Type A1-Ba.

Type 3. Bronze bar bracelet with seal-shaped ends, decorated on the body with registers consisting of incised lines and stamped dots. It was discovered by chance in the cemetery during surface research, before systematic excavations began (Pl. LXXXIX/3). Such bracelets appear in LT B1, but in the context of the cemetery at Fântânele–Dâmbul Popii, this one belongs to the LT B1/B2 phase. Analogies: BUJNA 2005, fig. 3, Type A1-D.

Type 4. Cast bronze bracelets, with ‘crab tail’ mouldings on the body, sometimes with small knots in relief, free ends finished in seals. They were worn individually or in pairs. Two variants have been identified:

4a: with a simple body and simple ends;

4b: with pronounced mouldings and seal ends shaped in a plastic style.

Dating: LT B1/B2 (especially variant 4a) – LT B2. Grave no. 4/1967 (Pl. XC/3); graves no. 11, 73, 74, 78 (Pl. XII/2; LVI/2–3; LVII/4; LIX/5). Analogies: BUJNA 2005, fig. 8, Type B1-B2.

Type 5. Bronze or iron bar bracelets with an interlocking fastening system (*Steckverschluss*). They are among the most characteristic bracelets from the early phases of the La Tène culture. They were worn individually or in pairs. Dating: LT B1/B2–B2. Graves no. 4/1967, 5/1967 (Pl. XC/5–6, 11), grave no. 79 (Pl. LIX/29). Analogies: NÉMETI 1988a, 65–66, Type B1; BUJNA 2005, fig. 3, Type A3-Ca.

Type 6. Bracelets made of bronze or iron bars, usually smooth, but some examples with a notched body have also been found. They were worn individually or in pairs. Three variants have been identified:

6a: in the form of closed links;

6b: with free ends;

6c: made of iron, featuring a notched body:

Dating: they are found in the last three phases of the cemetery (LT B2a, LT B2b, LT C1), the last variant, from grave no. 71, being documented only in LT B1/B2. Graves no. 40, 59, 62, 71, 73, 78, 83 (Pl. XXXIII/7–8; XLVII/2; XLIX/13; LIV/3; LVI/6; LIX/4; LXI/6). Analogies: BUJNA 2005, fig. 90, 93.

Type 7. Bracelets made of wavy iron wire (silver and bronze bracelets have also been found in other cemeteries). Found in grave no. 62 (Pl. XLIX/14). This type of bracelet is dated to the early La Tène (LT B1), and is typical of the so-called Duchov–Münsingen horizon (KRUTA 1979, 84). These armrings are known from Central and Western Europe (Bohemia, Switzerland, Bavaria and Lower Austria: KAENEL 1990, 241 (*anneaux en méandres*); KRÄMER 1985, 168, fig. 26/10 (Riekofen, grave no. 5); RAMSL 2011, 117–119, Abb. 89). In the Carpathian Basin such finds are less numerous; one piece made of bronze wire comes from Chotín, grave no. 25 (RATIMORSKÁ 1981, 48–50, pl. 19/3; BUJNA 2005, 69, fig. 54, type BR-H3-B), another made of silver wire is known from Farnos, grave no. 1 (HELLEBRANDT 1999b, 28, pl. 5/8) in the Great Hungarian Plain and another, also of silver, comes from Pişcolt, grave no. 174 (NÉMETI 1989, 95, fig. 17/5-M. 174). All these funerary contexts have been dated to LT B2. The piece from Fântânele, clearly coming from a LT C1 grave, was probably made several decades earlier and remained in use for a longer period.

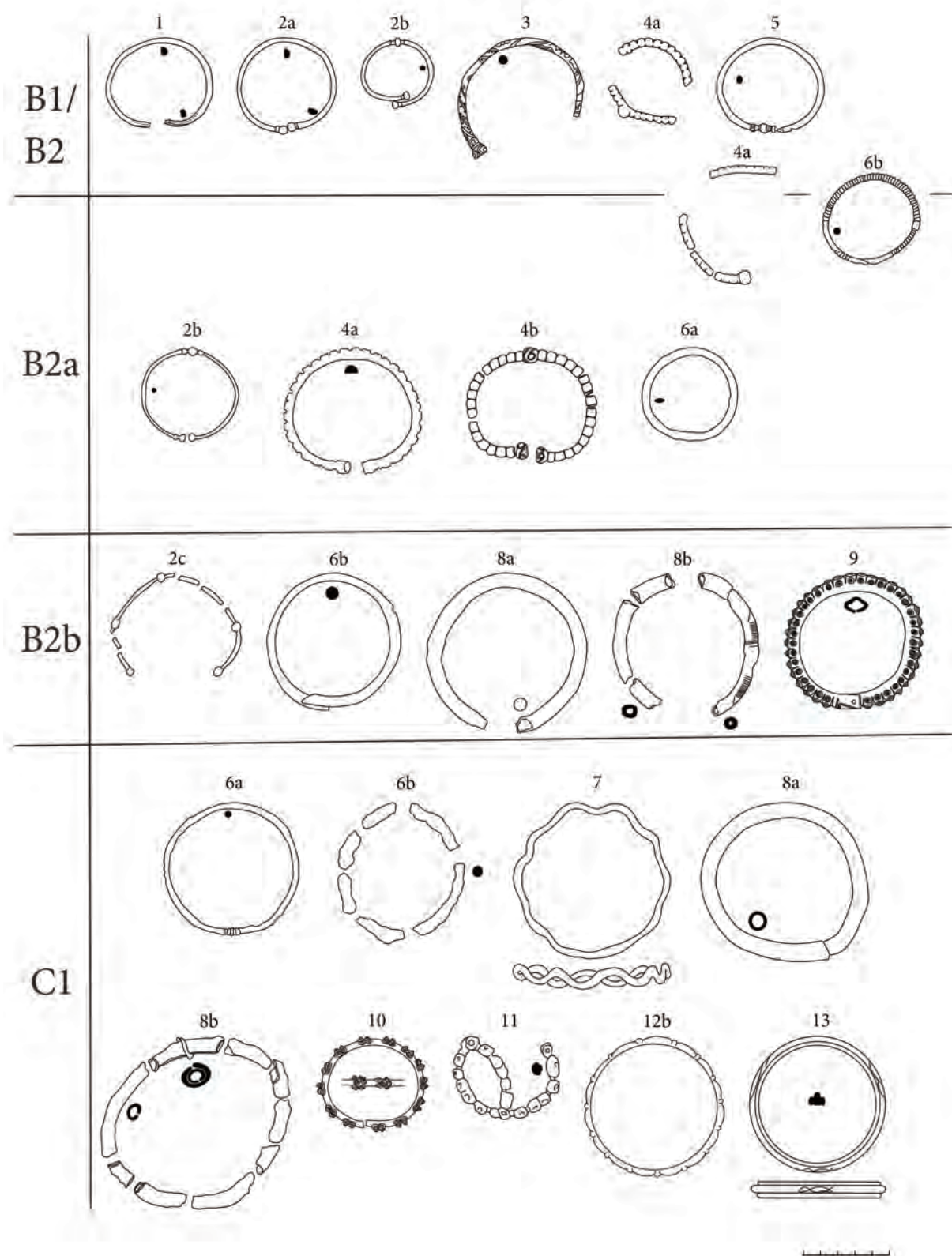


Fig. 32. The chronology of the bracelets.

Type 8. Bracelets usually made of iron, with a tubular body and a plug or interlocking fastening system. They were worn individually or in pairs. Two variants have been identified:

8a: with a simple body;

8b: with the body decorated with perpendicular notches or with wires wrapped around the body.

Dating: LT B2b–C1. Graves no. 2, 21, 42, 43, 45 (Pl. II/2; XXII/10; XXXV/4; XXXVI/4; XXXVIII/4). Analogies: BUJNA 2005, fig. 92.

Type 9. Tubular bronze bracelet decorated with raised pearls, with an interlocking closure system. Dating: LT B2b. Grave no. 83 (Pl. LXI/5). Analogies: BUJNA 2005, fig. 16, Type C4-a.

Type 10. Bracelets made of cast bronze bar and decorated with pseudo-filigree and pseudo-granulation; the ends are free and close together. They are worn in pairs. Dating: LT C1. Grave no. 5 (Pl. V/6–7). Analogies: BUJNA 2005, fig. 75–76, Type O1-A.

Type 11. Iron bracelet made of two pieces joined together with a hinge and a frame joint system. The body is decorated with S-shaped and lyre-shaped plant motifs, the decoration originally being enamelled (Pl. XLIX/12; LXVII/12). This piece, a true work of art, was discussed at length by V. Megaw in RUSTOIU – MEGAW 2011. Bracelets of this kind appear in Western Europe in LT B, but the one from grave no. 62 at Fântânele–Dâmbul Popii dates to LT C1. For analogies see RUSTOIU – MEGAW 2011.

Type 12. Iron bracelets featuring bodies decorated with segmented designs and small protrusions that are perpendicular to the axis of the body. These bracelets were worn either in pairs or individually. Two variants have been identified:

12a: circular and flat;

12b: with a saddle-shaped body.

Dating: LT C1. Graves no. 5 and 45 (Pl. V/8–9; XXXVIII/5). Analogies: BUJNA 2005, fig. 84, Type 2-A.

Type 13. Blue glass bracelet (Pl. XXXIV/4; LXX/24). It comes from grave no. 41 which also contained weapons. The bracelet was made of blue glass and was decorated with three identical eight-shaped motifs made of yellow glass paste. Typologically, it belongs to the Haevernick 6b group (HAEVERNICK 1960), *mit Schleifenverzierung*. This kind of bracelet was popular in the Carpathian Basin at the beginning of the production period of the La Tène type bracelets, around the middle of the 3rd century BC. It is attested mainly in Lower Austria, northern Hungary and south-western Slovakia, along the middle Danube. It also has to be noted that such bracelets always appeared in female burials (KARWOWSKI 2005, 164–165, fig. 3–4). According to the published archaeological evidence, grave no. 41 at Fântânele–Dâmbul Popii is the single case belonging to the middle La Tène ‘Celtic’ environment in which this kind of glass bracelet is associated with weaponry. This is due to the ritual practice noted for this grave, which is related to the magical value of the bracelet (see below).

The bracelet from grave no. 41 and its ritual and magical value

Cremation grave no. 41 contained weapons but also a blue glass armring which is usually associated with women’s attire (see further RUSTOIU 2019a). The sword in its scabbard was placed next to the cremated human remains. The sword bears no traces of burning, indicating that it was not put on the funerary pyre with the deceased, but was laid into the pit after cremation. The complete glass bracelet was placed on top of the sack containing the cremated human remains. The bracelet shows no signs of burning, so it must have been placed in the pit after cremation. (When the corpses were cremated on the pyre, their glass jewellery melted

and became deformed. One relevant example comes from the cemetery at Zvonimirovo: DIZDAR 2013, 253).

The three burnt brooches from the grave inventory and the sword can be dated to LT C1, corresponding to the second half of the 3rd century BC.

A quite similar situation, though later dated (LT D1), was encountered in the Danube's Iron Gates region, at Dubova (SPÂNU 2002; RUSTOIU 2007, 86–87, note 19). The inventory of the cremation grave from Dubova consisted of the panoply of weapons (from which one spear head, one shield-boss and one curved dagger are preserved), harnessing fittings (one iron horse bit and one iron spur), one small curved knife and one silver bracelet (LUCZKIEWICZ – SCHÖNFELDER 2008, 187, fig. 23/7, erroneously mentioning that the bracelet is made of gold). Aside from the silver bracelet, all other grave-goods show burning traces indicating that they accompanied the deceased on the funerary pyre. The grave in question belongs to the so-called 'Padea–Panagjurski Kolonii' group and can be dated to the LT D1, corresponding to the second half of the 2nd century BC and the first half of the 1st century BC (see eg. RUSTOIU 2012b).

The silver bracelet belongs to a type which is also encountered in the Dacian silver hoards from Transylvania (HOREDT 1973, Type D4; RUSTOIU 1996, 99–100, type 6; SPÂNU 2012, 59, type 2.3). These bracelets are associated with jewellery dated to the end of the 2nd century and the first half of the 1st century BC. As already demonstrated in another study (EGRI – RUSTOIU 2014), the structural analysis of the Dacian silver jewellery hoards indicates that they consist of sets of costume accessories which have a unitary character both technologically and functionally. More precisely, they are not simple accumulations of valuable items which were collected during a given period, since the components seem to have been made at the same time, most probably by a single artisan, and for a single individual; they were later buried together as a set, very probably following the owner's death.

The particular compositional and functional structure of these sets of costume accessories indicates that the owners of these costume sets including silver ornaments were women with sacred functions in the society. Thus, it might be presumed that their use was restricted to a certain social group within the community, quite small and having a particular status, and for whom they probably served as identity symbols. It is also important to note that costume accessories, which are typologically similar to those included in the aforementioned silver jewellery sets, are missing (with a few small exceptions) from the burials containing weaponry and belonging to the Padea–Panagjurski Kolonii group, which was contemporaneous with the horizon of the silver hoards.

Returning to the aforementioned graves, one dated to the 3rd century BC and another dated to at least a century later, it has to be noted that the presence of weaponry in their inventory could suggest that they belonged, at least symbolically, to warriors.

One common characteristic is the placing of a female bracelet in the grave after cremation and after laying the cremated remains in the pit, during the end of the liminal stage of the funerals. In both cases the practice must have had a magical meaning, without excluding the possibility of representing a private gesture resulting from the close relationships between the mourners and the deceased. Nevertheless, the silver bracelet placed in the grave from Dubova had a special meaning, taking into consideration the symbolic significance of the aforementioned sets of silver jewellery during the period in question. The offering of a silver bracelet which was part of a ritual costume points to the connections between the warlike elite and these priestesses acting as specialists of the sacred, which are also suggested by the images depicted on the *phalerae* from Lupu on which the female characters are associated with armed riders.

The custom of placing bracelets in cremation graves at the end of the ceremony, on top of the cremated bones or nearby, has also been observed in other cultural environments, for

example in Iron Age Scandinavia. Since the annular jewellery could have different meanings from one community and chronological horizon to another, these offerings have been interpreted in different ways. One of these interpretations was related to the apparent ability of the annular jewellery to 'bind'. Their placing in graves after cremation could be part of a ritual which was meant to link the spirits of the deceased with the otherworld, making them incapable of returning to the world of the living (MCGINNIS 2016, 46–47). In Nordic mythology, Odin places the magical gold ring Draupnir, which has the ability to multiply every nine days, on the funerary pyre of Baldur (MCGINNIS 2016, 48).

On the other hand, this custom could have had another meaning, with analogies in the Scandinavian environment, for example (MCGINNIS 2016, 50–51). The bracelets could be considered votive offerings and the deceased were the means through which the objects, charged with symbolic meanings (which is obvious in the case of the aforementioned silver bracelet), were transferred from the world of the living into that of the supernatural beings. The bracelets were chosen as votive offerings due to their diverse symbolic relevance, and the examples across Europe are numerous (see e.g. RUSTOIU – FERENCZ 2017).

Lastly, the offering of female bracelets in graves belonging to warriors could also indicate the important role played by these women in the sacred domain in general and in certain funerary rituals in particular.

VII.1.4. Neck rings (Fig. 33)

Rigid necklaces, called *torques* if twisted, are a true emblem of Late Iron Age elite identity. This image has also been reinforced by artistic representations in the classical world, especially thanks to the works of art created in Pergamon by Attalos I to remind his contemporaries and descendants of the victories achieved against the Galatians in Asia Minor. However, rigid necklaces are not numerous in archaeological finds. In the entire cemetery at Fântânele–Dâmbul Popii, only three examples have been documented. They can be classified into two different types.

Type 1. Bronze wire neck ring, thickened in the middle and thinned towards the ends. The only piece comes from grave no. 73 (Pl. LV/10) and is dated, based on context and association with other items of clothing (type 2b and 4b fibulae), to LT B1/B2. Analogies: BUJNA 2005, pl. 50, Type BR-H2.

Type 2. Neck ring made of twisted silver wire, with open ends or terminal buttons. Two examples are known, one from grave no. 4/1967 and the other from grave no. 11 (Pl. XII/1; XC/4). The latter, after its spherical button ends were cut off, was twisted into the shape of Hercules' knot, an obvious magical practice (RUSTOIU 2019a). The first piece dates to LT B1/B2 (associated with a type 2a fibula), and the second to LT B2a. Analogies: BUJNA 2005, pl. 50, Type AR-H1. See also RUSTOIU 2019a, 232–236.

Overall, it can be concluded that these ornaments appear exclusively in the early phases of the cemetery and only in graves without weapons.

The magical neck ring from grave no. 11

The neck ring (*torques*) was made of a silver rod with rectangular cross-section, which was twisted (see RUSTOIU 2019a, 232–236). Its ends are missing, being cut off during the funerary ritual. If the neck ring was of the open type, it could have had buffers, loops, flattened or pointed ends, while a closed one could have had hooked ends. The preserved body of the neck ring has a length of ca. 290 mm, so the complete ornament must have had a diameter of at least 92.3 mm, though it could have reached 100–110 mm if the missing ends are added.

The ends of the neck ring were cut off with a chisel sometime during the funerary

ceremony. The removed ends were probably thrown on the pyre, next to the deceased. This would explain the presence of the two melted bits of silver which have been found among the cremated remains. The rest of the silver ring was hammered (either with a wooden hammer, or a metal hammer with a cloth-covered head to avoid leaving marks) to form an eight-shaped knot. This task likely required the skills of a specialised artisan, since no traces of hammering are visible on the silver wire. The resulting silver knot was placed into the burial pit, near the ceramic vessels and in the vicinity of the sack containing the human remains.

Silver rigid neck rings of the *torques* type, as well as bracelets with a similar morphology, are attested in the Carpathian Basin from the LT B1 onwards (see, for example, the neck ring from the grave at Timișoara–Cioreni, or the one from the Csepel Island in Hungary: RUSTOIU 2011a, pl. 3/1; HORVÁTH 2016, pl. 5/2), being more-or-less intensely used in different areas by women, and sometimes also by men (BUJNA 2005, fig. 52), until the late La Tène period (GUŠTIN 1991, 47–51; GUŠTIN 2009; BUJNA 2005, 64–71, fig. 50). This kind of ornament is more frequently present in the Dacian silver jewellery hoards from Transylvania (RUSTOIU 1996, 89–91; SPÂNU 2012, 53–57).

Some of these annular ornaments are decorated with different types of knots, either simple or intricate. In general, the knots are simple, cross-shaped, though in some cases Herakles' knots or the eight-shaped ones are also attested (GUŠTIN 1991, fig. 25; GUŠTIN 2009, fig. 3).

In general, it has been noted that the knot-shaped details were usually an intrinsic part of the annular jewellery. However, some knots were made afterwards, when the bracelets were placed into the graves. For example, graves no. 86 and 114 at Mannersdorf contained a bracelet each, one made of gold and another of bronze, having a hook-and-eye fastening system and the body bent into an S-shaped meander. The bending contributed to the deformation of the bracelets, mainly in the case of the piece from grave no. 114, which suggests that the operation was carried out sometime after it was produced. Another gold bracelet coming from Prague-Veleslavin has the front side decorated with omega-shaped knots facing each other, while the back side was bent into an S-shaped meander which is similar to the piece from Mannersdorf.

The mentioned examples illustrate the existence of quite similar customs and beliefs across wider areas; their circulation could be related to the increased human mobility of the Late Iron Age. This phenomenon contributed to the circulation of various categories of artefacts and also to that of many immaterial 'goods' which are invisible archaeologically (ideas, beliefs, customs, technologies, etc.).

Returning to the silver neck ring from Fântânele–Dâmbul Popii, the knot made by bending the jewellery's body does not appear to be random, the artisan aiming to obtain a precise shape which resembles a carelessly calligraphed eight with free-flowing ends. A similar decorative motif was also used later on blue glass bracelets of the Haevernick 6b type, which were decorated with yellow paste inlays (*mit Schleifenverzierung*) in the same manner in which the annular ornament from Fântânele–Dâmbul Popii was bent (see type 13). Other motifs of the same kind, carefully made to resemble a double bow, are also present on other annular jewellery. This is the case of the bronze bracelet with filigree decoration from Ižkovce, in south-eastern Slovakia (BUJNA 2005, fig. 77).

The features of the silver artefact from Fântânele–Dâmbul Popii, as well as the mentioned analogies, suggest that the intention was to obtain a symbolic slip knot. This kind of knot is made of two loops separated by a knot, which have free-flowing ends; by pulling them, the knot is untied. The slip knot has significant magical meanings, suggesting both the act of 'binding' and the power to control it through the act of 'releasing'. The visual representations of the slip knot are rarely encountered in the Classical world, though these are more common in the Minoan period. In Egypt, the signs having the meaning of 'amulet', 'life', 'health'

resemble the shape of a slip knot. Some traditional cultures used similar knots in magical healing rituals (DAY 1950, 239, 241–243).

Summarising these observations, it can be noted that the rigid neck ring from the cemetery at Fântânele–*Dâmbul Popii* was removed from its regular social ‘life’ through ‘mutilation’. This action brought a new symbolic function in its biography, since it contributed to the transformation of the jewellery into a magical instrument which was incorporated into a magical ritual performed during the funerary ceremony. The artefact’s remodelling into a particular knot was done by an artisan who could have also been a specialist of the sacred, and this suggests a specific meaning of this action. The slip knot could be interpreted as a way of ‘binding’ the spirit of the deceased during the journey to the otherworld; upon reaching the destination, the spirit would have been able to ‘free’ itself by releasing the knot. Nevertheless, other interpretations could also be offered for the choice of this type of knot in this context, though its use in a magical ritual is certain, even if no other examples are known from the cemetery at Fântânele–*Dâmbul Popii*, and similar rituals are rarely encountered elsewhere.

VII.1.5. Earrings (Fig. 33)

Earrings are rare in the La Tène environment in Transylvania and in the Carpathian Basin in general. They appear as items of clothing only in the neighbouring areas and in the early phases of the La Tène era, particularly in areas with ties to local indigenous groups that wore such ornaments. This phenomenon is exemplified in the Scordiscian context around Belgrade or within the ‘Celtic’ milieu in Banat and along the Lower Mureş (see RUSTOIU – URSUȚIU 2013; RUSTOIU 2017b).

In the cemetery at Fântânele–*Dâmbul Popii*, a single pair of earrings has been documented in grave no. 79 (Pl. LIX/22–23), which also contains other items of extra-Carpathian or Mediterranean provenance, such as a Thracian-type fibula and an amphora-shaped glass bead. The earrings in question have one pointed end and the other shaped like a small button. Dating: LT B2a (RUSTOIU 2011a).

VII.1.6. Finger rings (Fig. 33)

Unlike other cemeteries in the La Tène area where rings are well represented, at Fântânele–*Dâmbul Popii*, rings appear in only two graves, both female.

Type 1. Simple bronze rings. Sometimes several are worn. Dating: LT B2a. Grave no. 79 (Pl. LIX/26–28). Analogies: RAMSL 2011, fig. 80.

Type 2. Simple bronze ring with overlapping ends. Dating: LT B2a. Grave no. 79 (Pl. LIX/25). Analogies: RAMSL 2011, fig. 79/4/11.

Type 3. Silver ring with a wavy body, identical in appearance to the type 7 bracelet. Dating: LT B2a. Grave no. 79 (Pl. LIX/24). Analogies: WALDHAUSER 1998.

Type 4. Pair of saddle-shaped silver rings, discovered in grave no. 5 (Pl. V/4–5). They are among the most popular types in the La Tène culture, being made of gold, silver, and bronze. They are found in all phases of the La Tène era (see RUSTOIU 2016c for more details, with the repertoire of discoveries in the Carpathian Basin). At Fântânele–*Dâmbul Popii*, they date from LT C1, depending on the context.

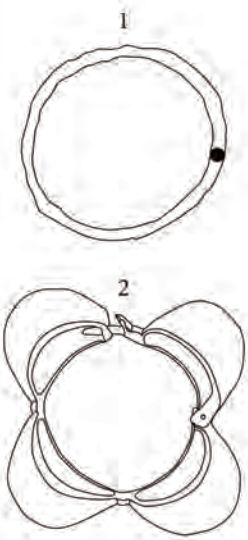
	neck rings	earrings	finger rings	anklets
B1/ B2				
B2a				
B2b				
C1				

Fig. 33. The chronology of the neck rings, earrings, finger rings and anklets.

VII.1.7. Anklets (Fig. 33)

Anklets are poorly documented. It is possible that certain items classified as bracelets might have served as anklets. However, given the predominance of cremation graves, it is difficult to make more accurate determinations in this regard.

Type 1. Simple anklets, made of iron bar or wire, with open or closed ends. Dating: LT C1. Graves no. 30 and 42 (Pl. XXVIII/1–2; XXXV/5–6).

Type 2. Anklets with large hollow knobs: graves no. 21, 40, 62 (Pl. XXII/11; XXXIII/9–10, L/1–3). Such ornaments with three or four large hollow knobs are common in the Carpathian Basin (MARÁZ 1974, 115–117, fig. 7: distribution map). A recent analysis of the finds from Hungary has provided updated insight concerning their production, chronological evolution, functionality and association with other types of ornaments in female graves (MASSE – SZABÓ 2005; MASSE 2007). Chronologically the anklets of this type represent a continuation in the Carpathian Basin of the evolution of rings featuring multiple smaller hollow knobs, which emerged in the early La Tène period. Their association with other categories of characteristic ornaments (armrings, chain belts, brooches; see MASSE – SZABÓ 2005, 219, 220, fig. 7; MASSE 2007, 305–306, fig. 6; BUJNA 2005, 57–59, fig. 43–44), indicates that such pieces were in use during LT C1. For example, in the cemetery at Pişcolt such anklets appear in the most recent horizon (NÉMETI 1992, 105–106, B18 type; NÉMETI 1993, 128). In cemeteries from Slovakia, anklets with three or four hollow knobs come from graves belonging to all three phases of the Middle La Tène period (BUJNA 2005, 185–188). Furthermore, no archaeological contexts dated more recently than LT C1 have yielded anklets of this type.

VII.1.8. Chain belts (Fig. 34)

Starting from LT B2 but mainly in the LT C1 period, the Carpathian Basin sees a wide variety of women's chain belts made of metal. In this context André Rapin has observed that some of these objects were, from a technological point of view, the source of inspiration for craftsmen who created various types of chains for swords, included in the military equipment of warriors in the 3rd century BC (RAPIN 1995, 280).

However, a series of metal elements, such as buckles or various fittings attached to leather or textile material, indicate that belts were already worn in the earlier period of the Fântânele–Dâmbul Popii cemetery. That is why such pieces have been included in the typology and general discussion of belts.

Type 1. Iron fitting from grave no. 13, rectangular in shape, with edges bent inward where a fastening link is attached (Pl. XIII/4). This piece is similar to the rectangular belt buckles characteristic of the Alpine region and the Carpathian Basin, known since LT A and used until the beginning of LT B2 (RAMSL 2011, 105, fig. 76). At Pişcolt, they appear in the first horizons of the cemetery (NÉMETI 1988a, 67, type E1). Therefore, the one at Fântânele–Dâmbul Popii could be dated to the LT B1/B2 phase, possibly to LT B2a.

Type 2. Simple buckle, with one end attached to the organic belt with an iron rivet (still preserved), and the other end bent into a hook shape: grave no. 84 (Pl. LXII/4). Similar examples are known from Mannersdorf, in Lower Austria, where they are dated to LT B2/C1 (RAMSL 2011, 105, fig. 76).

The following types of chain belts date from LT C1.

Type 3. Organic belt with iron fittings and a three-link closure system. It comes from grave no. 35 (Pl. XXX/11–12). Similar belts are documented, for example, at Pişcolt and date back to LT C1. (NÉMETI 1992, 106–107, type E4).

Type 4. Iron belts with wire woven into a figure-eight pattern and double twisted. Three variants have been identified:

4a: with a single-segment body equipped with a link at one end and a hook at the other end; three examples are known from graves no. 40, 45 and 62 (Pl. XXXIII/11; XXXVIII/6; L/4).

4b: derived from the first variant, consisting of two distinct pieces, with shorter components, having one short and one long segment; fastened with organic threads; one example in grave no. 21 (Pl. XXII/13).

4c: two-piece belt, short and tightly woven links, fastened with an additional ring attached with organic threads; one piece in grave no. 5 (Pl. V/10).

The chain made of figure-eight shaped iron rods and double twisted, is a characteristic piece for this period. Such chains were widely used for military equipment, consisting of two segments (a short and a long one) to carry a sword (RAPIN 1991, 362–364, fig. 6A/4–5). M. Dizdar has identified certain chains made of a single segment, with a fastening hook fitted on one end and another ring or loop shaped (his chains of Zvonimirovo LT 6 type). Chain belts are known from female graves in the south-eastern Alpine area, southern Carpathian Basin, and in the Scordiscian area (DIZDAR 2009, 293–294). To the north they reached Slovakia, such pieces being found in graves without weapons at Horný Jatov, grave no. 233 (BENADIK ET AL. 1957, 23, no. 6, fig. 5/1–4, pl. V/1), Maňa, grave no. 132 (BENADIK 1983, 61, pl. LIII/13), Nitra (PIETA 1993, 43, 45, fig. 4/1) and Ižkovce, grave no. 5 (VIZDAL 1976, 154, no. 5, fig. 10/1), being associated in the latter burial with two anklets with large hollow knobs, similar to the inventory from Fântânele. A similar combination has been noted in grave no. 699 from Ludas in north-eastern Hungary, dated to LT C1 (SZABÓ – TANKÓ 2012, 32–34, 111). Chronologically these chains appear in LT B2 (according to the dating of the grave from Horný Jatov, see VIZDAL 1976, 154, no. 5, fig. 10/1) extending into LT C1 (see also SZABÓ – TANKÓ 2012, fig. 163).

Type 5. Chain belt made of iron segments consisting of two twisted rods, inter-linked with the help of some rings. One end has a fastening hook, while the other has two bi-truncated pendants with hemispherical finials. Grave no. 62 (Pl. L/5), discovered together with a chain of 4a type. The chain from Fântânele has analogies in the same region at Orosfaia, grave no. 8 (VAIDA 2000, 138, 143–144, fig. 9/4) and in the cemetery at Pișcolt, grave no. 67, both in terms of general form and the shape of the fastening hook as well as the pendants at the other end (NÉMETI 1992, 70, fig. 9/5, M. 67). In both examples the chains are associated with anklets with large hollow knobs. A larger number of similar pieces are known from the territory of the Scordisci (KULL 1991, 158: Feudvar, Kupinovo, Ritopek, Subotište, Surčin), and also in cemeteries from the Great Hungarian Plain such as at Bodroghalom and Vác (HELLEBRANDT 1999b, 193–194). To the west they reached Slovenia (KRIŽ 2005, 43, pl. 2/3, gr. 103: Novo Mesto–*Kapiteljska njiva*, grave no. 103) and southern Bavaria (KRÄMER 1985, 81, 97, pl. 13/1, 36/9: Steinbichel, grave no. 24; Manching-Hundsrucken). Chronologically such chains appeared at the end of LT B2 and beginning of LT C1 as evidenced by the inventories of Steinbichel, grave no. 24 (KRÄMER 1985, 81, pl. 13/1) and Drňa, grave no. 2/74 in Slovakia (FURMÁNEK – SANKOT 1985, 279–289, fig. 10), being mainly used during LT C1. They were the prototype of some belts dated to LT D, made of silver and bronze and widespread in pre-Roman Dacia and in the area of Padea–Panagjurski kolonii group (RUSTOIU 1996, 112–113; RUSTOIU 1997, 153–155).

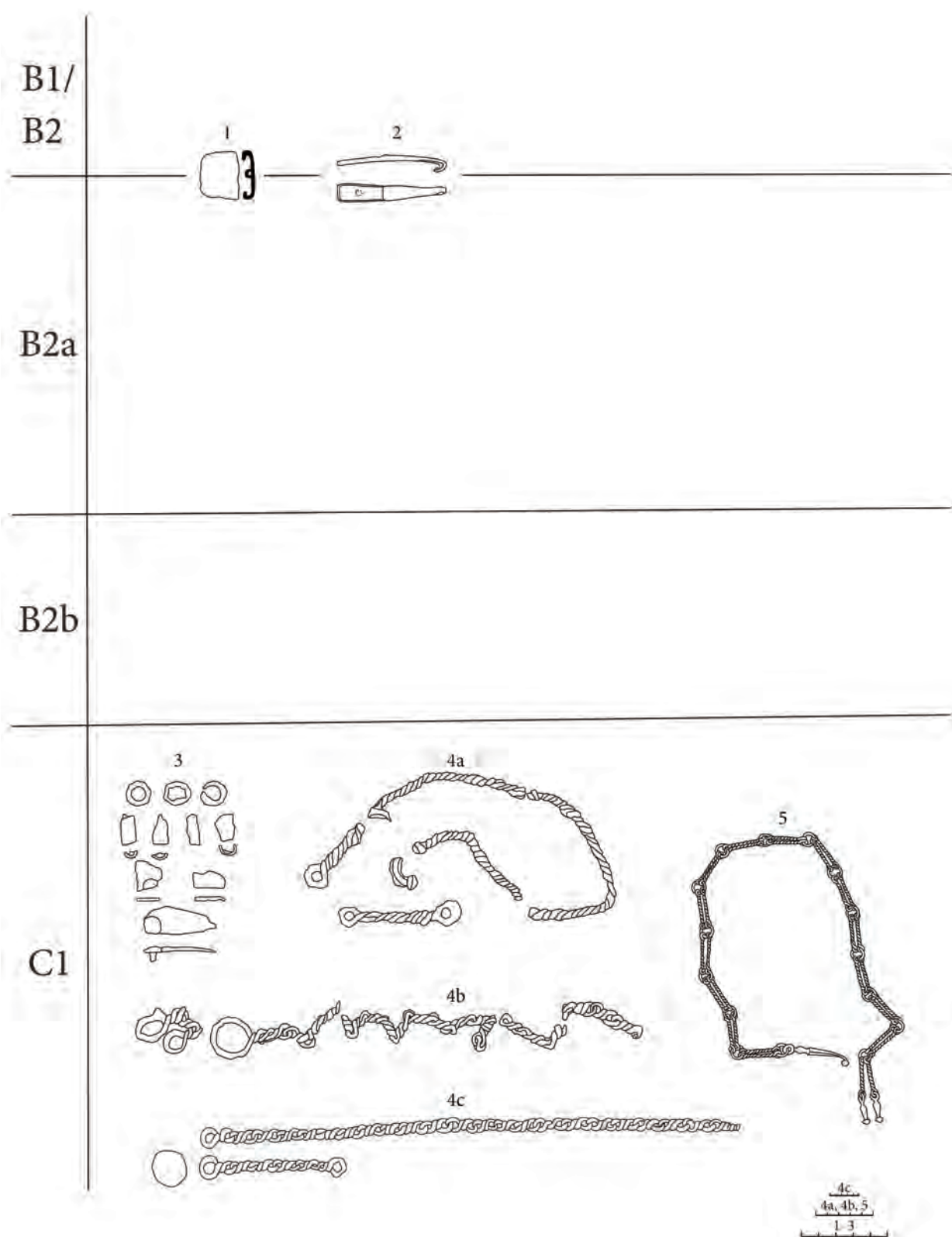


Fig. 34. The chronology of the chain belts.

VII.1.9. Glass, coral, and kaolin beads

The 94 graves identified at Fântânele–Dâmbul Popii yielded a number of glass ornaments, including monochrome and polychrome beads of simple and more complex shapes. In comparison to ornaments made of metal, clay, bone, kaolin and amber, the quantity of glass artefacts is relatively limited. Nevertheless, beads were recovered from inhumation grave no. 79 (Pl. LIX/b, 14–20) and cremation grave no. 73 (Pl. LV/b, 7; LVI). Fortunately, this distribution allows the analysis to be carried in a contextualised manner since monochrome and polychrome beads were discovered in separate funerary contexts.

Accordingly, the following presentation of the glass ornaments will divide the material into two categories based on colour and shape. The analysed material has precise analogies in the current specialised literature concerning glass fineries from temperate and Mediterranean Europe (BECK 1928; HAEVERNICK 1960; CALLMER 1977; ALEKSEEVA 1975; 1978; 1982; GEBHARD 1989; MATTHÄUS 1983; VENCLOVÁ 1990; 2016; ZEPEZAUER 1993; KARWOWSKI 2004; ČIŽMÁŘOVÁ 2022). In the same time, in Transylvania and the neighbouring regions of the eastern Carpathian Basin other chronological synchronous discoveries help picture the distribution and circulation of the fineries discovered at Fântânele–Dâmbul Popii, while their archaeological contexts provide insight into consumption patterns regarding the studied objects (NÉMETI 1988a; 1989; 1992; 2000; GAIU 2000; TANKÓ 2006; VAIDA 2006; BERECKI 2015; RUSTOIU 2019a; 2021b; POP – CĂSĂLEAN 2022; GRINDEAN ET AL. 2023).

VII.1.9.1. Monochrome beads

Grave no. 79 contained, among others, a necklace composed of approximately 13 beads made of kaolin, amber, bronze, and glass, along with a bronze pendant featuring a small suspension loop (Pl. LIX/21; RUSTOIU 2021b, 824, fig. 3). The glass beads were exclusively monochrome and displayed both simple and more complex forms, including small rounded and ring beads, conical pieces, a ribbed example, and one bead shaped like an amphora.

1. Small rounded beads

The two small rounded beads (Pl. LIX/b, 17, 19) present a quasi-symmetrical shape having a cobalt-blue translucent matrix with parts of a light brownish foil on the surface of the perforation. The latter traverses the mid axis of the pieces having an almost perfect cylindrical shape. The circular structure of the matrix and the mentioned foil indicate that they were made by winding on a rod probably fitted with an anti-adhesive material such as clay.

Typologically, the described rounded cobalt-blue beads belong to type 117 Venclová (VENCLOVÁ 1990, 49). Type 117 pieces are considered common and are likely the most widespread among the group of rounded beads, being encountered in a variety of contexts dating back to the Bronze Age. In the Central European area, Iron Age examples show a marked distribution during the Late Hallstatt period (ČIŽMÁŘOVÁ 2022, 148). For the Late Iron Age, funerary finds indicate a consistent presence of type 117 within the LT B2 phase (VENCLOVÁ 1990, 49–50; VENCLOVÁ 2016, 25; ZEPEZAUER 1993, 81). Moreover, type 117 pieces also circulated in later settlements such as Němčice and Staré Hradisko (VENCLOVÁ 2016, 25, 77; ČIŽMÁŘOVÁ 2022, 149).

From the Banat region, some beads of type 117 are known from CX 50 at Aradu Nou–Grădinile C.A.P dated in LT B2a phase (RUSTOIU – URSUȚIU 2013, 80), while others from Transylvania were unearthed in recent excavations at Sâncrai and dated according to their context of discovery to LT C2 (GRINDEAN ET AL. 2023, 108–109).

2. *Small ring bead*

Similar to the presented beads are the small ring beads. From the necklace found in grave no. 79 only one such piece was identified (Pl. LIX/b, 16). The circular cobalt-blue matrix shows an outward thread indicating that viscous glass was wound on a rod and further divided into smaller beads using a sharp object (VENCLOVÁ 2016, 27). In this case some beads were probably partially divided during the initial cutting and broke from each other in a cold state.

Alongside the monochrome beads of type 117, the group of ring-shaped beads corresponding to type 155 is among the most widespread, with considerable quantities discovered in the context of the Vekerzug culture and, more broadly, throughout Ha C–D, extending across nearly the entire La Tène period and even into later periods (VENCLOVÁ 1990, 55–57). Beads of type 155 found in La Tène contexts show a concentration during the LT B1–C2 phases, particularly within funerary contexts (VENCLOVÁ 2016, 27; ČIŽMÁŘOVÁ 2022, 152; KRÄMER 1985). These beads were often discovered in large numbers, either forming complete necklaces or as part of more complex assemblages composed of multiple bead types (VENCLOVÁ 1990, 56). For LT C1–C2, special mention should be made of the workshop at Němčice, where unfinished beads suggest the local production of types 117 and 155 (VENCLOVÁ 2016, 26–27, fig. 20; ČIŽMÁŘOVÁ 2022, 149). These types continued to be in use throughout the LT D phase as well, being identified in settlements such as Stradonice and Berching–Pollanten (HAFFNER 1978; ZEPEZAUER 1993, 81).

In Transylvania the discovery of small ring beads is currently scarce, with some examples recorded at Sâncraia in LT C2 contexts (RUSTOIU – FERENCZ 2021, 86; GRINDEAN ET AL. 2023, 121, fig. 10), the described artefact from Fântânele–Dâmbul Popii being probably the earliest example from the La Tène period.

3. *Ribbed bead*

The forth cobalt-blue bead presents a melon shape provided with nine asymmetrical profiled vertical ribs (Pl. LIX/18). The translucent matrix shows a circular structure of the glass threads indicating the initial winding of the bead followed by the profiling of ribs using a sharp object.

Ribbed beads of cobalt-blue colour correspond to type 307 (VENCLOVÁ 1990, 59–60). The general distribution of ribbed bead types is remarkably widespread, with discoveries of such beads reported in Egypt, the Mediterranean basin, temperate Europe up to the Baltic Sea, the Black Sea region, and the Caucasus area (VENCLOVÁ 1990, 60–61; ČIŽMÁŘOVÁ 2022, 155–156). Similarly, the earliest variants of ribbed beads first appear around the mid-2nd millennium BCE, and they are encountered throughout all subsequent periods until the end of the Roman Imperial era (TEMPELMANN-MACZYŃSKA 1985, 39–45; Tafel 3/155–173).

However, pieces attributed to the Late Iron Age are distinct from earlier or later examples, particularly due to the number of ribs – ranging between five and nine – as well as their asymmetrical arrangement. Additional distinguishing features include the coloration: translucent cobalt blue, dark-blue, and bluish-green variants are more typical of the Late Iron Age (VENCLOVÁ 1990, 60; VENCLOVÁ 2016, 28; ČIŽMÁŘOVÁ 2022, 155).

Chronologically, beads of this group exhibit significant circulation in the Transalpine area and south-eastern Alpine region during the Ha D2 – LT A phases (ČIŽMÁŘOVÁ 2022, 155, with references; NEUBAUER 2007, 92–94, Abb. 26). More sporadic finds have been reported in funerary contexts from LT B1–B2, in several settlements during LT C, and in oppidum contexts throughout LT C2–D. Moreover, a Mediterranean origin for these bead types cannot be excluded; some researchers have noted their increased circulation in the central and eastern European area during the last three chronological segments mentioned above (KYSELA 2020, 151 with references).

4. Conical beads

Although conical beads are simpler in shape compared to those previously described, they represent a category that is not found in the bead typologies of the Central European area. The two beads (Pl. LIX/14–15) that are part of the necklace discovered in grave no. 79 at Fântânele are characterised by a small size, truncated-conical shape with rounded ends, and an opaque bluish-green matrix. Due to their form, these beads exhibit two different diameters: one end of the perforation measures 4 mm in diameter, while the other reaches 5 mm. The perforation diameter is narrow – up to 2 mm – and the overall height does not exceed 6 mm. The manufacturing technique involved most likely the winding of viscous glass, as evidenced by the circular structure of the glass strips within the matrix. The truncated-conical shape was probably achieved by rolling the bead on an inclined surface while still malleable.

As previously mentioned, such beads are not recurrent finds in either the Central European or Carpathian basin archaeological record. Analogues for these items have been identified in the North Pontic region. A. Alekseeva classified conical beads within types 33–44, with those corresponding to our two pieces being most similar to type 39 in that typology (ALEKSEEVA 1978, pl. 33/8). Chronologically, the latter type has been documented in the northern Black Sea region in contexts dated to the 4th–3rd centuries BC (ALEKSEEVA 1978, 66/type 39; STOLBA – ROGOV 2012, 347–355 with references; 356, pl. 78/N13). These types of beads may be interpreted as markers of contact between the Late Iron Age communities in Transylvania and the Pontic area, during the phases preceding the expeditions into the Balkans.

5. Amphora shaped bead

The final glass element of the necklace from grave no. 79 is a monochrome, amphora-shaped bead (Pl. LIX/20). It was made of a colourless, translucent glass with a subtle yellowish tint. The upper section of the bead was flattened and features a small horizontal perforation, which transitions into a vase-shaped body. The lower extremity terminates in a circular protrusion. The morphological features described above were most likely achieved through a series of shaping techniques applied while the glass was still in a malleable state.

Amphora-shaped beads were classified by H. Čižmářová, who divided them into four variants based on their colour. The piece from Fântânele falls within Variant 1, which is also the most widespread among amphora-shaped bead discoveries (ČIŽMÁŘOVÁ 2022, 185–186).

The chronology, distribution, circulation routes, and the mechanisms through which these bead types spread into the Carpathian Basin have been thoroughly analysed in a series of studies (VENCLOVÁ 1990; POPOVIĆ 1997; BOUZEK 2011; SCHÖNFELDER 2007; RUSTOIU 2015a; 2021c; BLEČIĆ-KAVUR – KAVUR 2017, fig. 4; ČIŽMÁŘOVÁ 2022, 185–189). The origins of these artefacts has been placed in the Mediterranean and Pontic regions, with production occurring from the end of the 5th century BC to the beginning of the 3rd century BC (RUSTOIU 2015c, 365 with references). The distribution of amphora-shaped beads spans a vast territory, stretching from the Lower Danube and the Black Sea in the east, to the Upper Danube basin and the Italian Peninsula in the west and southwest, encompassing the entire Balkan Peninsula in the south, and reaching as far as Moravia in the north (ČIŽMÁŘOVÁ 2022, 189, fig. 104).

Within this extensive area, A. Rustoiu distinguished two major distribution zones for the Carpathian Basin: a western and an eastern zone. The western zone, characterised by the association of amphora-shaped beads with coral and amber beads, was subdivided into four groups of finds (RUSTOIU 2015c, 365). In this regard, J. Bouzek and M. Schönfelder suggested that amphora-shaped beads entered the Danube region as a consequence of ‘Celtic’ expeditions into the Balkans, which led to the influx of spoils of war, acquired by mercenaries and warriors, into

temperate European communities (SCHÖNFELDER 2007, Abb. 2; BOUZEK 2011). Nevertheless, within the western group close analogies for the analysed bead can be observed in the context of CX 50 at Aradu Nou where a large amount of such pieces completed an elaborate necklace provided with biconical glass beads, amber and coral beads (RUSTOIU – URSUȚIU 2013).

As for grave no. 79 from Fântânele, the amphora-shaped bead was included in the eastern distribution group, along with Lower Danube contexts from: Berteștii de Jos, Pietroasele–*Gruicul Dării*, Radovanu and Zimnicea (RUSTOIU 2015c, 373). The latter group is characterised by the absence of coral bead discoveries, suggesting that the amphora beads were supplied from the Pontic region, where they were most likely produced. This conclusion is further supported by finds along the Lower Danube and by the presence of a ‘Thracian’-type fibula in the context of the Fântânele grave (Pl. LIX/34; LXIII/11) and also by the association within the same necklace with the conical example presented earlier.

VII.1.9.2. Polychrome bead

Within the entire assemblage of glass ornaments discovered at Fântânele–*Dâmbul Popii* there is just one example that belongs to the polychrome category. The piece presents a low cylindrical shape with the perforation mid-axis. The matrix is opaque green provided with eye decorations that consist of a cobalt blue translucent disc overlapping a larger white opaque disc. The manufacturing technique of this particular bead implied winding, similar to the rounded pieces mentioned, while the eye decoration was applied in a heated state onto the surface of the matrix, beginning with the white disc, which was then covered by the smaller blue disc.

The shape, colour and decoration assigns the analysed bead within type 558 that can be regarded as related to types 501–504 in terms of the eye decoration, representing probably a transition towards the decoration found on type 505. Apart from the aforementioned types, type 558 is distinguished primarily by the arrangement of its decoration, which follows a sequence of paired eyes alternating with single ones, in the pattern 2–1–2–1–2–1. This decorative register was most likely intentional, representing an evolution from the single row of eyes found on beads of types 501–504, and a more structured composition compared to the oblique rows of three eyes characteristic of type 505 (for discussion about types 501, 504 and 505, see DAVIDSON-WIENBERG 1969, 145, pl. 79a; ALEKSEEVA 1975, 61; VENCLOVÁ 1990, 28; 68; VENCLOVÁ 2016, 78; ČIŽMÁŘOVÁ 2022, 161–162). Nevertheless, the group of beads decorated with eye made from two layers, white and blue, presents different chronologies from type to type. For example, in the eastern area of the Carpathian Basin, types 501, 502 and 504 were almost in their entirety discovered in LT C2–D contexts (LUPU 1989, 53, pl. 28/14; CRIȘAN 2000, pl. 110/3; SÎRBU ET AL. 2007, 20–21), while types 503, 505 and the current 558 are more specific to the ‘Celtic horizon’ during LT B–C1 phases. Types 503 and 505 were discovered in funerary contexts at Fântânele–*Livadă*. In this context the latter spread more intensely in the eastern Carpathian basin with finds recorded in the cemeteries at Pișcolt–*Nisipărie*, Olteni–*Cariera de Nisip* and Sanislău–*La Capelă* as well as the habitats from Ciumești–*Bostănărie* and Topolovățu Mare (ZIRRA 1980, 49; NÉMETI 1989, 75, fig. 1/M11; 112; SÎRBU ET AL. 2008, 124; GEORGESCU 2022, 48).

Type 558 was first identified by H. Čižmářová and included in N. Venclová’s typology, based on a single piece discovered at Břeclav (ČIŽMÁŘOVÁ 2022, 168). Although the analysis of this type has not been pursued in detail, its inclusion within the group of eye beads composed of blue and white discs would not be without merit. From the northern Black Sea region, several types of beads are known with bluish-green or greenish matrices, whose eye decoration follows the same colour composition and layering order seen in beads of type 558. However, the arrangement of

the decoration on these Pontic types differs from that observed in pieces from Moravia and the eastern Carpathian Basin (ALEKSEEVA 1975, pl. 14/31–46, 60).

As in Moravia, in the eastern Carpathian Basin, type 558 beads have only been reported in the cemeteries at Fântânele–Dâmbul Popii and in K. Torma's collection, which comprises stray finds from the site of Ilișua–Cristeștii Ciceului (HICA-CÂMPEANU 1980, 659, fig. 3/3). These pieces are nearly identical in terms of shape and matrix colour, as well as the arrangement and colour scheme of their decoration. Nevertheless, the low number of type 558 beads published so far makes any remarks difficult regarding their distribution, origin and general chronology.

At Fântânele–Dâmbul Popii, the type 558 bead discovered in the second pile of calcined bones of grave no. 73 was supported by a bronze wire necklace. The pile also included six bracelets made of iron and bronze (Pl. LVI/1–6; LXVI/8, 10, 18). In this context the bead was fully preserved without visible secondary burns, suggesting it was placed in the pile during the deposition and funerary procession rather than worn by the deceased during incineration. Viewed as a whole, the identified accessories were probably made to be worn in the extremities of the upper limbs and in the chest region. In this arrangement, the eye bead assumes a central role, its greenish hue likely blending chromatically with the bronze necklace, thereby accentuating the eye decoration. The placement of the necklace after the cremation also suggests the important symbolic role of the eye bead. Perhaps, the bead was given some sort of protective function during life, being also a useful asset into the afterlife. In this regard, the decorative pattern of all seeing eyes precisely arranged in a sequence could've probably also been assigned a particular meaning.

Two costumes, one character. A particular funerary ritual

Grave no. 62 is a good example of some particular funerary rituals and ritual treatment of costumes (see RUSTOIU – MEGAW 2011). The cremated bones were scattered over the entire bottom level of the pit and not placed in a single deposit. Unfortunately, an anthropological analysis of the human remains has yet to be carried out, but the ornaments and clothing accessories are typically feminine. The vessels placed in the pit belong to two functional sets, each consisting of a large pot for liquids and a bowl. Their presence may suggest a double burial. Furthermore, the ornaments and clothing accessories also belong to two distinct sets. One set comprised the objects worn by the deceased on the pyre, the chain belt made of twisted rods (no. 6), the iron brooches (no. 13–15), the anklets with hollow knobs (no. 18–19) and the armring decorated with vegetal motifs (no. 21). The other set consists of pieces which exhibit no signs of having been affected by the funerary pyre, probably having been placed in the pit after cremation. These are the chain belt (no. 7), the large iron brooch (no. 8), two pairs of bronze brooches (no. 9–12), two anklets with hollow knobs (no. 16–17) and the armring made of iron wire (no. 20). The composition of these two sets of ornaments and clothing accessories may also suggest a double burial. Still, given that the cremated remains were scattered in the pit and not placed in two distinct bundles (as was usually the case of double burials, the deceased being cremated on separate pyres – see for example the graves LT 43 and 46 from Zvonimirovo, Croatia: DIZDAR 2004, 48), this is more likely a single burial.

A similar situation has been published, cremation grave no. 56 from Brežice, Slovenia. In this case the presence of two belts and two spindle whorls in the funerary inventory initially suggested a double burial. The anthropological analysis of bone remains indicated that the deceased was a woman of about 35–40 years old (JOVANOVIĆ 2011, 52). Garment accessories were placed in the grave after being collected from the funerary pyre, while others were intact and laid as such into the pit. Therefore, similarly to Fântânele, two costumes were placed in

the grave, a damaged one which was worn by the deceased on the pyre, and another which was intact and laid into the pit after cremation.

This hypothesis is also supported by the presence of a single iron knife. In this case the deceased was cremated wearing a particular costume from which the burnt accessories and ornaments were preserved, while another unburnt costume was placed in the grave. The placing of a complete or partial unburnt funerary inventory in the pit after the cremation, has been recorded in other La Tène cemeteries from the Carpathian Basin (NÉMETI 1993, 119; RUSTOIU 2006, 44; RUSTOIU 2008a, 18).

As previously noted, the inventory includes two sets of ornaments and garment accessories, each being part of a distinct costume (see Fig. 35). One of these costumes was worn by the deceased on the pyre, whereas the second one was placed intact in the grave after the cremation. From the functional point of view, the sets are nearly identical. Fig. 35 clarifies the way in which the elements of each costume were combined.

	Costume 1	Costume 2
Shoulders	– iron brooches no. 14–15, in a pair, one on each shoulder	– bronze brooches no. 9–10, a pair, one on each shoulder – bronze brooches no. 11–12, a pair, one on each shoulder
Chest	– iron brooch no. 13	– large iron brooch no. 8
Waist	– iron chain no. 6	– iron chain no. 7
Arm	– armring decorated with Vegetal motifs no. 21	– iron armring made of waved wire no. 20
Ankles	– anklets no. 18–19	– anklets no. 16–17

Fig. 35. Functional distribution of sets of ornaments and garment accessories in grave no. 62.

Costume 1, the one burnt on the pyre with the deceased, included a pair of iron brooches worn on the shoulders, while a third, much larger iron brooch was fitted on the garment on the chest. In many cases it has been noted that the pair of brooches worn on the shoulders were linked with bronze chains. Moreover, cords made of organic materials (textiles, leather) could have also been used, for example in this case. Costume 1 also included an iron chain belt around the waist. The deceased also wore an armring (the hinged and decorated one), and a pair of anklets with large hollow knobs.

Costume 2, which was intact, displays a similar combination of ornaments and garment accessories. The brooches, the chain belt and the ring-shaped ornaments are identical general types even if they are typologically different from those included in the first costume set. The sole functional difference is the presence of two pairs of brooches on the shoulders. This represents another case in which it can be assumed that cords composed of organic materials were used to connect the pairs of brooches.

Also to be noted with regard to both costume sets is the association between iron chain belts and an armring and a pair of anklets with four hollow knobs. This association is known in female burials from Transylvania and in general from the Carpathian Basin during LT C1. Examples worth mentioning are the grave discovered in the same area at Fântânele–Livadă in which three armrings made of different materials were used (CRIȘAN 1975a); Orosfaia, grave no. 8 (with two armrings of different types: VAIDA 2000, 138, fig. 9), Pișcolt, graves no. 67, 101, 102 (NÉMETI 1992, fig. 9, 15–16), Ižkovce (VIZDAL 1976, 154, 164), graves no. 5, 18 and 19, Maňa, grave no. 127 (BENADIK 1983, pl. 50) and Novo Mesto–*Kapiteljska njiva*, grave no. 194 (KRIŽ 2005, pl. 56).

As for the armrings, as mentioned above, these appear to have been in fashion over a relatively long period. Typologically they are less frequent in the eastern part of the Carpathian

Basin or in Transylvania. Thus, it can be presumed that the armrings were inherited by successive generations, perhaps within the same family, having a significant symbolic role, perhaps related to the origin of the group which settled in north-eastern Transylvania to occupy a new territory during the colonisation of the eastern Carpathian Basin and of the Balkans.

Finally, the burial of two sets of clothing in the same grave has been observed relatively recently in the Pontic Hellenistic area, at Anchialos (TONKOVA 2015), which illustrates a particular burial custom that transcends the ethnic boundaries of temperate Europe and indicates a more general ritual and symbolic position than we might have expected.

VII.2. Weapons (Fig. 36)

Of the 84 graves excavated by I. H. Crişan, to which another 10 graves uncovered in 1967 were added, making a total of 94 Late Iron Age graves, only 11 contained weapons in their inventories. Consequently, graves with weapons account for 11.70% of the total number of graves. This percentage corresponds, overall, to that of other cemeteries belonging to rural communities in the eastern part of the Carpathian Basin, such as Ciumeşti (9.09%) or Pişcolt (9.75%) (see RUSTOIU 2006; 2008a). Only two graves contained complete panoplies, the rest yielded mainly spearheads, suggesting a specific manner of displaying a warrior's identity, as well as a certain functional and probably social hierarchy. Below, we will refer to each category of weapons and pieces of military equipment, in order to outline a series of elements related to the warrior identity and social role of the weapon bearers.

VII.2.1. Swords and sword chains

VII.2.1.1. Swords

The swords are not varied in terms of type, and chronologically they are concentrated in two stages of the cemetery. The analysis of the swords from Gournay-sur-Aronde by Th. Lejars, who compiled a large corpus of swords based on morphology and typology, enables us to reference his study both typologically and chronologically (LEJARS 1994).

Type 1. Swords with the scabbard chape-end featuring a massive border: grave no. 1/1967 (Pl. LXXXIX/4–6). From a typological point of view, those found at Gournay-sur-Aronde were classified in group 2 (LEJARS 1994, 21), sometimes also referred to as the Cernon-sur-Coole type. Such swords are widespread from Gaul to the Carpathian Basin. Close analogies have been identified at Cernon-sur-Coole in France (DUVAL – KRUTA 1986), but also at Chotín in south-western Slovakia (RATIMORSKA 1981, grave no. 14/71). Such swords are associated in graves with shield bosses that are either bivalved or with rectangular wings, with twisted or double-twisted suspension chains, as well as with free-leg fibulae, rarely with examples of the middle La Tène type. All these observations indicate a date in LT B2, some swords of this type still being used at the beginning of LT C1 (LEJARS 1994, 42–44). At Sajópetri, in north-eastern Hungary, such swords are dated to the Gebhard 4 horizon (GEBHARD 1989) of the Carpathian Basin chronology, more precisely to LT B2a, while in the cemetery at Ludas, in the same area, they belong to the Gebhard 5 horizon, i.e. LT B2b (SZABÓ – TANKÓ 2012, 115, fig. 185/11). The sword discovered in grave no. 1/1967 at Fântânele–Dâmbul Popii should rather be placed in the LT B2a phase, possibly with an extension into LT B2b.

Type 2. Swords with the scabbard chape featuring a pierced non-circular end: grave no. 69 (Pl. LIII/3). From a typological point of view, those found at Gournay-sur-Aronde were classified in group 2 (LEJARS 1994, 21). This type of sword is also found across large areas of Europe. They are associated with shield bivalved bosses, but also with bosses featuring rectangular wings or

crests, suggesting a wide chronological span, from LT B2a to LT C1 (LEJARS 1994, 45). At Ludas, such a sword was dated to LT B2b (SZABÓ – TANKÓ 2012, 115–117, fig. 185/10). At Fântânele–*Dâmbul Popii*, the sword from grave no. 69 is associated with a type 4a fibula, which implies a dating closer to the LT B2a phase.

Type 3. Swords with a long, fine scabbard with no piercing; grave no. 28 (Pl. XXVI/1). From a typological point of view, those found at Gournay-sur-Aronde were classified in group 5, with two variants distinguished: 5A1: characterised by a triangular or slightly oval scabbard adorned with globules; 5B: provided with a longer and more massive scabbard (LEJARS 1994, 23–24). Three swords discovered at Fântânele–*Dâmbul Popii* can be classified in this group. One of them, from grave no. 28 (Pl. XXVI/1), belongs to variant A1, and the other two, from graves no. 17 and 41 (Pl. XVII/1; XXXIV/5), belong to variant 5B. Type 5A1 swords are usually associated with ‘gourmet’ sword chains, as at Fântânele–*Dâmbul Popii*, while type 5B pieces are generally discovered alongside shield bosses with rectangular or trapezoidal side wings, all dated to LT C1 (LEJARS 1994, 49–52), as is the case in our cemetery. Moreover, at Fântânele, the swords in question are associated with LT C1 type fibulae, and grave no. 41 contains a blue glass bracelet characteristic of the same subphase. At Ludas and Sajópetri, swords of this type also belong to the LT C1 horizon (SZABÓ – TANKÓ 2012, 144, fig. 186/6, 8; SZABÓ – TANKÓ 2018, fig. 172/s).

VII.2.1.2. *Sword chains*

Belts designed for suspending swords at the waist are, undoubtedly, essential when dealing with such weapons. Typically, they consist of two parts, one elongated and the other shorter, which are secured together and to the sword hanger with three bronze links. During both the early and late stages of the Late Iron Age, these belts were predominantly crafted from organic materials; however, there are instances where the connecting links between these components and/or the buckles or fasteners used to attach them to the belt have survived. From the very first discoveries made on the surface of the cemetery, two such bronze links were identified, one is a simple design with an oval cross-section (Pl. LXXXIX/1), the second with a flattened profile (Pl. LXXXIX/2) (see RAPIN 1987).

In the graves that were systematically investigated, only a chain used to secure the sword was found, while in two other graves, links characteristic of sword belts were found, but the swords themselves were missing from those graves. We will refer to the latter first.

1. *Belt links*

In cremation grave no. 43, two bronze sheet metal rings of different sizes (40 and 45 mm) were found (Pl. XXXVI/5–6) alongside a spearhead, an arrowhead, and a shield boss (which has not survived), the latter three crafted from iron. These rings serve as connectors for sword belts, linking the two sections of the belt to the waist. However, the sword is missing from this grave. This absence suggests that leather or textile belts featuring such metal links may have been used by other armed individuals, but not in conjunction with swords, serving instead as components of their attire.

This is also the case in cremation grave no. 49 (see RUSTOIU 2019a), in which the weapons are represented by a spearhead and a shield boss, alongside which an iron link with a profiled section was also found (Pl. XLII/8), probably used on a belt (see a synthesis of the bibliography about these artefacts in BUJNA 2011, 11–14 and fig. 11–18).

Chronologically, they were used during the early and middle La Tène. The piece from grave no. 49 at Fântânele imitates the morphology of the tubular rings made of bronze or iron. Quite similar, albeit not identical, rings are known from Palárikovo, in south-western Slovakia, being

dated to the LT B2 (BUJNA 2011, 42 and fig. 25/6–7) and Manching–*Steinbichel*, in graves dated to the LT C1 and C2 (KRÄMER 1985, 77, pl. 3/4–5, grave no. 10 and 80; pl. 12/5, grave no. 21 and 81; pl. 12/9, grave no. 23).

2. Sword chain

The only sword hanger chain from Fântânele–*Dâmbul Popii* associated with such a weapon was discovered in cremation grave no. 28 (Pl. XXVI/2). It was also associated with a spearhead and a shield boss. The entire context dates from LT C1.

These sword belts (*Panzergürtel* in German, *gourmettes* in French) belong to a type specific to the LT C (RAPIN 1987, 537–538, fig. 9/8; SCHÖNFELDER 1998, 86–87, fig. 6), which was widespread in the Carpathian Basin during the second half of the 3rd century BC and the beginning of the 2nd century BC (ZIRRA 1974, 147–148, fig. 6/5–7; GUŠTIN 1984, 339, Beilage 1/34; POPOVIĆ 1994, 54, map 1; HELLEBRANDT 1999b, pl. XI/11, XX/6, LVIII/1, 9, LXVI/1, XC/2).

VII.2.2. Spearheads

Spearheads have few variables and, due to their functional shape, have undergone constant evolution over a long period of time. However, a series of detailed morphological observations have sometimes revealed subtle changes over time, so that there are situations in which these pieces can serve as chronological markers. The analysis of spearheads from Gournay-sur-Aronde (RAPIN 1988) or those from south-eastern Pannonia (DRNIĆ 2015) represents significant contributions to the research on this category of weaponry.

Despite some being badly damaged by fire, as a result of being burned on the pyre together with the deceased, the spearheads from Fântânele–*Dâmbul Popii* can be divided into two main types.

Type 1. Spearheads with a socket representing approximately 1/3 of the total length of the piece, with the active part shaped like a willow leaf and with a pronounced median rib, semi-circular in section. Such spearheads are found in both early and middle La Tène (RAPIN 1988, 133, Type Ia; DRNIĆ 2015, Type 1.2). Therefore, it was natural for them to be represented in all phases of the cemetery at Fântânele–*Dâmbul Popii*. The spearhead from grave no. 65, dated to LT B2a, heavily damaged due to burning on the pyre, belongs to this type. The spear was also equipped with a conical, tubular iron spear butt. Grave no. 72, from which a similarly damaged spearhead comes (Pl. LV/1), probably dates to LT B2b, which may explain the apparently long socket. However, this is only an impression determined by the poor state of preservation. It belongs to the same type. Other, better-preserved pieces are known from the inventories of grave no. 43 (preserved fragmentarily, Pl. XXXVI/10) and grave no. 58 (Pl. XLVI/5) dated to LT B2b and grave no. 7 (Pl. VIII/5) from the LT C1 period.

Type 2. Spearheads with a short socket (representing approximately 1/4 of the total length) and with the active part wider at the base than the previous type. Such spears are usually dated to LT C1, but may also appear earlier (RAPIN 1988, 133, Type Ib; DRNIĆ 2015, Type 1.3), and are still in use in LT C2 (see DIZDAR 2013). At Fântânele–*Dâmbul Popii*, this type is present in graves no. 17 and 49 (Pl. XVII/2; XLII/11), which are dated to the LT C1 phase based on their inventories.

VII.2.3. Arrows

Iron arrowheads in a fragmented state were identified in cremation graves no. 18 (?) and 43 (Pl. XIX/2; XXXVI/9). The one in grave no. 18, should it indeed be classified as an arrowhead, is not associated with other weapons, but in grave no. 43 there was also a type 1 spearhead. The preserved lengths of these arrowheads are 53 and 62 mm, respectively.

The arrows were rarely placed in graves across temperate Europe in this period. Amongst the rare examples of funerary contexts dated to the LT B–C and containing arrowheads is grave no. 135 from Monte Bibele (VITALI 2008, 32, fig. 22) and grave no. 520 from Pottenbrunn, in Austria, the latter including artefacts specific to the end of the Early Iron Age (RAMSL 2002, 83, pl. 60–9). These weapons are more likely associated with hunting than with the warlike panoply (KRAUSSE 2012, 1473–1474). Their presence in the burial from Fântânele–Dâmbul Popii may point to an older tradition associated with the prior ‘Scythian horizon’ from the region, when arrows were frequently placed in warrior graves (PÁRDUCZ 1973, 32–34; KEMENCZEI 2009, 44–47; VASILIEV 1980). The same tradition predating the ‘Celtic’ colonisation seems to be illustrated by the presence of some arrowheads in other burials from Transylvania, which contain complete panoplies of arms, for example at Dezmir (LT B2) and Orosfaia (LT C1) (FERENCZ – VAIDA 2010). Grave no. 20 from the last phase of the cemetery at Pișcolt also contains three arrowheads (NÉMETI 1992, 62, fig. 3). However, such discoveries are scarce and their presence in burials containing weaponry merely suggests that hunting was also part of the warlike elite’s lifestyle.

VII.2.4. Shields

La Tène shields served as a significant ethnic symbol of ‘Celtic’ identity, which accounts for their extensive study from both archaeological perspectives and as depictions on ancient monuments (see a summary of all these archaeological and iconographic approaches in la RAPIN 1988, 21–25; see also DIZDAR 2013, 153–166). In the vast majority of cases, only the metal elements of the shield, the umbo, and the handles have been preserved, sometimes also the rim that reinforced the wooden shield plate.

At Fântânele–Dâmbul Popii, only four iron shield bosses were discovered, one of which was not preserved due to destruction by fire on the pyre. All belong to late types, with the bivalved pieces characteristic of the early phases of the Late Iron Age entirely missing.

Type 1. Shield boss with a ribbed central part, with the wings attaching it to the shield being probably triangular. They have not been preserved, having been cut or torn from the wooden shield. In M. Domaradzki’s typology, such pieces were classified as type II1D (DOMARADZKI 1977), while at La Gournay-sur-Aronde they were classified as type 3 (RAPIN 1988, 80). The only piece comes from grave no. 28 (Pl. XXVI/3), where a type 3 sword was also deposited alongside this shield. The type in question dates, like the context, to LT C1. Analogies are found, among others, in the last chronological horizon, LT C1, from the cemetery at Ludas (SZABÓ – TANKÓ 2012, fig. 186/11), as well as in the cemetery at Sajópetri (SZABÓ – TANKÓ 2018, fig. 172/r).

Type 2. Shield boss with trapezoidal attachment wings. Such pieces were found in graves no. 17 and 49 (Pl. XVII/3; XLII/10), alongside a complete panoply in the first case, and a type 2 spearhead in the second case. These shield bosses were classified by Domaradzki as type 2IB, by Rapin as type V, and by Dizdar as type Slatina 10 (DIZDAR 2013, 158–160).

Shields with this kind of boss and similar dimensions and rivets with the one from Fântânele are widely encountered from Western to Central Europe. These are also frequently found in the Carpathian Basin. Among the numerous examples are those from Fère-Champenoise (LEJARS 1994, 49–50) in France, from the cemeteries at Darmsheim in Baden-Württemberg (LEJARS

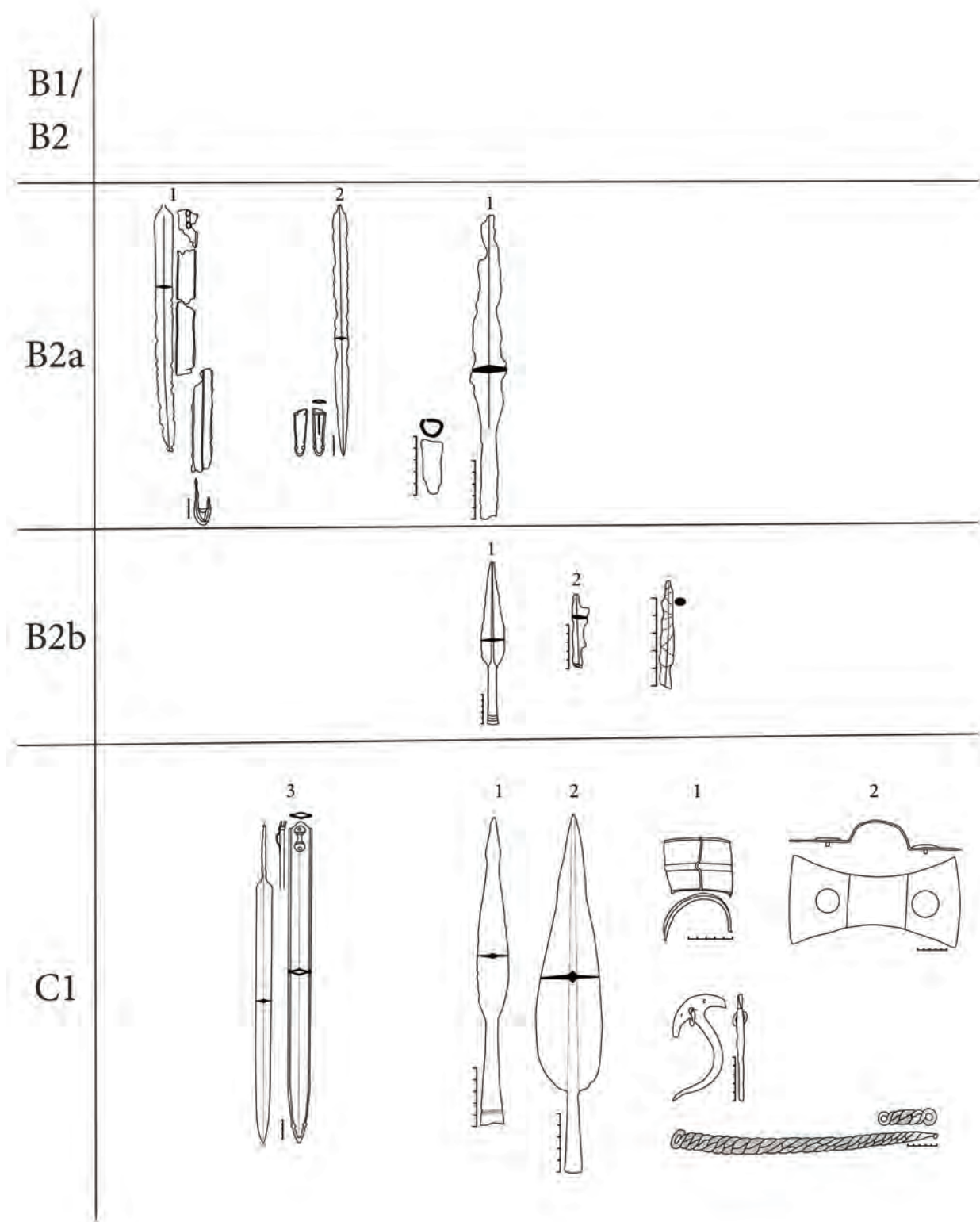


Fig. 36. The chronology of the weapons.

1994, 52) and Manching–*Steinbichel*, Hundsrucken, Pföding, München–Obermenzing, in southern Bavaria (KRÄMER 1985, 80, 86–88, 96, 114, 121–122 and pl. 11/8; 21/16; 22/6; 35/10; 59/5; 60/6), and from Chotín (RATIMORSKÁ 1981, 35–37, 52, pl. 13/8, grave no. 16; pl. 20/4, grave no. 27), Malé Kosiň (BUJNA 1995, 37–40, pl. 15/2), Drňa (FURMÁNEK – SANKOT 1985, 290–291, fig. 12/1), Mátraszőlős (ALMÁSSY 2012, pl. 17/4, grave no. 11, pl. 21/2, grave no. 12, pl. 33/1, grave no. 23, pl. 50/1, grave no. 39, pl. 73/4, grave no. 62), Belgrade–*Karaburma* (TODORVIĆ 1972, 19, no. 5, pl. 12/9; 51/2) or Dobova (GUŠTIN 1977, pl. 5/6), in the Carpathian Basin. Chronologically the earliest examples from the Carpathian Basin appeared in archaeological contexts dated to the end of the LT B2, like graves no. 16 at Chotín and grave no. 149 at Malé Kosiň. However, the majority belong to panoplies of arms dated to the LT C1, though in some regions they were also used during the LT C2 (DIZDAR 2013, 158–159, fig. 57, map 15).

According to the context of discovery at Fântânele, this type of shield boss belongs to LT C1 phase.

VII.2.5. Chariots

In the cemetery at Fântânele, in grave no. 49, a linchpin with a crescent-shaped head and a curved stem was discovered (Pl. XLII/9; LXXII/5). The head has a perforation through which an iron ring was affixed (probably the extremity of a chain). Dimensions: maximum height: 122 mm; maximum width of the head: 70 mm. The height measured between the base of the crescent-shaped head and the beginning of the maximum curvature of the stem, which indicates the diameter of the chariot's axle: 40 mm.

The linchpin with a crescent-shaped head and a curved stem belongs to a relatively common type (see further on this topic in SCHÖNFELDER 2002, 177–181). Linchpins of this shape appeared during the Early Iron Age (PARE 1992, 90–91). During the Late Iron Age, these are mostly encountered in the middle and late La Tène. Similar linchpins were found from northern France to the Carpathian Basin, but most pieces come from Central Europe (the Rhine basin, western Switzerland and southern Bavaria). The linchpin from Fântânele is the easternmost discovery of this kind. The examples from Mukačevo–*Galliš-Lovačka* probably belong to the middle La Tène (KOBAL 1996, 155–156) similarly to the artefact from Fântânele.

Weapons as symbols in funerary contexts

It has already been noted that during the Late Iron Age, from the Atlantic to Eastern Europe, warriors were buried with characteristic panoplies of arms, consisting of a sword, a spear and a shield (RAPIN 1995; 1999; 2007, etc.). However, a detailed analysis of these specific burials from each cemetery may reveal a series of particular features, pointing to the existence of several regional variations regarding the manner of expressing individual and collective identities within this apparently unitary social group (see further RUSTOIU – BERECKI 2015b).

The cemetery from Pișcolt, in north-western Romania, provides a good example. The burials cover the entire 'Celtic horizon' from Transylvania, the first graves being dated to LT B1/B2, while the last ones were dated to LT C1 (NÉMETI 1988a; 1989; 1992; 1993). Taking into consideration the compositional structure of the panoply of arms, an analysis of the funerary inventory reveals two different patterns:

1. In the first three horizons of the cemetery the graves containing a sword usually also include a shield and one or two spears. Wooden shields lacking metal fittings may have also been placed in cremation burials, but they left no archaeological traces.²

² The wooden shield discovered at Fayum in Egypt, attributed for a while to a 'Celtic' mercenary (KIMMIG 1940;

2. The graves which contain only spears were also associated with the first two horizons of the cemetery, whereas in the last horizon, the weaponry consists exclusively of spears.

These two models of structuring the panoply of arms may have many explanations. The presence of a 'standard' panoply in some burials concomitantly with the presence of spears alone in others, may suggest the use of different battle techniques and strategies. The situation identified at Pişcolt is similar to that observed in the cemetery from Ludas-*Varjú-dűlő*, in north-eastern Hungary. In this case, amongst the 20 graves containing weapons, ten include swords sometimes associated with a spear, whereas other eight funerary inventories include one (in three burials) or two spears (in five burials) (SZABÓ – TANKÓ 2012, 115–116, fig. 164). Amongst the graves containing two spears, the spearheads either have identical dimensions, thus belonging to a set, or variable dimensions, which might suggest a different functionality of each weapon.

On the other hand, this variation may also suggest a hierarchisation of the warriors, expressed through the placing in graves of the weaponry which was specific to each military 'rank'. The absence of complete panoplies in the last horizon of the cemetery from Pişcolt can be interpreted as an expression of certain ideological mutations within the group of warriors in a period in which the rural community from Pişcolt was not involved in major military actions. In this context, it has been noted that in a series of cemeteries from the Carpathian Basin, belonging to communities that were probably involved in military actions in the Balkans and Greece in the first half of the 3rd century BC, for example in the one from Belgrade-*Karaburma*, the number of graves containing weapons (complete panoplies) is large (70% of the total number of graves belonging to this chronological horizon from the mentioned cemetery), but it was reduced by half during the period of stability from the second half of the same century (RUSTOIU 2006, 61–62; RUSTOIU 2008a, 45–46). However, this situation cannot be generalised across the entire area of the Carpathian Basin, as archaeological evidence points to a certain variation from one community to another.

For example, the smaller cemetery from Remetea Mare, in Banat, which was used for a shorter period that coincided with the major 'Celtic' expeditions in the Balkans and Greece, features a higher proportion of burials with complete panoplies: 35% of the total number of graves (RUSTOIU 2006, 68, Table 4). This figure represents a significantly greater percentage when compared to the 9.75% of the total number of graves identified at Pişcolt during the entire period in which the cemetery functioned (RUSTOIU 2006, 67, table 2). At the same time such graves are more numerous in the last phase of the cemetery from Fântânele-Dâmbul Popii, more precisely in the LT C1, the same period in which they disappeared from the cemetery at Pişcolt.

Lastly, the burials which contain only spears may belong to a category of deceased defined by a younger age, similarly to the situation encountered at Monte Bibele (VITALI 2008, 30, 32, fig. 22–23, 26; LEJARS 2008, 158). In this case some of the burials belonging to children or teenagers contain only a spear as a sign of their virtual belonging to the warrior class. Still, even in this situation the patterns might be different from one community to another. Unfortunately, the human remains recovered from the cemetery at Pişcolt have not been analysed until now, so a correlation between the funerary inventories and the age categories

RAPIN 2012) and dated to the Republican period (MAIER 1973, 471; STARY 1981, 303; FEUGÈRE 2002, 77–78), illustrates the use of such items. Aside from that, only three nails belonging to a shield have been found in grave no. 961 from the cemetery at Ludas-*Varjú-dűlő*, whereas other metal fittings (umbo, handle or rim) are missing (SZABÓ – TANKÓ 2012, 54, pl. 30/1–2). It was probably the absence of the iron umbo, handle and rim of the shield that made the authors of the monograph leave grave no. 961 aside from the list of burials containing shields (see SZABÓ – TANKÓ 2012, 115–116, 123, fig. 164). Lastly, some shields made of organic materials, with very few metal fittings, have also been found in the cemetery from Monte Bibele (VITALI 2008, 31, fig. 24). Thus, the presence of shields in graves containing weaponry is not always archaeologically visible.

of the deceased cannot be established precisely. However, at Ludas–*Varjú-dűlő* it has been noted that all of the graves containing weapons (including those with only one or two spears) belong to adults (TANKÓ 2012). At the same time, the presence of weapons in children's burials has also not been documented in north-eastern Austria (RAMSL 2010). It seems that within the Late Iron Age communities from the Carpathian Basin the practice of placing weapons in children's burials is so far absent, unlike in some of the communities from the south of the Carpathians, dated to the end of the Early Iron Age (NICOLAESCU-PLOPȘOR – WOLSKI 1975, 54), or in some Germanic populations (HÄRKE 2004).

Resuming, the placing of weaponry in graves sought to underline the inclusion of the deceased into the warlike social group. The manner in which the panoply of arms was constituted may sometimes indicate the fighting style or the military rank of the warrior within this group, but in other situations it can be a sign of a certain hierarchic social status, or of the association with a particular age group.

The iron linchpin from grave no. 49, a *pars pro toto* practice?

The presence of this chariot piece in grave no. 49 which contained weapons, raises questions about its function and significance in the middle La Tène context from the eastern part of the Carpathian Basin. These questions will be detailed below.

The grave goods play an important role in understanding the symbolic practices that accompany the funerals and their connections with the deceased, the mourners and the community (RAMSL 2014, 200, fig. 18/1). In this case, it was possible to infer that the deceased was completely dressed and was cremated together with the panoply of weapons. After cremation, the remains were laid in a compact pile in the south-western side of the funerary pit. The cremated bones were mixed with clothing accessories (brooches, belt ring) and small pieces detached from the weaponry (shield rivets, tube of the spear head), which indicate that they were burnt together. The burnt remains were probably collected into a textile sack or a casket made of perishable materials (for the manner in which the cremated remains were collected and laid into the grave, see the hypotheses drawn for the cemetery at Ludas, in Hungary, in TANKÓ – TANKÓ 2012). Above this container the meat offering was placed consisting of large chunks of pig meat and its head.

The larger metal parts of the panoply of arms – the spear head and the shield boss – were treated differently. These were selected from among the burnt remains and were deliberately laid in a precise position in the opposite side of the pit: the spear head was placed perpendicularly to the pit wall, while the shield boss was placed longitudinally on top of the spear head. The linchpin that belonged to a chariot was placed next to them, at a small distance; this object was not burnt on the pyre. The manner in which the weapons and the linchpin were laid into the grave indicates that these artefacts played an important role within the funerary ritual as means of symbolically expressing the social identity of the deceased.

There are no ceramic vessels in this funerary inventory, in spite of the meat offering. In this context, it has to be noted that all other graves with weapons from the cemetery in question contain ceramic vessels, usually more than three. Thus the absence of vessels from this grave is rather unusual.

Returning to grave no. 49 from Fântânele–*Dâmbul Popii*, the careful placement of the metal parts of the panoply in the pit indicates the intention of the mourners to express the social status and identity of the deceased through the ostensive displaying of relevant objects (see further in WILLIAMS 2003, 10; WELLS 2007, 472–474). In this context, the linchpin also played an important symbolic role, and even more so as this is the single chariot piece discovered in the cemetery in question.

A close analogy for the situation at Fântânele is represented by grave no. 72/147 at Sajópetri.

A cart wheel was placed in that grave: its metal parts were discovered, which leads us to consider the importance of the wheel in pan-‘Celtic’ sacred representations (SZABÓ – TANKÓ 2018, 195, Fig. 157).

The presence of some structural elements coming from chariots or horse harness fittings (pairs of horse bits, phalerae) in graves was interpreted as a *pars pro toto* practice (JOACHIM 1969, 97–98; MÜLLER-KARPE 1989, 148–149). On this matter, M. Schönfelder has noted that the cremation graves of the Late Iron Age usually contain more or less complete sets of metal parts belonging to the body, frame and wheels of the chariots, which were accompanied by linchpins, terrets and harness fittings (pairs of horse bits and phalerae). However, in the case of *pars pro toto* practice only pairs of horse bits or phalerae were placed in graves, and maybe also linchpins (SCHÖNFELDER 2002, 311–316, Tab. 52; fig. 192).

The use of linchpins as *pars pro toto* was noted for the late Early Iron Age mostly in Bohemia, and rarely in the nearby Central European areas. The number of linchpins discovered in graves oscillates between two and four, and even eight. It was noted that in some graves the linchpins were grouped or were arranged in a row along one side of the funerary pit, which indicates that the chariots in question were not made exclusively of wood, having only the linchpins made of metal, and these pieces were deliberately laid in the same place (PARE 1992, 122–123).

Linchpins alone are rarely found in graves of the Late Iron Age (SCHÖNFELDER 2002, 312–313 and Tab. 52; fig. 190). One iron linchpin having a rectangular head and a curved stem comes from a grave dated to the LT B2 at Wildeshausen, Kr. Oldenburg (NORTMANN 1983, 71–72, 193, pl. 13/15; SCHÖNFELDER 2002, 170, 313, Tab. 18/3). Another linchpin probably dated to the end of the middle La Tène comes from a grave at Abbeville in northern France (SCHÖNFELDER 2002, 312, Tab. 52; GINOUX ET AL. 2009, 213, 219, Tab. 1). Recently, one iron linchpin having an enamelled head was found in a LT D1 grave at Waldgirmes, in western Germany (RASBACH 2011, 145–146, fig. 12/26). The single example from Eastern Europe is the linchpin from Fântânele. The two linchpins with spectacle-shaped heads from Belgrade–Karaburma (Cf. SCHÖNFELDER 2002, 172, 175, 387, fig. 103/8–9; Tab. 19/11; Cat. I/68) were accidentally discovered in the area occupied by the Late Iron Age cemetery and their eventual belonging to a burial or the association with other chariot parts are uncertain (TODOROVIĆ 1968, 147, pl. 33/11; TODOROVIĆ 1971, 161, no. 671–672, pl. 73/2–3; 96/81). Since they were not discovered during the excavations in the cemetery, the linchpins were not included into the monograph (TODOROVIĆ 1972). As a consequence, the finds from Belgrade–Karaburma cannot be included on the list of graves that contained only linchpins in their inventory.

Thus, the placing of linchpins alone in graves of the Late Iron Age is a less common practice. The question is whether they reflect the deliberate and systematic use of *pars pro toto*, as it seems to happen in the more frequent cases in which harness fittings were offered, or these artefacts were used in other rituals.

Even from their first appearance during prehistory, chariots played an important symbolic role, irrespective of their primary use as means of transportation, battle or ceremonial vehicles. This importance is reflected by their placing in graves within different communities, numerous figurative depictions (including those on Mediterranean or ‘Celtic’ coins), ancient writings or Irish and Norse literature of the early medieval period (HARBISON 1969, 45–55; PARE 1992, 177–216; RAULWING 2000, 37–59; SCHÖNFELDER 2002, 283–299), etc. The chariots, as well as the weapons of the warriors, were seen as symbols of their owners’ social status. At the same time, they were also involved in religious or magical practices and this could be one reason for which some parts were invested with symbolic meanings. One example is the wheel, which is commonly rendered in the figurative art, often in association with various divinities. Furthermore, there are numerous miniature chariot models made of metal all over Europe (for the association of the wheel with the sun and the solar divinities during the Iron

Age and later, see GREEN 1992, 225–226. For the miniature wheels and their multiple functions, see KIERNAN 2009, 11–39).

From this perspective, linchpins were also invested with certain symbolic meanings probably resulting from their practical function – to hold the wheel in place on the axle. In the magical domain, the linchpin could have been seen as a means of ‘closing’ (‘holding’) or, on the contrary, ‘opening’ or ‘liberating’ the wheel as a moving part. As a consequence, the linchpin would be more likely associated with the symbolism of the wheel than with that of the entire chariot.

The symbolic importance of the linchpins is also reflected by their frequent ornamentation. One chariot model made of bronze and dated to the Early Iron Age (‘Kesselwagen’ type), discovered in a grave belonging to the Basarabi culture at Bujoru, in southern Romania, provides a relevant example. The chariot is decorated with bird-shaped protomes and the linchpins also resemble aquatic birds (MOSCALU – BEDA 1988; PARE 1992, 181, fig. 126; VULPE 2001, 44–45, fig. 28), which point to the symbolical importance of these chariot parts.

Linchpins decorated in various styles are well documented during the Late Iron Age. For example, one iron linchpin having a bronze head, which was discovered at Unterradlberg in Lower Austria and was dated to the early La Tène, is decorated with an anthropomorphic mask framed by a pair of birds of prey facing each other. The birds have an S-shape and together they resemble a lyre, similarly to the pairs of dragons or griffins that decorate the scabbards of the La Tène swords (MEGAW ET AL. 1989, 506–510, fig. 14; 15/1). Other iron linchpins having bronze heads with an anthropomorphic rendering reappeared during the *oppida* period. Among them one piece from Urach can be mentioned, probably a votive offering in water (MEGAW 1970, 105, no. 150; SCHÖNFELDER 2002, 184–185, Tab. 25/8; fig. 112/7), and another from the *oppidum* at Donnersberg (POLENZ 1974; SCHÖNFELDER 2002, 184–185, Tab. 25/2; fig. 112/3). The head of this linchpin shows a human head having a crescent-shaped ornament on top. This element probably suggests in a hyperbolised manner the haircut of the character rendered on the linchpin. This haircut resembles the one depicted on the human head made of stone from Mšecké Žehrovice, which is considered to be specific to the druids (VENCLOVÁ 2002, 77–79). Linchpins with zoomorphic or geometric decoration appeared during the same period, for example at Manching (decorated with owl heads) (KRÄMER – SCHUBERT 1979; VAN ENDERT 1991, 52–53, pl. 11), Berching–Pollanten, Basel/Gasfabrik, Stradonice (SCHÖNFELDER 2002, 184–185, Tab. 25; fig. 112, with previous bibliography), etc.

Other types of linchpins used during the LT B2–C1 were also decorated with intricate motifs. For instance, some pieces having a rectangular or semicircular head were richly decorated in the Vegetal or Plastic Style. Among these, one example from the British Museum can be mentioned, the famous bronze linchpins from Mezek in Bulgaria, or those from Grossdraxdorf, Urach, Niederweis, La Courte (MEGAW 1970, 105, no. 149; KRÄMER – SCHUBERT 1979, 373–375, fig. 3/1–8; MEGAW – MEGAW 1995; EMILOV – MEGAW 2012, etc.) in Western Europe. Other iron linchpins were decorated with enamelled geometric motifs, for example those found at Condé-sur-Marne, Waldalgesheim, Nanterre or Brezice (SCHÖNFELDER 2002, 168–172, Tab. 18; fig. 102, with previous bibliography). Enamelled ornaments are also encountered on a series of linchpins having a crescent-shaped head and a straight stem, like the piece coming from the fortress on Mont Kemmel, in Flanders (VAN DOORSELAER 1999, 102, fig. 10/4), or those from Colne Fen, in Britain (FOSTER 2014, 63–64, fig. 6.6/22–23).

Lastly, it has to be noted that the crescent-shape head of some linchpins with a curved or straight stem also had symbolic meanings. For example, such astral symbols were incised or punched on the blade of some short swords or daggers with anthropomorphic hilts, and occasionally also on spear heads, which might have been used as sacrificial instruments in temperate Europe from the 3rd until the 1st century BC (FITZPATRICK 1996; MEGAW 2002).

In conclusion, the linchpin placed in grave no. 49 from Fântânele–Dâmbul Popii after the

cremation of the deceased could indicate the presence of the *pars pro toto* practice. However, the use of linchpins for this kind of ritual is rarely encountered during the Late Iron Age. As a consequence, taking into consideration the symbolic meaning of the linchpins, the placing of this object into the grave might indicate more likely certain magical practices which were performed during the funerals in connection with the rites of passage. The association of the linchpin with the wheel may also suggest a connection with the symbolism of the chariot as a psychopomp vehicle. Nevertheless, these suggestions and interpretations are rather speculative, but it is quite clear that the linchpin in question played an important role during the funerals due to its association with the weaponry, the most important element that defined the social identity of the deceased.

VII.3. Tools and utensils (Fig. 37)

This chapter presents the tools and domestic utensils discovered in the inventories of the graves at Fântânele–Dâmbul Popii. Among these tools, a jeweller's hammer was unearthed in grave no. 34, prompting a more extensive examination of graves containing craft tools, in terms of the social and cultural identity of the craftsmen.

The domestic utensils are significantly more diverse, including a wide range of iron slashing knives and knives, toiletries, whetstones, sewing needles, and ceramic pieces, such as a spindle whorl, an oil lamp and a rattle. Each of these items will be analysed individually.

VII.3.1. Hammer

The iron hammer of small dimensions (its length is 78 mm), discovered in grave no. 34 (Pl. XXX/3; LXXII/6), was used in metallurgical activities, either for finer blacksmith techniques (punching, chiselling, etc.), or for jewellery manufacturing. The morphological repertoire of the hammers used by metallurgical workshops is rather large, illustrating a wide variety of operations involved in the technological process (PLEINER 2006, 76–81). The piece from the grave at Fântânele, of simpler shape, has both morphological and dimensional analogies within a wider geographic area and between extended chronological limits. Similar items, contemporaneous with the hammer from Fântânele, have been discovered in the graves from Sankt Georgen am Steinfeld (TAUS 1963, 14, fig. 2) and at Mukačevo–Galliš-Lovačka (KOBAL 1996, 146, fig. 3/3), but also in later contexts and archaeological sites at Manching (JACOBI 1974, 5–7, no. 1–2, 4: the last piece has a length of 65 mm, pl. 1/4), Cáceres el Viejo (PLEINER 2006, 77–78, fig. 30/3) or Piatra Craivii in pre-Roman Dacia (RUSTOIU 1996, fig. 23/2; RUSTOIU 2000, 234–235, fig. 2/VI; RUSTOIU 2002, 85, fig. 48/VI).

The jeweller's hammer is a rare find in the context of early La Tène in the Carpathian Basin. The grave to which it belongs can be dated to LT B2a rather than later (as was believed earlier: see RUSTOIU 2009; the analysis of the fibulae and the entire inventory of the cemetery now allows for a more accurate chronological classification of the grave), and the rest of the funerary inventory indicates that the craftsman who used it was most likely of foreign origin, from outside the community.

VII.3.2. Large slashing knives (*Hiebmesser*)

Meat knives, which have long been erroneously regarded as combat knives, are represented by only seven pieces in the cemetery at Fântânele–Dâmbul Popii. Five of these are in relatively good condition and can be classified typologically. The majority belong to the La Tène type. Due

to extensive research focused on this category of artefacts (OSTERHAUS 1981; STÖLLNER 1998; SCHÖNFELDER 2010; DIZDAR 2013), they do not present significant challenges in classification and dating, thereby facilitating a deeper comprehension of this knife type.

Type 1. Knives of the Brežice type – grave no. 6. Knives of this type have an elongated triangular blade, with the tip slightly raised above the axis of the blade, a short, curved handle, and a button at the end of the handle. The dimensions of these knives from Fântânele vary between 290 and 340 mm in length. Knives of this type are known across large areas of the Carpathian Basin, being present in the eastern and south-eastern Alpine regions, in north-eastern Hungary, in the Scordiscian region, and in Transylvania. They appear in contexts dated to LT B2 and LT C1, with the latest objects being documented in LT C2 (see DIZDAR 2013, 130–133, map 12). At Fântânele, they were found in graves dated to LT B2a (Grave no. 2/1961; graves no. 18 and 25; Pl. XIX/3; XXIV/1; LXXXIX/9) and LT B2b (graves no. 2, 43, 59, Pl. II/1; XXXVI/8; XLVII/3).

Type 2. The blade is long, narrow, and sharp, with an angular edge towards the handle, the latter being sharpened in order to be fixed in a wooden sheath. The only piece comes from grave no. 17 (Pl. XVII/5). It was deposited together with the weapons in the grave, which raises a number of interpretation issues. Such knives are not known in the Fântânele cemetery, making it a unique find.

Referring to the slashing knives again, it is noteworthy that inside the graves they were not grouped together with elements of the panoply of weapons. Instead, they are associated with bones resulting from the meat offerings (usually pork). Meanwhile, when these bones are missing, the offering is supposed to have consisted only of boneless meat. Accordingly, it is quite clear that the instruments in question were used to slice off meat, like some sort of cleaver. The pointed tip also allowed them to be used for deboning the carcass. Their overall morphology did not change very much throughout the Late Iron Age. The length of these knives (ca. 250–370 mm) is similar to that of modern-day cleavers. The blade is massive, straight or slightly curved, having a quasi-triangular shape and a pointed end. Morphological changes were observed at the handle whose shape is one of the main criteria for their typological classification. From the point of view of their distribution, it has been observed that certain shapes were preferred in Western Europe, whereas knives of a different morphology were used in the East (OSTERHAUS 1981, 14–16; NÉMETI 1993, 119–120; SZABÓ – TANKÓ 2012, 128; MARION – GUILLAUMET 2012, 190–193, etc.). However, the general aspect of these knives did not undergo major alterations, probably due to their function, namely slicing off and deboning the meat, which has not changed over time. In this context, it should also be noted that knives of a similar morphology were used in Classical Greece for sacrificing animals and for deboning the meat.

Regarding the context of discovery, the slashing knives were not exclusively found in graves with weapons. There are other quite frequent situations in which their presence in women's graves has been noted, without any other accompanying elements that would be specific to the 'male' graves (SCHÖNFELDER 2010, 226–227, table 1). As a result, the idea that these knives are strictly weapons has been questioned for several decades (OSTERHAUS 1981).

On this account, slashing knives cannot be associated with the panoply of weapons. Functionally, they were tools for slicing off and deboning the meat. The inclusion of such objects in graves containing panoplies of weapons, but also in graves comprising feminine assemblages, could be discussed from a different perspective. M. Schönfelder considered recently that, due to their functionality, these knives could have played a role in certain collective banquets, where they were used by the 'organisers' to slice and distribute the meat to the participants. These 'organisers' enjoyed a higher social status, which explains the association of these knives with the panoplies of weapons (SCHÖNFELDER 2010, 229). Likewise, the presence of such tools in women's

graves could indicate a similar status related to the right to slice and distribute the meat to other members of the group participating in the feast. P. Sankot also noted that the occurrence of such knives in several graves with or without weapons indicates the high social status of the deceased (SANKOT 2014, 154). This idea appears to be further supported by the simultaneous occurrence of regular domestic knives in funerary (especially female) assemblages from a series of cemeteries located outside the Carpathian Basin. This indicates the existence of additional cutting tools for personal rather than collective use as, for example, in the cemetery at Ludas, in Hungary, or that at Zvonimirovo, in Croatia (SZABÓ – TANKÓ 2012, 128–129; DIZDAR 2013, 266–267). While dealing with the role of instruments for slicing meat, M. Poux also considered their ceremonial implications, pointing to their use in sacrifices. These knives and other objects used for the aforementioned purpose appear in graves of the great aristocracy of Gallia (POUX 2004, 42).

The symbolic importance of the knives in question appears to be also indicated by the care given to their appearance, some having ornamented handles or blades (SANKOT 1996, 560–562; SCHÖNFELDER 2010). Finally, there are cases recording the existence of metal, equally ornamented, or leather sheaths (SCHÖNFELDER 2010, 229). The display of slashing knives attached to the belt where members of the community or outsiders could see them, suggests once more their role as a symbol of rank or status.

As for the type 2 knife, it was deposited together with the panoply of weapons, which could lead to the hypothesis that it was a combat knife. Its design is distinctive and bears a resemblance to Illyrian daggers that feature handles angled relative to the blade (see GUŠTIN 1984, fig. 29), without being identical to them. No similar examples are known from the Carpathian Basin.³ Nevertheless, considering that La Tène-type cleavers share a similar size with the knife in question and that morphologically, this item can fulfil the same function, it can be categorised as a tool for cutting and boning meat. The precise origin of this unique shape remains to be more accurately established.

VII.3.3. Kitchen knives

Knives of this type, without any particularly pronounced morphological variation, can be divided into two types.

Type 1. Knives, typically shorter than slashing knives (ranging from 150–186 mm in length), feature a curved blade edge and a somewhat bent cutting edge. The handle is designed to be pointed, allowing it to be secured in a sheath crafted from organic materials. Occasionally, these knives are equipped with bone handles (SZABÓ – TANKÓ 2012, 129, fig. 176; DIZDAR 2013, 267, fig. 92). These knives are relatively frequent and are generally discovered alongside food offerings. In some instances, two knives were interred within a single grave. They are found throughout all phases of the cemetery. Graves no. 8, 10, 21, 31, 38, 56, 58 (two pieces), 65, 69, 72, 73, 74, 77 (two pieces) and 79.

Type 2. Knives with straight blades and slightly upward-curved tips. Two pieces were discovered, one in grave no. 9/1967 and the second in grave no. 80. Their dimensions are 196 and 144 mm, respectively.

Knives of this type, which are generally absent from the western ‘Celtic area’, are almost always found in the eastern Carpathian Basin (the Great Hungarian Plain and Transylvania), as well as in neighbouring areas. They are a legacy of the previous era, the ‘Scythian horizon’ (VASILIEV 1980; SZABÓ – TANKÓ 2012, 128–129). They served a domestic purpose and, as standalone tools,

³ Courtesy of Andrei Georgescu, who compiled a database of knife discoveries from Late Iron Age graves in the aforementioned area; unpublished.

were used for eating. In graves, they maintain a similar symbolic significance, being linked to food offerings.

VII.3.4. Toiletries: razors and shears

Razors and shears are relatively common in graves in the Carpathian Basin, with 202 graves from 37 cemeteries recently catalogued as containing personal toiletries (GEORGESCU 2018). At Fântânele–Dâmbul Popii, toiletries were discovered in four graves.

Razors, characterised by a blade shape similar to that of slashing knives yet significantly smaller in size, can be divided into three types according to the morphology of their handles.

Type 1 is represented by short, pointed-handled razors. Three items were discovered in graves no. 7, 51, and 53 (Pl. VIII/4; XLIII/7; XLIV/6), one of which (grave no. 7) is decorated with zoomorphic motifs.

Type 2 has a handle shaped like a ring. It was discovered in grave no. 47 (Pl. XL/1).

Type 3 has a handle shaped like a teaspoon. It was discovered in grave no. 17 (Pl. XVII/4), which contained weapons.

Shears are represented by a single piece discovered in grave no. 53 (Pl. XLIV/5), alongside the razor mentioned above.

From a chronological perspective, toiletries were predominantly discovered in graves dating from the final phase. This observation aligns with the general trend observed in the eastern region of the Carpathian Basin, where similar items were deposited in graves particularly during LT C1 (see GEORGESCU 2018, 167, fig. 2).

Regarding the contexts of discovery, two razors were found in graves with weapons (graves no. 7 and 17), one of them (grave no. 7) being associated with a whetstone. According to anthropological analysis, both graves belong to mature men. The razor from grave no. 47, the one from grave no. 51, as well as the razor and shears from grave no. 53, come from cremation graves with no weapons. Notably, the razor from grave no. 51 is associated with a whetstone. Graves no. 47 and 53 did not undergo anthropological analysis because the cremated bones were not recovered, but they most likely belonged to women. Grave no. 51 is confirmed to have belonged to an adult female. In the Carpathian Basin region, burial sites that include weapons and those that do not are found to contain toiletries in nearly equal proportions, although there is a slight preference for burial complexes that lack weapons. (GEORGESCU 2018, 167).

The razor from grave no. 7 was decorated with a stylised bird motif. Similar razors with animal-shaped handles have been unearthed in various cemeteries throughout the Carpathian Basin, typically illustrating mythical creatures like dragons (see GEORGESCU 2018).

As for the razor from grave no. 17, with its end shaped like a teaspoon, it was discovered among the cremated bones of the deceased, which reinforces the hypothesis that it was a personal toilet item. Razors with teaspoon-like ends, but smaller in size and with another general shape (the spoon oriented upward), are documented mainly in the LT D period (see BARTOLI 2016). The function of the spoon is not entirely clear (see e.g. BOCHNAK 2009 who is referring to the different opinions about their functionality). However, the recent discovery in Zvonimirovo, in a LT C2 grave, of a similar razor, but with a tweezers-shaped end (DIZDAR ET AL. 2014), suggests that such instruments could have been used for pharmaceutical, medical, or cosmetic purposes, for dosing substances. Another instrument, this time from grave no. 72/147 in Sajópetri (SZABÓ – TANKÓ 2018, 187–190; MARION ET AL. 2018, 342–343, fig. 275), features a small knife-like end, a handle on the upper edge resembling a file, and the opposite end equipped with tweezers, as

in the case of the instrument from Zvonimirovo. In this case, too, it is possible that this was a medical tool.

VII.3.5. Whetstones

Three such artefacts were uncovered. The first, which is rectangular, originates from cremation grave no. 7 (Pl. VIII/3) and was found alongside weapons, as well as a razor, while the second, parallelepiped in shape, was found in grave no. 51 (Pl. XLIII/6), also together with a razor. The latter item measured 130 mm. Both pieces were perforated to facilitate hanging. The third whetstone was found in grave 17, also together with a razor. This piece has been lost.

Whetstones, usually made of sandstone, are quite common in Late Iron Age cemeteries in the Carpathian Basin (see also GEORGESCU 2018). It has been suggested that they were used as touchstones for assessing the quality of various precious metals (JEŽEK 2013). However, their connection with razors indicates that their primary function was often to sharpen the corresponding tools.

VII.3.6. Sewing needle and spindle whorl

It was discovered between the pottery offering and the meat offering in cremation grave no. 73, which contained no weapons. It is made of iron, measuring 78 mm in length, and it was likely bent upon its placement in the grave. The cremated remains did not permit the determination of sex; however, it is probable that the grave was that of a woman. The burial complex from which this item originates is chronologically classified within the LT B1/B2 phase.

The only spindle whorl discovered comes from grave no. 8 (Pl. LXXII/2). It has a diameter of 21 mm and was placed together with the cremated bones.

Sewing needles are rare in finds from the Carpathian Basin. A needle of this type, found alongside a spindle whorl, was located in female grave no. 90 at Zvonimirovo. Other examples have been recorded at Kapiteljska Nijva and Mokronog in Slovenia, also in women's graves (see DIZDAR – LJUŠTINA 2019, 58). Consequently, the presence of sewing needles and spindle whorls may be linked to female identity. On the other hand, a magical interpretation of the placement of such tools in graves, as a means of connecting the souls of the deceased to the afterlife, cannot be dismissed.

VII.3.7. Ceramic lamp

The lamp from grave no. 34 was hand-made, from a coarse brown ceramic fabric (Pl. XXX/4). The piece imitates a Greek wheel-made prototype, the so-called open lamp. Various types of Greek lamps, as well as local hand-made imitations have been found outside the Carpathians and in the northern Balkans, in the area influenced by the Hellenistic centres from the eastern Mediterranean or Pontus (ČIČIKOVA 1984, 78–79, fig. 3, 40, pl. 20–22: Seuthopolis; BOUZEK 2005, 97, fig. 7–9: Plovdiv, the cremation grave of an Hellenised 'Celtic' warrior (?) includes two lamps and many Greek vessels, together with the local ones, in the inventory; VANČUGOV ET AL. 1999, 143–149, fig. 42/9: Greek lamp found in an indigenous settlement at Orlovka-Cartal, Ukraine close to the estuaries of the Danube; KULL 1997, fig. 27a/14–15: *Vrača-Mogilanska mogila*, grave no. 2), etc. Similar artefacts were found in the North-Pontic area, both in Greek cities and in nearby indigenous settlements (E.g. HANNESTAD 2007, 142, fig. 4; HØJTE 2010, 436, no. O-105, pl. 326).

In these regions, the daily customs and practices of the Greeks were often emulated by the local

population, especially when these two ethnical groups cohabited (for example at Seuthopolis). The presence of this type of lamp in the 'Celtic' La Tène environment from Transylvania, and indeed in the entire Carpathian Basin, where to our knowledge it stands as the sole example, is outstanding. The use of this ceramic device requires a certain degree of familiarity with this form of artificial lighting, which could not have been acquired within the Fântânele community, but rather in a location where these lamps were common. Considering these details and the complete inventory of this grave, it cannot be ruled out that the artisan interred within the community of Fântânele may have originated from areas beyond the Carpathians, possibly from the eastern regions, or at the very least, he may have resided and practised his craft there for some time.

VII.3.8. Rattle

The ceramic rattle from cremation grave no. 1 (Pl. I/5; LXXII/2) has recently been analysed in detail (see RUSTOIU – BERECKI 2015a; RUSTOIU – GÁL 2018; RUSTOIU 2019a, 163–171). The grave is dated to LT B2a. The human remains indicate that the deceased was a young woman (slightly over 20 years old).

The egg-shaped rattle found in grave no. 1 was handmade using a fine ceramic fabric. It was fired at relatively low temperature in an oxidised atmosphere, so its colour is reddish on the outside and brown on the inside. The top of the rattle was perforated to allow the insertion of more than 27 small balls made of fired clay and resembling cereal grains. The perforation was closed with a small conical stopper made of fired clay. On the outside, the rattle was decorated with registers of small incised dots longitudinally interrupted by undecorated registers, which were delimited by incised lines. The object has a height of 57 mm and the maximum diameter of 46 mm.

The distribution area of ceramic rattles is very wide across the European territory, from north-western France to Transylvania and Moldavia. However, their number is usually reduced, and such objects are missing from many regions. The middle Rhine basin is an exception, since rattles have been discovered more frequently in this region (see RUSTOIU – BERECKI 2015a with further bibliography).

Ceramic rattles of the type in question were used from the end of the Early Iron Age and the beginning of the Late Iron Age period until the beginning of the Roman period (HORVÁTH 2010, 182–184, with further bibliography; see also PAVEL ET AL. 2014). They have been more frequently discovered in cemeteries of the lower Main basin dating from the last phase of the Late Iron Age.

Regarding their context of discovery, most rattles come from cemeteries, and always from burials without weapons. A large percentage of these contexts consist of child burials, but some graves belonging to adult individuals were also identified. The number of finds coming from settlements is reduced, the rattle recovered from a dwelling dated to the LT C1 from Nagyrécse, in Hungary being a rare example (HORVÁTH 2010). The finds from Moldavia were usually included in toolkits used in magical practices or witchcraft (SÎRBU 2006, 68–70).

As sound-making instruments, they might be associated with other objects having quite similar characteristics, for example with bells. Some of these bells were part of amulets made of multiple elements and substances, each part having a specific role, and their combination contributing to a higher, comprehensive protection against evil beings (PAINE 2004). Cremation grave no. 1 at Pişcolt, belonging to a woman, offers a good example of the manner in which one such complex amulet was created. Aside from the usual costume assemblage, the inventory of the grave also included a necklace consisting of four blue or yellow glass beads decorated with 'peacock eyes', two clay beads, four iron beads, one iron loop and one small bronze bell (NÉMETI

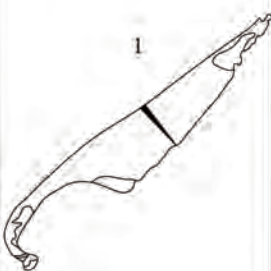
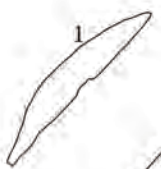
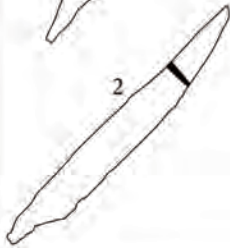
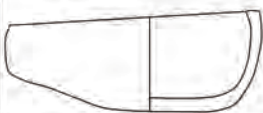
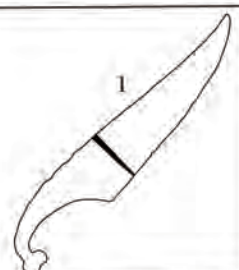
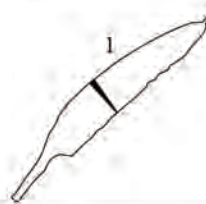
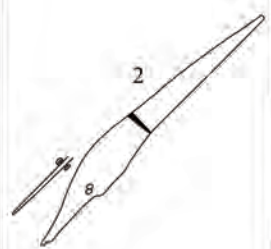
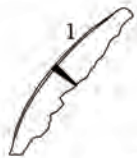
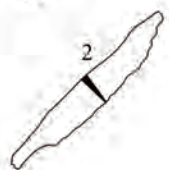
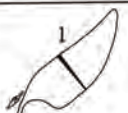
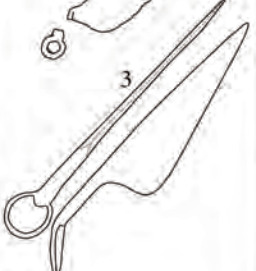
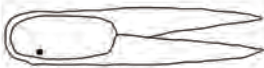
	slashing knives	kitchen knives	toiletries	others
B1/ B2				
B2a		 		   
B2b				
C1	 	 	    	 

Fig. 37. The chronology of the tools.

1989, 75, fig. 1; NÉMETI 2000, 166–167, pl. 2/3). Another example is provided by grave no. 23 from the cemetery at Münsingen, belonging to a child. Its inventory includes, aside from the costume accessories, a necklace consisting of glass and amber beads and a rattle, all of these items having an apotropaic role (HODSON 1968, 44, pl. 12; PAULI 1975, 30, fig. 10/4–6).

In conclusion, ceramic rattles discovered in the La Tène environment performed various functions and were used in different ways from one region and context to another. In funerary contexts, they were generally found in assemblages lacking weaponry, many belonging to children, so they were commonly interpreted as toys. However, these sound-making ‘toys’ were once perceived as useful protective means against the maleficent spirits which, among other things, could make children cry, though this perception was gradually lost, so only their distractive quality remained.

On the other hand, some of the rattles come from burials belonging to adult women. Consequently, it was supposed that they were part of the funerary rituals and probably facilitated the safe passage of the deceased into the otherworld (SANZ MINGUEZ ET AL. 2013, 275). At the same time, in some areas inhabited by Thracian populations, such rattles were part of the toolkits which were used in magical practices or witchcraft.

The analysis of the context of discovery of other similar artefacts from Late Iron Age Europe, as well as several historical and ethnographic analogies, suggest that rattles were often included among instruments used by the ‘masters’ of magic and witchcraft. In the case of the ceramic rattle from Fântânele–Dâmbul Popii, on the basis of its context of discovery and the available analogies, it can be presumed that it was used in an apotropaic ritual, intended to ward off with its sound the menacing supernatural beings that were believed to have tormented the deceased during her lifetime and also during her journey to the afterlife.

VII.4. Pottery (Fig. 38)

The only monographic work on ceramics from the Late Iron Age in Transylvania remains the one published by I. H. Crişan in 1969 (CRIŞAN 1969). In his view, the pottery of the Dacian Kingdom, from the 1st century BC to the 1st century AD, was the result of a local evolution, beginning in the Early Iron Age, crossing the ‘Celtic horizon’ and leading to the ‘Dacians’. Today, it is quite clear that the historical evolution of the intra-Carpathian space was not a linear process, it underwent periods of disruption, ethnic and social reconfiguration, which led to variations in material culture across different eras. Consequently, I. H. Crişan’s work is no longer relevant and cannot be used effectively in the analysis of the pottery from Fântânele–Dâmbul Popii. Handmade vessels have already been illustrated by I. H. Crişan in a 1977 study (CRIŞAN 1977a; see also CRIŞAN 1978). A series of contributions on certain ceramic or ornamental forms in Transylvania are due to Vl. Zirra (ZIRRA 1975; 1978).

The pottery associated with the La Tène culture in north-western Romania has gained recognition largely due to the work of I. Némethi, whose 1988 study serves as a key reference in this domain (NÉMETI 1988b). I. Némethi is also credited with observing the incorporation of local pottery styles into the functional repertoire of Late Iron Age pottery. Another important study on the evolution of ‘Celtic’ pottery was conducted in conjunction with the publication of the monograph on Sajópetri, which laid the groundwork for the classification and typological as well as chronological contextualisation of pottery forms across the Hungarian Plain (SZABÓ ET AL. 2007). Furthermore, we can acknowledge the contribution made by K. Tankó in 2010 (TANKÓ 2010). Finally, for the extra-Carpathian areas, the work of E. Moscalu (MOSCALU 1983)

continues to be valuable for the identification of ceramic forms that originated from the Lower Danube areas.

Therefore, the pottery of the ‘Celtic horizon’ in Transylvania has not benefited from contemporary methodologies that can systematically organise both published and unpublished materials from a typological and chronological perspective. For this reason, this chapter will outline our own framework for Fântânele–Dâmbul Popii, enabling future connections between the cemeteries in the region (Fântânele–Dealul Iușului, Fântânele–Livadă, Zoreni, etc.) and the cemetery that is the subject of this paper.

From a technological point of view, the pottery from Fântânele belongs to both the hand-made and wheel-thrown types. Handmade pottery is usually attributed to the local population, while wheel-thrown pottery is associated with the population that migrated into the intra-Carpathian region in successive waves, from the middle of the 4th century BC to the first part of the 3rd century BC (see RUSTOIU 2008a; 2012a; 2014a, etc.). The association of these two types in graves, but also in settlements, demonstrates, as has often been said, the coexistence of indigenous people and ‘Celtic’ settlers. But more than that, this combination of pottery types, along with their various shapes and functional categories, suggests a blending of culinary traditions and consumption practices (RUSTOIU 2008a; 2014a).

A final point worth noting is that the pottery discovered in graves showcases the features of tableware (which includes vessels for eating and drinking) and storage vessels (containers for liquids, provisions, etc.), while cooking vessels are seldom found. This rarity is understandable considering the nature of funeral rituals, beliefs regarding the afterlife, and the perceived needs of the deceased in the world beyond.

VII.4.1. Handmade pottery

These were generally made from fine or semi-fine clay (vessels made from coarse clay, specific to open-fire cooking, are rare), and the firing, which was more or less uniform, was usually oxidising; however, there are also vessels that have undergone non-oxidising firing. The walls are generally polished.

VII.4.1.1. Storage vessels

These are represented by several basic forms, some of which are characteristic only of certain phases of the cemetery, while others were in use for a long time.

Type 1. Bell-shaped vessel, with a mouth diameter much wider than that of the bottom, with arched walls, most often equipped with flattened handles below the maximum diameter, sometimes in combination with circular buttons below the rim. There are also such vessels without plastic elements on the body. Their height varies between 225–350 mm. Such vessels appear mainly in the early phases of the cemetery (LT B1/B2 and LT B2a). They are generally absent from the ‘Celtic’ environment of the Great Hungarian Plain (see SZABÓ ET AL. 2007; NÉMETI 1988b). Their presence is documented mainly in the ‘Getic’ settlements in the extra-Carpathian area (MOSCALU 1983, pl. XIII/6, XXVII, XXX, etc.).

Type 2. A short, jar-type vessel with curved walls and flattened handles pointing upwards, attached below the rim, and an alveolar belt. Such vessels, which were common in the ‘Getic’ settlements on the Lower Danube in the 4th–3rd centuries BC (MOSCALU 1983, pl. XIV–XVII), were used mainly for cooking. The only vessel of this kind documented at Fântânele comes from grave no. 65. It is fragmentary, which suggests that it was placed on the funeral pyre, together with the food cooked in it, and that only the fragment discovered in the grave was retrieved from the pyre.

Type 3. Bitronconical vessel with arched walls, usually equipped with flattened handles at or below the maximum diameter (some examples lack handles), occasionally adorned with cylindrical buttons on the neck or with an alveolar belt. The heights of these vessels generally vary between 290–400 mm. Vessels of this type are present throughout the cemetery's existence, with an increased frequency in the last three phases. They are also an ever-present feature of the extra-Carpathian 'Getic' environment (MOSCALU 1983). Sometimes, the vessels in question continue to be used during the 'Dacian horizon' in Transylvania, as is the case, for example, in Sighișoara–Wietenberg (ANDRIȚOIU – RUSTOIU 1997).

Type 4. Pseudo-kantharos-type bitronconical vessel with arched walls, featuring flattened handles at its maximum diameter and two raised handles. The vessel measures 160 mm in maximum diameter and 225 mm in height. It comes from grave no. 19, dated to LT B2b. Such vessels are rare in the 'Celtic' environment of eastern Hungary and north-western Romania (see a cup-sized vessel, at Pișcolt: NÉMETI 1988b, fig. 7/6), yet they reappear in the 'Getic' context (MOSCALU 1983, pl. VIII).

VII.4.1.2. *Drinking vessels*

The main types are cups, mugs, and glasses.

Type 1. Cup with one handle (which starts from the base and connects to the rim of the vessel), short body, slightly curved walls. It was discovered in graves no. 4 and 22. It is not known in the eastern 'Celtic' environment, but is present in the 'Getic' area (MOSCALU 1983, pl. LVII/14, 16, LIX/6–9). Dated to the first phase of the cemetery (LT B1/B2).

Type 2. Jar-shaped vessel with handle and flattened buttons under the rim. It comes from grave no. 60. Analogies are also found in the 'Getic' environment (MOSCALU 1983 pl. LVIII).

Type 3. Mug with almost straight walls and a slightly everted rim, a good example comes from grave no. 63. Dated to LT B2a.

Type 4. Cup with a more or less pronounced bitronconical body, everted rim, handle oval or rectangular in section; sometimes the handle is twisted (see grave no. 26). These are the most common cup types in the eastern 'Celtic area' (NÉMETI 1988b; SZABÓ ET AL. 2007). They were the prototypes for the wheel-thrown pottery.

Type 5. Truncated cone-shaped cup with eight conical buttons under the rim, discovered in grave no. 61. It may have been a cooking vessel. However, its dimensions (height 65 mm, maximum diameter 90 mm) suggest that it was used as a cup. It dates from LT B1/B2. Similar items, but larger in size, are known from the 'Getic' environment. (MOSCALU 1983, pl. LI/4).

Type 6. Cup with thin, almost vertical walls and a contoured neck. It comes from grave no. 58 and dates from LT B2b. It represents an unusual shape. Similar pieces, but with an everted rim, were found in Sajópetri (SZABÓ ET AL. 2007, type I.3.2.).

VII.4.1.3. *Tableware*

Three types of handmade bowls have been identified:

Type 1. Truncated cone bowls with angular shoulders and vertical rims;

Type 2. Bitronconic bowls with angular shoulders and inverted rim;

Type 3. Truncated cone bowls, with rounded or straight walls and a bevelled edge.

All three types were in use for a long time and are represented in all phases. They are found in large areas, both in the eastern 'Celtic' environment and in the 'Getic' one.

VII.4.2. Wheel-thrown pottery

Wheel-thrown vessels are usually made of fine paste, fired in a non-oxidising atmosphere, with colours ranging from grey to black, sometimes with black engobe. The shapes recorded in the cemetery are characteristic of the Late Iron Age pottery repertoire, therefore their analogies are numerous in the cemeteries of the Carpathian Basin.

VII.4.2.1. Storage vessels

The storage vessels found in Late Iron Age cemeteries within the eastern Carpathian Basin exhibit a generally consistent morphology. Nevertheless, they are typically categorised into various types based on specific general characteristics, despite their chronological significance being somewhat restricted (see NÉMETI 1988b; TELEAGĂ 2007, 35–36; SZABÓ ET AL. 2007). We will classify the vessels with this function that were unearthed at Fântânele according to particular morphological features.

Type 1. Bitronconical vessels with angular walls, everted rims, and diameters of the base close to that of the rim. The bottoms of these vessels may be either straight or designed with a ring or omphalos. The walls exhibit a varying number of bands, which may occasionally be notched, located on the body and/or neck. Additional decorative elements include those stamped with circular patterns. These vessels are present across all horizons of the cemetery.

Type 2. Bitronconical vessels with rounded walls, otherwise similar in characteristics to type 1 vessels. They were also used for a long period of time.

Type 3. Bitronconical vessels with rounded walls but a pronounced neck. These vessels also had a long life span.

Type 4. Short, spherical bitronconical containers. They share similar morphological characteristics with the aforementioned types.

Type 5. Jug-type vessels. These evolved from the Type *Linsenflasche* which is typical of early La Tène. At Fântânele, they are documented mainly in the last two chronological phases of the cemetery.

VII.4.2.2. Drinking vessels

Drinking vessels come in two basic shapes: cups and glasses:

Type 1. Bitronconical cups with an angular profile;

Type 2. Bitronconical cups with a rounded profile;

Type 3. Bitronconical glasses.

VII.4.2.3. Tableware

Dining vessels are represented by two main shapes: bowls and dishes.

Type 1. Bitronconical bowls featuring an S-profiled rim and a bottom that is either straight, ring-shaped, or designed with an *omphalos*. These are the most common types of dining vessels found in the cemetery. One such vessel, discovered in grave no. 4, dated to LT B1/B2, has morphological characteristics similar to the *Brauach*-type bowls, usually dated to LT B1.

Type 2. Bowls with spherical walls and thickened rims that are slightly turned outward.

Type 3. Dishes. These are bitronconical in shape, with an angular wall in the middle of the vessel (located halfway between the bottom and the rim), the diameter of the rim is closer to that of the bottom, and they are taller than bowls; the rim is everted. Various shapes can be identified: the middle section may be either angular or rounded, while the base can be straight,

ring-shaped, or feature an omphalos, among other forms. Nevertheless, this category remains relatively unchanged throughout the use of the cemetery, a phenomenon that has also been observed in other regions (see NÉMETI 1988b).

VII.4.3. The ornamentation of pottery

Handmade vessels are designed with flattened handles, cylindrical buttons, and alveolar cordons. While they served a functional purpose, it is widely accepted that they also had an ornamental function. Similarly, wheel-thrown pottery, especially storage vessels, feature horizontal ribs in relief (occasionally adorned with delicate incised dots or lines), which are also considered to have an aesthetic, decorative purpose. The truly intricate embellishments, which convey clear symbolic meanings, are exemplified by stamped and incised designs. Consequently, we will examine these in greater detail below.

VII.4.3.1. Stamped ornaments

Amongst the artefacts from the funerary inventories discovered at Fântânele–Dâmbul Popii is a series of ceramic vessels decorated with stamped motifs. Their analysis begins with the list of vessels and of their contexts of discovery (see further RUSTOIU 2014b).

Grave no. 17, Cremation grave with weapons. LT C1.

1. A wheel-thrown pitcher having a fine grey fabric. Decoration: six identical combinations of four concentric circles (two horizontally and two vertically placed) were symmetrically stamped on the neck and shoulder. Initially the circles were inlaid with a white substance, but only some traces are now preserved. Diameter of circles: 9.5 mm.

2. A wheel-thrown bi-truncated beaker having a ring base and being made of a fine black, burnished fabric. Decoration: five identical groups of two concentric circles were stamped above the maximum diameter of the body. Similarly to the first vessel, some traces of the white substance which once filled the circles can be sometimes noted. The diameter of the circles is identical with that of the circles stamped on the first vessel, indicating that the same stamping tool was used in both cases.

Grave no. 28, Cremation grave with weapons. LT C1.

3. A large bi-truncated vessel, wheel-thrown, having a fine brown-reddish fabric. Decoration: three groups of stamped elements were placed above the maximum diameter of the body. Each group consists of rows of four rosettes (resembling a small wheel with four spokes) and four concentric circles, grouped in parallel and horizontally, united by arches consisting of incised dots. In two groups the rosettes are on the upper line and the circles are on the lower line, whereas in the remaining group their position is reversed. Diameter of circles: 7 mm; diameter of rosettes: 11 mm.

Grave no. 40, Cremation grave without weapons. LT C1.

4. A wheel-thrown bi-truncated pitcher having a fine grey fabric. Decoration: a stripe in relief, decorated with oblique incisions, was placed above the maximum diameter of the body. Three identical groups of stamped elements were placed below it. Each group consists of five stamped concentric circles surrounded by other circles consisting of fine incisions. Diameter of stamped circles: 5 mm.

Grave no. 41, Cremation grave with weapons. LT C1.

5. A large bi-truncated vessel, wheel-thrown and having a fine brown-reddish fabric. Decoration: three groups consisting of four concentric circles were stamped above the maximum diameter of the body, between two parallel stripes in relief. The groups are united by arches consisting of incised lines. Diameter of stamped circles: 5.5 mm.

6. A wheel-thrown carinated bowl, having a ring base and a fine black, burnished fabric. Decoration: three groups consisting of four concentric circles, united by arches, were stamped above the maximum diameter of the vessel. The motif is similar to the one present on the previous vessel and was made with the same stamping tool.

Grave no. 42, Cremation grave without weapons. LT C1.

7. A large bi-truncated vessel, wheel-thrown and having a fine brown fabric, burnished on the outside. Decoration: three groups of decorative elements were stamped above the maximum diameter of the vessel. Each group consists of four stamped concentric circles, surrounded by a circle of fine incised lines. The latter are also surrounded by other eleven or twelve stamped circles. The two groups of motifs are united by two arches consisting of fine incisions, each having a stamped circle in the middle. Diameter of stamped circles: 7 mm.

8. A wheel-thrown bi-truncated beaker having a fine grey fabric. Decoration: triangular groups consisting of three concentric circles were stamped above the maximum diameter of the vessel. Diameter of stamped circles: 8 mm.

The eight vessels presented above belong to a relatively unitary group characterised by a broadly similar style of decoration. They all belong to the ceramic category decorated with stamped concentric circles combined in various manners. This type of decoration was widespread in Europe (SCHWAPPACH 1977, 119, fig. 1, distribution map). Although the stamped decoration was considered to be specific to the early eastern La Tène art (see for example SCHWAPPACH 1973; *contra* SZABÓ 1992, 112), in reality it was encountered on a vast area, from the western extremity of France to Transylvania, sometimes reaching the regions eastward of the Carpathians, in Moldova (BABEŞ 1993, 71, pl. 39, 40), or even eastern Bulgaria, an area situated in the hinterland of the 'Celtic kingdom' from Thrace, having the centre at Tyllis or in its vicinity (LAZAROV 2010, 105, fig. 5/1, 3; VAGALINSKI 2007, 82, fig. 18; ANASTASSOV 2011, 232, fig. 18). Chronologically such ornaments are present throughout the early and middle La Tène (LT A–C), but in certain areas they are already used in the middle Hallstatt period, being included in complex figurative compositions, for example on a series of funerary urns from the cemetery at Sopron–Burgstall (MEGAW 1970, 46, no. 10; EIBNER 1996, 108, pl. 5, etc.).

In spite of this vast distribution area and of a wide chronological span, several particular situations have been identified in different regions or sites, regarding the frequency, decorative structure and motif combination on various ceramic forms. In general, the number of vessels decorated with stamped motifs recovered from cemeteries is reduced in comparison with the total number of ceramic containers. Therefore, it can be presumed that the stamped motifs were not just a simple popular manner of ornamentation, but must have had a specific symbolic significance. Furthermore, it has to be noted that the use of stamped decoration had a different chronological evolution from one community to another. For example, at Mannersdorf (RAMSL 2011), in the western part of the Carpathian Basin, the vessels with stamped decoration (consisting of concentric circles) are present in graves belonging to the early phases of the cemetery (LT A–B1). In this case the twelve vessels stamped with concentric circles represent 19.35% of the total number of funerary pottery belonging to the mentioned phases. On the other hand, in the subsequent phases only one vessel of this type has been placed in a grave, suggesting that the popularity of this decorative style gradually diminished within this community. The situation is totally different in other cemeteries from the Carpathian Basin. For example, at Ludas–Varjú-dűlő (SZABÓ 2012) the stamped pottery (four vessels) represents 2.56% of the total number of vessels recovered from graves, but from the chronological point of view they are equally distributed in the first (LT B2a) and the last phase (LT C1) of the cemetery, while missing from the middle phase (LT B2b). In the cemetery from Pişcolt, in north-western Romania (NÉMETI 1988a; 1989; 1992), the percentage of

the stamped pottery belonging to the early horizons (LT B1/B2–B2a) is of 2.32%, whereas the figure increase to 6.66% in later horizons (LT B2b–C1). Lastly, at Remetea Mare–*Gomila lui Pituș* (MEDELEȘ *ms.*), in Banat, western Romania, a small cemetery dated to the LT B2 was excavated, in which a single vessel, decorated with stamped concentric circles associated with lyre motifs, was found (MEGAW – MEGAW 2001, 263, fig. 443; 2006, 371, fig. 21), representing 0.44% of the total number of vessels from the graves.

The aforementioned statistic data seem to suggest that the stamped concentric circles were more frequently used at the beginning of the Late Iron Age (LT A–B1), Mannersdorf being a good example, whereas their popularity diminished in the LT B2. A rather timid revival of this decorative style can be noted in the LT C1, at least in some communities from the Carpathian Basin. For example, a series of preliminary results from the cemetery at Zvonimirovo, in Croatia, seem to indicate an intensification of the use of this decoration mainly in the middle La Tène period (DIZDAR 2011, 104). However, these observations have to be further verified through a statistic analysis of the inventories from a larger number of cemeteries and settlements from this region. Moreover, the stamped vessels (representing 3.63% of the total number of ceramic vessels) are only present in the last phase of the cemetery from Fântânele–*Dâmbul Popii*, dated to the LT C1. This situation can be interpreted as a resurgence or remembrance of some earlier traditions from the community's region of origin (probably located in Central Europe), from which some 'colonists' migrated to the east, in Transylvania, a few generations before. Some other archaeological evidence of this eastward movement of the 'Celtic' groups, and of the persistence of the collective memory of the first 'colonists', has been identified at Fântânele. One example is the iron bracelet enamelled and decorated in the Vegetal Style, recovered from the grave no. 62. The object was produced at the end of the 4th or the beginning of the 3rd century BC (LT B2), somewhere in Western Europe. Afterward it was brought over in the East by a migrating individual, being then inherited and further integrated into a set of jewellery belonging to a woman from the community from Fântânele, who belonged to a later generation and was buried in the second half of the 3rd century BC (RUSTOIU – MEGAW 2011).

The stamped vessels from the cemetery at Fântânele appear both in graves containing weaponry (graves no. 17, 28 and 41) and in others containing feminine costume sets (graves no. 40 and 42). As a consequence, there is no connection between this type of decoration and a particular social or gender category. The same situation has been noted in the cemetery from Ludas–*Varjú-dűlő*, in which the stamped vessels are equally present in graves with or without weaponry. On the other hand, at Mannersdorf this type of pottery appears in only two burials containing weaponry (from a total of eleven graves including vessels stamped with concentric circles in their inventory), whereas at Pișcolt only one grave with weaponry (from a total number of ten) contains such finds. These characteristics may suggest that the attitude towards these motifs and their meanings was different from one community to another, even if they are remarkably similar from the morphological point of view.

Bringing into discussion the functionality of the vessels with stamped decoration, it has to be noted that mostly the typical tableware of the Carpathian Basin (NÉMETI 1988b) is ornamented in this manner. The mentioned motifs are present on liquid storage and serving vessels, drinking vessels and open forms for eating or serving. It is important to note that different combinations of concentric circles were also stamped on vessels inspired by forms from the eastern Mediterranean region. For example, they are present on some Danubian kantharoi (Zvonimirovo, Balatongyörök, Kosd, Szombathely, Zalakomár: MAJNARIĆ–PANDŽIĆ 2001, 91, pl. 5; DIZDAR 2011, 115, fig. 4/1; KRUTA – SZABÓ 1982, pl. 2–3; HORVÁTH 2008, 113, fig. 2–7; RUSTOIU – EGRI 2011, fig. 6/1, 15/6, 23/2) or on an oenochoe from the cemetery at Ludas–*Varjú-dűlő*, which copies in a local manner a Greek ceramic or metal vessel (SZABÓ 2012, 82, no. 13, 135, pl. 50/11). At the same time, similar decorative motifs are also present on a

series of ceramic objects having different functions than those mentioned above. One example is the fragmentary zoomorphic figurine discovered in a pottery workshop from Biharea, in Romania (DUMITRAȘCU 1982, 165, fig. 6/2). Lastly, some concentric circles were also used in combinations of motifs decorating some boot-shaped vessels which are present in a few cemeteries from the Carpathian Basin, for example at Mannersdorf (RAMSL 2011, 182–183, pl. 36).

The vessels from Fântânele–Dâmbul Popii belong to some types which are frequently found in cemeteries and settlements from the Great Hungarian Plain and Transylvania (NÉMETI 1988a; SZABÓ 2007, 243, fig. 49; SZABÓ ET AL. 2008, 217). The large bi-truncated vessels (no. 3, 5 and 7), the pitchers (no. 1 and 4) and the carinated bowl (no. 6), are all typical La Tène forms. On the other hand, the bi-truncated beakers (no. 2 and 8) are mainly specific to the eastern part of the Carpathian Basin. They were inspired by forms coming from the Greek Pontic region and from the northern Balkans, being morphologically adapted to the ‘Celtic’ tableware set from the inner Carpathians region (ZIRRA 1975, p. 50, 53; ZIRRA 1978, 132; see the distribution map of the single-handled vessels in the Carpathian Basin in TELEAGĂ 2008, 120, fig. 18). These vessels became popular in this region due to the earlier tradition (of the Early Iron Age) of using single-handled drinking vessels, which commonly replaced the handleless beakers of La Tène type, frequent in the tableware of Central Europe. At the same time, their distribution area overlaps to the west, in the Great Hungarian Plain and the middle Danube region, the area in which the so-called Danubian kantharoi, inspired by Greek forms, were used. The incorporation of the latter forms into the Late Iron Age tableware was also facilitated by the prior existence of an ‘Illyrian’ tradition of using two-handled drinking vessels in southern Transdanubia and the basins of the Sava and Drava rivers (RUSTOIU – EGRI 2010c; 2011). The two types of drinking vessels illustrate two different manners of manipulating, serving and consuming beverages, preferred by various communities from the aforementioned regions. In this context it has to be noted that some drinking vessels were important individualised items in certain situations. An example is the ceramic beaker recovered from grave no. 107 from Pișcolt, which has a handle made of bronze sheet, replacing the broken original one; the vessel must have remained in use up to the death of its owner, as a cherished belonging (NÉMETI 1975, pl. 3/11; NÉMETI 1992, 82, fig. 17/10).

As concerning the style and repertoire of the decorative motifs, the vessels from Fântânele are decorated (with a single exception) with stamped concentric circles arranged in various combinations and sometimes united by incised arches. Such circles were impressed onto the vessels’ walls before firing, using a series of stamping tools made of animal bone or horn. A good example is the stamp made of horn discovered in the already mentioned pottery workshop from the settlement at Biharea (DUMITRAȘCU 1982, 157, fig. 6/1), dated to the LT C1 and eventually up to the beginning of the LT C2 (RUSTOIU – EGRI 2011, 73; MEGAW – MEGAW 2006, 376–378, with a list of stamps for decorating pottery).

In the case of the vessels no. 1 and 2 from grave no. 17 and of the vessels no. 5 and 6 from grave no. 41, only one stamping tool was used, indicating that the containers were made at the same time and in the same workshop. This hypothesis is also supported by the similar firing and composition of the fabric of all these vessels. Summarising these observations, it might be possible that the tableware placed into the graves was purposefully ordered for funerary scopes, an idea which was also suggested many years ago by I. Némethi in his analysis of the cemetery from Pișcolt (NÉMETI 1988a, 109).

The remaining vessels were each decorated with different stamps, one type of tool being used for each vessel. The vessel no. 3 from grave no. 28 was decorated with concentric circles and rosettes having a wheel-like shape, with four spokes. Such rosettes, but with more spokes, are also encountered on the indigenous pottery from the Balkans during the 4th–3rd centuries BC (ČIČIKOVA 1984, fig. 13, 32–33, pl. 8, 10y11, etc.; MOSCALU 1983, pl. 67–69;

ALEXANDRESCU 1980, 35, 48, fig. 39/8), and reappeared later in Dacia, on vessels from the Kingdom period of the 1st century BC (CRIȘAN 1969, 210–211, pl. 111/1, 4). This pattern led V. Zirra to presume that the rosettes appeared on Late Iron Age pottery from Transylvania due to the contacts with the Thracian communities from the Balkans (ZIRRA 1975, 54), albeit later he abandoned this hypothesis (ZIRRA 1978, 131). The rosette-shaped stamps were rarely used on Late Iron Age ceramics in comparison with the concentric circle motifs. For example, rosettes were stamped on a vessel from Dipșa (ZIRRA 1975, 54, fig. 3/1) and on another one from Orosfaia (VAIDA 2000, 135, fig. 2/3; VAIDA 2006, 303, fig. 15/6). The latter cemetery was wrongly localised in older literature, in the nearby village at Comlod (DĂNILĂ 1971; ZIRRA 1978, 129–130). The mentioned examples come from cemeteries located in the same region as the one from Fântânele. The rosette-shaped stamps (more or less closely resembling those from Fântânele) are also known from Hungary, on a vessel from Szob, on which they are associated with another type of rosette, the triskele type (JEREM 1975, 52, pl. 15/2), south-western Slovakia, at Dvory nad Žitavou (BENADIK ET AL. 1957, 78, 137, pl. 27/7) and Malé Kosiň (BUJNA 1995, pl. 14/1, 55/7) or Lower Austria, at Pottenbrunn (RAMSL 2002, 107, pl. 44/12). Similar rosettes also appear westward in Bavaria, at Schwebheim (SCHWAPPACH 1975, pl. 2/3). However, the closest analogy for the decorative motif from Fântânele appears on a vessel from the pottery workshop from Sopron–*Krautacker*, which functioned in the 4th–3rd centuries BC (JEREM 1984, 60, fig. 4/5). At the same time, the stamped rosettes on two vessels from the settlement at Nitra–*Šindolka*, in south-western Slovakia (BŘEZINOVÁ 2000, pl. 43/5, 141/10; BŘEZINOVÁ 2002, fig. 2/2–3) are stylistically quite close. Lastly, some rather similar rosettes appear on a series of metal artefacts, for example those decorating the chape of the scabbards of some swords from Hatvan–Boldog, Kosd, etc. (SZABÓ – PETRES 1992, pl. 18, 29, 31, etc.) or the countermarks on ‘Celtic’ coins, like those from the hoard discovered at Chișineu-Criș, in western Romania (DEMBSKI 1994, pl. 9/13, 19–21). In the same way in which a series of ornaments belonging to the Vegetal Style, usually represented on metal objects, were transferred on pottery by craftsmen having a variable degree of technological and artistic ability (MEGAW 1970, 92–93, no. 115; DUVAL 1974; SZABÓ – PETRES 1992, 53–54), some stamped decorative motifs specific to the metal art were also used to ornate the ceramic tableware, pointing to the possible existence of a common symbolic repertoire.

The manner in which the groups of stamped motifs were composed is quite unitary. On beakers the concentric circles are displayed either in pairs (vessel no. 2) or in triangles (vessel no. 8). On larger vessels either four concentric circles or rosettes were united with arches, or groups of four or five stamped elements were included into an incised circle; sometimes these motifs were combined, like on the vessel no. 7. In all these cases the groups of stamped motifs were symmetrically placed on the vessels, three times. The vessel no. 1 is an exception in what concerns the composition and the placing of ornamental groups on its surface. Thus the four stamped circles make a T-shaped motif, each group being symmetrically repeated six times. The same composition, as well as the same decorative rhythm, is encountered on a series of early La Tène bowls belonging to the so-called Braubach type. Amongst the examples the vessels from Győr–*Újszálás* and Kosd (HUNYADY 1942, pl. 59/1, 4; 60/1) can be listed, as well as the finds from the graves no. 10 and 114 from Mannersdorf, dated to the LT B1 (RAMSL 2011, pl. 46/1, 125/6). Thus, the vessel from Fântânele is again an expression of the remembrance of some earlier traditions from the region of origin of the ‘colonists’, who moved eastward at the end of the LT B1 and the beginning of the LT B2, through the transferring of some ancestral symbols on vessels used in funerary ceremonies which were performed a few generations later.

In conclusion the stamped pottery from the cemetery of Fântânele–*Dâmbul Popii* illustrates a series of particular aspects regarding the use of such ornaments in the eastern ‘Celtic world’. These aspects were determined by the cultural evolution of the Late Iron Age

communities which ‘colonised’ the Carpathian Basin in successive phases during the 4th and 3rd centuries BC.

M. Szabó already noted that in the Carpathian Basin the La Tène culture was characterised by a synthesis of the Central and Western European elements and of many components belonging to the local communities. Several cultural ‘borrowings’ from the eastern Mediterranean area and the northern Balkans were added to this core part, which were filtered and interpreted in a particular manner. The result of this ethnic and cultural synthesis was the formation of a veritable *koiné* of the eastern Celts (SZABÓ 1971; 1992; 2006, etc.). The stamped pottery from Fântânele, as well as many aspects from the same cemetery, illustrate the same cultural amalgamation.

The decorative motifs, consisting mainly of stamped concentric circles and rarely of rosettes, were usually placed on typical vessels belonging to the Central European Late Iron Age tableware set. The local dining sets also include forms originating from the earlier local repertoire, for example beakers and mugs, which were adapted to the consumption style of the newcomers.

Chronologically, all of the stamped vessels from Fântânele come from graves dated to the LT C1. The preliminary statistical analysis of some cemeteries from the Carpathian Basin seems to suggest a resurgence of the decorative motifs consisting of concentric circles precisely in this phase of the Late Iron Age, at least in some communities. More than that, in certain cases the organisation of the motifs and the ornamentation rhythm illustrate the resurgence of some earlier Central European traditions of the beginning of the La Tène period. This pattern might be interpreted as a remembrance of some cultural traditions from the region of origin of the communities which ‘colonised’ the eastern part of the Carpathian Basin.

On the other hand, some decorative motifs, for example the rosettes, were inspired by products from the eastern Mediterranean region. The vessel stamped with rosettes and palmettes, discovered in the grave no. 89 from Pottenbrunn and dated to the LT B1, is a good example (RAMSL 2002, 36, 107, 110, fig. 125, pl. 44/12). In the western part of the Carpathian Basin the connections with Italy were established early along the famous Amber Route, facilitating such exchanges. At the same time, the communities from the central and south-eastern parts of the Carpathian Basin were connected to the eastern Mediterranean area soon after the colonisation of these regions in the second half of the 4th century and the beginning of the 3rd century BC. Macedonia played a major role in the northward distribution of Greek products, using the route along the Vardar–Morava corridor (ROLLEY 2002, 49). A series of local commercial centres, like the one recently investigated at Kale-Krševica, in the upper basin of the Južna Morava, Serbia (POPOVIĆ 2005; 2006, etc.), also played an important role in the distribution of such products. These contacts directly established or filtered through the Illyrian or Thracian populations from the northern Balkans, determined the appearance of some objects inspired from Greek forms in the Late Iron Age environment from the Carpathian Basin, but adapted in a particular manner to the necessities of the local communities. For example, this was the case of the Danubian kantharoi (RUSTOIU – EGRI 2010c; 2011). At least a part of the rosette-shaped stamped motifs which appear on pottery from the Carpathian Basin might have the same source of inspiration.

The stamped pottery from Fântânele illustrates in the local manner the amalgamation of the symbolic languages specific to a community living on the frontier between the East and the West.

VII.4.3.2. Combined ornaments: stamped and incised

The decorated beaker from grave no. 59 is relevant for what means this kind of ornamentation. The wheel-made beaker has the body and handle decorated with intricate motifs. The body

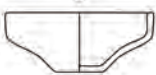
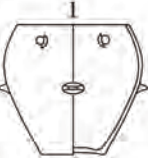
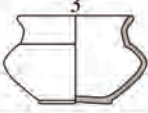
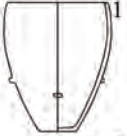
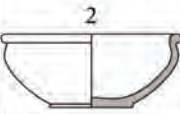
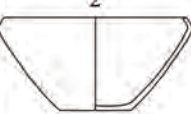
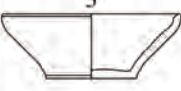
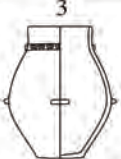
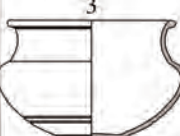
	HANDMADE			WHEEL-THROWN		
	tableware	drinking	storage	tableware	drinking	storage
B1/ B2		  		 		 
B2a	 	  	  	  	 	 
B2b	 		 	 		  
C1				 	 	  

Fig. 38. The chronology of the pottery.

was decorated with a register of triangles on the maximum diameter and above it. The upper edge of the register consists of a row of semicircular elements stamped with a bone tool (most likely similar to the one identified in a ceramic workshop from the LT C1 settlement at Biharea: DUMITRAȘCU 1982, 157, fig. 6/1) or a wooden one. The row of stamps is not exactly horizontal, sometimes deviating from the line. The lower edge was made in the same way but with a different instrument since the resulting motif is different. The register was made by incising zigzag lines which created a row of triangles. The triangles with a downward tip were filled with stamped semicircles using the same tool as in the case of the upper edge of the register.

The base of the handle was decorated with a similar triangle filled with semicircular stamps. Above this motif are placed four rows of semicircular stamps at a roughly equal distance (15–20 mm) from one to another. Two diagonal lines were incised between the first two rows. The resulting lateral triangles were filled with semicircular stamps. The next two rows of stamps are separated by two diagonally incised lines.

This intricate decoration was not randomly chosen and composed, in spite of the apparently rough technique and lack of ‘artistic quality’. Each motif is also present on other ceramic vessels from the Carpathian Basin or more distant regions during different phases of the Late Iron Age, which may suggest that they had a precise symbolic meaning.

Late Iron Age ceramic vessels from the Carpathian Basin display a wide variety of decorative motifs. Among the most common ones are the stamped ornaments which were sometimes combined with the incised ones. These include combinations of circular and semicircular stamps (ZIRRA 1978; KRUTA – SZABÓ 1982; DUMITRAȘCU 1982; SZABÓ ET AL. 2007; RUSTOIU 2014b, etc.), single S-shaped stamps or combined in rows or in the so-called lyre motif (JEREM 1984; MEGAW – MEGAW 2006, etc.), etc.

Another category of ornaments includes those belonging to the Vegetal Style. In the Carpathian Basin, they are present on ceramics but mostly on metal objects, being introduced by groups of Central and Western European populations arriving in the LT B1 and LT B2. One example belonging to this chronological phase is the situla from Dolný Pál, Slovakia on which the vegetal ornaments are combined with the geometric ones, which will be discussed below. Some examples seem to confirm the connection between ornaments on ceramics and those on metal objects. One local kantharos discovered at Nagyhorcsök, in Hungary, displays registers of incised ornaments under the handles, which are a simplified version of the Swords Style decoration (DUVAL 1974, fig. 1–2, 7–8, pl. 9–10; SZABÓ – PETRES 1992, 53–54). Unlike in other regions, the vegetal decoration persisted over a longer period in the eastern Carpathian Basin, more likely due to the need to preserve and memorise traditional symbols and practices from the ‘Celtic’ colonists’ homeland (RUSTOIU 2016a, 238). This is the case of some vessels discovered in contexts dated to the LT C1, for example the beaker found in the grave of the ‘chieftain’ from Apahida (ZIRRA 1976; BERECKI ET AL. 2017, 148) or the bi-truncated vessel from Moftinu Mic (NÉMETI 2012).

In this context, a series of geometric motifs which are present in the Late Iron Age decorative repertoire from the Carpathian Basin seem to be alien, if we compare them with the specific stylistic features encountered in this environment during the period in question. Among these alien motifs are some of the elements decorating the aforementioned beaker from Fântânele-Dâmbul Popii.

The incised triangles sometimes filled with incised lines or circular and semicircular stamps were used over a longer period of time. For example, incised triangles filled with circular stamps are present on ceramic vessels dated to the middle phase of the eastern Hallstatt area (*Osthallstattkreis*) in the cemetery from Sopron-Burgstall (MEGAW 1970, no. 10; EIBNER

1996, pl. 5, etc.). Similar motifs are also encountered on vessels belonging to different La Tène phases, for example: one beaker with a horned handle, dated to the LT A/B1, from Vienna–*Leopoldau* (NEBEHAY 1993, pl. 24/1, 27/4); one bowl of the Braubach type from a LT B1 grave at Mannersdorf (RAMSL 2011, pl. 34/23) and one vessel dated to the same LT phase from Pötsching (ZEILER 2010, 168, no. 841, pl. 43); one bowl from a LT B2a grave at Rezi (HORVÁTH 1987, 111–112, pl. 23/10); one beaker with an anthropomorphic handle decorated with triangles filled with either circular or semicircular stamps from a LT C1 grave at Kósd (SZABÓ 1972, pl. 37/4; SZABÓ 2003, fig. 2/2); one bi-truncated vessel from a LT C1 grave at Tápiószele (HELLEBRANDT 1999b, 41, pl. 15), etc.

Another symbolically charged motif also appears on the beaker from Fântânele–*Dâmbul Popii*, on the lower side of the handle. The incised and stamped motif represents a rectangle with two diagonals resembling St. Andrew's cross. The opposite resulting triangles suggest two hourglass motifs, one horizontal and another vertical.

Although this motif is widely encountered through time, it is rarely documented in the Carpathian Basin during the Late Iron Age. The few ornaments of this kind were made using different techniques. One of them consists of a stamped rectangle which includes one 'St. Andrew's cross'; it appears on a vessel from Körösszegapáti, in eastern Hungary, coming from a grave which was dated to the LT B2b (NEPPER 1976, 15, 29, fig. 14). One pair of bronze bracelets found at Maňa, in south-western Slovakia, which have the band decorated with a row of similar motifs, was dated to the same La Tène phase (BENADIK 1983, 32, no. 5–6, pl. 47/4–5; BUJNA 2005, 82, fig. 62, 66, type BR-K4-B). One bowl from a grave discovered at Rezi, in Transdanubia, was slightly earlier dated to the LT B2a. The vessel is decorated with three groups of three stamped rectangles including the 'St. Andrew's cross', combined with other motifs consisting of stamped circles (HORVÁTH 1987, 111–112, pl. 23/10). Also from Transdanubia, from Rácalmás–Kulcs, comes one bowl decorated with similar stamped motifs. Its dating is far from clear, though – either LT B2 or LT C1 (MÁRTON 1933, pl. 20/5; PETRES 1971, 24, 27, fig. 8; for an unknown reason SCHWAPPACH 1975, pl. 3/4 and ZEILER 2010, 117, fig. 88/3, indicate Veszprém–*Jutas* as the place of discovery). Lastly, one small beaker with cross-like stamps comes from the funerary inventory of a child grave from the cemetery at Malé Kosihy, being dated to the LT C1 (BUJNA 1995, 34, pl. 13/3, grave no. 109). This kind of stamped ornaments is also rarely found in Western Europe during this period. Among these examples are one vessel from Bad-Nauheim and another from Pritschöna/Merseburg, in Germany (ZEILER 2010, 117, fig. 88/2, 6).

One analogy that is closer technically and stylistically to the ornament on the beaker from Fântânele–*Dâmbul Popii* comes from Berettyóújfalu, in eastern Hungary. This is a wheel-made beaker whose body is decorated on both sides of the handle with motifs consisting of incised lines and semicircular stamps, which resemble the 'St. Andrew's cross'. The opposite triangles delimited by the cross were filled with stamped elements; they resemble an hourglass similar to those on the beaker from Fântânele–*Dâmbul Popii* (HUNYADY 1942, pl. 74/1; HUNYADY 1957, 143). The beaker from Berettyóújfalu can be more likely dated to the LT C1.

The 'St. Andrew's cross' ornament appearing on the beaker from Fântânele–*Dâmbul Popii* has a more stylised correspondent on the handle of a local kantharos discovered in a grave containing a female inventory, dated to the LT C1, from Nyíregyháza–*Császárszállás* (ALMÁSSY 2014, 244–245, fig. 5). On the base of one handle two similar crosses were incised. The rest of the handle, as well as the second handle, were decorated with a row of incised hourglass-like motifs. Another ornament that belongs to the same symbolic language, though more elaborate, appears on another local kantharos found in a grave from Csobaj, in the same upper Tisza region.

The vessel from Csobaj belongs to the funerary inventory of a grave without weapons which was dated to LT C1. The handles were decorated on top with small ram heads; on their

length there is a row of rectangular motifs made of incised lines and dots; 'St. Andrew's cross' appears on one handle and squares with a single diagonal were incised on the other handle. Some Vegetal Style ornaments were incised on the back of the ram heads and on the base of the handles. Two rectangular ornaments were incised on the vessel's body on both sides of the handles and above the maximum diameter. One of these pairs, placed next to the handle decorated with a row of 'St. Andrew's cross' motifs, is made in the same manner but with double crosses. The second pair, located close to the opposite handle, is decorated with composite angular motifs (HELLEBRANDT 1989).

Similar pairs of rectangular ornaments are also present on a beaker from grave no. 36, without weapons, from Vác-Kavicsbánya, dated to the LT C1. In this case, two rectangular motifs were placed on both sides of the handle which was decorated with incised diagonal lines bordered by rows of stamped semicircles. One motif includes a chequered pattern inside, while the other includes one 'St. Andrew's cross' (HELLEBRANDT 1989, 44–46, fig. 15–16; HELLEBRANDT 1999b, pl. 36).

Lastly, the already mentioned situla from Dolný Pial, Slovakia, dated to the LT B1, has the neck decorated with a row consisting of Vegetal Style and geometric motifs. The latter include the same type of rectangular incisions already mentioned. Inside, they either have a chequered pattern, a swastika or a stylised meander (MÁRTON 1933, 48, fig. 9, pl. 18–19; MEGAW 1970, 92–93, no. 115).

Summarising these observations, it can be said that the earliest geometric ornaments appeared sporadically in the Carpathian Basin during the LT B1, in combination with motifs belonging to the 'Continuous Vegetal' or 'Waldalgesheim' style. The situla from Dolný Pial is the single known example and it is quite clear that the vessel and its decoration originate from the Western European area. During the following phases of the La Tène (LT B2a and LT B2b), the geometric ornaments including rectangular stamps which contain the 'St. Andrew's cross' appeared sporadically on ceramic vessels and some jewellery in the middle Danube region (Hungary and south-western Slovakia) and to the east of the Tisza River. A single artefact of this kind, which was dated to the LT C1, comes from south-western Slovakia. Similar ornaments, though made in a different technique, appeared in the LT B2b and mostly in the LT C1. These are only present in the eastern Carpathian Basin, in north-eastern Hungary and Transylvania. The decorative motifs, sometimes combined with vegetal ornaments in elaborate designs, other times simplified and extremely stylised, resemble the early La Tène decorative themes. Lastly, it also has to be noted that the motif of 'St. Andrew's cross' is never associated with weaponry in funerary contexts.

VIII. THE CHRONOLOGY OF THE CEMETERY

Following his research into the ‘Celtic’ cemetery at Fântânele–*Dâmbul Popii* (Cemetery II, the earlier cemetery having belonged to the Scythian period), I. H. Crișan also addressed the chronology of this significant Transylvanian burial site. He noted that, in spatial terms, the ‘Celtic’ graves appeared to extend from east to west, forming a linear stratigraphic sequence from the earliest to the latest funerary complexes (see CRIȘAN MS, CRIȘAN 1975a, 41, note 1; CRIȘAN 1975b, 185; CRIȘAN 1977, 75). It is quite clear that the scholar from Cluj was influenced by the model of the Münsingen cemetery (Switzerland), where such a spatial evolution had been observed (HODSON 1968). As we have already argued (RUSTOIU 2015a; RUSTOIU 2016a, etc.) and as will be demonstrated in this chapter, the cemetery at Fântânele–*Dâmbul Popii* was organised into three groups of burials, which probably corresponded to the families or clans of the community to which the cemetery belonged.

As regards both relative and absolute chronology, I. H. CRIȘAN (MS) considered that the cemetery could be divided into three phases: the first phase: LT B1 (beginning around 350 BC and covering the second half of the 4th century BC); the second phase: LT B2 (beginning at the end of the 4th century BC and ending at the beginning of the 3rd century BC; in Crișan’s text, ‘the beginning of the 2nd century BC’ is a typographical error); the third phase: LT C1 – the beginning of LT C2 (beginning in the 3rd century BC and ending around 150 BC).

This chronological framework can no longer be maintained. Nevertheless, it is worth noting that, by drawing on archaeological evidence and chronological models from Central and Western Europe, I. H. Crișan proposed, already in the 1970s, a considerably more accurate chronological picture than that offered by V. Zirra (see, for example, ZIRRA 1967; ZIRRA 1971), who considered the ‘Celtic horizon’ to have ended at the end of the 2nd century BC. Crișan’s chronology was thus more closely aligned with the international scholarship of his time.

VIII.1. Relative and absolute chronology

The relative chronology of the Fântânele–*Dâmbul Popii* cemetery can be established on the basis of the grave goods. A large number of graves have provided important chronological markers in the form of metal artefacts: items of personal adornment and weapons (Fig. 39). However, some of these objects remained in use over relatively long periods and therefore have limited chronological value. Such artefacts were consequently excluded from the combinatorial analysis of the grave assemblages. This is the case, for example, with type 6 bracelets (a and b) or type 1 spearheads (no. 3 in the typological table). For the same reason, ceramic forms were not considered, despite the fact that some types had a comparatively shorter period of use. In general, ceramic vessels underwent no substantial morphological changes and continued to be used over relatively long periods.

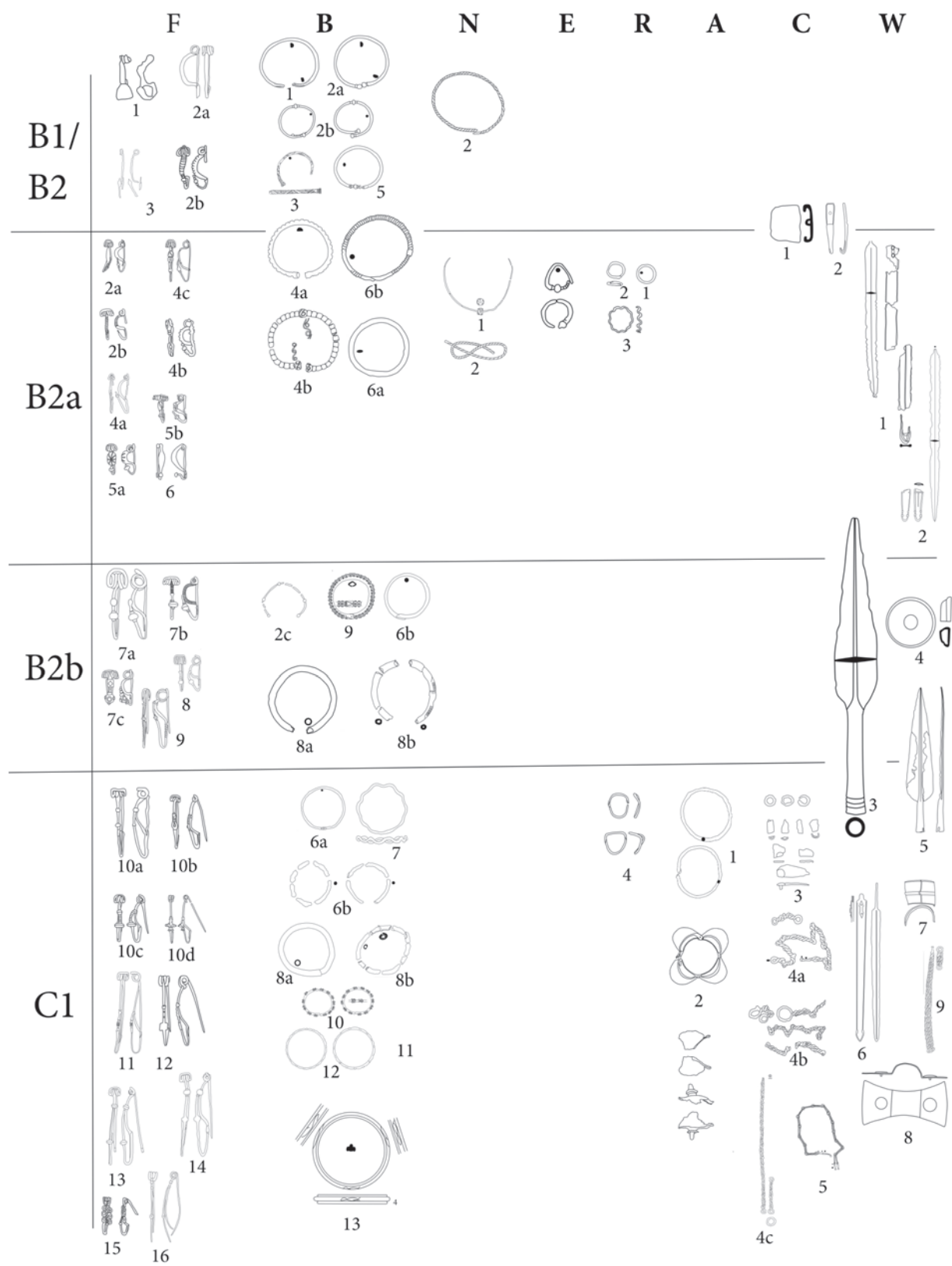


Fig. 39. Chronologically relevant artefacts.

Of the 84 graves investigated by I. H. Crişan, 44 contained artefacts of high chronological significance. These can be supplemented by two graves discovered before the beginning of systematic excavations (Nos. 1 and 4/1967). Consequently, the chronological analysis encompassed 46 graves, representing more than half of the funerary complexes discovered. This sample is sufficiently large to provide a reliable basis for reconstructing the chronological development of the cemetery. Four phases or horizons of the cemetery were thus identified, each belonging to distinct chronological stages (Fig. 40): phase 1: LT B1/B2; phase 2: LT B2a; phase 3: LT B2b; phase 4: LT C1.

Combinatorial analysis indicates that none of these phases ended abruptly; rather, they gradually overlapped and transitioned into one another, reflecting the natural evolution of the Fântânele community's use of the burial ground. Artefacts characteristic of particular phases occur across different chronological stages, documenting the emergence, continued use, and eventual decline and abandonment of specific accessories and elements of dress.

The first phase comprises graves containing brooches (F) of types 1, 2a, 2b and 3; bracelets (B) of types 1, 2a, 2b, 4a and 5; belt buckles (C) of types 1 and 2; and neck rings (N) of types 1 and 2. The second phase is characterised by graves containing fibulae of types 4a, 4b, 4c, 5a, 5b and 6, bracelets of type 4b, earrings (E), rings (R) of types 1, 2 and 3, and swords (W) of types 1 and 2. In the third phase, type 5b fibulae are still in use, but new types also appear: 7a, 7b, 7c, 8 and 9. The preferred bracelets in this phase are of types 2c, 8 and 9, whilst items of military equipment are represented by disc-shaped belt fittings (W4). The fourth phase, which is the best represented across the entire cemetery, comprises graves containing type 8 fibulae and type 8 bracelets – already found in the previous phase – as well as numerous new items: type 2 spearheads (W 5); type 10 fibulae in all variants, types 11, 12, 13, 14, 15, 16; bracelets of types 7, 10, 11, 12, 13; rings (R) of type 4; ankle rings (A) of types 1 and 2; belts (C) of types 3, 4a, 4b, 4c and 5; weapons and items of military equipment W 6, 7, 8, 9.

Returning to the relative chronology of the 'Celtic horizon' from the eastern Carpathian Basin, the cemetery from Pişcolt is important, as it spans the entire period under consideration (Fig. 41). The four phases of the cemetery (NÉMETI 1993) can be synchronised with horizons 3–7 proposed by Gebhard's chronology for the Carpathian Basin (GEBHARD 1989, 74–127; for Transylvania, see BERECKI 2008a; BERECKI 2015, 30, fig. 1). For regional comparison, the cemeteries at Ludas and Sajópetri are also relevant. Both have been divided into three phases (SZABÓ – TANKÓ 2012, 141–149; SZABÓ – TANKÓ 2018, 211–222) which correspond to horizons 2–4 from Pişcolt. These cemeteries also point to the gradual nature of 'Celtic' colonisation, which involved less numerous groups of colonists rather than a large-scale migration or massive western invasion.

Relative chronology	Absolute chronology	Carpathian Basin (GEBHARD 1989, 74–127)	Pişcolt (NÉMETI 1993)	Ludas (SZABÓ – TANKÓ 2012)	Sajópetri (SZABÓ – TANKÓ 2018)	Fântânele– Dâmbul Popii
LT B1/B2	350– 330/320 BC	horizon 3	horizon I			1 st phase
LT B2a	330/320– 290/280 BC	horizon 4	horizon II	horizon 4	horizon 4	2 nd phase
LT B2b	290/280– 260/250 BC	horizon 5	horizon III	horizon 5	horizon 5	3 rd phase
LT C1	260/250– 200/175 BC	horizons 6–7	horizon IV	horizon 6	horizon 6	4 th phase

Fig. 41. A comparative table showing the evolution of the Fântânele–Dâmbul Popii cemetery in relation to other relevant cemeteries and absolute chronology.

[illegible]



Consequently, the cemetery at Fântânele–*Dâmbul Popii*, like that at Pişcolt, developed through four chronological phases and encompassed the entire period associated with the ‘Celtic’ culture in the eastern part of the Carpathian Basin. In absolute chronological terms, both cemeteries date from approximately the middle of the 4th century BC and continued to be used until shortly after 200 BC, at the beginning of LT C2. This was a period marked by the arrival of new population groups in the intra-Carpathian region, led by an eclectic warrior elite. Their origins can be traced to the south-eastern Alpine area, particularly the territory inhabited by the historical Taurisci, as well as to the northern Balkans. This is suggested, among other evidence, by the recently discovered cemetery at Sâncrai (Aiud, Alba County), in the middle Mureş Valley (see RUSTOIU ET AL. 2021, 49–51).

To refine and verify the relative chronology of the Late Iron Age in the Carpathian Basin, eleven samples originating from three ‘Celtic’ cemeteries in Transylvania (Archiud–*Hânsuri*, Fântânele–*Dealul Iuşului / La Gâta*, and Fântânele–*Dâmbul Popii*) were analysed by AMS radiocarbon dating (BERECKI 2023). The results obtained from both human and animal skeletal remains, together with additional published radiocarbon dates from across the Carpathian Basin, indicate that the chronological span represented by these datasets is considerably broader than the Transylvanian ‘Celtic horizons’ established through artefact typology. This suggests that the conventionally defined chronological phases, largely based on typological developments associated with historical events and broader socio-historical processes, encompass a substantially longer period than previously assumed.

The 2348±43 BP result of the radiocarbon dating of the animal offering from grave no. 78 dated to the earliest phase of the eastern burial group yielded significantly discontinuous calendar years, of which a probability of 88% dates the animal bones to the mid-6th – mid-4th century (Fig. 42/1).

In the case of the cremation grave no. 61 located in the middle group and belonging to the first chronological phase, the samples were also taken from the animal bone placed as food offering. The result 2255±43 BP dates the grave with 95.4% probability between the beginning of the 4th century and the end of the 3rd BC, while the bulk of the probability density with 63.6% dates it between 325–199 calBC (Fig. 42/2). This covers the LT B2a – LT C1 period in relative chronological terms.

The bronze and iron fibulae from warrior grave no. 58 of the middle group of graves date it to the third phase. The sample for carbon isotope measurements was human bone. With a probability of 95.4%, 2293±46 BP can be dated between the middle of the 5th century (457 calBC), or rather between its end (418 calBC) and the end of the 3rd century (200 calBC) (Fig. 42/3). The 324–200 calBC period of a 47.3% probability also represents the entire second to fourth phases in relative chronological terms.

Therefore, one can observe that absolute chronological dates cover a much wider time interval than the relative chronological classifications determined by typo-chronological methods. In addition to the Archiud and Fântânele samples, the same can be said for the results obtained from the Teiuş (Alba County, Romania) dwarf elder seeds (2205±23 BP), which date the object between the mid-4th century and the first half of the second century BC (CIUTĂ 2018, 49, fig. 2; CIUTĂ 2019, 649). But a similarly wide time range was obtained from a child’s cranium (400–210 calBC) in an object excavated at Süttő in the northern part of Transdanubia (CZAJLIK ET AL. 2019, 207), or from the charred peas (2190±35 BP = 95.4% probability 380–125 calBC) dating from the end of the Early La Tène (‘Vorpúchov-Stufe’) of the Liptovská Mara II site in the northern part of the Carpathian Basin (PIETA ET AL. 2021, 135–139).

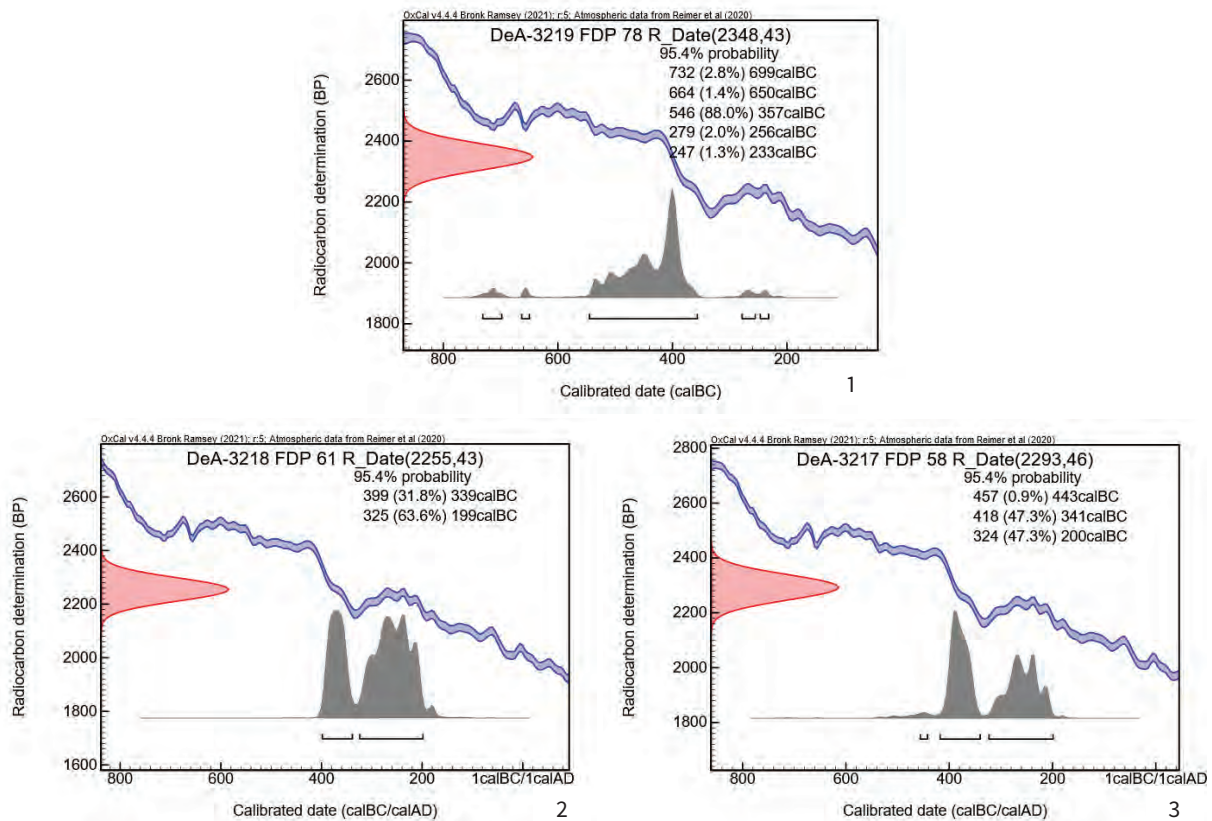


Fig. 42. 1. Calibrated date of grave no. 78; 2. Calibrated date of grave no. 61; 3. Calibrated date of grave no. 58.

VIII.2. Horizontal stratigraphy

Concerning the spatial evolution of the cemetery, the earliest burials are concentrated in three groups located on the hilltop from the east to the west (Fig. 43–46). These groups probably correspond to founding families or clans. All three groups developed concomitantly during the next two phases. However, the burials belonging to the western group expanded both spatially and numerically during the third phase and mostly in the last phase (in the LT B2b and LT C1) to the detriment of the other two groups. This pattern may suggest a demographic increase of the western group, which could have determined a stronger social authority of the group and of its leaders within the entire community.

This hypothesis seems to be also supported by the manner in which burials containing weaponry were located within the cemetery (Fig. 47–48). This type of burial is missing from the first phase of the cemetery. During the second phase, the sole burial containing weapons appeared in the central group, in which three other similar burials were included during the third phase. According to Ștefan Dănilă's sketch (DĂNILĂ 1978, fig. 1), grave no. 1/1967 could belong to the second chronological phase of the western group. However, in the last phase, the burials containing weapons were concentrated in the area occupied by the western group. It is also significant that in the early phases of the cemetery (LT B2) the weaponry consisted mainly of spears, whereas in the last phase (LT C1) the inventories contained complete panoplies consisting of swords, spears and shields, illustrating a particular way of expressing the warlike identity which was different from the one preferred by previous generations (RUSTOIU – BERECKI 2015b, fig. 4).

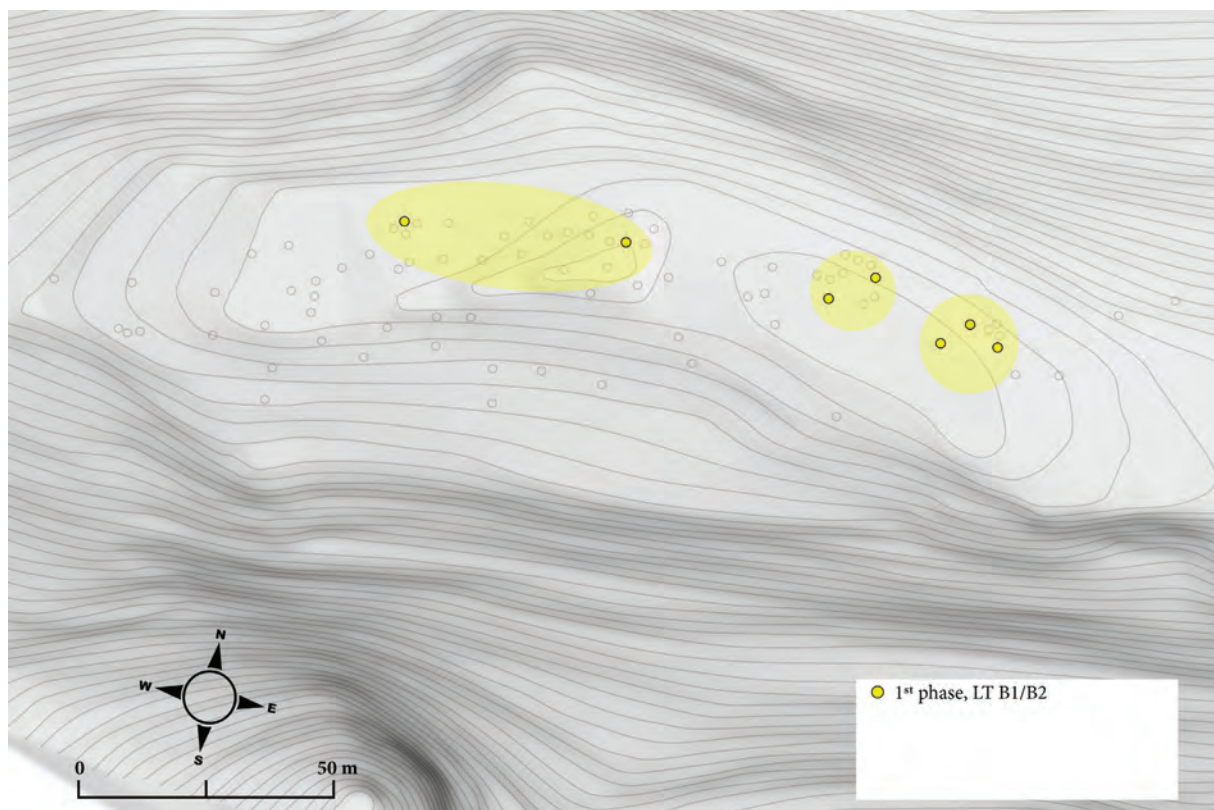


Fig. 43. The distribution of graves from the first phase of the cemetery.

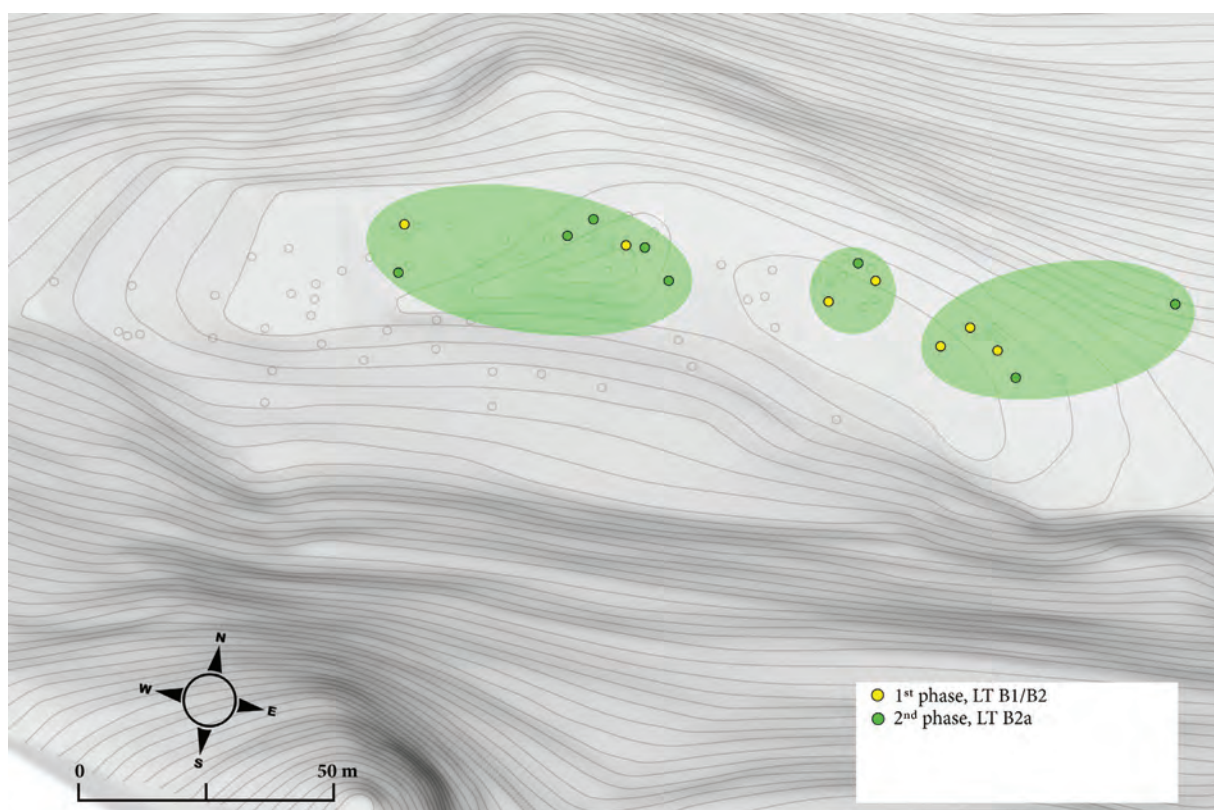


Fig. 44. The distribution of graves from the second phase of the cemetery.

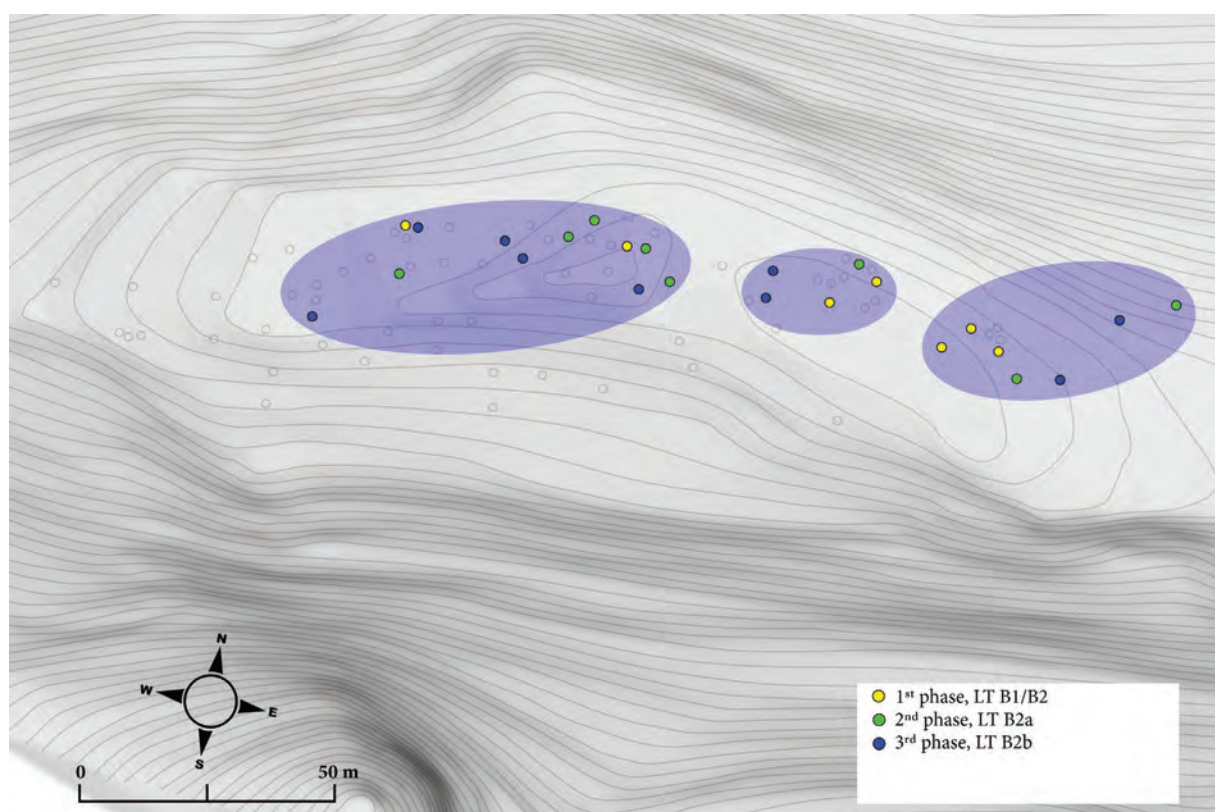


Fig. 45. The distribution of graves from the third phase of the cemetery.

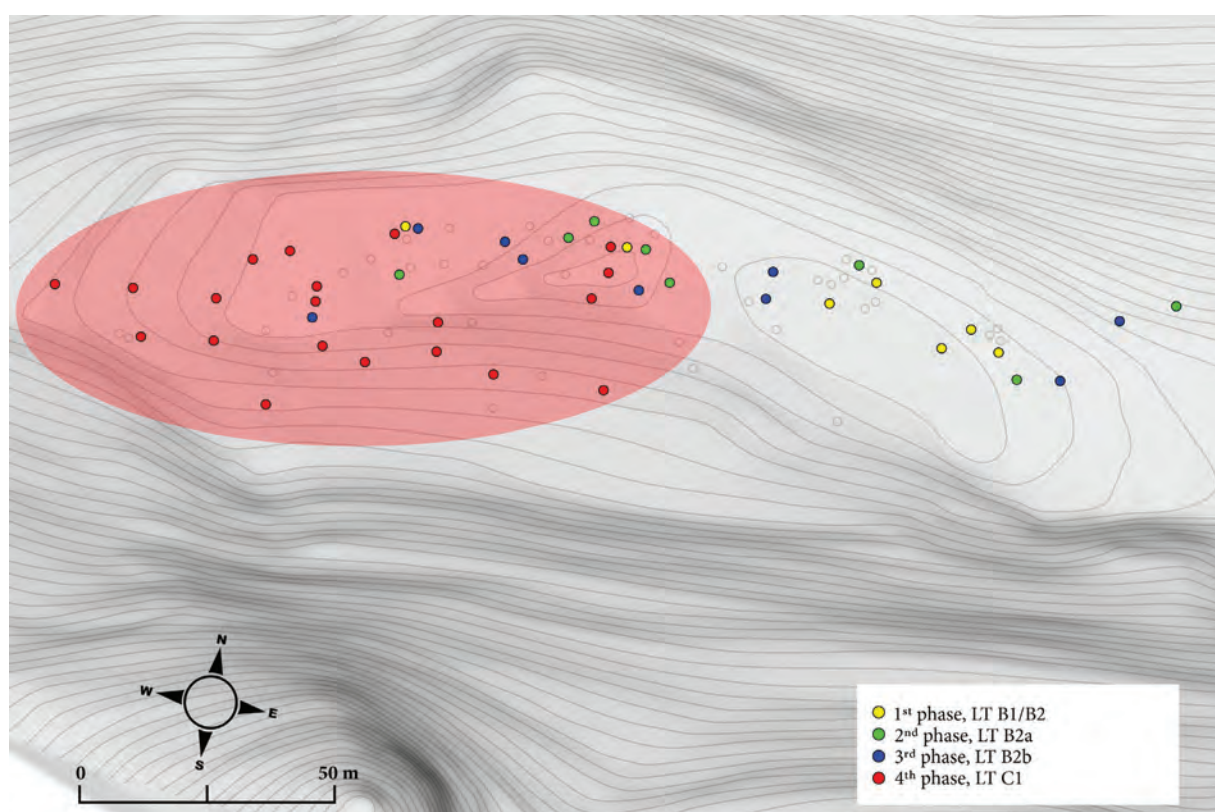


Fig. 46. The distribution of graves from the fourth phase of the cemetery.

Chronology	Grave no.	Incineration	Inhumation	Sword	Shield	Spear	Arrow	Observations
LT B1/B2								
LT B2a	65	X				1		
LT B2b	69	X		1				
	43	X			1	1	1?	
	58	X				1		
	72	X				1		chronology?
LT C1	17	X		1	1	1		
	28	X		1	1	1		
	41	X		1				
	49	X			1	1		iron linchpin
	7	X				1		

Fig. 47. The chronology of the graves with weapons.

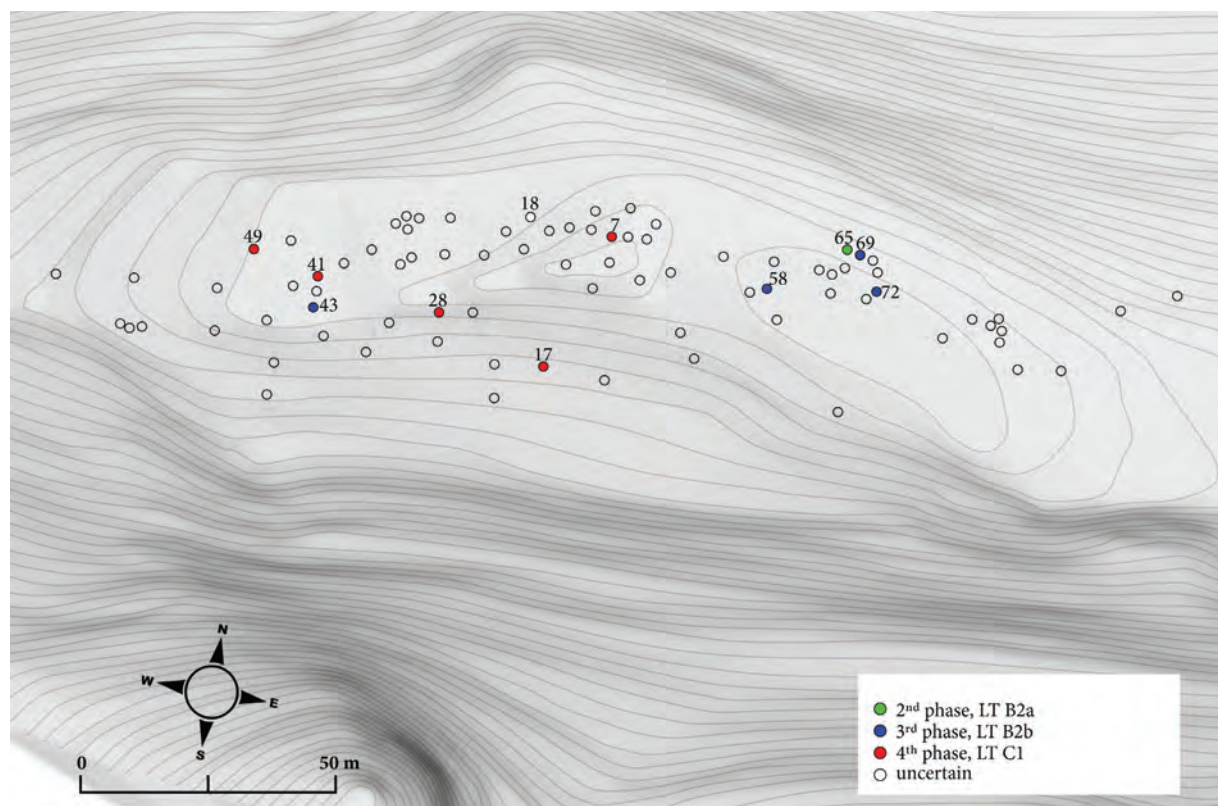


Fig. 48. The distribution of graves with weapons.

The organisation of the cemeteries into burial groups is encountered, in many forms, in other sites from the Carpathian Basin. For example, at Mannersdorf, the use of burial ground started in three different spots, the ‘founding’ burials belonging to women (RAMSL 2011, 210–211, fig. 177–178a). At Chotín, in south-western Slovakia, the location of the burials also suggests their organisation into three groups (RATIMORSKA 1981, 18, fig. 2; GEBHARD 1989; RUSTOIU 2008a, 78–79, fig. 36). Lastly, groups of burials which were spatially separated within the cemetery have been identified at Vác–Gravel pit and Muhi–Kocsmadomb (HELLEBRANDT 1999b, 99–102, 233–236, fig. 99, 192; ALMÁSSY 2010), as well as in other cemeteries which began to be used during the first stages of colonisation in the eastern and south-eastern Carpathian Basin, for example at Pećine (JOVANOVIĆ 2014, fig. 1). A similar internal organisation was presumed for the cemeteries from Ludas–Varjú-dűlő and Sajópetri–Homoki-szőlőskertek (SZABÓ – TANKÓ 2012, fig. 188), albeit the grouping of burials is less visible on their plan. All these examples indicate that the cemetery at

Fântânele–Dâmbul Popii was organised, at least in the initial phase, according to certain social rules and rituals specific to the original homeland of the colonists.

The family- or clan-based organisation of these communities during this period seems to be also reflected by the planimetry of certain settlements which were more extensively investigated. For example, groups of houses were located at variable distances from one another in the rural settlements from Ciumești (ZIRRA 1980) and Cicir (RUSTOIU 2013a), in western Romania, probably also in those from Polgár (SZABÓ ET AL. 2008), Kálmánháza and Nyíregyháza–Oros (ALMÁSSY – POP 2014), which were only partially unearthed along the new motorway in eastern Hungary, and at Göttlesbrunn (KARL 2005, 69–76; KARL 2015) or Oberschauersberg (TREBSCHKE 2014, 347–348, fig. 7), in Lower Austria. Each of these groups could have belonged to a family or clan from the respective communities. Accordingly, the internal organisation of the settlements' territory and probably the exploitation of the economic area and the natural resources as well (the dividing of agricultural land, pastures or herds) were based on this communal structure. However, this kind of internal organisation of the settlements is sometimes less visible. For example, the houses and their annexes from the settlement at Morești seem to be aligned (with a general west-east orientation) and concentrated within a relatively small area. Nevertheless, this pattern may partly reflect the limited extent of the archaeological investigations, which may not have revealed the full layout and spatial organisation of the settlement (HOREDT 1979; BERECKI 2008b; BERECKI 2015, 67).

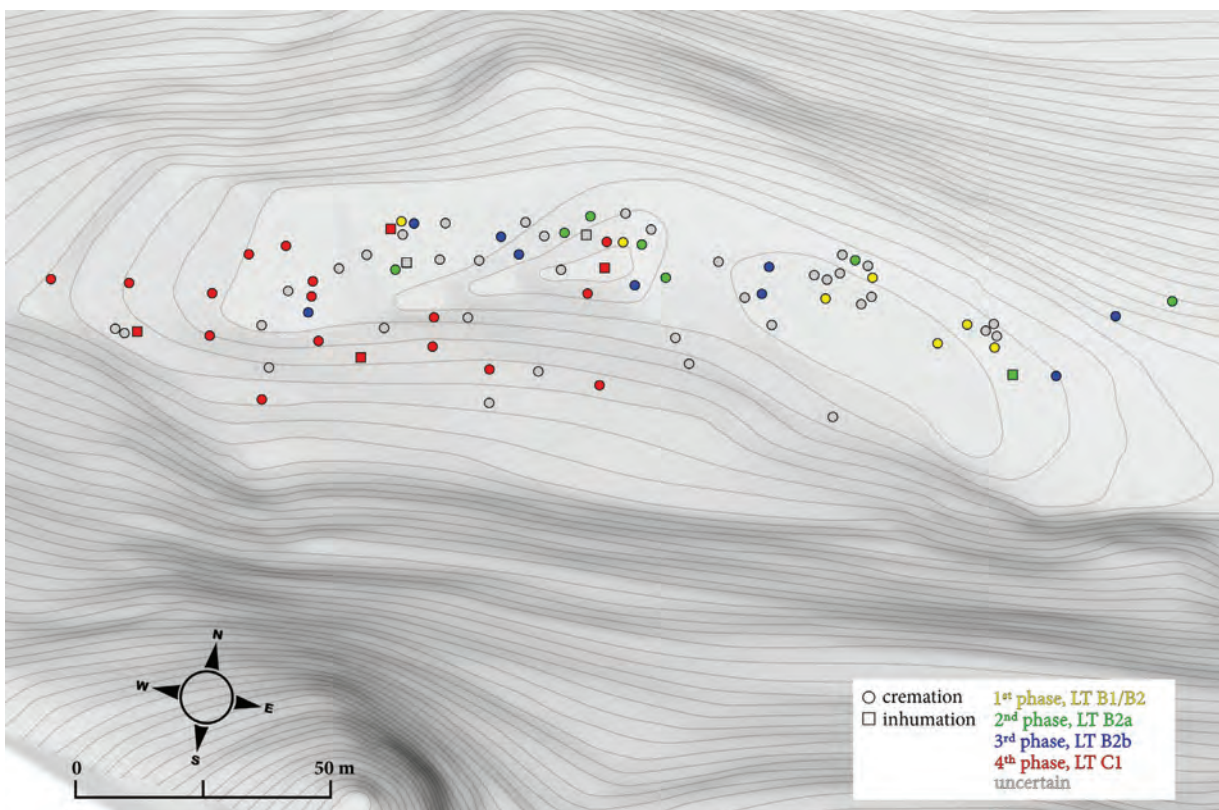


Fig. 49. Chronological distribution map of burial rites.

With regard to burial rites (Fig. 49), cremation graves clearly predominate during the early phases of the cemetery. Indeed, cremation was the prevailing funerary practice in Transylvania during the 'Celtic period' (see BERECKI 2006). Among the well-dated early funerary complexes – specifically, those belonging to the second phase of the cemetery in the eastern group – only

grave no. 79 represents an inhumation burial, whose grave goods point to strong extra-Carpathian connections. Although inhumation graves remain relatively rare compared with cremation burials, they become more frequent during the final phase of the cemetery and are concentrated in the western group. A comparable pattern can be observed, for instance, in the final two phases of the Pişcolt cemetery. In that case, however, as I. Némethi has already pointed out (see also RUSTOIU 2016a), the shift reflects the immigration of a new community that favoured this funerary practice.

On the other hand, the traditional theory regarding the evolution of the 'Celtic' communities in Transylvania maintained that inhumation graves belonged to the first settlers in the region, while towards the end of the period the immigrant population adopted cremation, following the funerary practice of the local population, and was ultimately assimilated by the indigenous communities (see, for example, CRIŞAN 1977b, 32 with bibliography). The cemetery at Fântânele-*Dâmbul Popii*, however, demonstrates the opposite with inhumation graves becoming more numerous during the final phase of the cemetery. This phase appears to have witnessed an intensification of La Tène-type material culture, reflected in the declining proportion of locally produced vessels among the funerary offerings and an increasing preference for vessels characteristic of the 'Celtic' cultural sphere.

IX. CONCLUSIONS

From the first La Tène discoveries in Transylvania, made as early as the 19th century, to the publication of the present monograph, research into the ‘Celtic’ cultural-chronological horizon in the intra-Carpathian area of Romania has undergone a long development, marked by several methodological and interpretative stages. Investigations focused primarily on funerary discoveries. Due to their more ‘spectacular’ inventories (weapons, dress accessories and ornaments, sets of vessels), compared with the ceramic fragments scattered throughout settlements, these attracted greater attention from researchers. Nevertheless, the number of investigated cemeteries remained limited. The first cemetery excavated on a larger scale was that at Apahida, at the beginning of the twentieth century. Although the graves were investigated more or less systematically, the cemetery subsequently benefited from careful scholarly analysis, both after its excavation (KOVÁCS 1911; see also BERECKI ET AL. 2017) and later, when the grave inventories were reinterpreted (CRIȘAN 1971b; ZIRRA 1976).

Other, often accidental, discoveries followed, which were repeatedly included in extensive catalogues of finds and synthesis studies (ROSKA 1944; ZIRRA 1971; CRIȘAN 1973). The late 1970s and the 1980s witnessed a decline in the investigation of the ‘Celtic horizon’. This was the period when national-communist propaganda brought research into Dacian civilisation to the forefront, in an effort to create a national mythology based on the indigenous origins of the Romanians, whose evolution was presented as beginning with Kings Burebista and Decebal and culminating, as the crowning achievement of this millennia-long development, with Nicolae Ceaușescu, the authoritarian ruler of Romania on behalf of the Communist Party. Within this broader ideological atmosphere, which influenced research during the communist period, the cemetery at Fântânele–*Dâmbul Popii*, although exhaustively investigated over several excavation campaigns, remained unpublished. More than five decades thus passed before it was finally subjected to scholarly analysis with a view to its complete publication.

As can readily be observed, the ‘Celtic’ cemetery at Fântânele–*Dâmbul Popii*, comprising 94 graves (84 excavated by I. H. Crișan and his team and 10 previously excavated by Șt. Dănilă), constitutes a reference archaeological site for the early and middle phases of the Late Iron Age in Transylvania, being the only such cemetery published from the intra-Carpathian area of Romania. Precisely because of its importance, already highlighted in the 1970s through a series of preliminary notes and articles by I. H. Crișan published in Romania and abroad (see *supra* Chapter II), the international scholarly community awaited the publication of the entire assemblage of finds with considerable interest and anticipation.

Similarly, the cemetery at Pișcolt (NÉMETI 1988a; 1989; 1992; 1993) constitutes a reference archaeological site for the lowland area between the Middle Danube and Transylvania. More recently, two other important cemeteries of comparable scale have been added: Ludas (SZABÓ 2012) and Sajópetri (SZABÓ 2018). Taken together, they now allow a better understanding of the development of the ‘Celtic’ cultural-chronological horizon in the eastern Carpathian Basin.

Although the present monograph appears a long time after the completion of the investigations at Fântânele–*Dâmbul Popii*, with much of the primary information having been lost over time, the authors of this work succeeded in recovering the essential data from the excavations conducted by I. H. Crişan. Information obtained by one of the authors directly from the Cluj professor and his collaborators also contributes to the reconstruction of certain elements of the archaeological documentation.

On the basis of this information, the excavation diaries, and the archaeological and graphic documentation preserved to the present day, important aspects relating to funerary customs could be reconstructed and analysed. These concern in particular elements of funerary rite and ritual, the manner in which cremated or inhumed deceased individuals were deposited, the orientation of the graves, and the composition and contents of the funerary offerings. The human remains could not be recovered in their entirety, but enough were preserved for the anthropological analysis carried out by S. Sz. Gál to be relevant and to allow comparison with the situation in other contemporary cemeteries in the Carpathian Basin.

The palaeodemographic evidence adds an important social dimension to this reconstruction. Despite the limitations imposed by cremation, incomplete recovery and the loss of part of the anthropological material, the analysed assemblage demonstrates that children, adolescents, adult males and females, and elderly individuals, all gained access to the same burial ground. Subadult graves were generally integrated among those of adults rather than confined to a separate funerary area. At the same time, the high proportion of adults for whom sex could not be determined advises caution when reconstructing sex-specific mortality patterns or the demographic structure of the community. The available estimates nevertheless point towards a relatively small rural population whose cemetery accumulated over several successive generations.

Beyond its importance as a large excavated cemetery, Fântânele–*Dâmbul Popii* provides one of the most completely documented funerary datasets for the Early and Middle La Tène period in Transylvania. The combined evaluation of the surviving archaeological records, anthropological evidence and complete inventory has made it possible to reconstruct aspects of the burial rite that are rarely accessible together within a single cemetery. As a result, the site constitutes a chronological reference and a methodological benchmark for the study of Late Iron Age funerary archaeology in the intra-Carpathian region.

The analysis of funerary practices reveals a system characterised by shared principles combined with considerable internal flexibility. Cremation remained the dominant rite throughout the use of the cemetery, while inhumation constituted a recognised alternative that cannot be correlated straightforwardly with age, sex or social status. The presumed cenotaphs, adult–child double burials, the division of the cremated remains into several heaps, their scattered deposition or partial placement inside vessels, and the highly selective quantities of bone transferred from the pyre demonstrate that the grave represents only the final stage of a more complex sequence of funerary actions. Animal offerings, the recurrent association of knives with deposited meat, and the staged placement of human remains and grave goods further indicate that food preparation, commensality and offering formed important components of these ceremonies.

The analysis of the archaeological inventory revealed that the composition of body ornaments (the types of jewellery and dress accessories and the general manner in which they were combined as part of costumes) is broadly similar to that encountered in the eastern Carpathian Basin and in certain neighbouring areas, such as south-western Slovakia. This indicates the existence of permanent connections among the communities across this extensive area, strong enough to impose shared elements of fashion. These connections are confirmed by the diffusion of artefacts characteristic of wider areas, as in the case of Pottenbrunn–Horný Jatov-type fibulae.

The analysis of dress elements also revealed the existence of rarer funerary customs, such as the deposition of two sets of costumes in grave no. 62, one accompanying the deceased woman on the funeral pyre, the other being placed in the grave pit after cremation. Likewise, grave no. 79, judging by the dress accessories and ornaments that also include eastern Carpathian elements, may illustrate the practice of exogamy. In any case, it is quite clear that this grave illustrates close connections with the area inhabited by the 'Getae' beyond the Carpathians. Finally, the manner in which certain body ornaments were deposited, as well as a series of their decorative elements, point to a number of magical practices not previously observed in the study of 'Celtic' funerary phenomena in the Carpathian Basin.

Graves containing weapons are not numerous. They are, however, important for understanding the warrior elite of the community and the evolution of this elite from the first families settled at Fântânele–Dâmbul Popii until the end of their existence. It could thus be observed that the period in which this elite manifested itself most strongly through all its status elements (complete weapon panoplies) falls within LT C1.

As regards the tools and implements discovered in the graves, these are similar to those identified in other cemeteries in the Carpathian Basin. In addition, grave no. 34, through the presence of a jeweller's hammer, attests to the presence of a specialised metalworker. Graves containing craft tools are rare in the Carpathian Basin. They are nevertheless important for understanding how the identity of craftspeople was symbolically constructed.

Vessel offerings are well represented in the majority of graves. The typological analysis of ceramic forms showed that, overall, the assemblage includes vessels belonging to the LT repertoire, but also examples with analogies in the local intra- and extra-Carpathian environments, reflecting the coexistence of the newcomers and the indigenous population. This mixing of the two population groups led to the emergence of blended culinary customs, even though, from a funerary perspective, the indigenous population is difficult to identify in the graves. They did not preserve their earlier burial rituals, having been assimilated in this respect by the colonists. In the later phases of the cemetery, LT-type pottery becomes predominant, while indigenous handmade forms gradually disappear. With regard to understanding the composition of vessel offerings, the cemetery at Fântânele–Dâmbul Popii provides essential information that will probably prove useful for future research into the Late Iron Age funerary phenomenon in the Carpathian Basin. A functional rather than typological analysis of the vessels from the graves showed that multiple sets were deposited in the early phases (hence the impression of 'vessel deposits'), whereas in the later phases sets consisting of three vessels were increasingly preferred.

Considered together, the different categories of grave goods reveal that pottery, jewellery, weapons, tools and food offerings formed an integrated funerary assemblage rather than independent groups of artefacts. Their significance emerges most clearly through their spatial relationships, functional associations and sequence of deposition within the grave. This contextual approach makes it possible to reconstruct the structure of funerary ceremonies more effectively than typological analysis alone and represents one of the principal methodological contributions of the present study.

The grave itself was also an actively constructed ritual space. Stepped pits, timber compartments, stone linings and paved areas created differentiated zones for the deposition of the deceased and the grave goods, while charcoal, charred beams and other traces of pyre material document different ways of transferring elements of the cremation process into the burial. Features identified between the graves, including post-holes and possible arranged stone surfaces, further suggest that funerary activity was not confined to the moment of burial. The cemetery was repeatedly visited and used as a setting for commemorative or other collective practices.

In this respect, Fântânele–*Dâmbul Popii* should be understood as a funerary landscape created and continually redefined through the actions of successive generations.

Finally, the relative and absolute chronology of the cemetery at Fântânele–*Dâmbul Popii* provides a coherent picture of the evolution of the community that used the cemetery. The first colonists who settled near the cemetery were organised into three clans or families, each occupying a specific funerary space. Subsequently, two of these families gradually died out, while the third underwent marked demographic growth during the final phase of the cemetery, probably also incorporating the descendants of the other two clans that had been present during the initial period of the community's existence. These observations allow a much deeper understanding of the evolution of a rural community during the 'Celtic horizon'.

The chronology of the cemetery at Fântânele–*Dâmbul Popii* is related to the development of the cemetery at Pișcolt, to the evolution of the more recently investigated cemeteries in north-eastern Hungary, as well as to the general chronology established for the Carpathian Basin by R. Gebhard. It is quite clear that the cemetery at Fântânele–*Dâmbul Popii* covers the entire 'Celtic horizon' in the region, developing through four distinct chronological stages, but without interruption. Precisely for this reason, like the cemetery at Pișcolt, it provides a complete chronological sequence useful for dating other discoveries that can be related to the general developmental scheme of the Fântânele cemetery.

As already mentioned throughout this work, as well as on other occasions, the cemetery at Fântânele–*Dâmbul Popii* is located in an area with numerous discoveries dating to the same period. Nearby, only a few hundred metres away, at the site known as *La Gâța* or *Dealul Iușului*, another cemetery is currently being investigated, while the grave accidentally discovered at *Livadă* probably belongs to another cemetery (BERECKI 2026). Furthermore, two other cemeteries have been identified in the neighbouring villages of Sălcuța and Zoreni (see VAIDA 2006; VAIDA – MARINESCU 2017; 2020; VAIDA ET AL. 2009, etc.). Their publication will in the future allow a better understanding of the dynamics of 'Celtic' communities within a clearly defined micro-region, while the cemetery at Fântânele–*Dâmbul Popii* will probably prove useful for the overall analysis of these cemeteries.

Another important objective for future research is the identification of settlements contemporary with these cemeteries. Their investigation will likewise allow a better understanding of the evolution of the communities during the 'Celtic' cultural and chronological horizon.

The publication of the cemetery also substantially improves the archaeological visibility of the eastern Carpathian Basin during the Late Iron Age. Until now, the regional record has been characterised by numerous isolated discoveries alongside cemeteries and settlements published to very different standards. Fântânele–*Dâmbul Popii* now provides a securely documented chronological and archaeological reference sequence against which these discoveries can be evaluated. The complete publication of the cemetery consequently establishes a firmer basis for future comparisons at both regional and interregional levels.

The concentration of several contemporary cemeteries within the Fântânele micro-region opens a further perspective that extends beyond the history of a single burial ground. Rather than representing an isolated community, Fântânele–*Dâmbul Popii* formed part of a densely used social landscape in which several burial grounds existed within relatively short distances of one another. Their partly overlapping chronologies raise questions concerning the relationship between the communities that used them, the principles governing the selection and maintenance of separate burial places, and the ways in which local territories were socially defined. Future comparison of these cemeteries, combined with the identification of their associated settlements, may therefore allow the reconstruction of a settlement–cemetery system at

micro-regional scale and provide a considerably more detailed picture of population dynamics in Late Iron Age Transylvania.

The significance of the cemetery therefore extends beyond the typology of its grave goods and the chronological sequence that they provide. Its long and apparently uninterrupted development makes it possible to follow changes in funerary behaviour, material culture, social representation and the internal organisation of a small community over approximately a century and a half. At the same time, the location of the Late Iron Age cemetery beside an earlier funerary landscape, which was respected rather than destroyed, suggests that the establishment of the new burial ground also involved engagement with an already culturally marked environment. Fântânele-Dâmbul Popii thus offers a rare opportunity to examine how mobility and cultural interaction, inherited and newly constructed identities, social memory and changing funerary practices were negotiated within the same community over several generations.

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Abbreviations

ActaAC	Acta Archaeologica Carpathica, Academia Scientiarum Polona Collegium Cracoviense, Kraków
ActaArchHung	Acta Archaeologica Academiae Scientiarum Hungaricae, Budapest
ActaMB	Acta Musei Brukenthal, Sibiu
ActaMN	Acta Musei Napocensis, Cluj-Napoca
ActaMP	Acta Musei Porolissensis, Zalău
AJHG	American Journal of Human Genetics
AJPhA	American Journal of Physical Anthropology
Alba Regia	Alba Regia, Annales Musei Stephani Regis, Székesfehérvár
AnnalesHNMNH	Annales Historico-Naturales Musei Nationalis Hungarici, Budapest
AnthrKözl	Anthropologiai Közlemények, Budapest
Apulum	Apulum, Acta Musei Apulensis, Alba Iulia
ArchAustr	Archaeologia Austriaca, Wien
Archaica	Journal of the Department of Archaeology, Faculty of Philosophy, University of Belgrade
ArchBulg	Archaeologia Bulgarica, Sofia
ArchÉrt	Archaeológiai Értesítő, Budapest
ArchHung	Archaeologia Hungarica, Budapest
ArchKorr	Archäologisches Korrespondenzblatt, Römisch-Germanischen Zentralmuseum Mainz
ArchRoz	Archeologické Rozhledy
ArchSlov	Archaeologia Slovaca Monographiae Studia, Nitra
ArhVest	Arheološki vestnik (Acta Archaeologica), Inštitut za arheologijo, Ljubljana
ASM	Archaeologia Slovaca Monographiae, Nitra
BCŞS	Buletinul Cercurilor Ştiinţifice Studenteşti, Alba Iulia
BerRGK	Bericht der Römisch-Germanischen Kommission
BJahrb	Bonner Jahrbücher
BMÉ	A Bihari Múzeum Évkönyve, Berettyóújfalu
BMM-sa	Bibliotheca Musei Marisiensis, series archaeologica, Târgu Mureş – Cluj-Napoca
BThr	Bibliotheca Thracologica, Bucureşti
BUFM	Beiträge zur Ur- und Frühgeschichte Mitteleuropas
CAR	Cahiers d'archéologie romande, Lausanne
CCA	Cronica Cercetărilor Arheologice din România
CMM-sa	Catalogi Musei Marisiensis, Series Archaeologica, Târgu Mureş – Cluj-Napoca
ComArchHung	Communicationes Archaeologicae Hungariae, Budapest
Dacia (N.S.)	Dacia, Recherches et découvertes archéologiques en Roumanie, I–XII (1924–1948), Bucureşti; Nouvelle série (N. S.), Dacia. Revue d'archéologie et d'histoire ancienne, Bucureşti
DissPann	Dissertationes Pannonicae, ex Instituto Numismatico et Archaeologico Universitatis de Petro Pázmány nominatae Budapestinensis provenientes, Budapest

DolgKolozsvar	Dolgozatok az Erdélyi Nemzeti Múzeum Érem- és Régiségtárából, Kolozsvár
DolgSzeged	Dolgozatok, Szeged
ECI	Ethnic and cultural interferences in the 1 st millennium B.C. To the 1 st millennium A.D., Cluj-Napoca
EphemNap	Ephemeris Napocensis, Cluj-Napoca
Eruditio – Educatio	Eruditio – Educatio, A Selye János Egyetem Tanárképző Kara tudományos folyóirata, Komárom
FAB	Folia Archaeologica Balcanica
FI	File de Istorie, Culegeri de studii, articole și comunicări, Bistrița
FolAnthr	Folia Anthropologica, Szombathely
FÖ	Fundberichte aus Österreich, Wien
HE	Human Evolution
IJOA	International Journal of Osteoarchaeology
Instrumentum	Instrumentum, Bulletin du Groupe de travail européen sur l'artisanat et les productions manufacturées dans l'Antiquité
IPH	Inventaria Praehistorica Hungariae, Budapest
Istros	Istros, Buletinul Muzeului Brăilei, Brăila
JAA	Journal of Anthropological Archaeology, Amsterdam
Jahrbuch DAI	Jahrbuch des Deutschen Archäologischen Instituts, Berlin
Jahrbuch SGUF	Jahrbuch der Schweizerischen Gesellschaft für Ur- und Frühgeschichte
JAMÉ	A Nyíregyházi Jósza András Múzeum Évkönyve, Nyíregyháza
JAS	Journal of Archaeological Science, London
JHE	Journal of Human Evolution
JPMÉ	A Janus Pannonius Múzeum Évkönyve, Pécs
JRGZM	Jahrbuch des Römisch-Germanischen Zentralmuseums Mainz
Közl Kolozsvar	Közlemények az Erdélyi Nemzeti Múzeum Érem- és Régiségtárából, Cluj
MAS	Materialia Archaeologica Slovaca, Nitra
MEFRA	Mélanges d'archéologie et d'histoire ancienne
MittAI	Mitteilungen des Archäologischen Instituts der Ungarischen Akademie der Wissenschaften, Budapest
MittPK	Mitteilungen der Prähistorischen Kommission, Vienna
Mousaios	Mousaios, Muzeul Județean Buzău, Muzeul Brăilei
MR	Magyar Régészeti Online Magazin
NyETK	A Nyugat-magyarországi Egyetem Tudományos Közleményei, Természettudományi Füzetek
OJA	Oxford Journal of Archaeology
OpArch	Opuscula Archaeologica, Arheološki zavod, Filozofski fakultet u Zagrebu
Pontica	Pontica, Anuarul Muzeului de Istorie Națională și Arheologie Constanța
PPS	Proceedings of the Prehistoric Society, London
Prilozi IAZ	Prilozi Instituta za arheologiju u Zagrebu
RAP	Revue archéologique de Picardie, Amiens
RégFüz	Régészeti Füzetek, Budapest
RKM	Régészeti Kutatások Magyarországon, Magyar nemzeti Múzeum, Budapest
Sargetia	Sargetia, Buletinul Muzeului județului Hunedoara, Acta Musei Devensis, Deva
SCIV(A)	Studii și Cercetări de Istorie Veche (și Arheologie 1974–), București
SEA	Specimina Electronica Antiquitatis
SlovArch	Slovenská Archeológia, Nitra
SMK	Somogyi Múzeumok Közleményei, A – Régészeti, A Somogy Megyei Múzeumok Igazgatóságának kiadványa, Kaposvár
Starinar	Starinar, Arheološki institut, Beograd
StComSM	Studii și Comunicări Satu Mare

Studia UBB	Studia Universitatis Babeş–Bolyai, series Historia, Cluj-Napoca
Študijné zvesti	Študijné zvesti archeologického ústavu SAV
Thraco-Dacica	Thraco-Dacica, Institutul de Tracologie, Bucureşti
VAMZ	Vjesnik Arheološkog muzeja u Zagrebu
WMMÉ	Wosinsky Mór Múzeum Évkönyve, Szekszárd
ZA	Zeitschrift für Archäologie
Zbornik NB	Zbornik Narodnog Muzeja, Beograd
Zbornik SM	Zbornik Soboškega Muzeja, Murska Sobota
ZM	Zalai Múzeum, Közlemények Zala megye múzeumaiból

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P LATES

-  profile of wheel-thrown pottery
-  cremated bones
-  pottery
-  metal objects
-  bone
-  charred beam
-  stone
-  burned soil

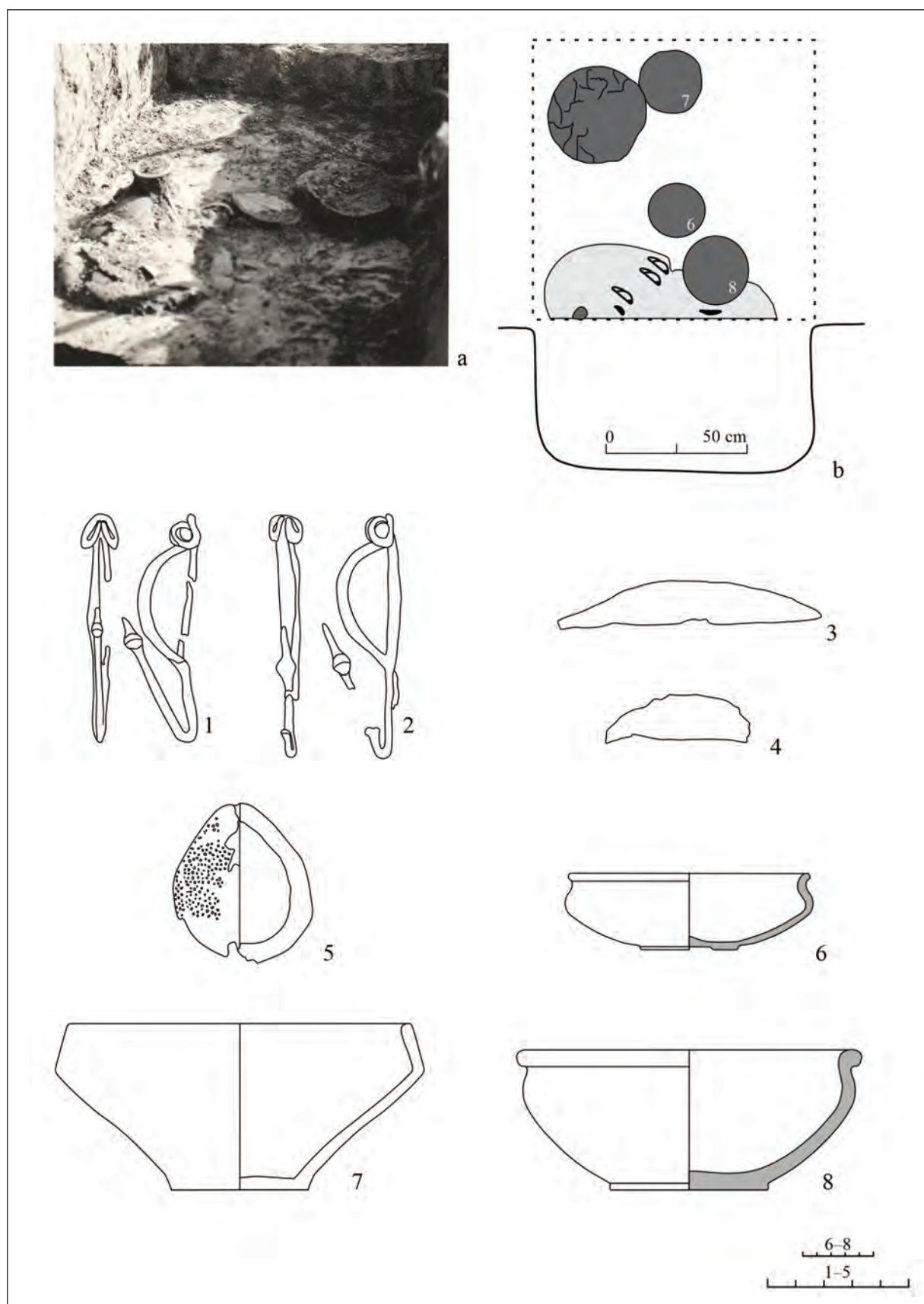


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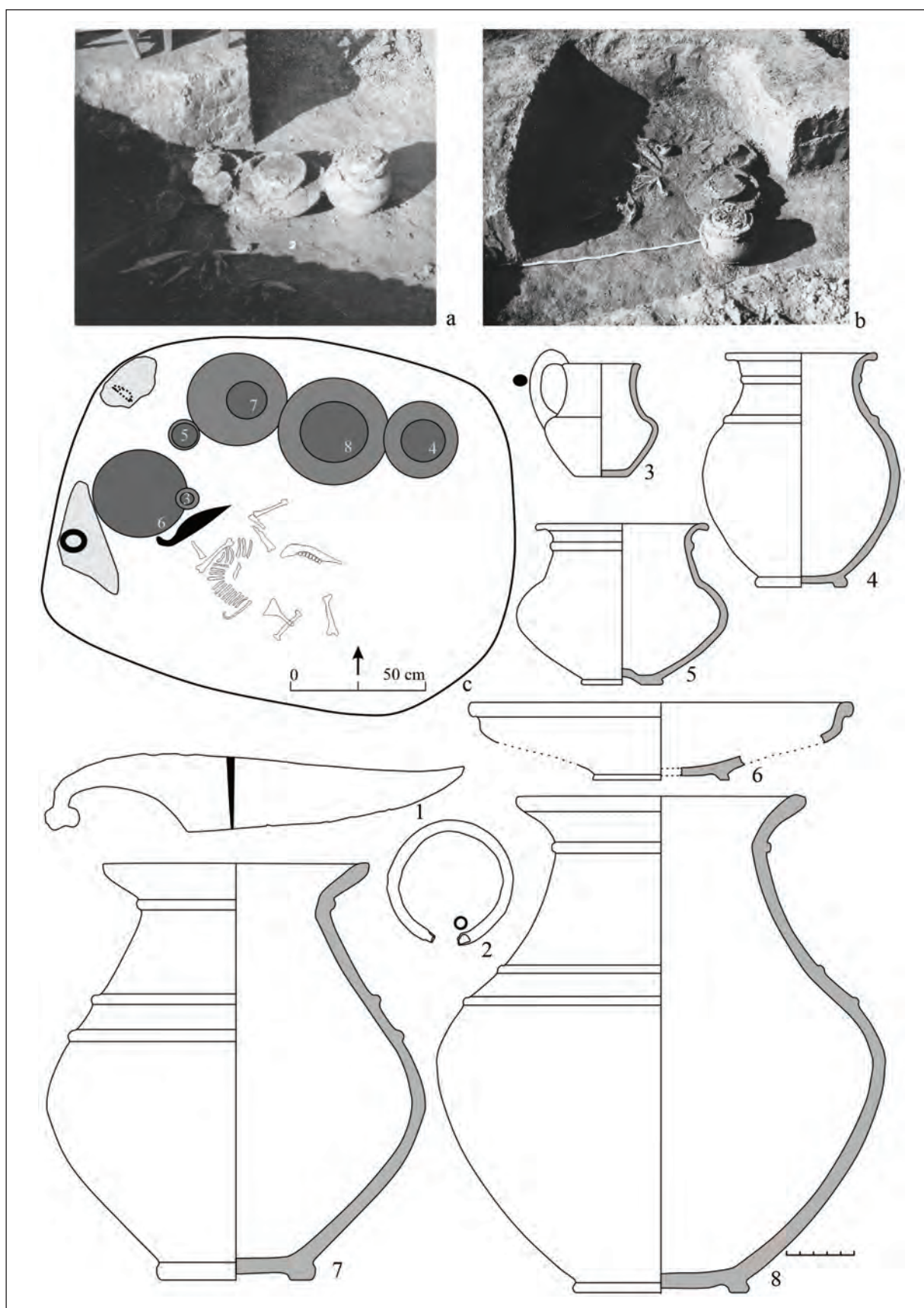


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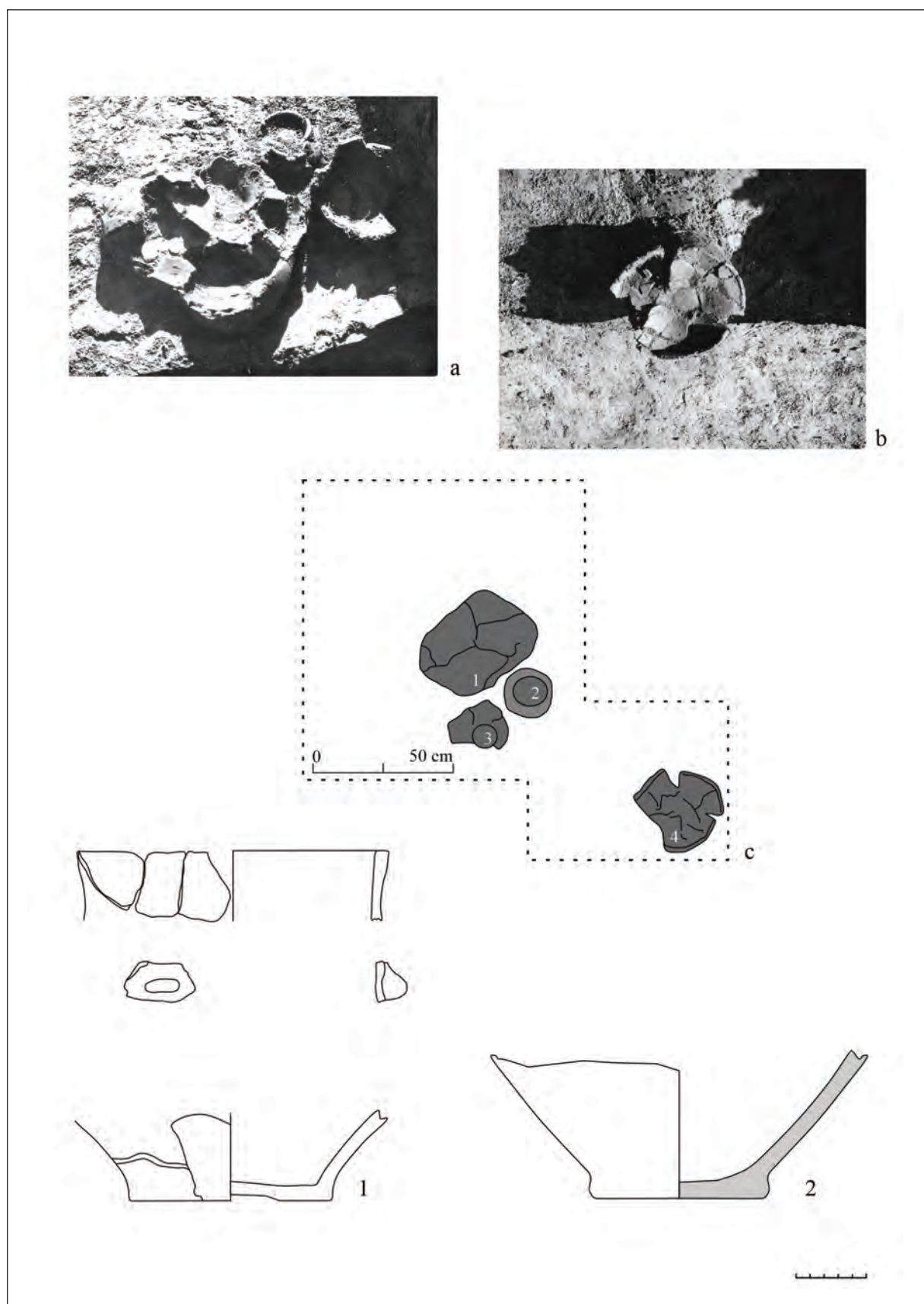


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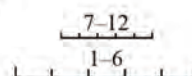
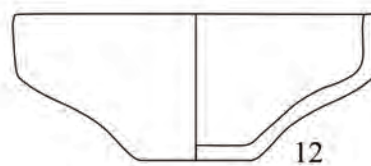
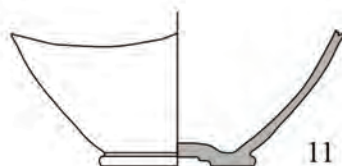
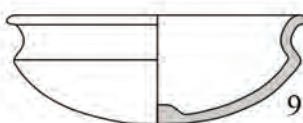
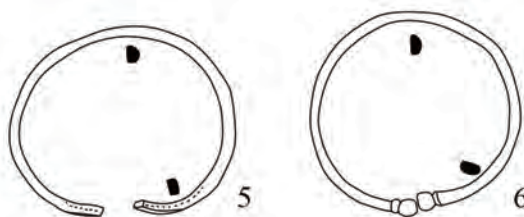
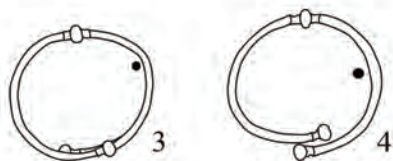
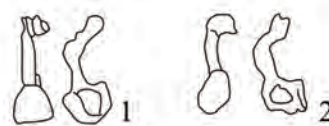
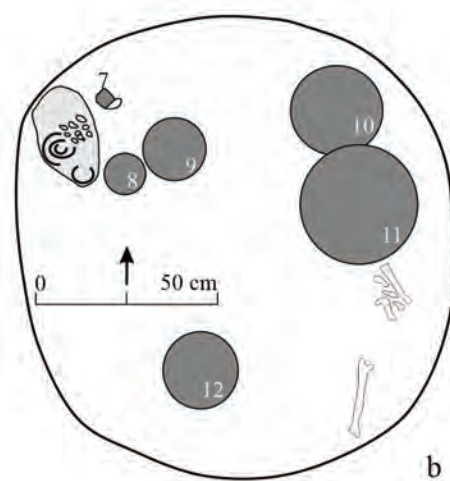


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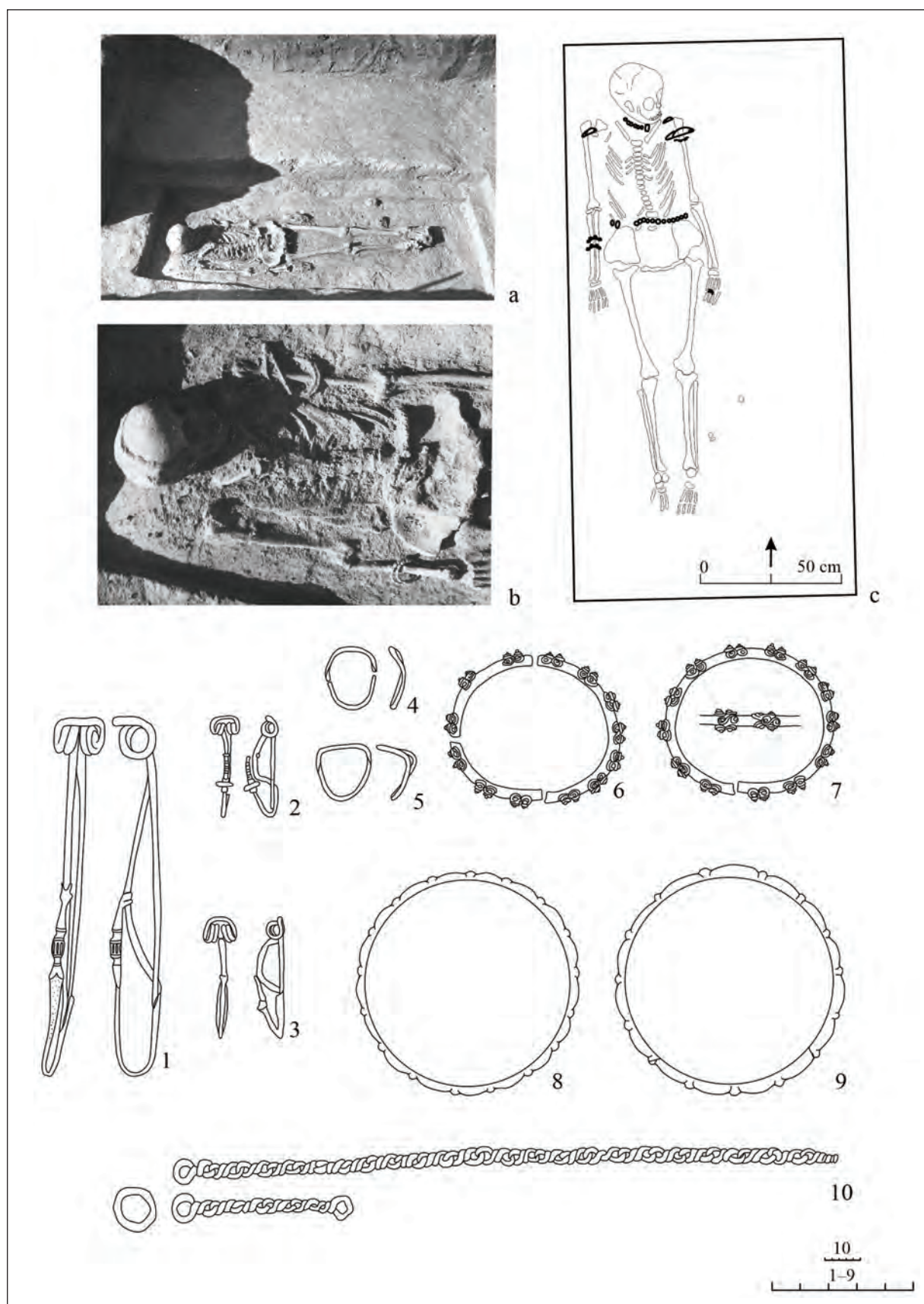


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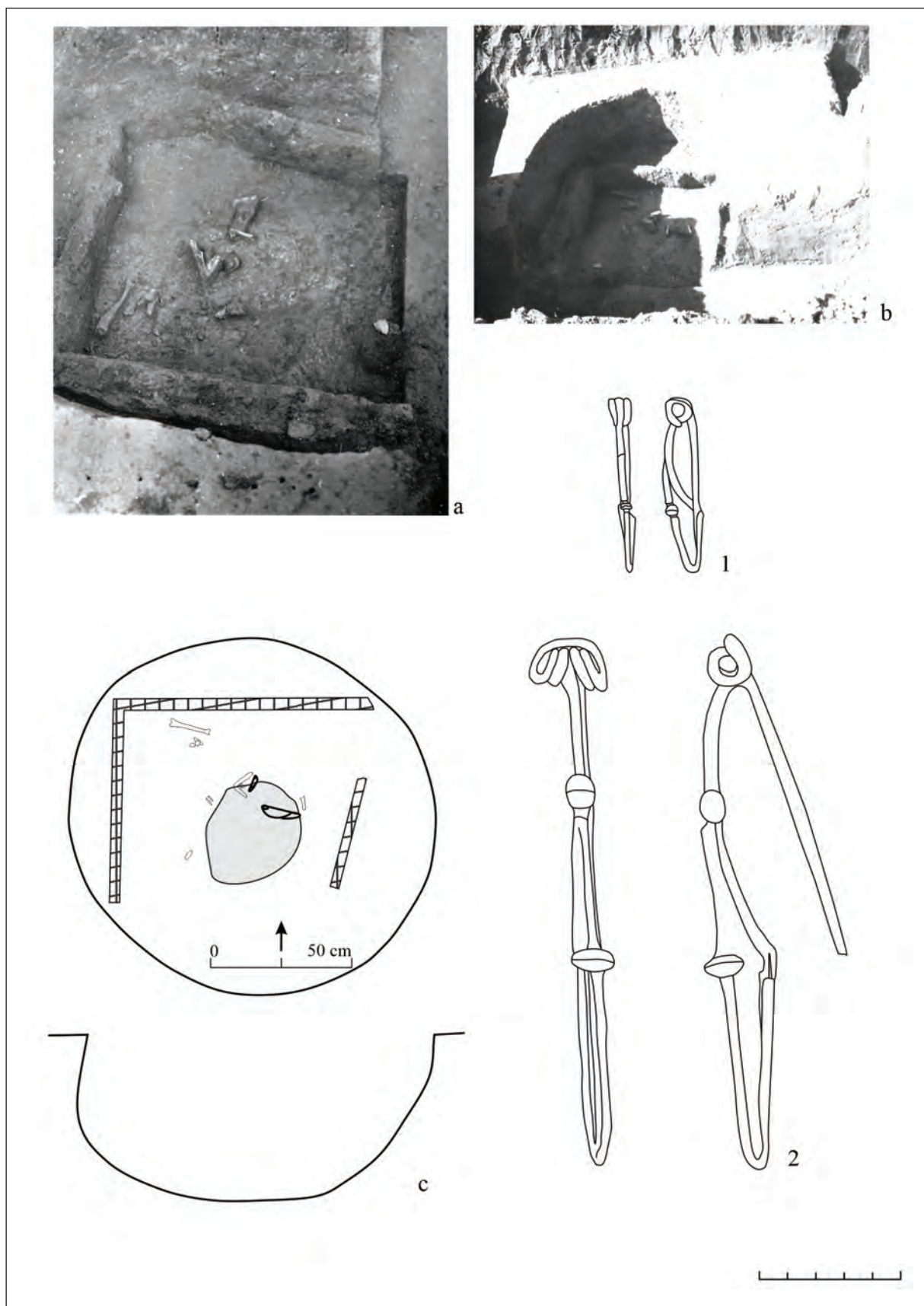


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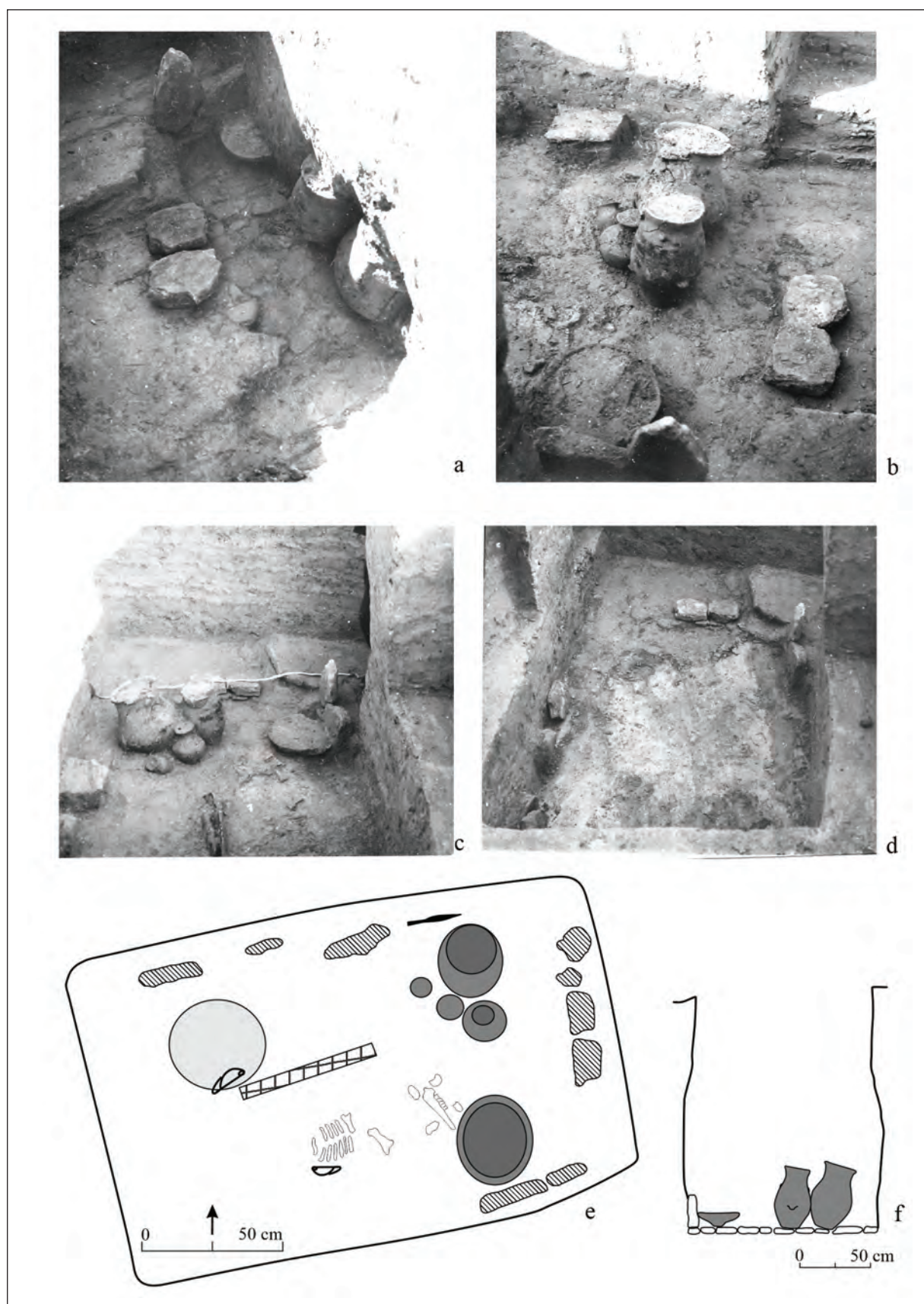


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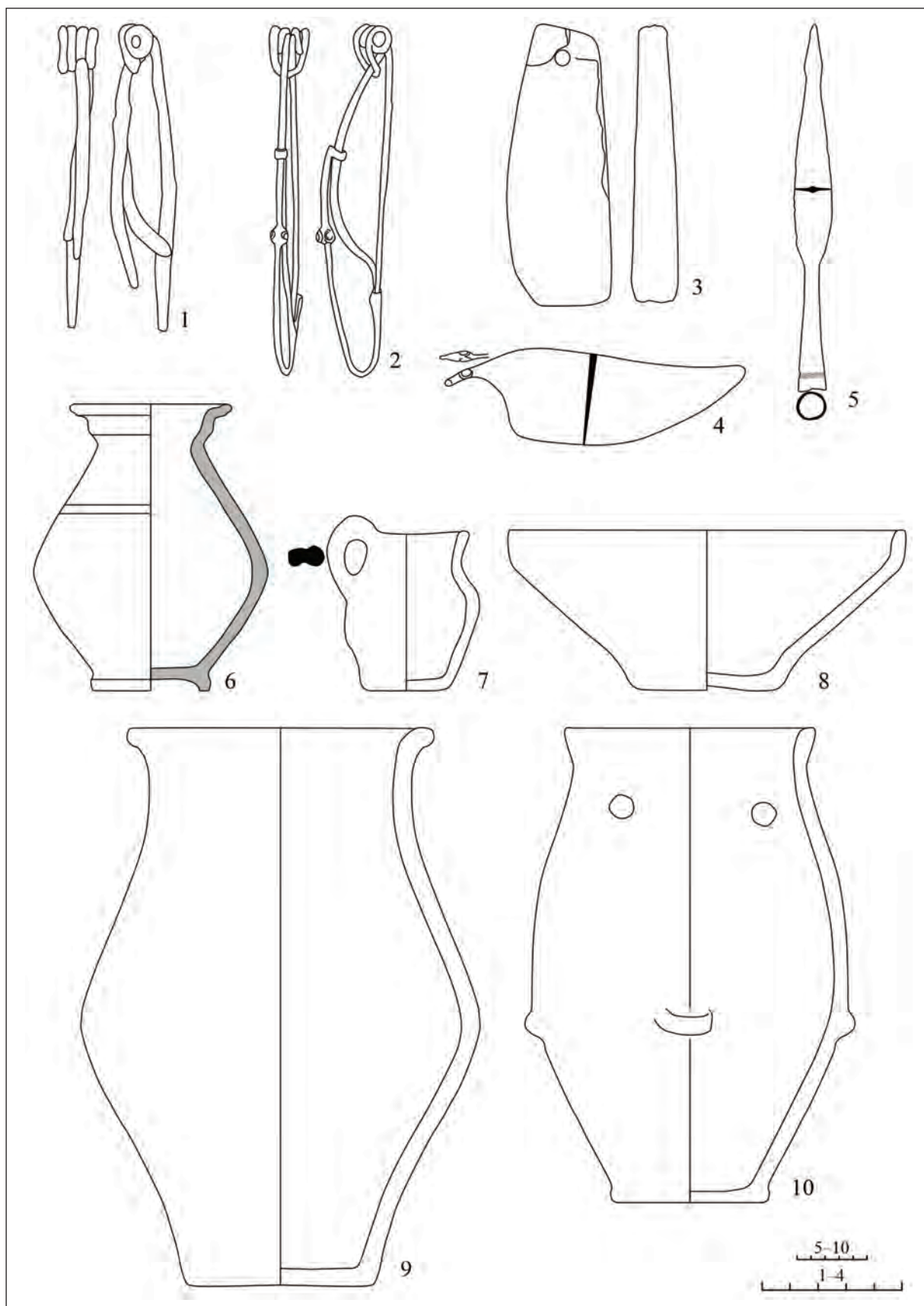


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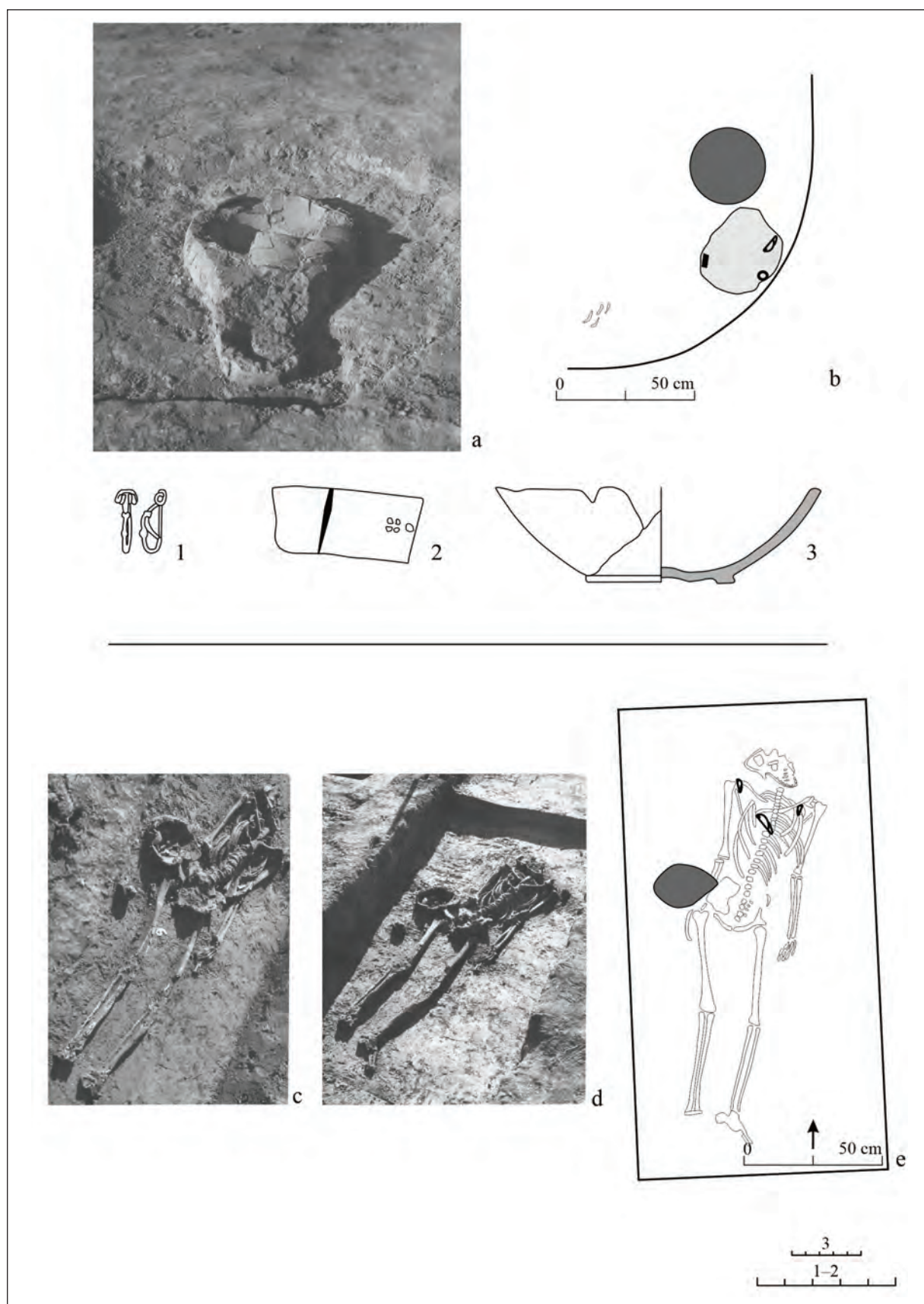


Plate IX. a-b, 1-3. Grave 8; c-e. Grave 9.

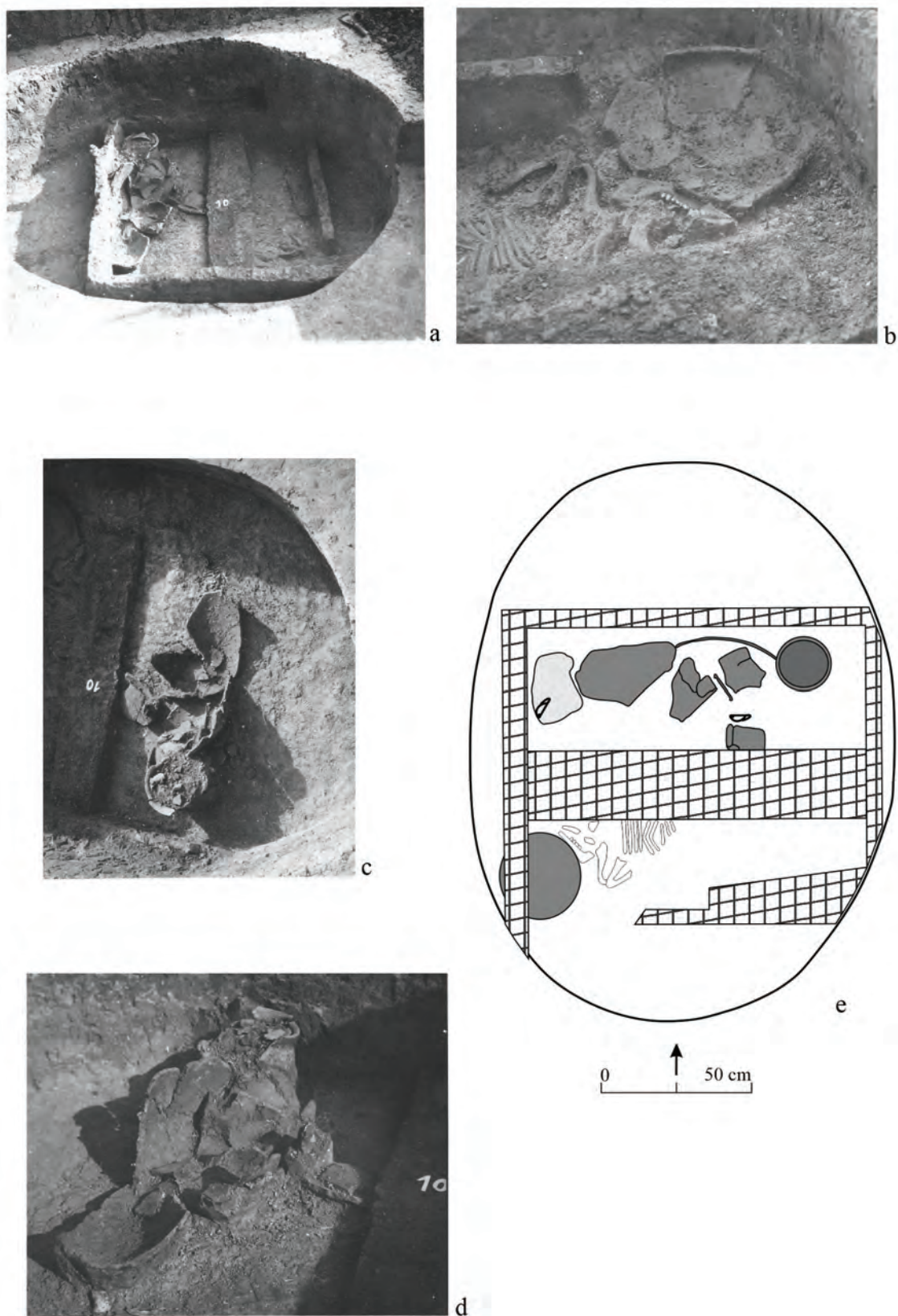


Plate X. Grave 10.

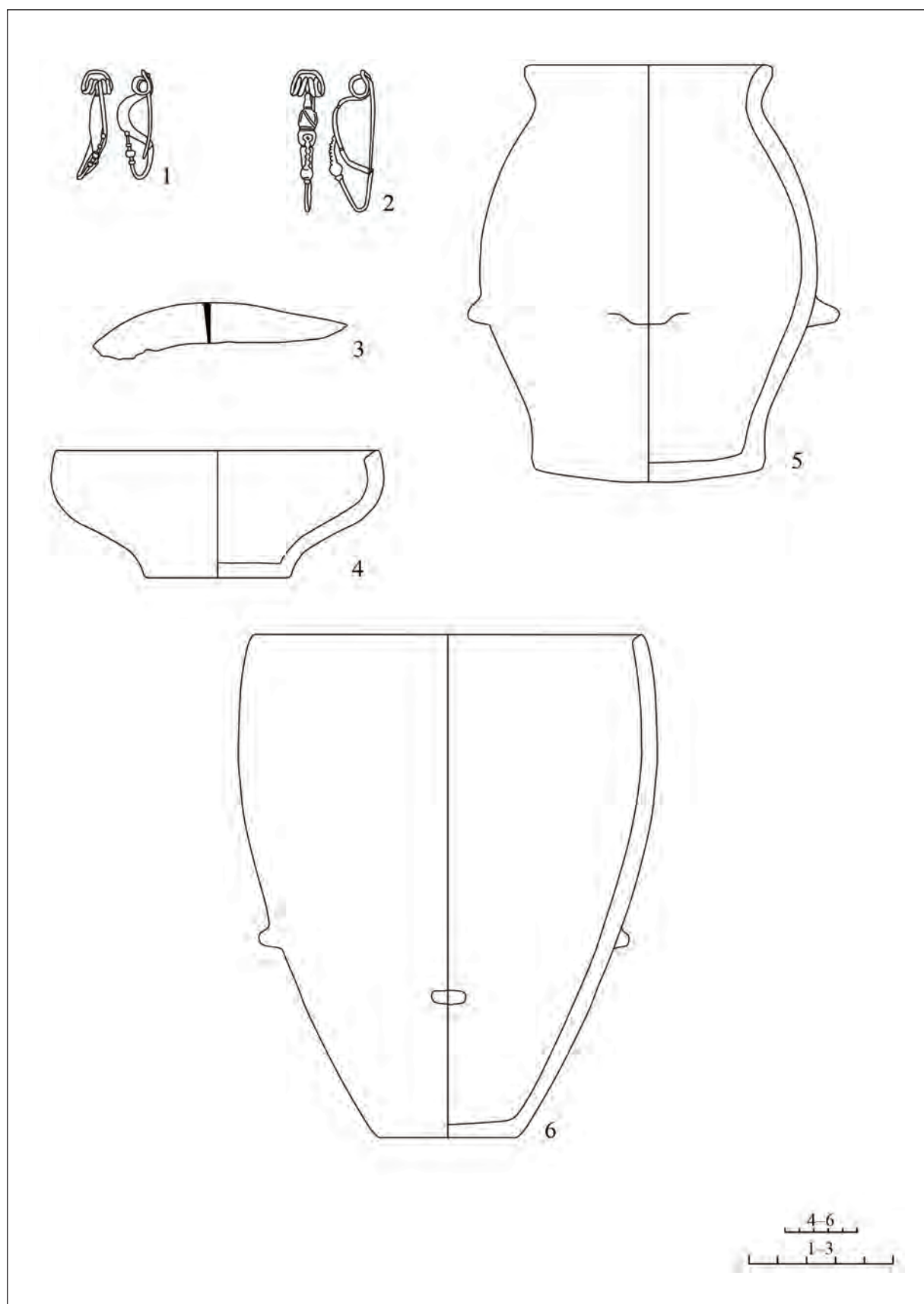


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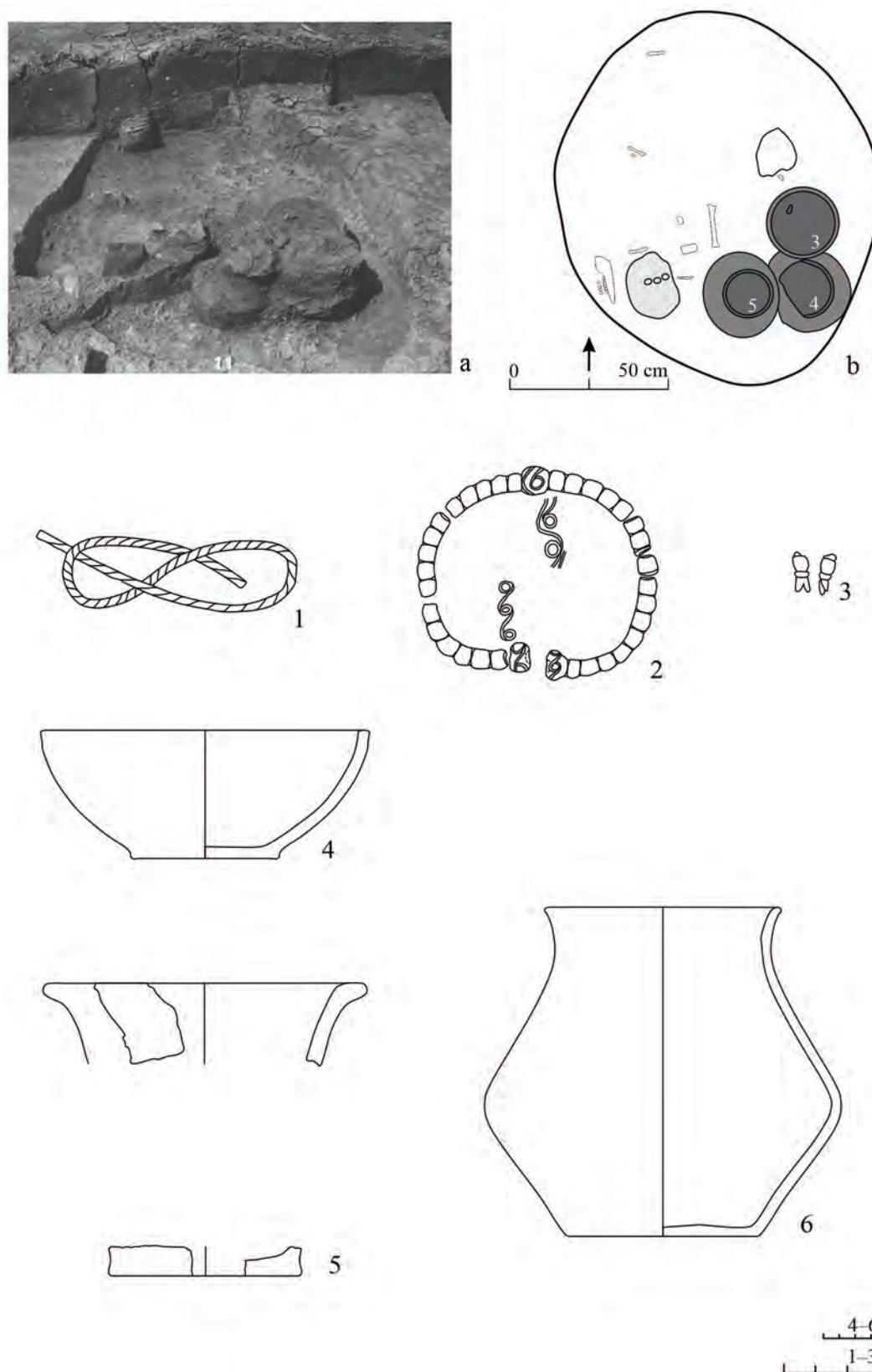


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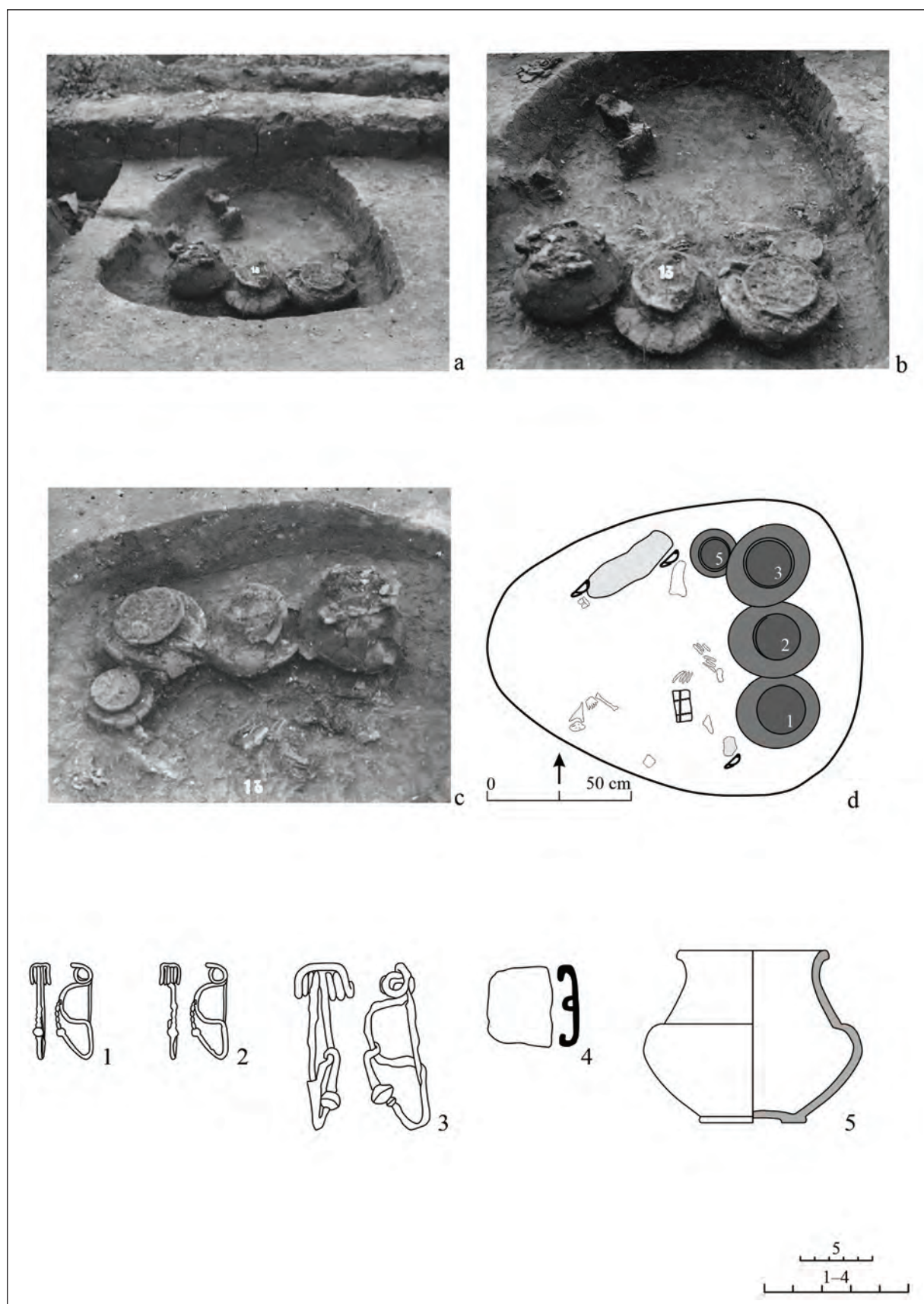


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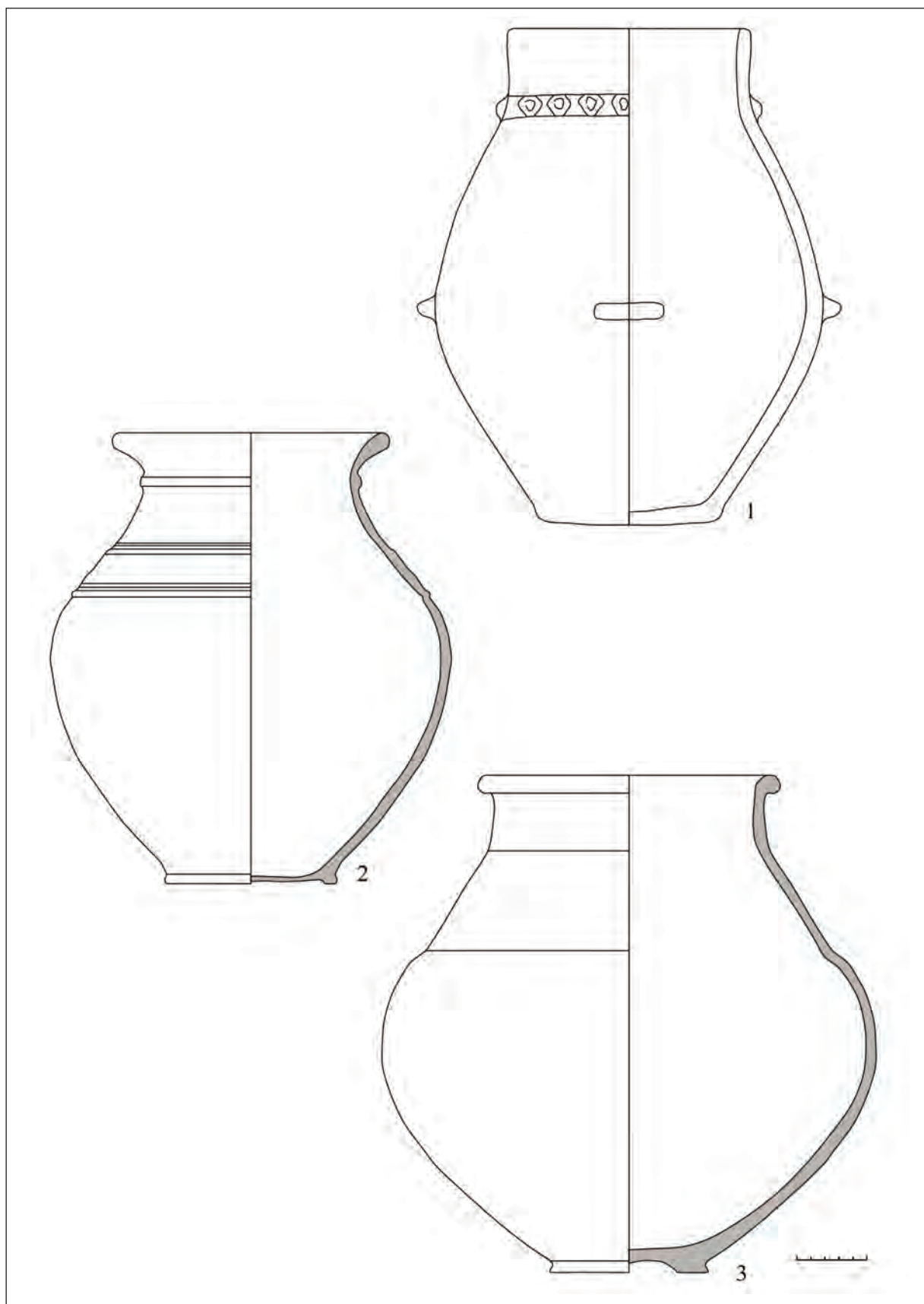


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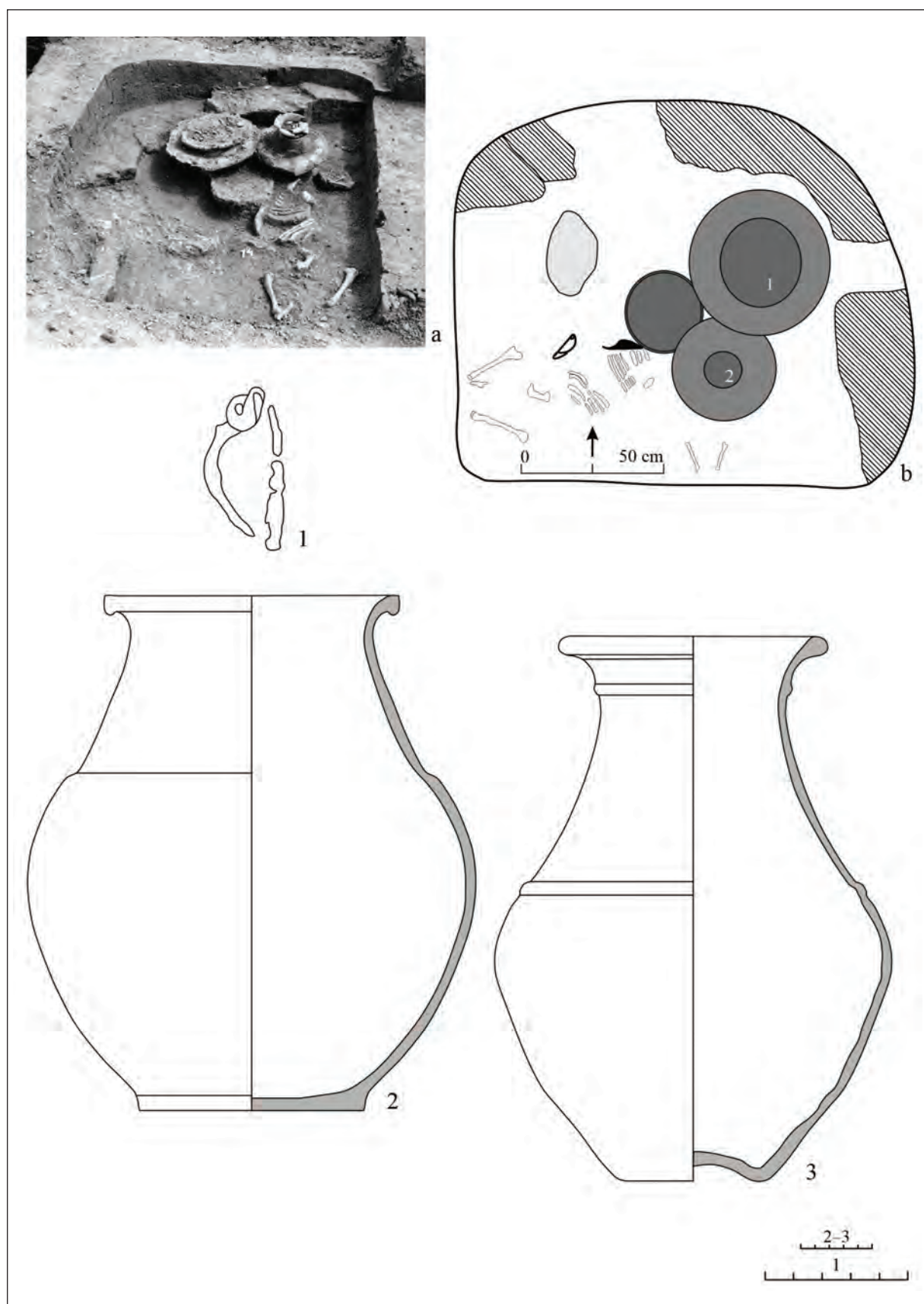


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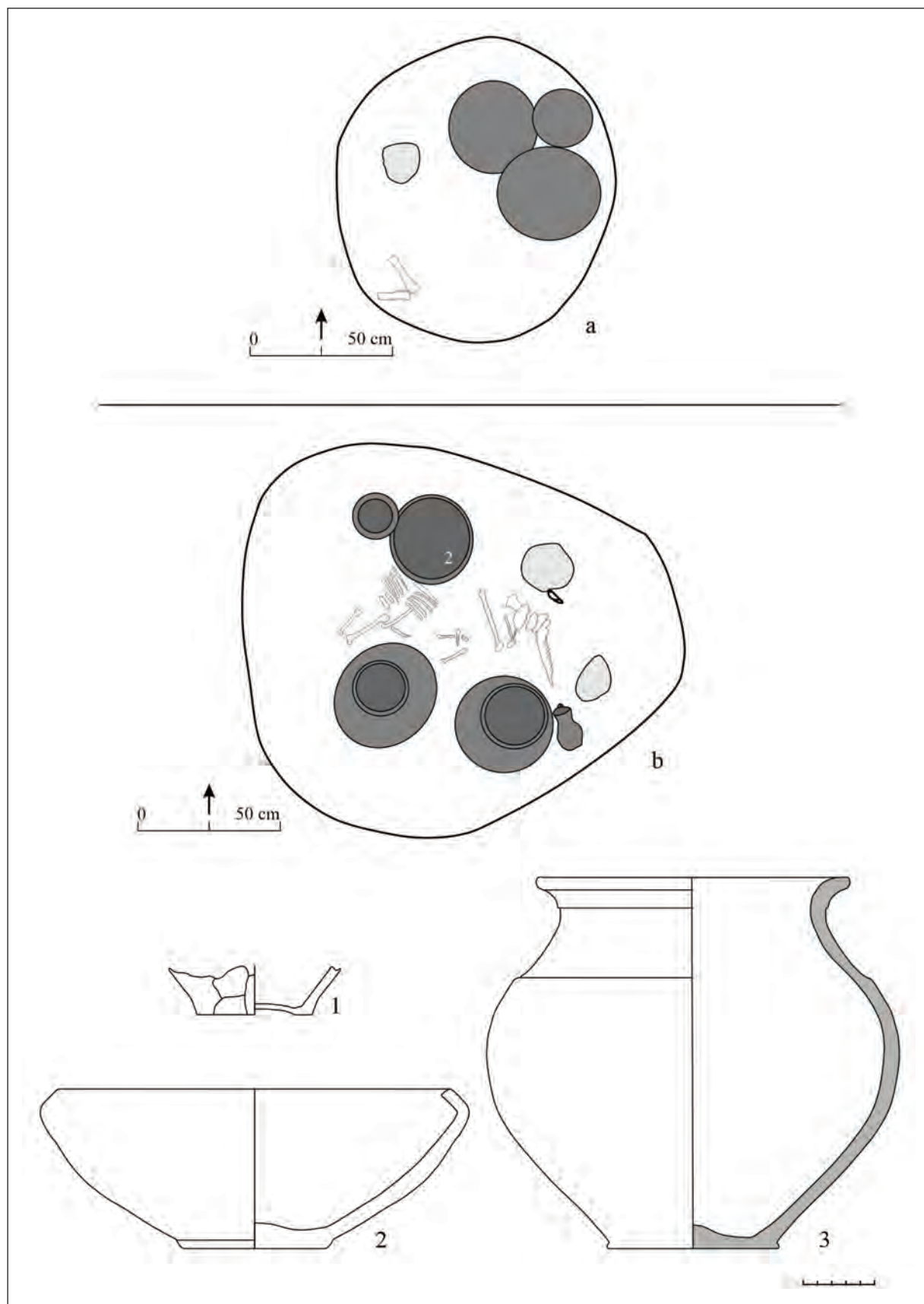


Plate XVI. a. Grave 15; b, 1-3. Grave 16.

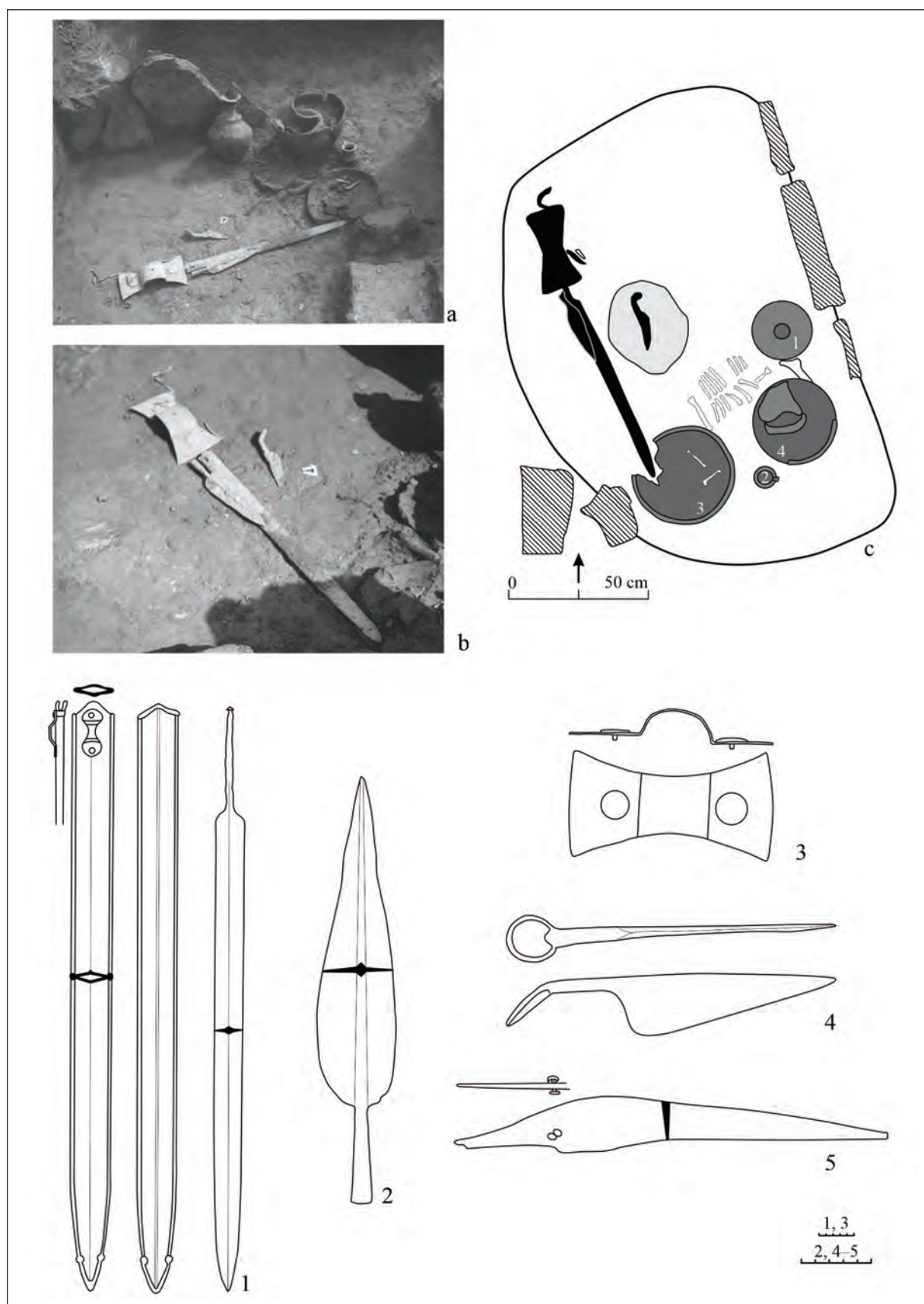


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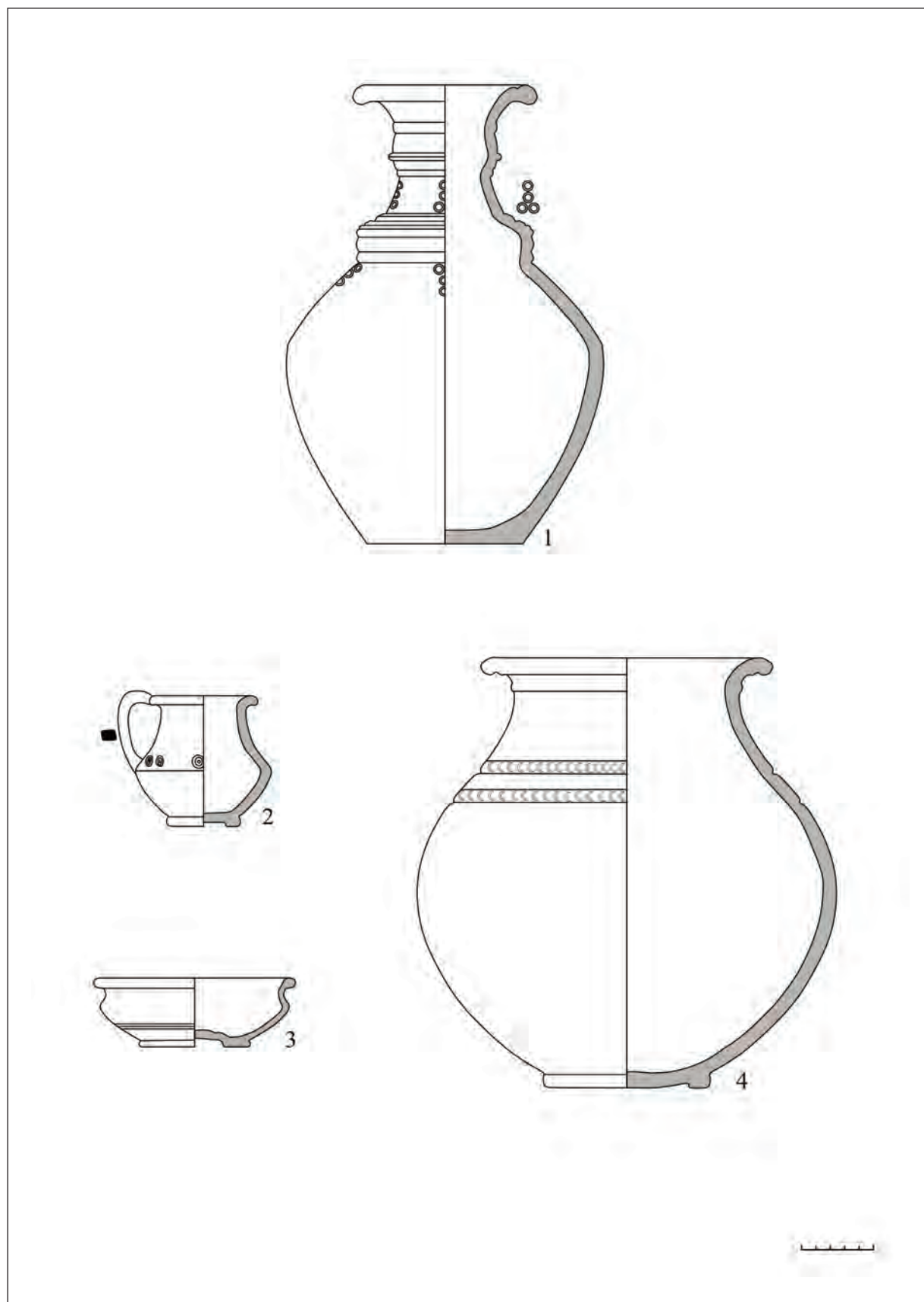


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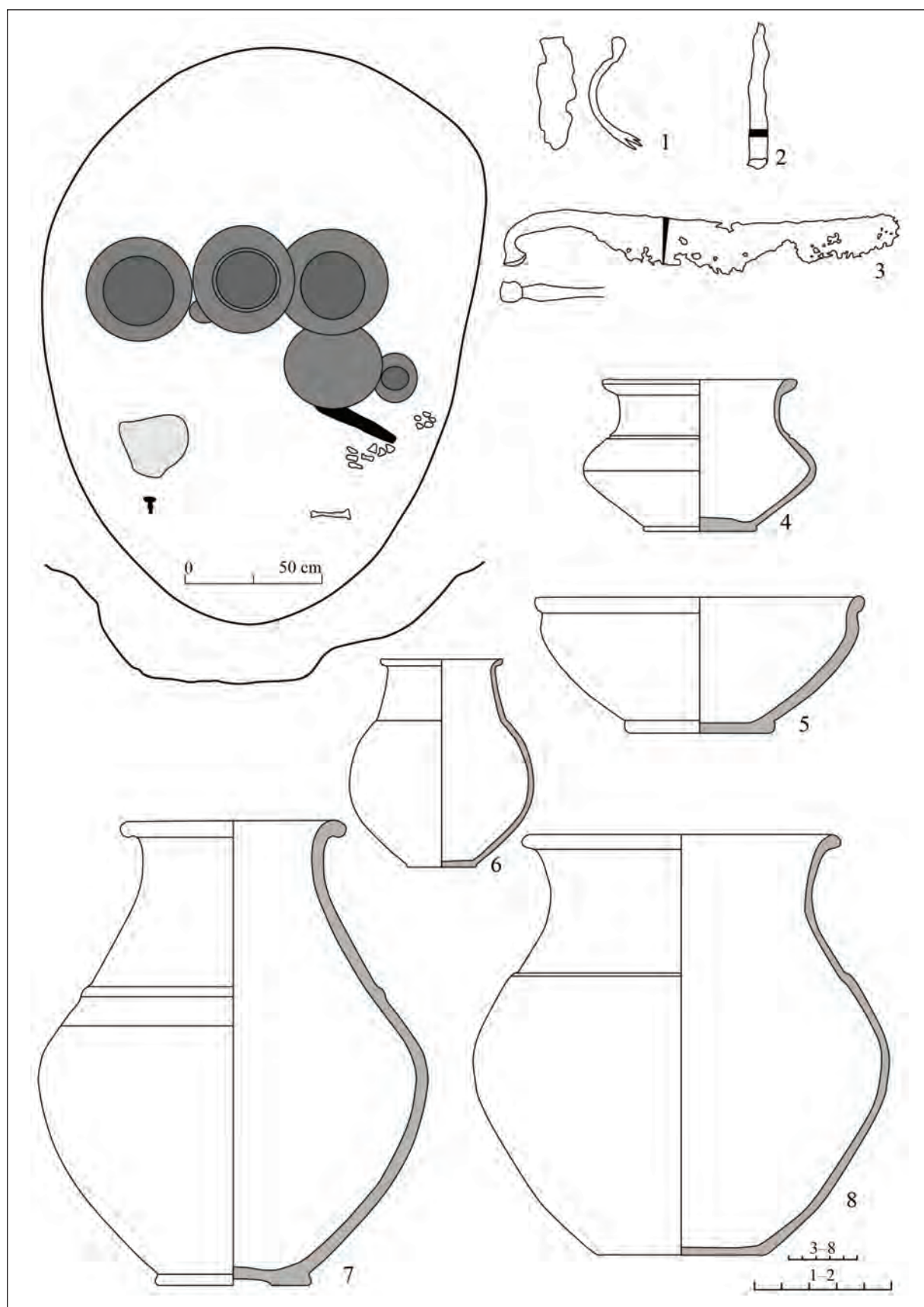


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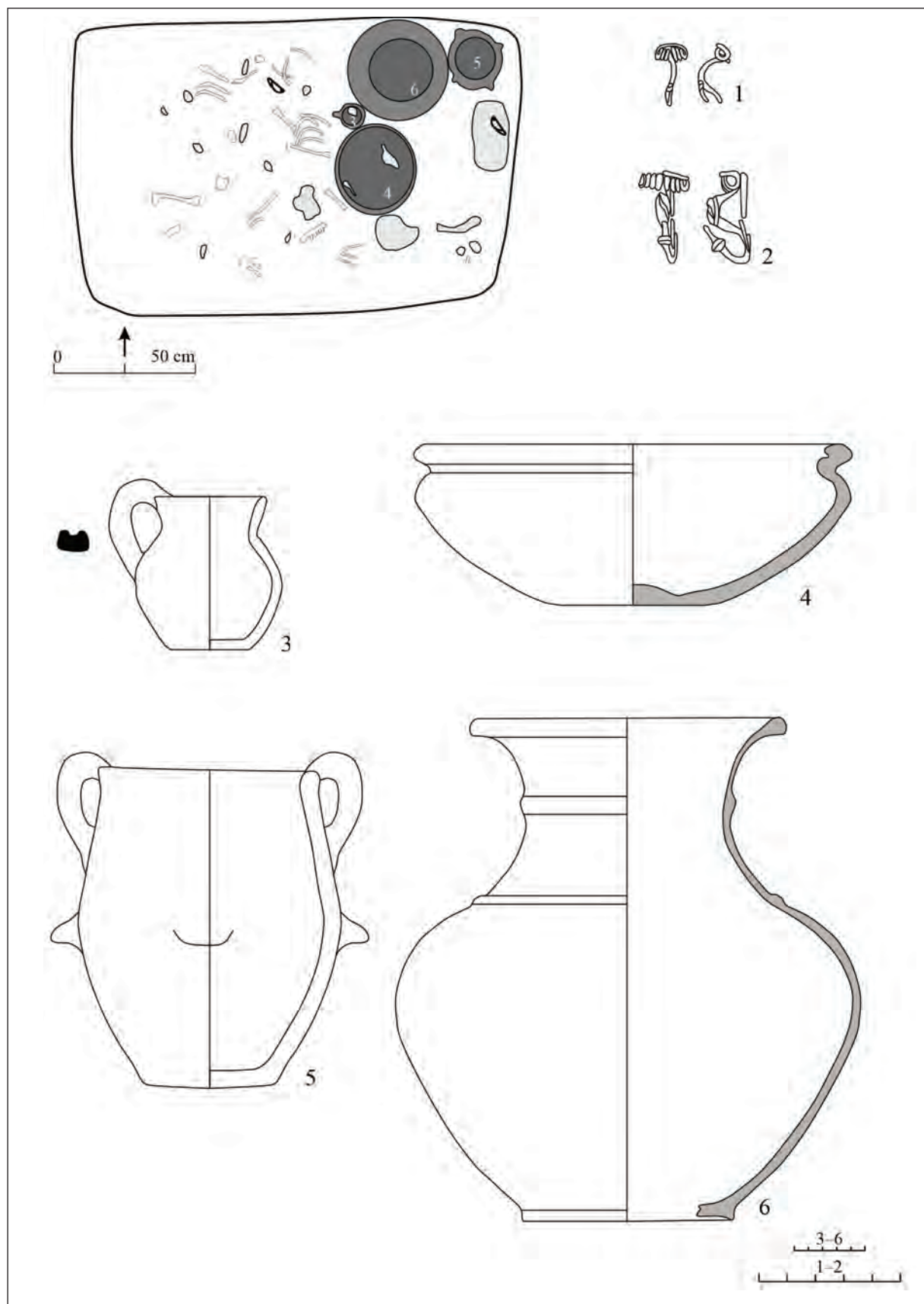


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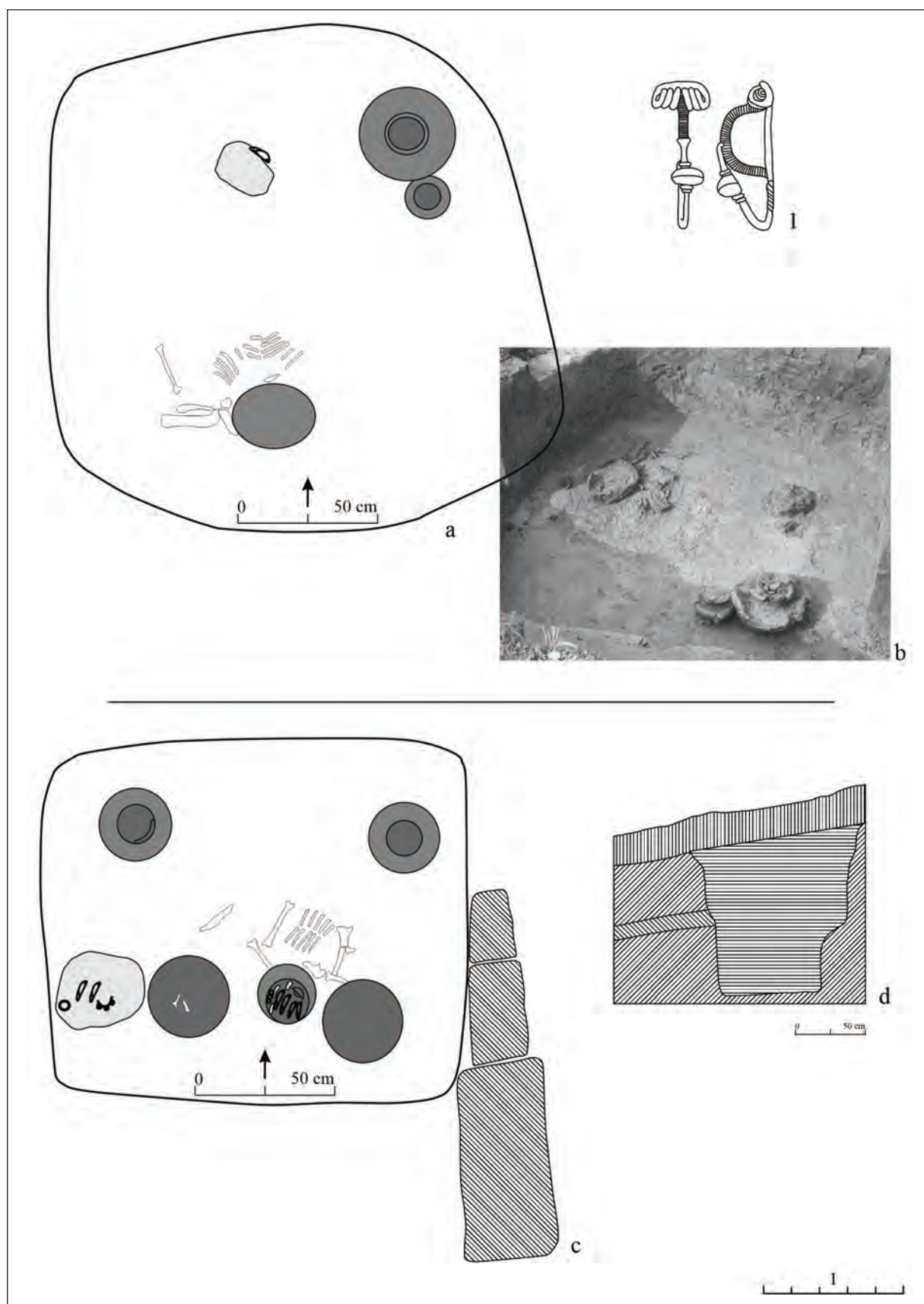


Plate XXI. a-b, 1. Grave 20; c-d. Grave 21.

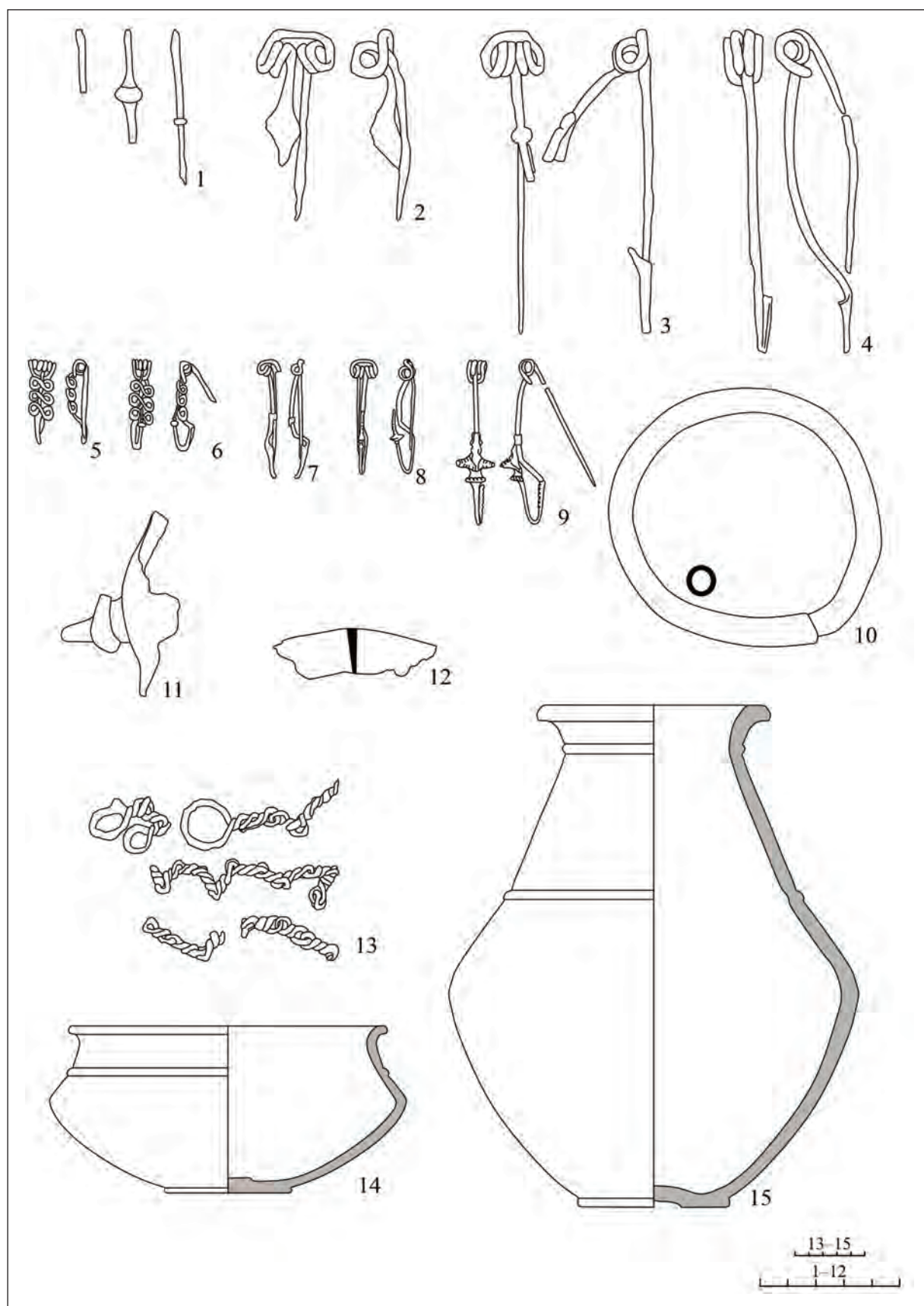


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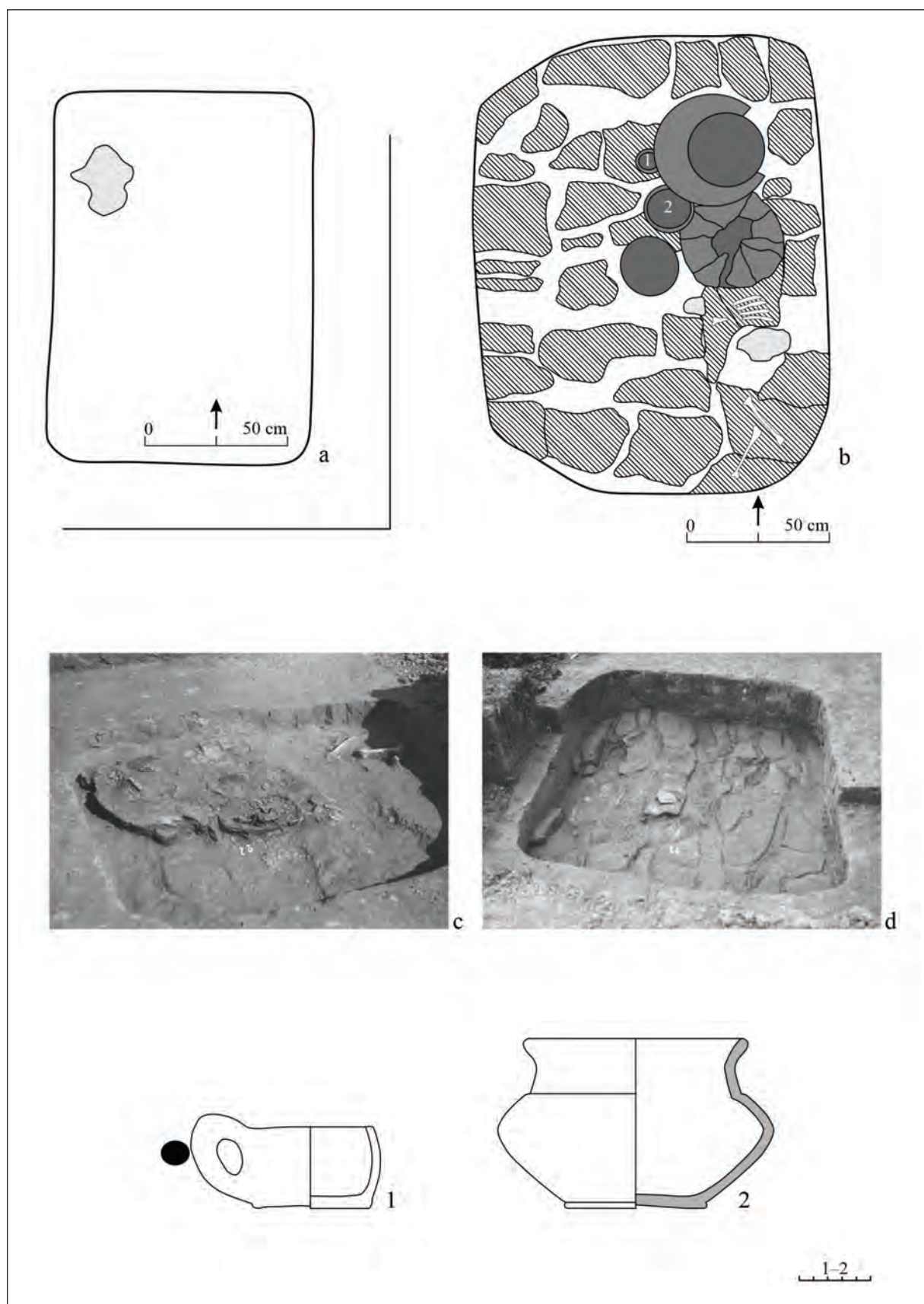


Plate XXIII. a. Grave 22; b-d, 1-2. Grave 23.

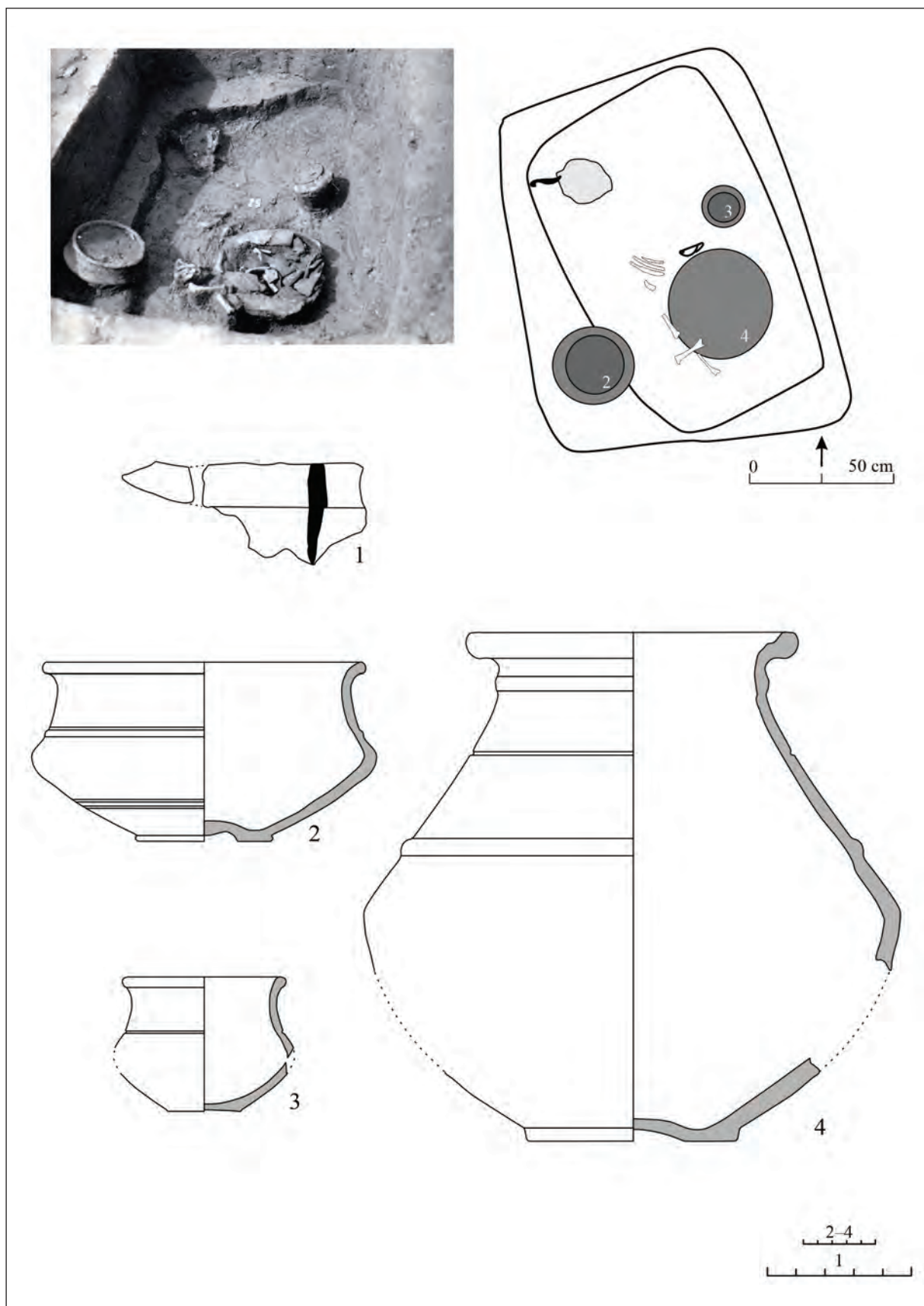


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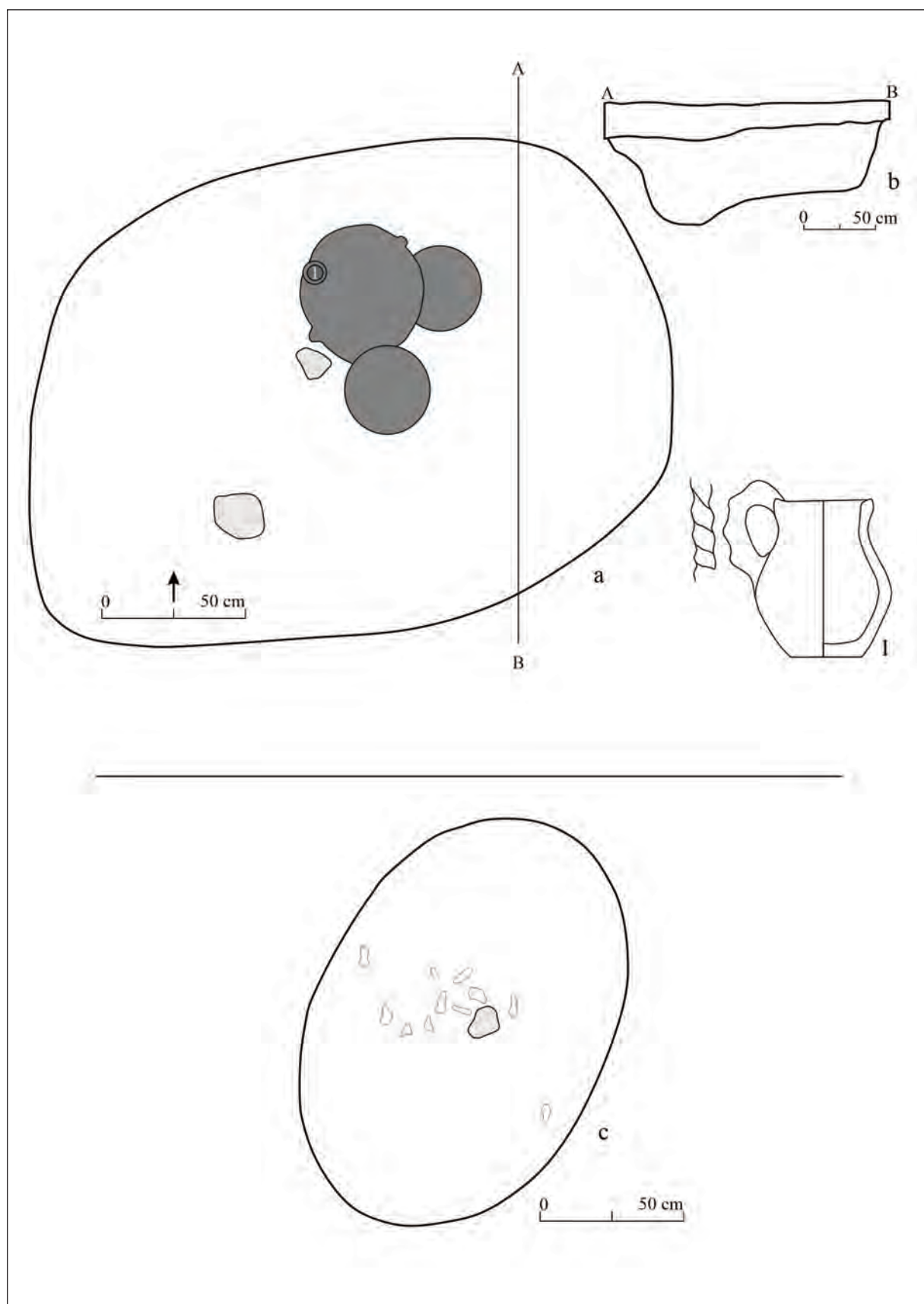


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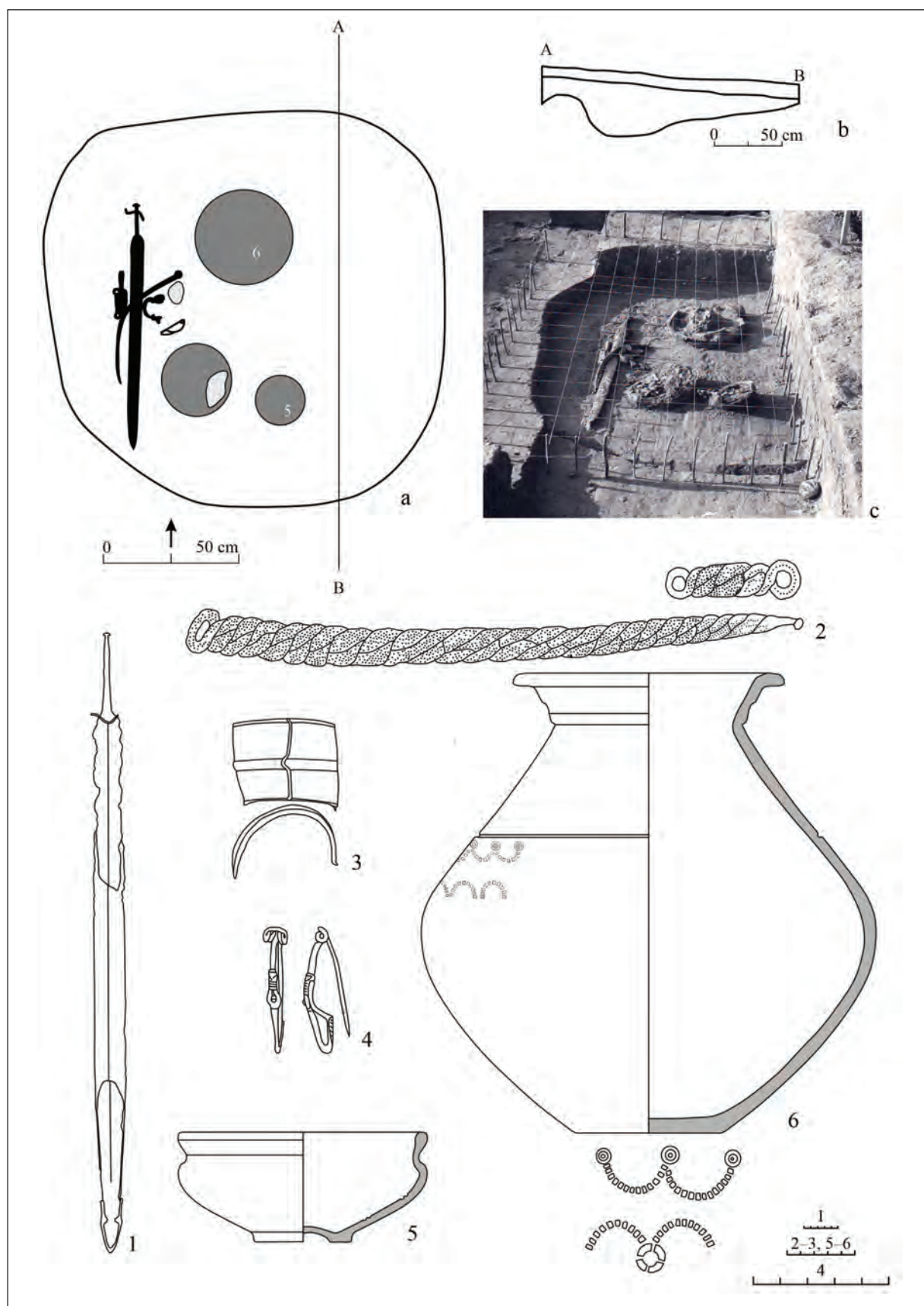


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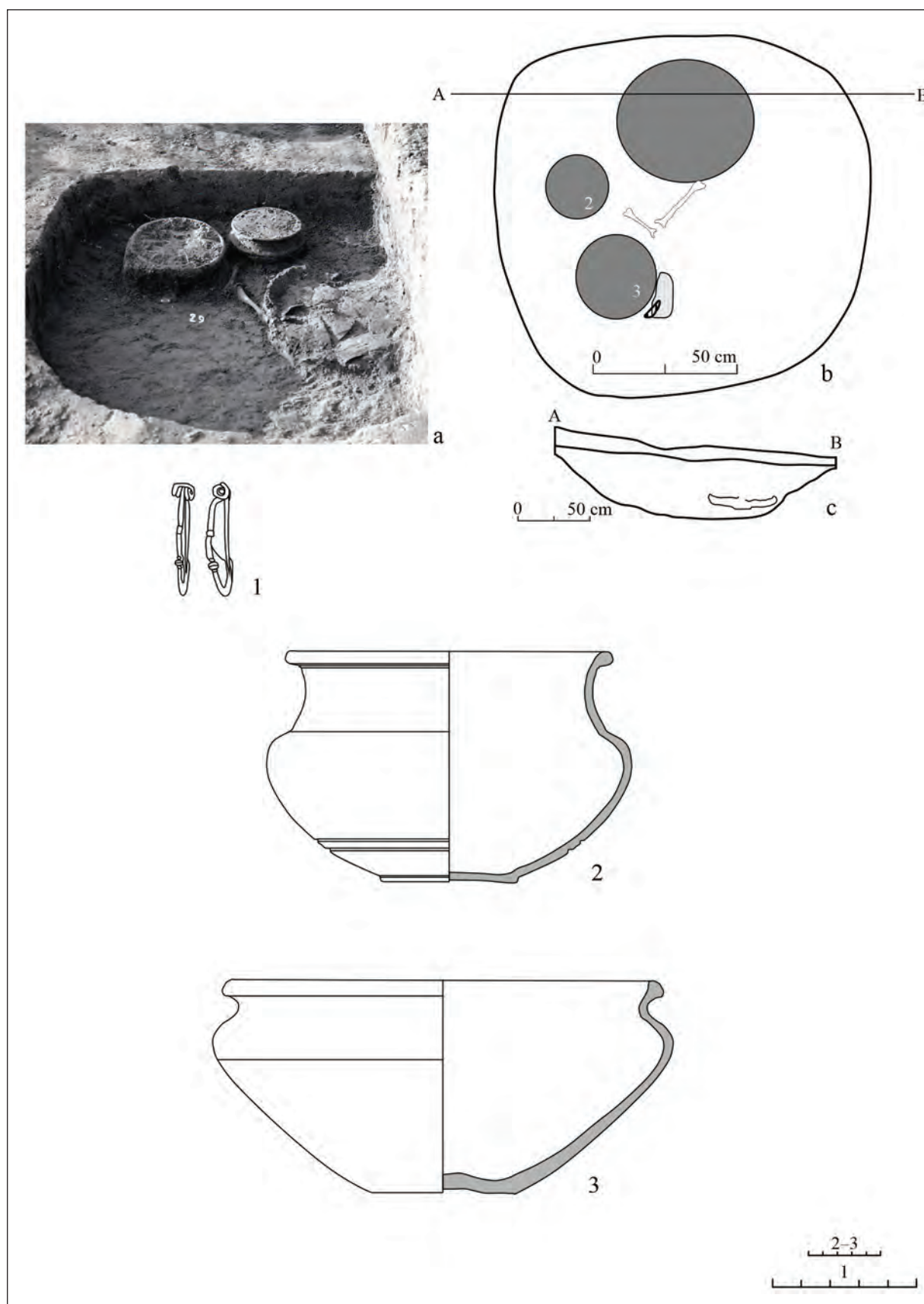


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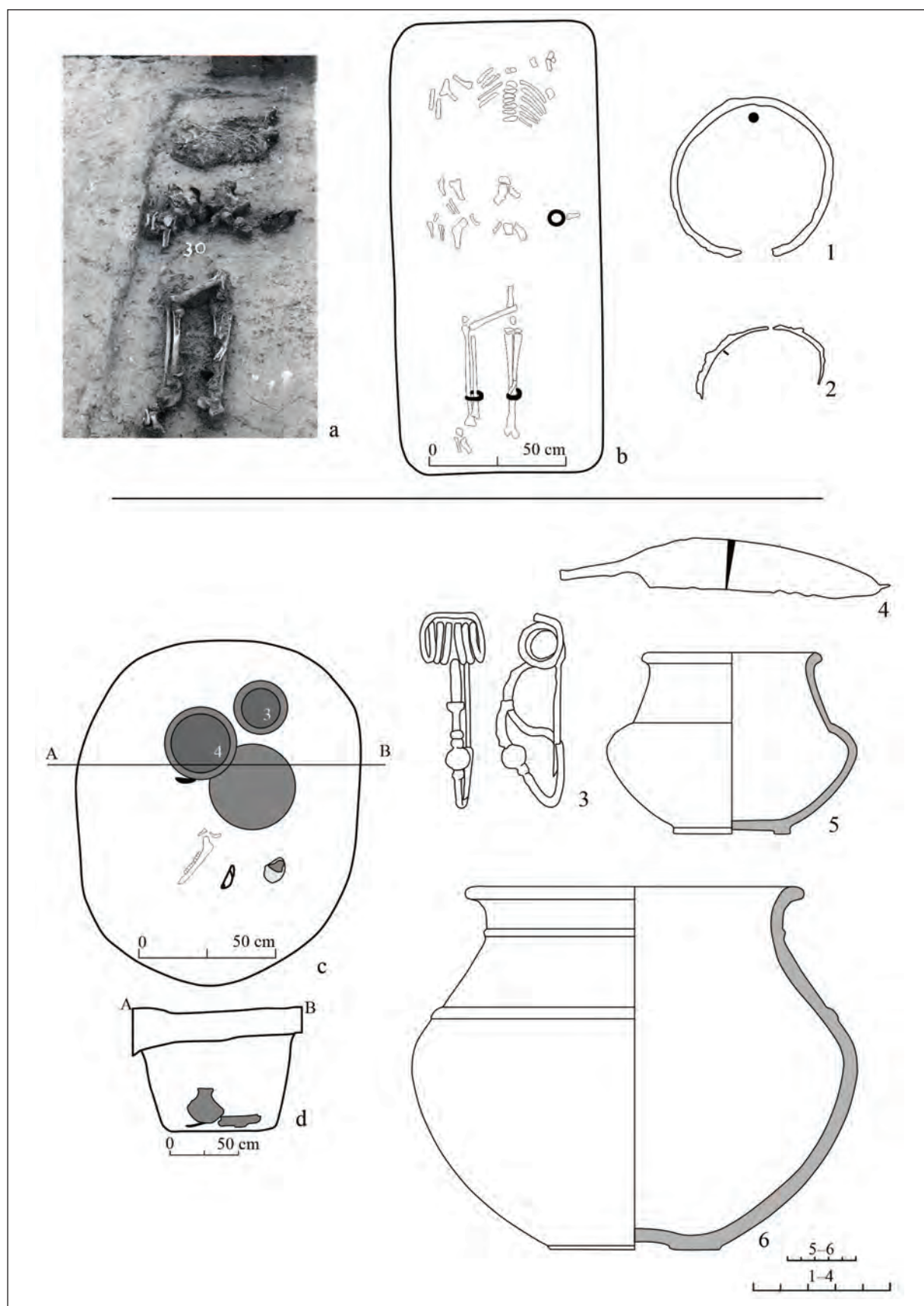


Plate XXVIII. a-b, 1-2. Grave 30; c-d, 3-6. Grave 31.

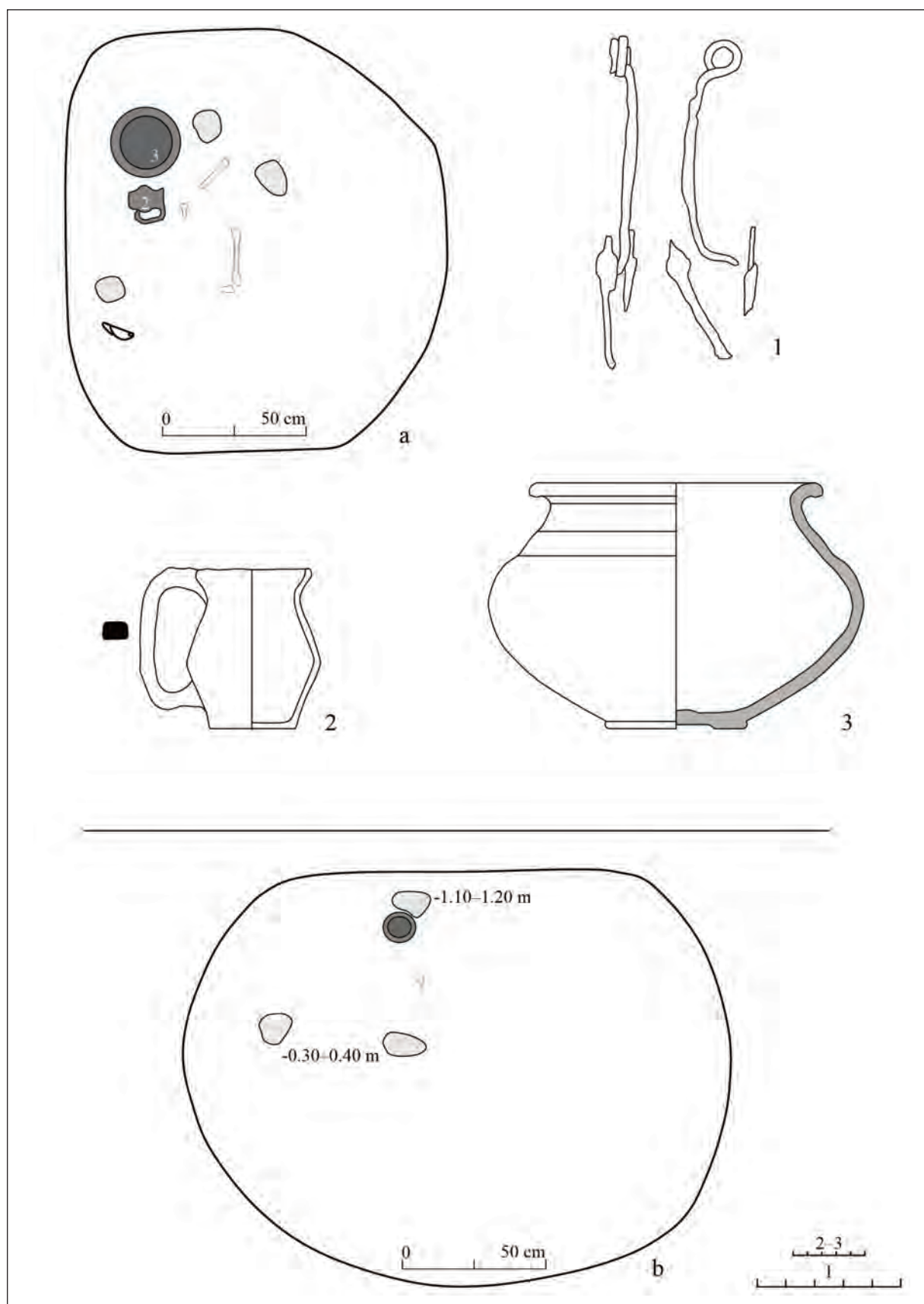


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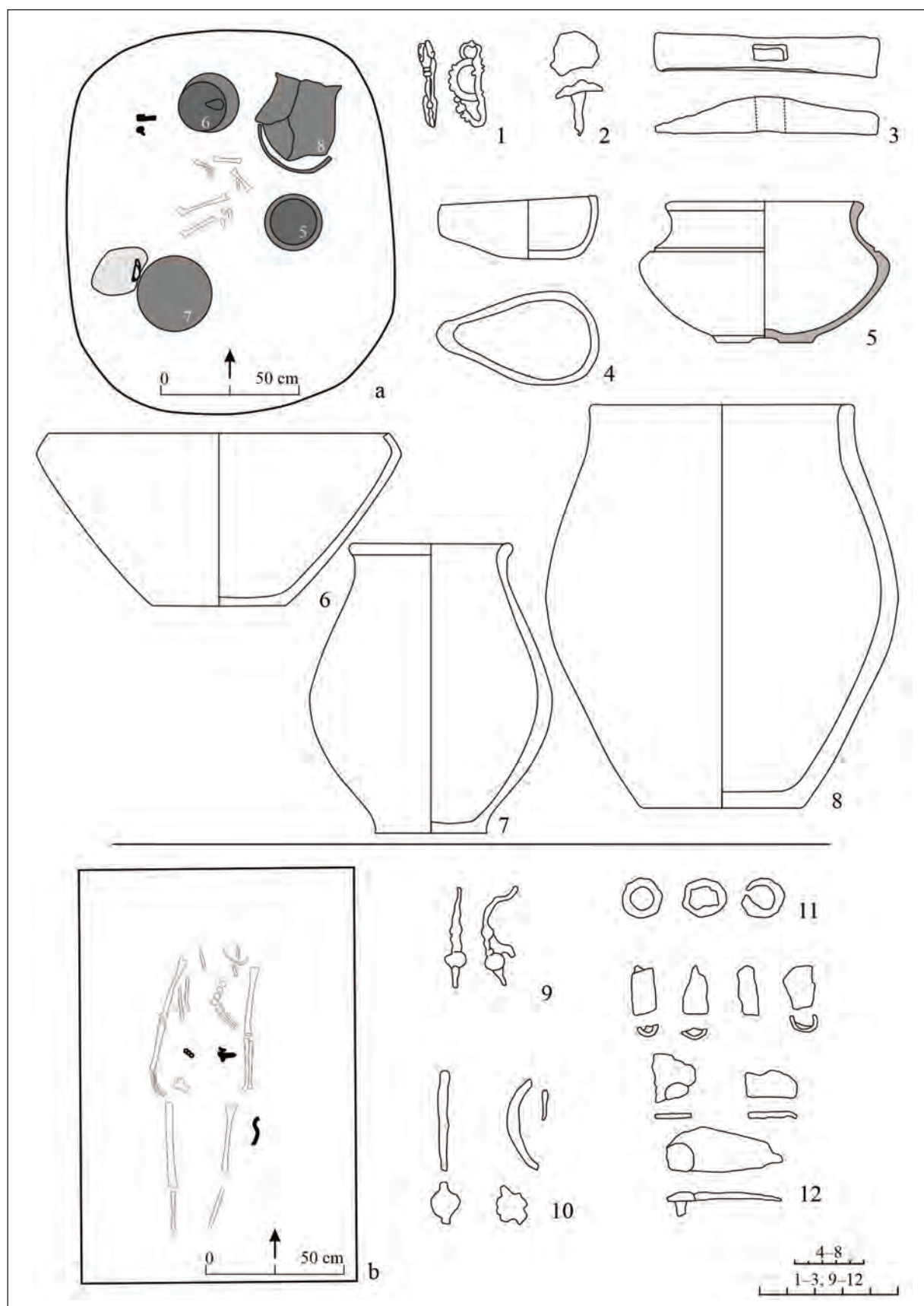


Plate XXX. a, 1-8. Grave 34; b, 9-12. Grave 35.

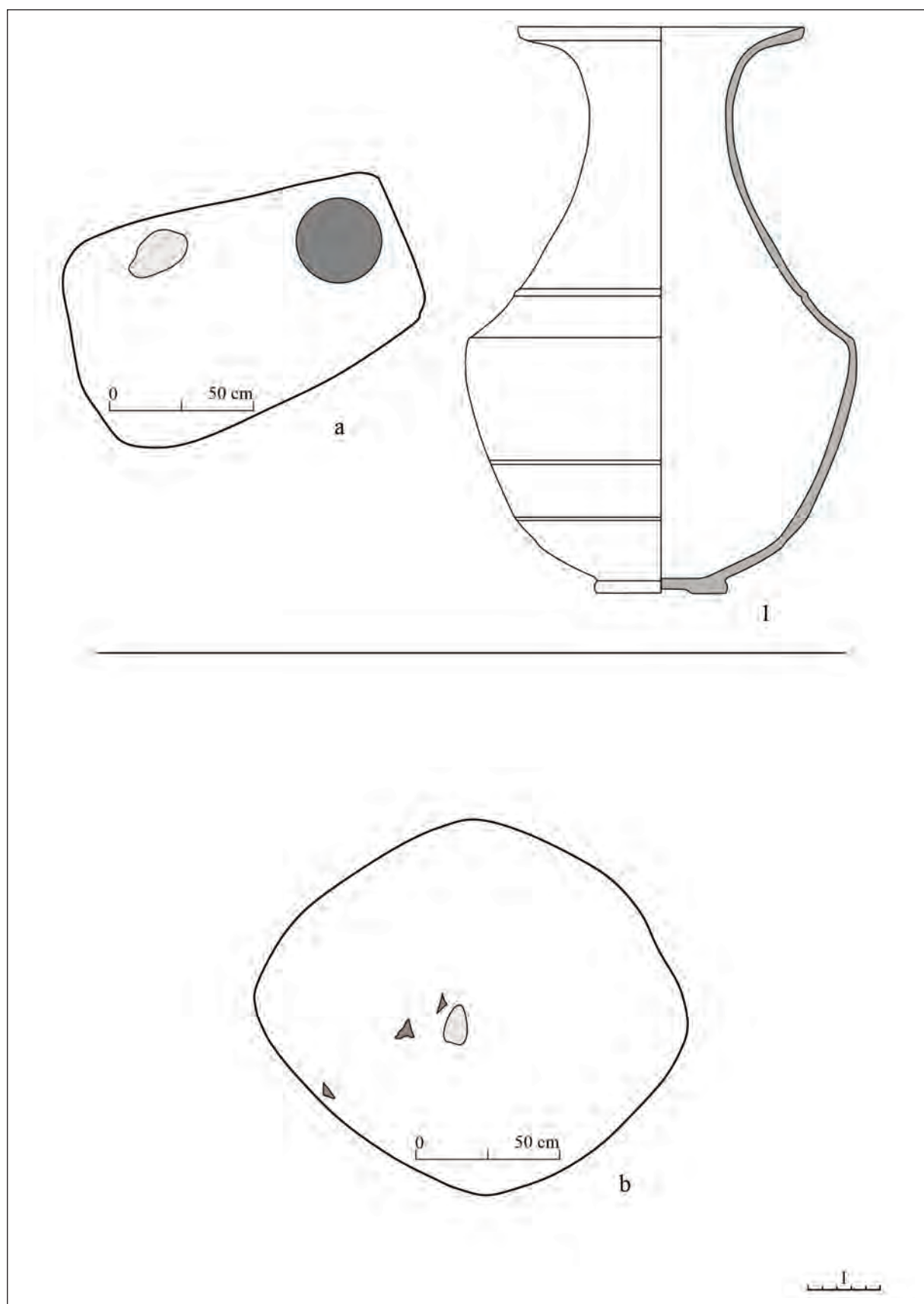


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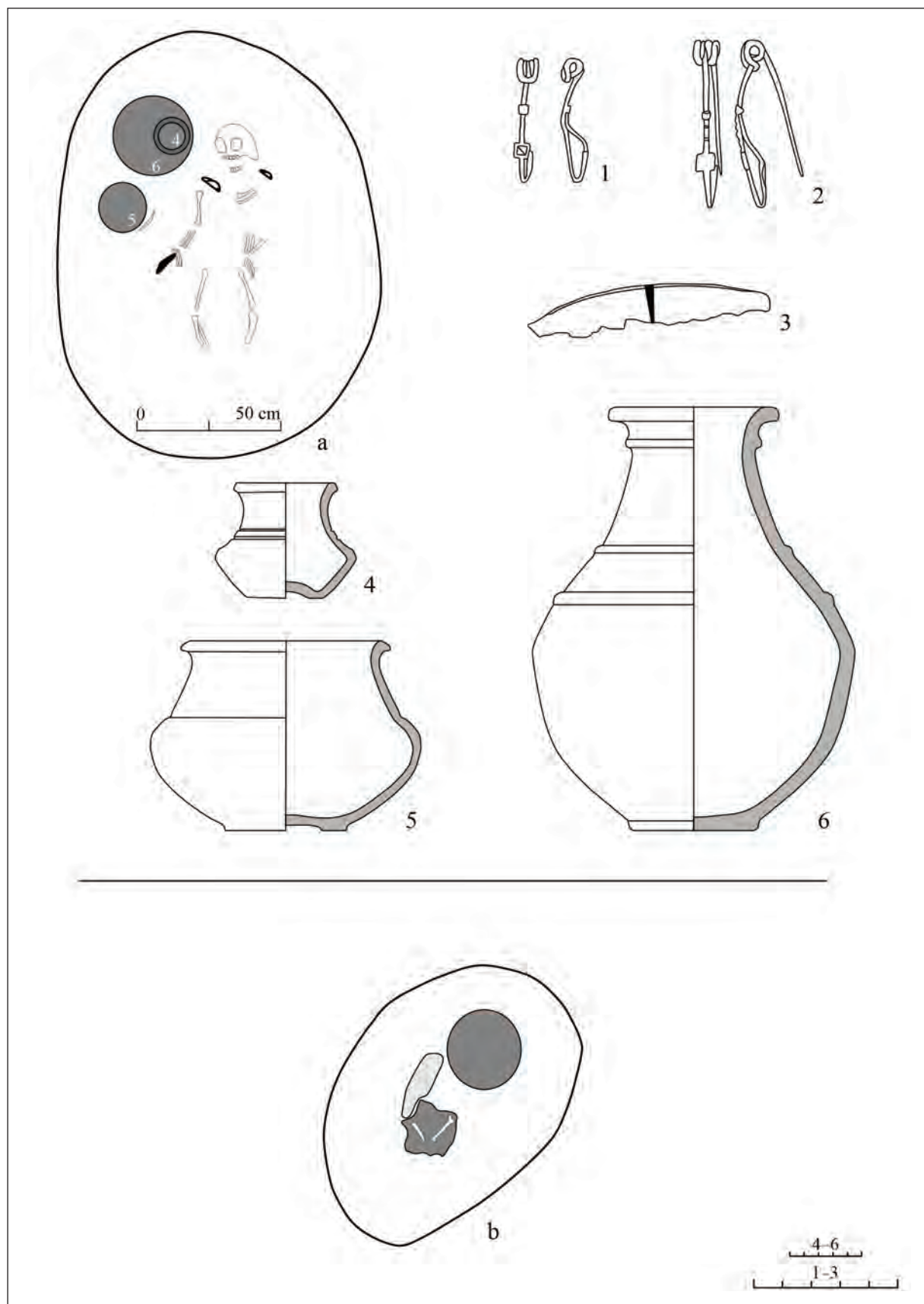


Plate XXXII. a, 1-6. Grave 38; b. Grave 39.

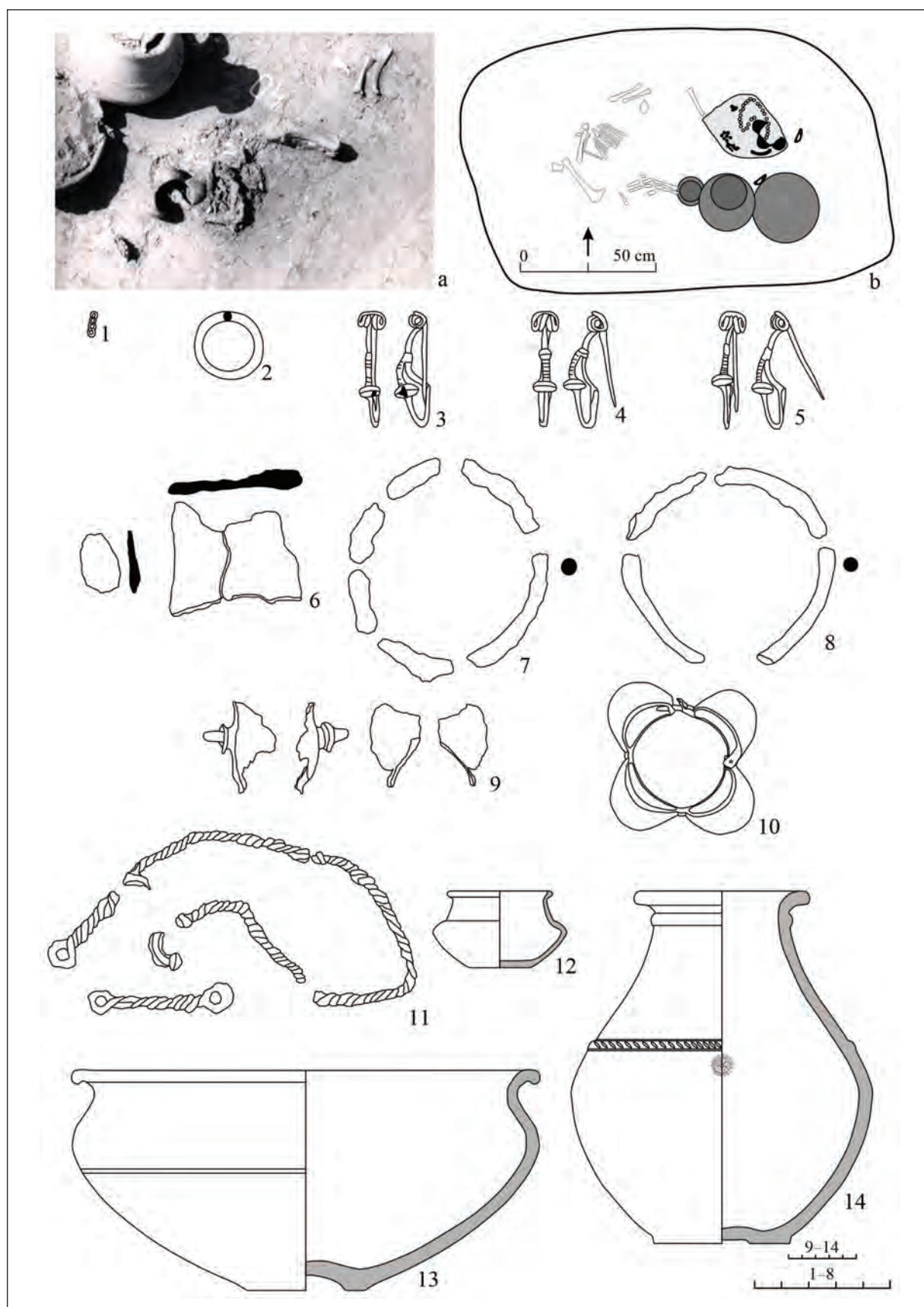


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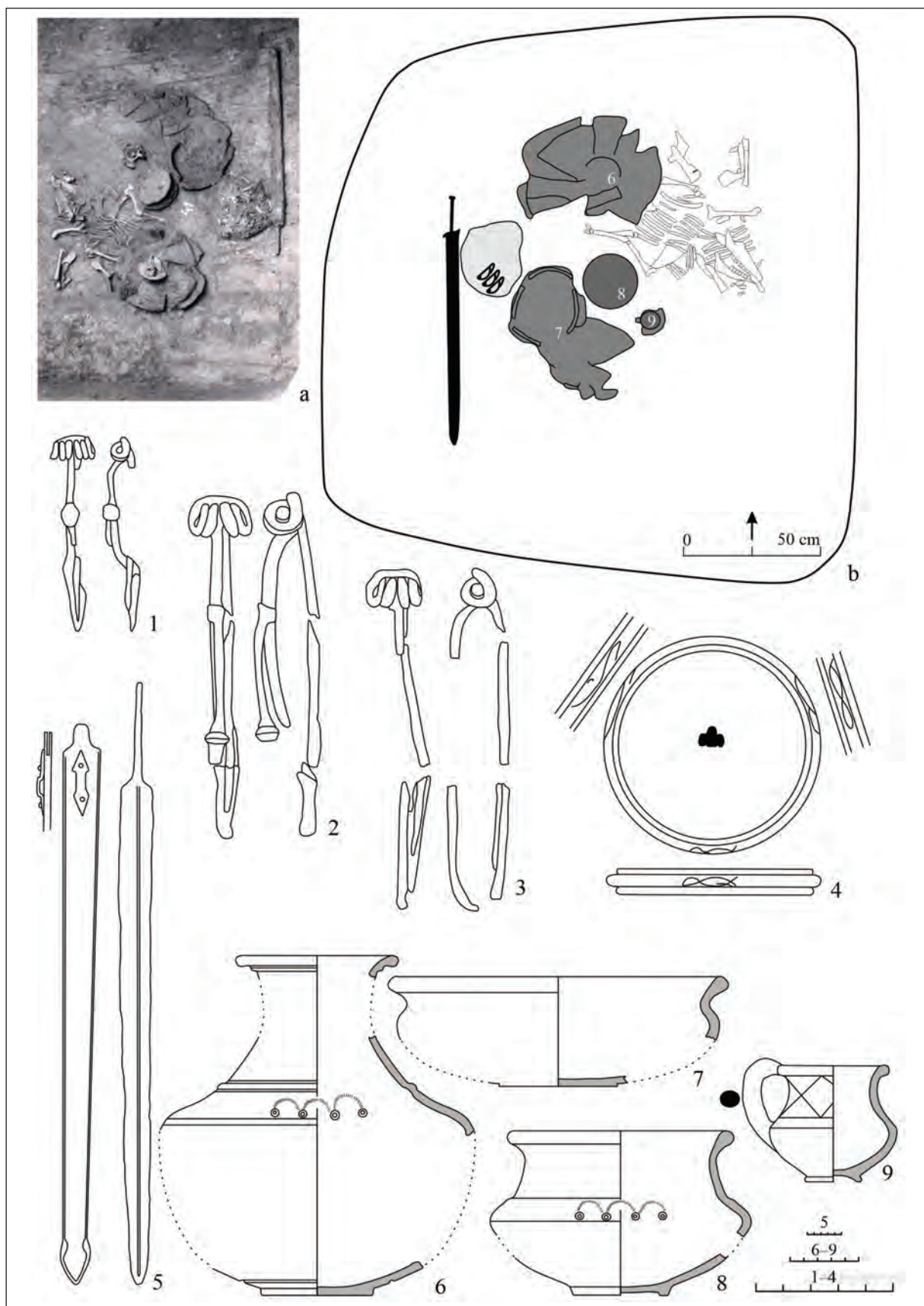


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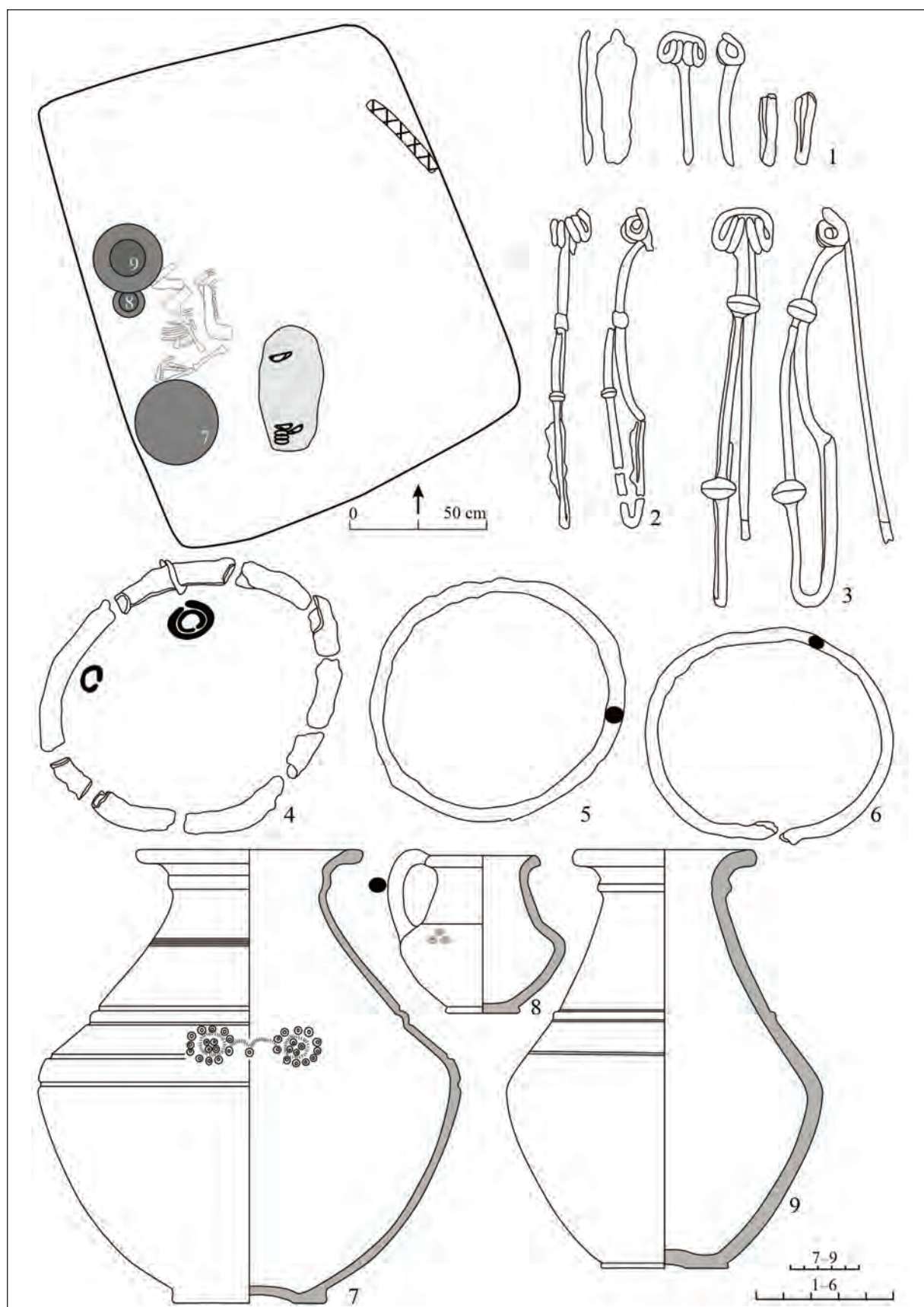


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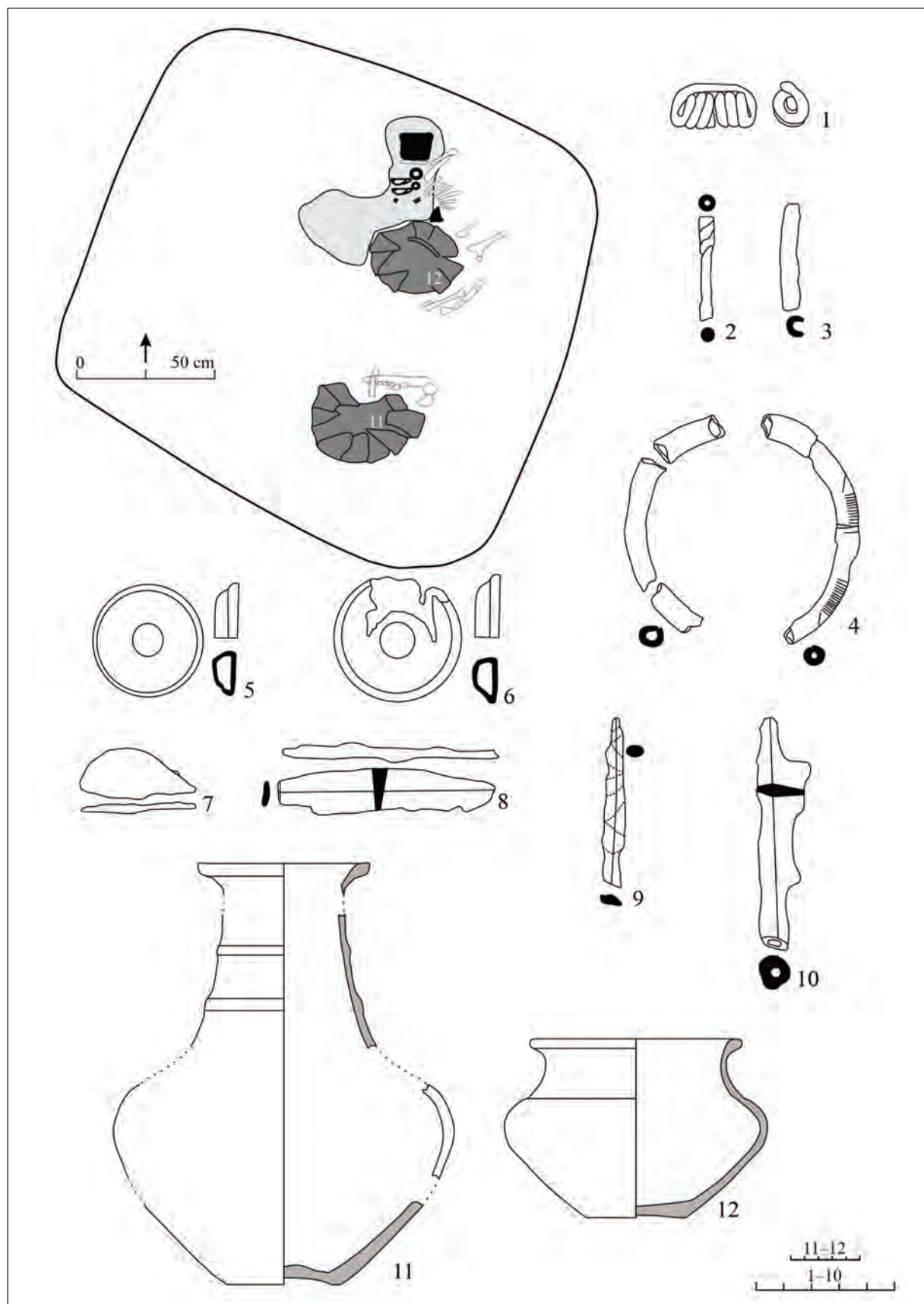


Plate XXXVI. Grave 43.

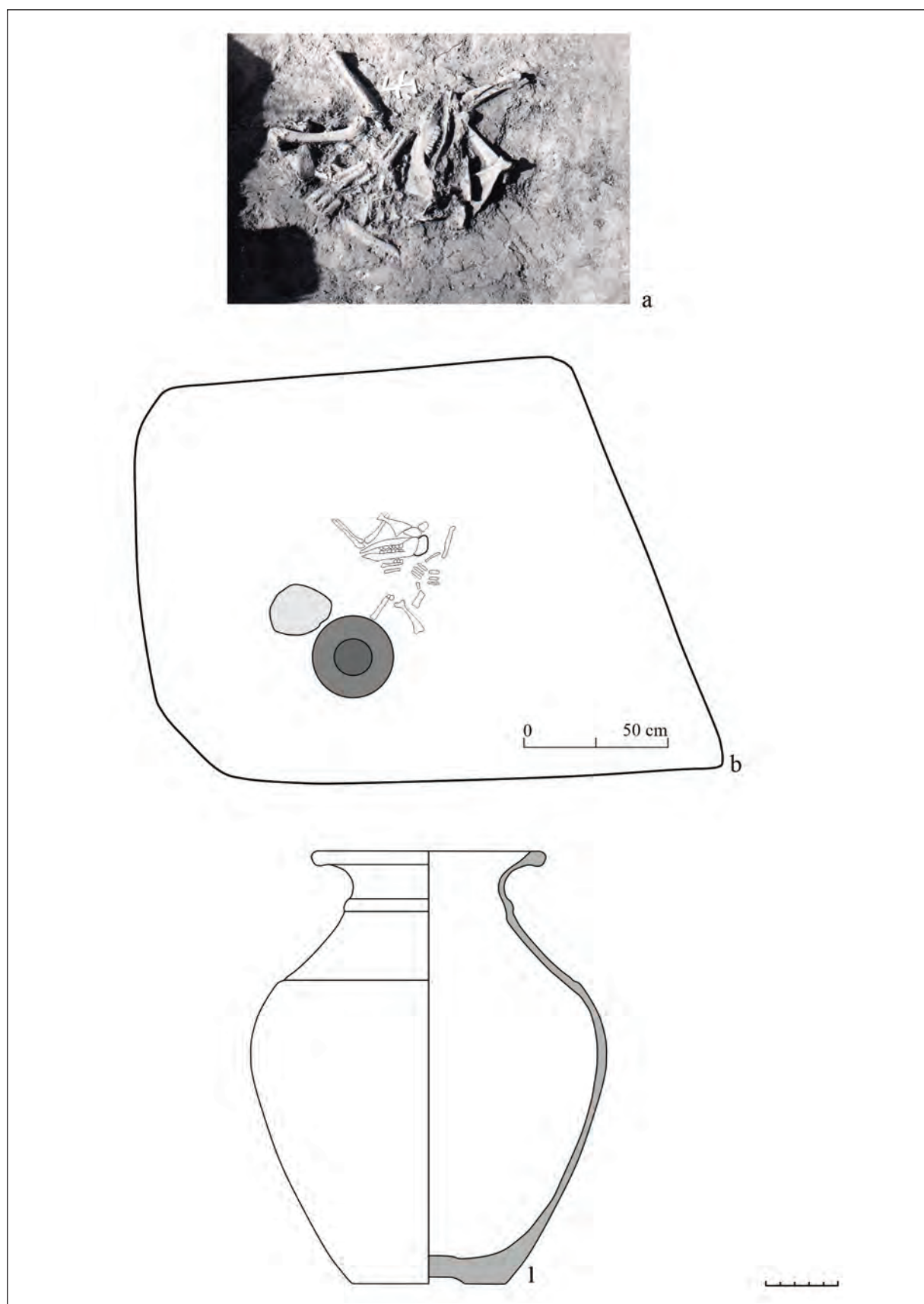


Plate XXXVII. Grave 44.

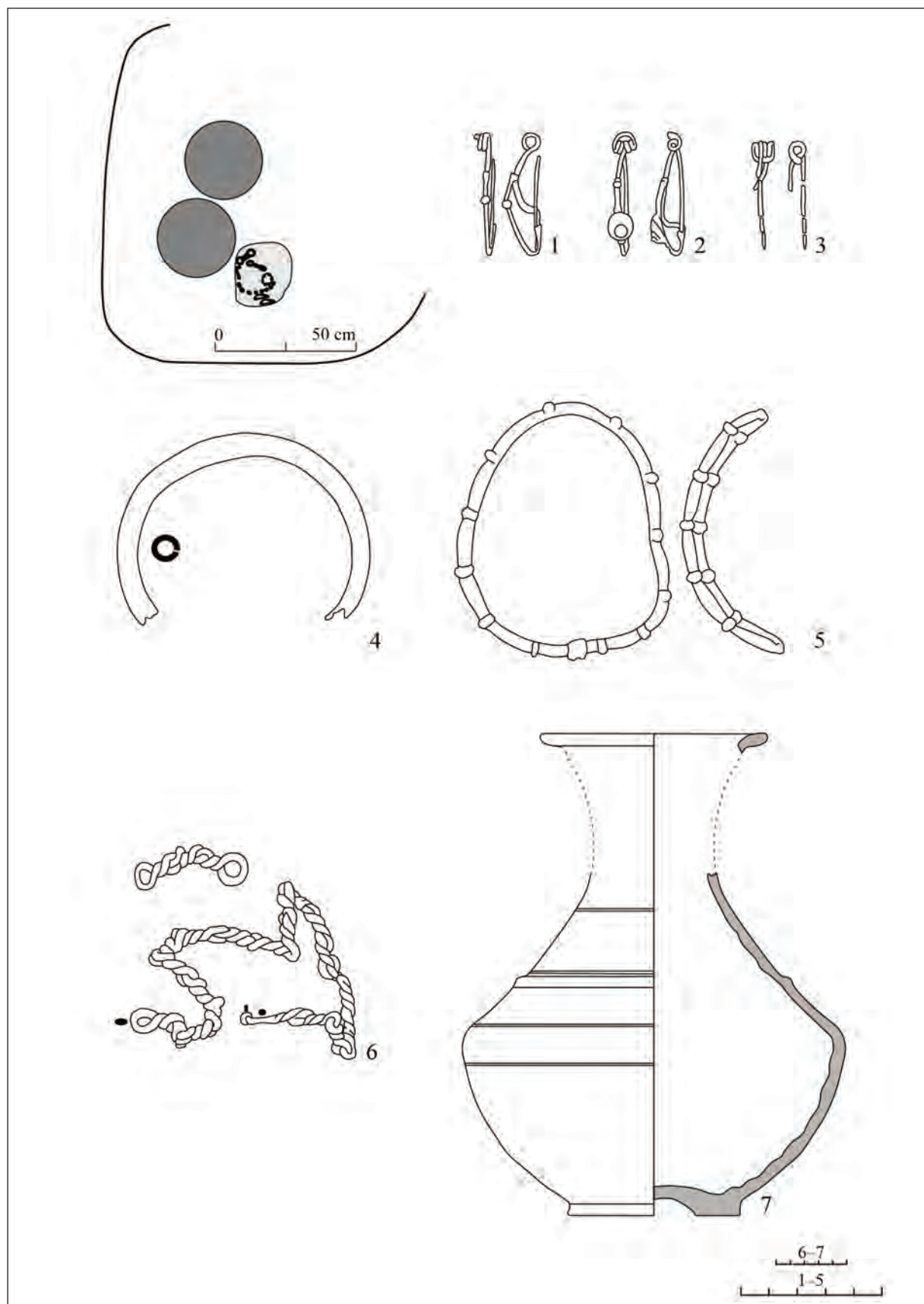


Plate XXXVIII. Grave 45.

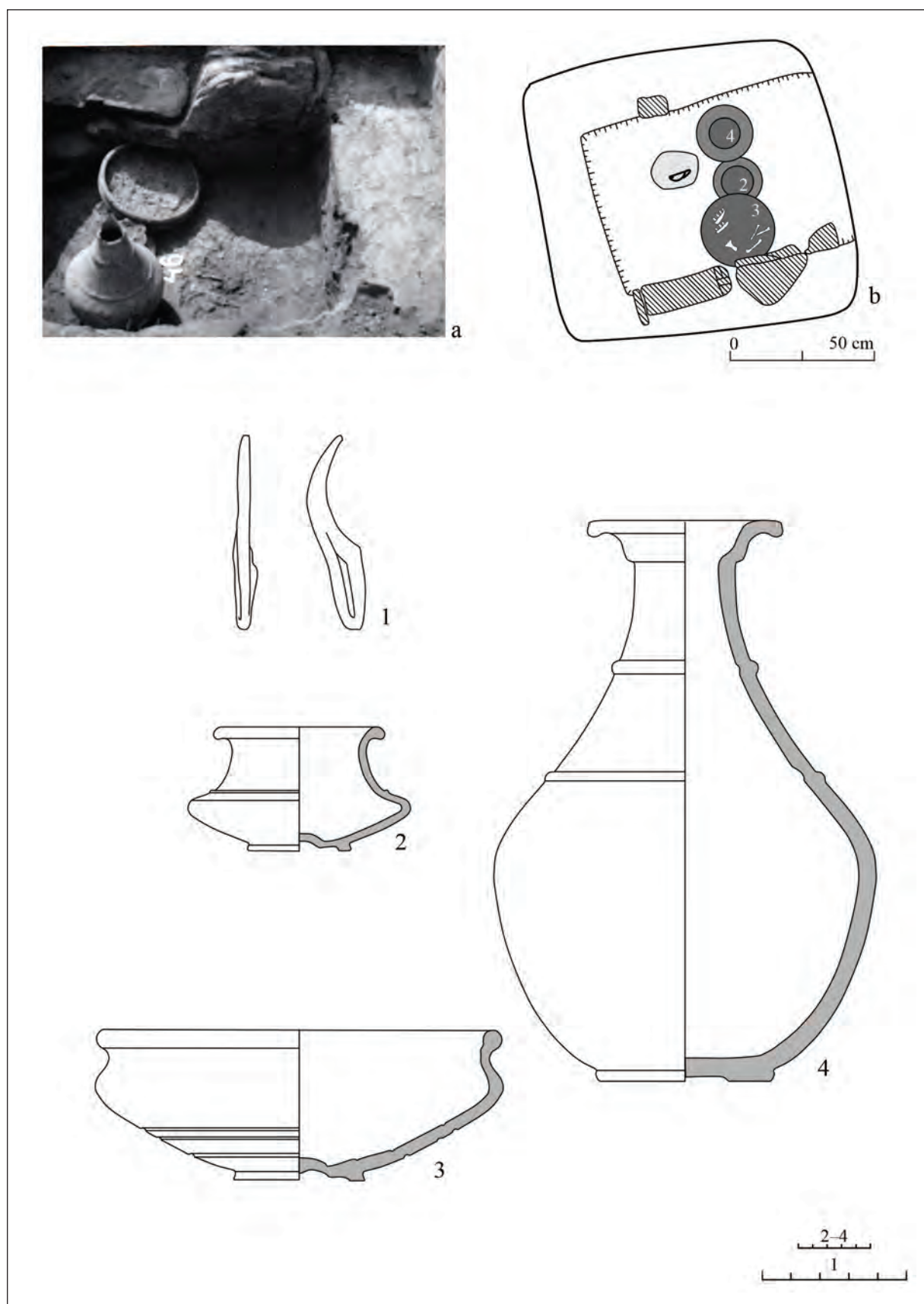


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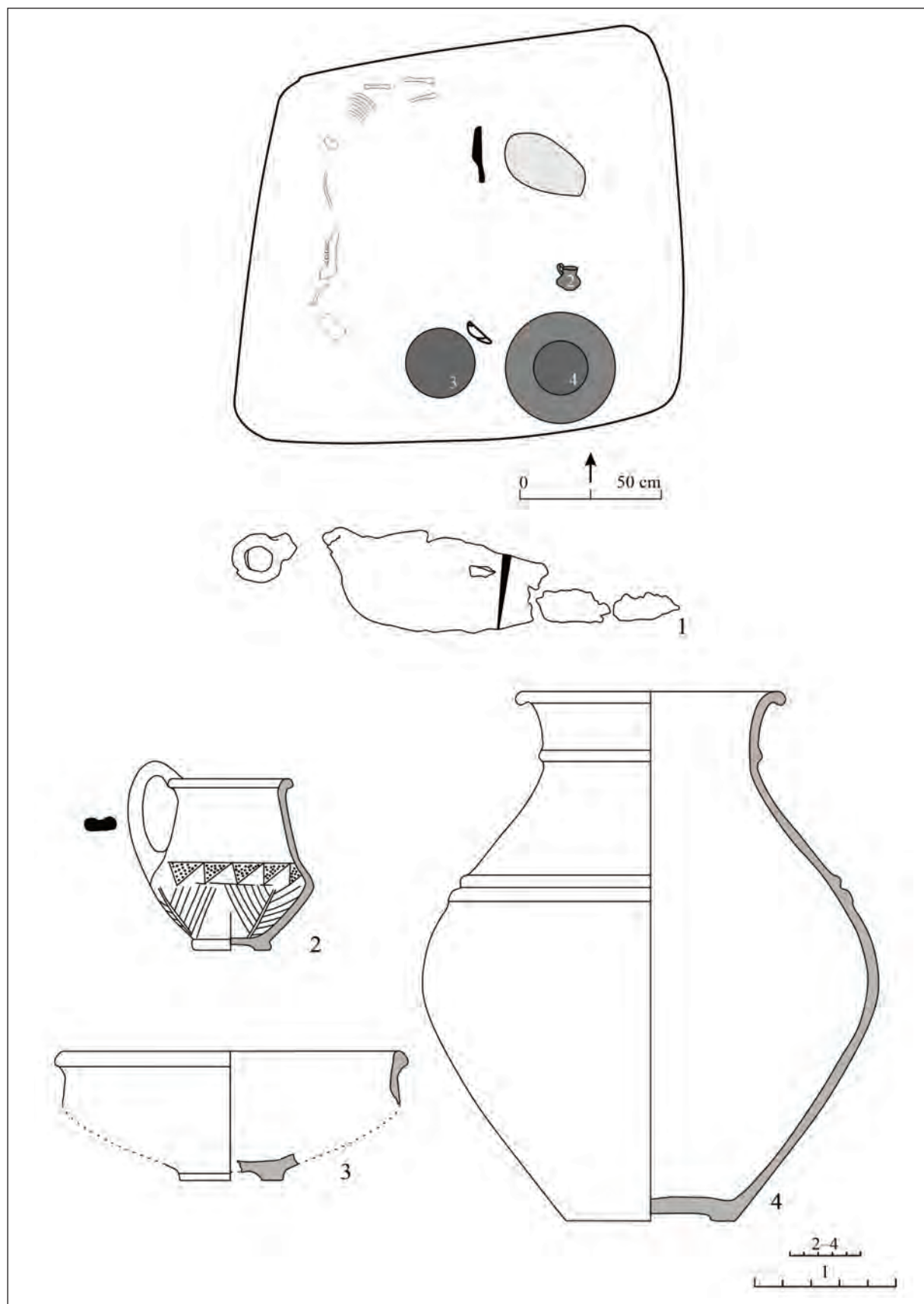


Plate XL. Grave 47.

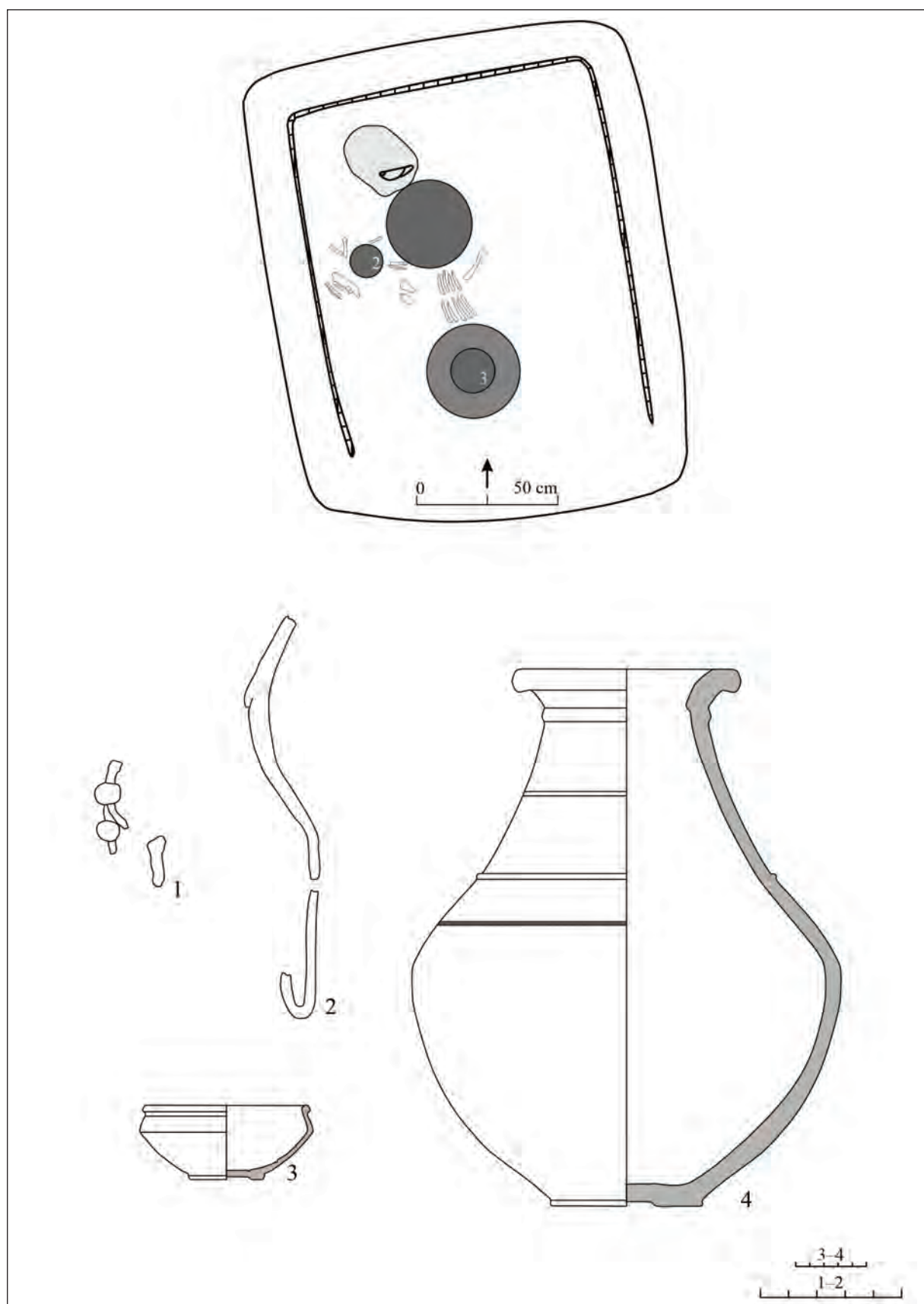


Plate XLI. Grave 48.

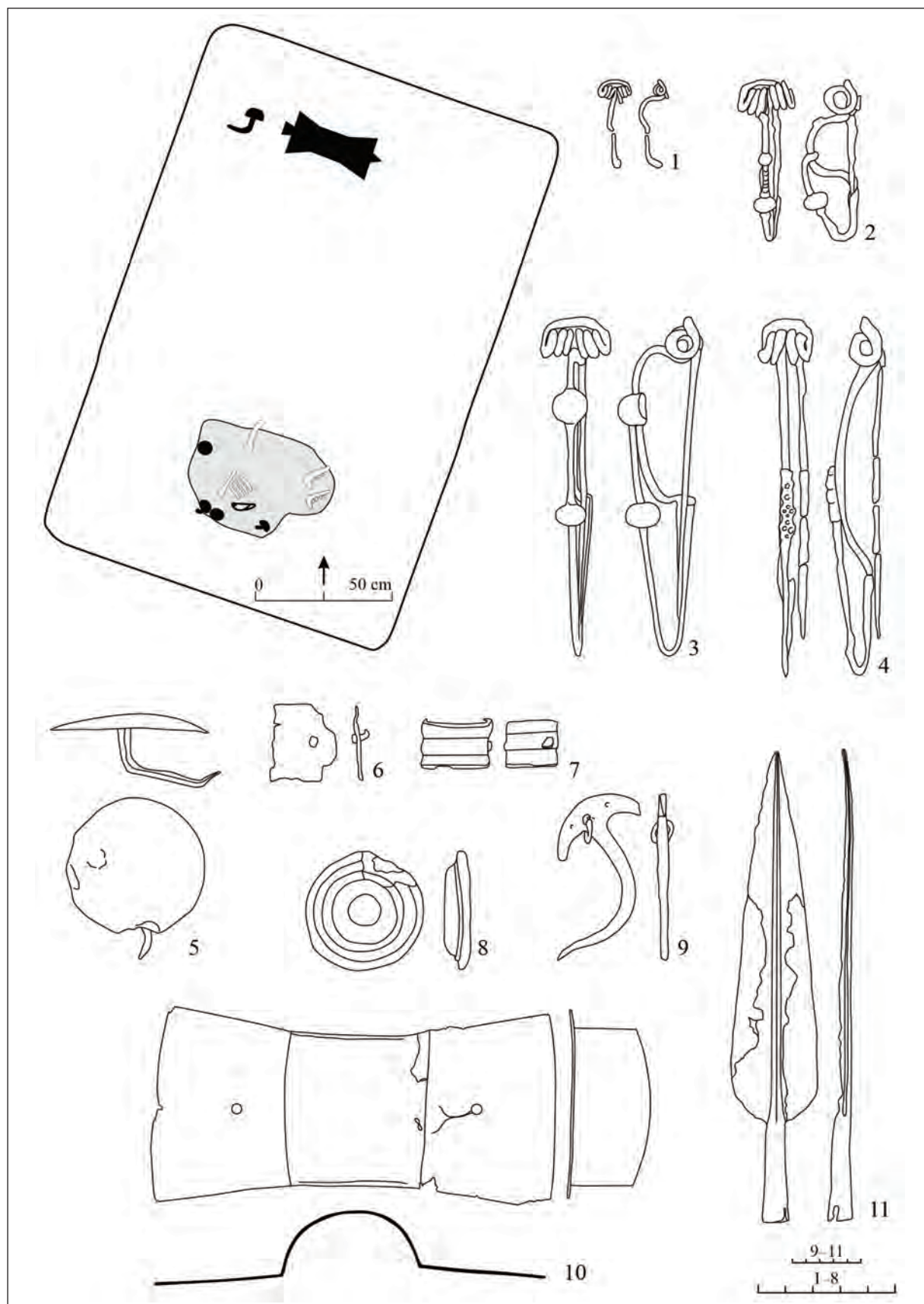


Plate XLII. Grave 49.

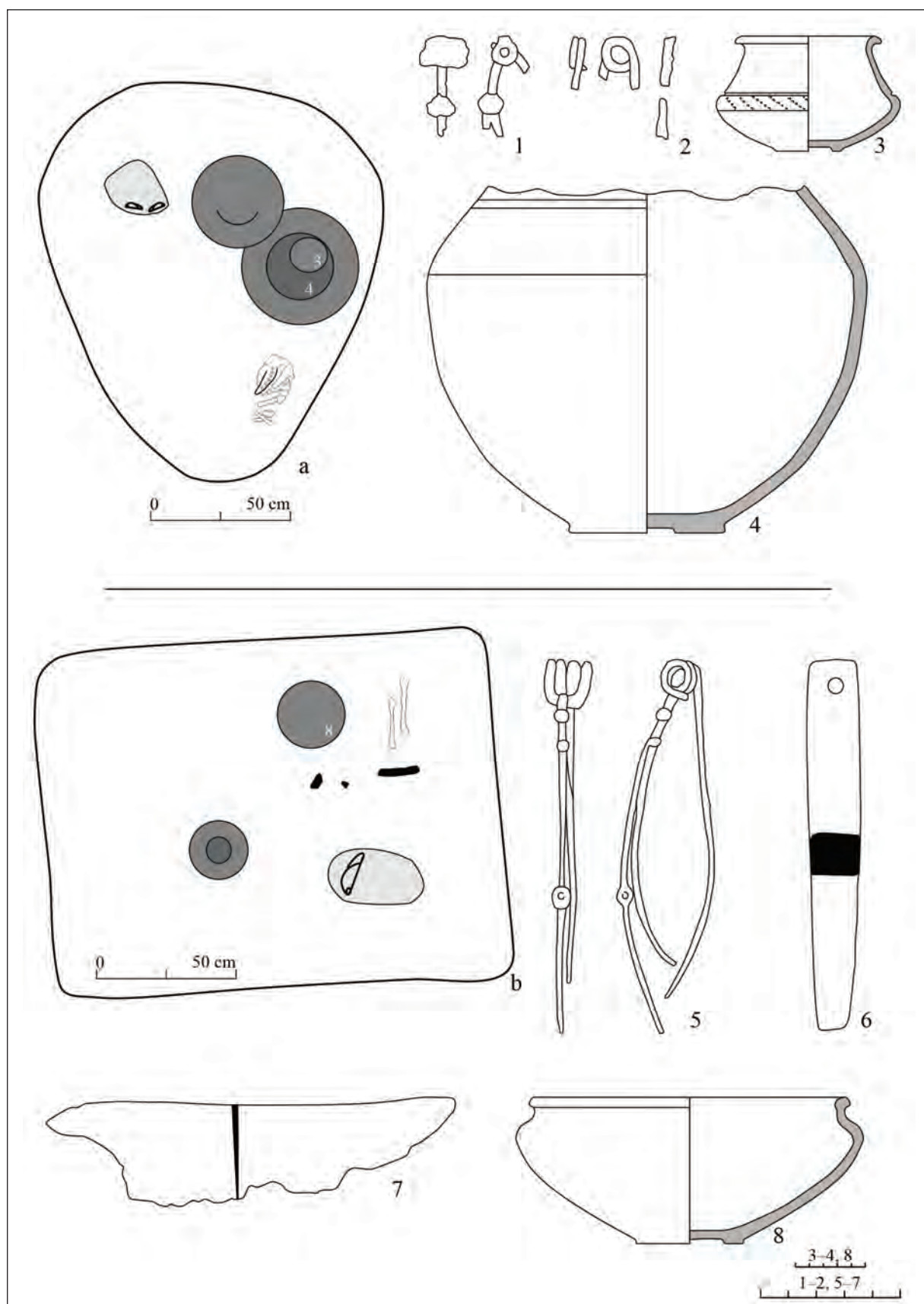


Plate XLIII. a, 1-4. Grave 50; b, 5-8. Grave 51.

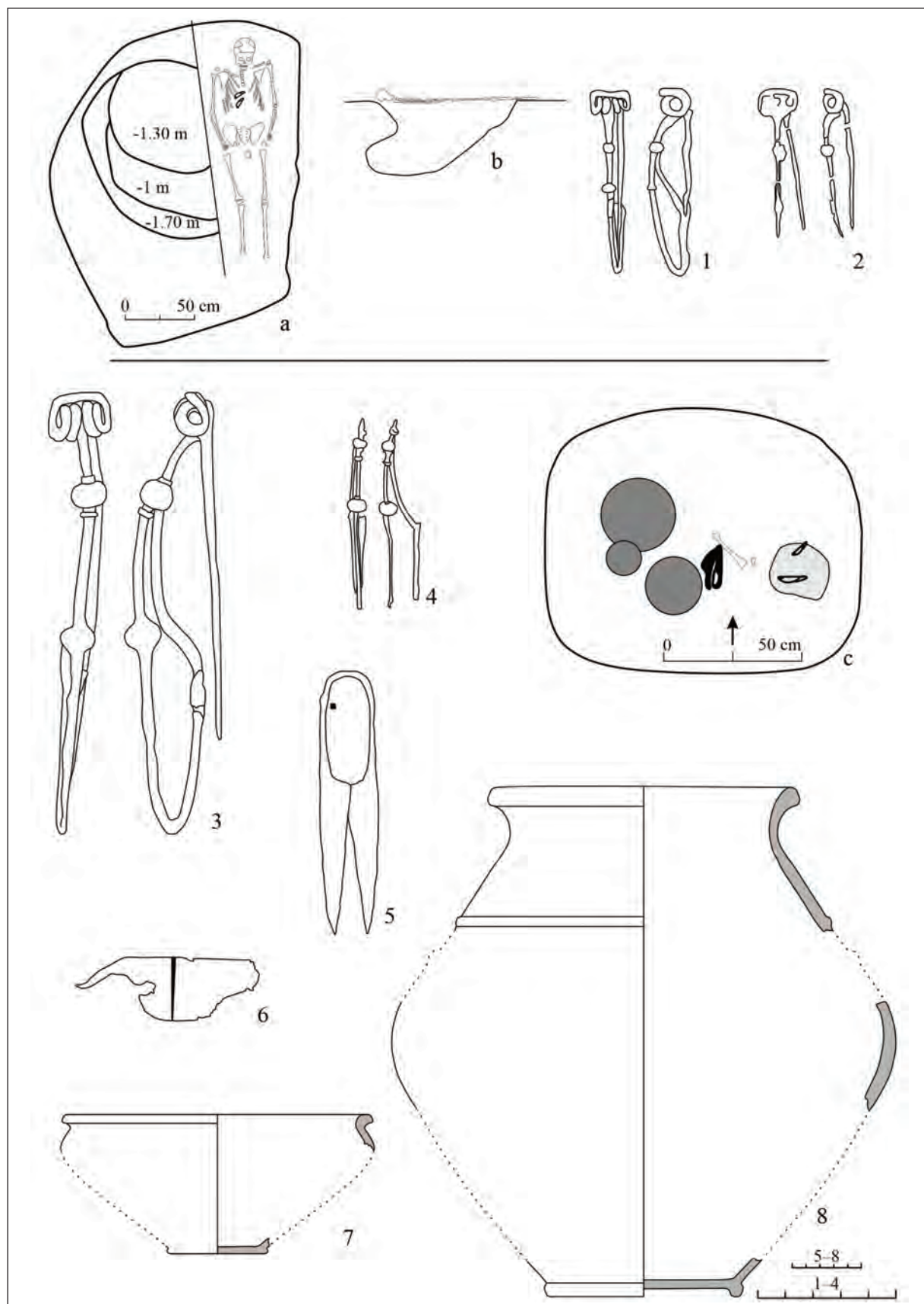


Plate XLIV. a–b, 1–2. Grave 52; c, 3–8. Grave 53.

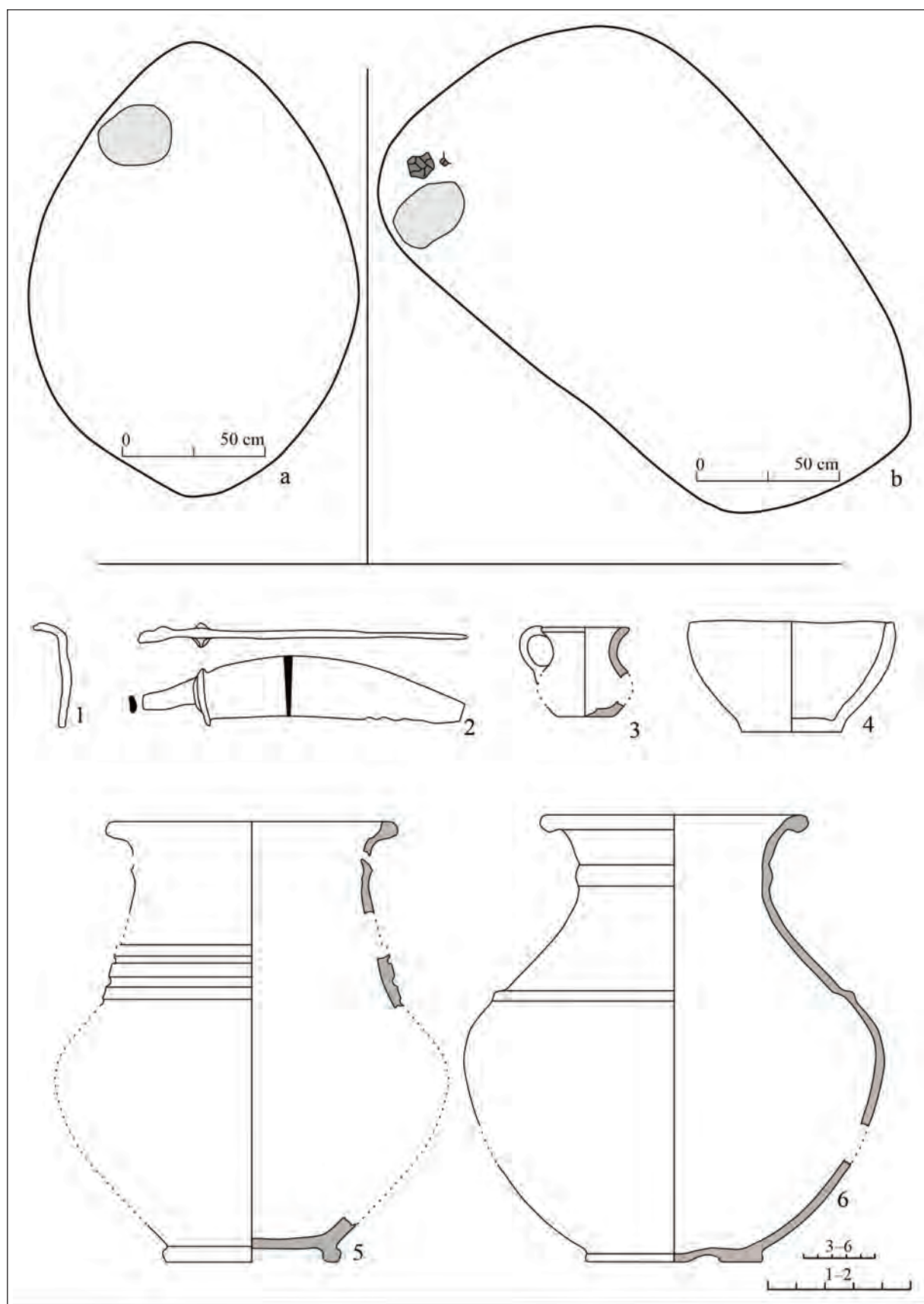


Plate XLV. a. Grave 54; b. Grave 55; 1-6. Grave 56.

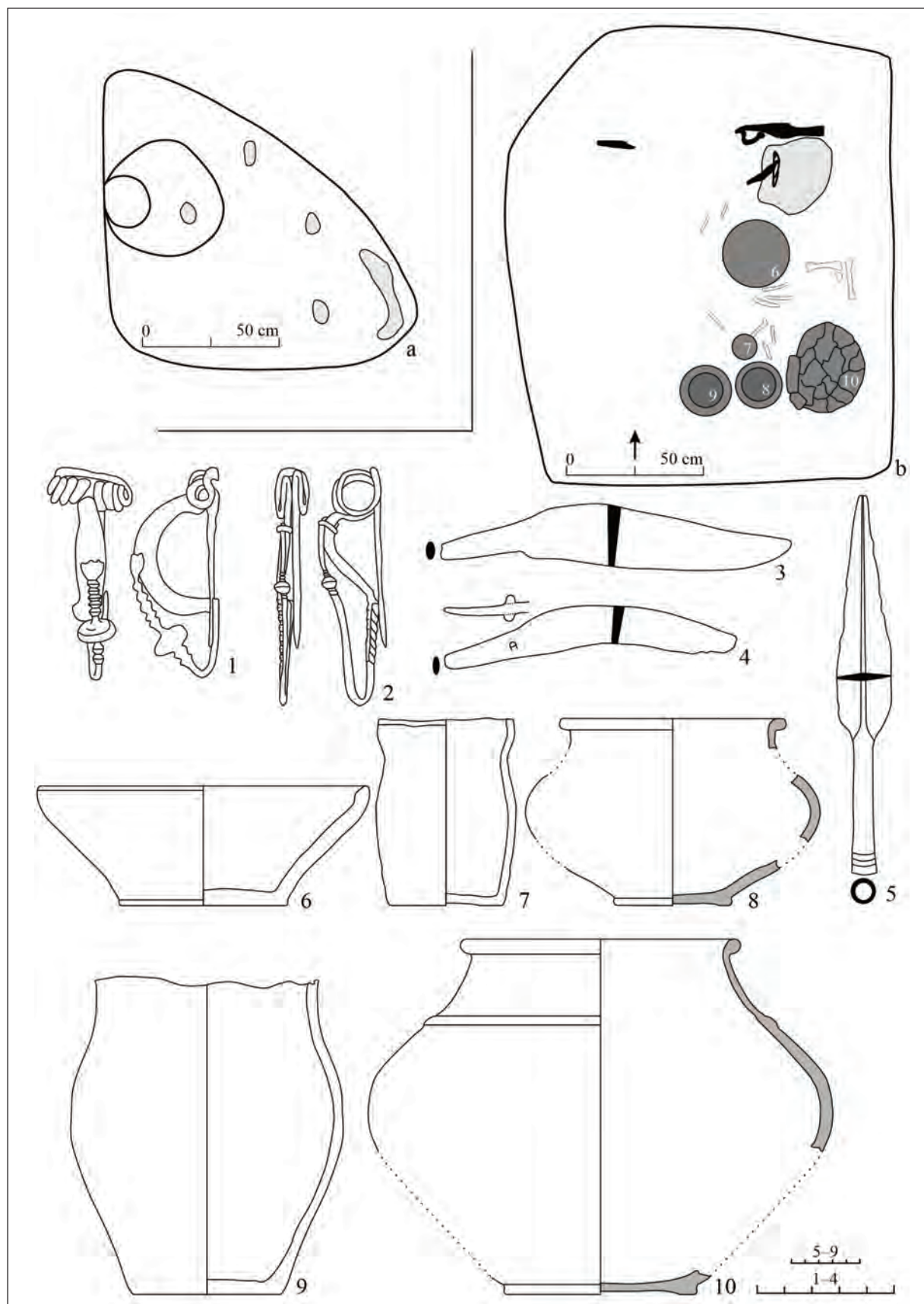


Plate XLVI. a. Grave 57; b, 1-10. Grave 58.

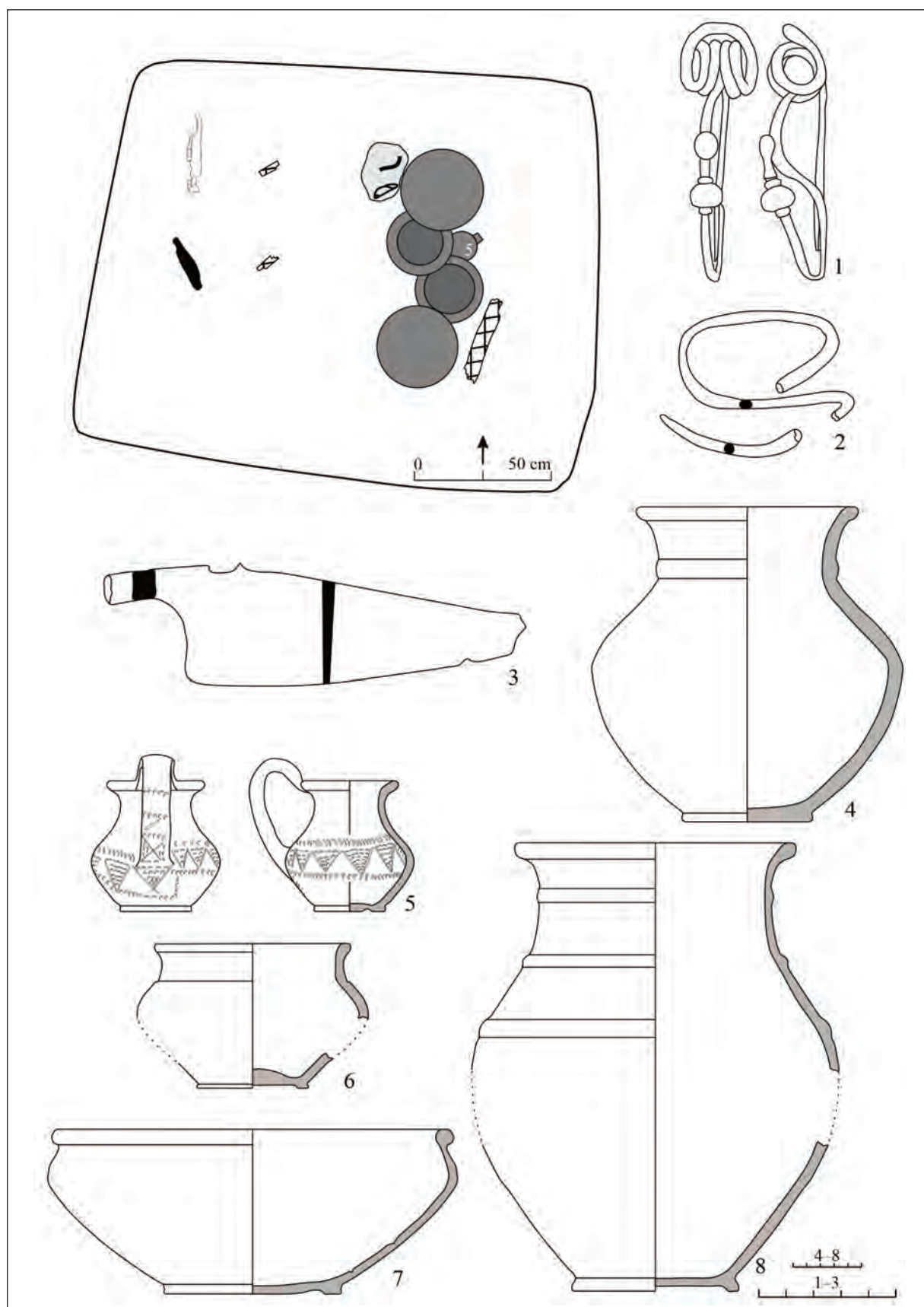


Plate XLVII. Grave 59.

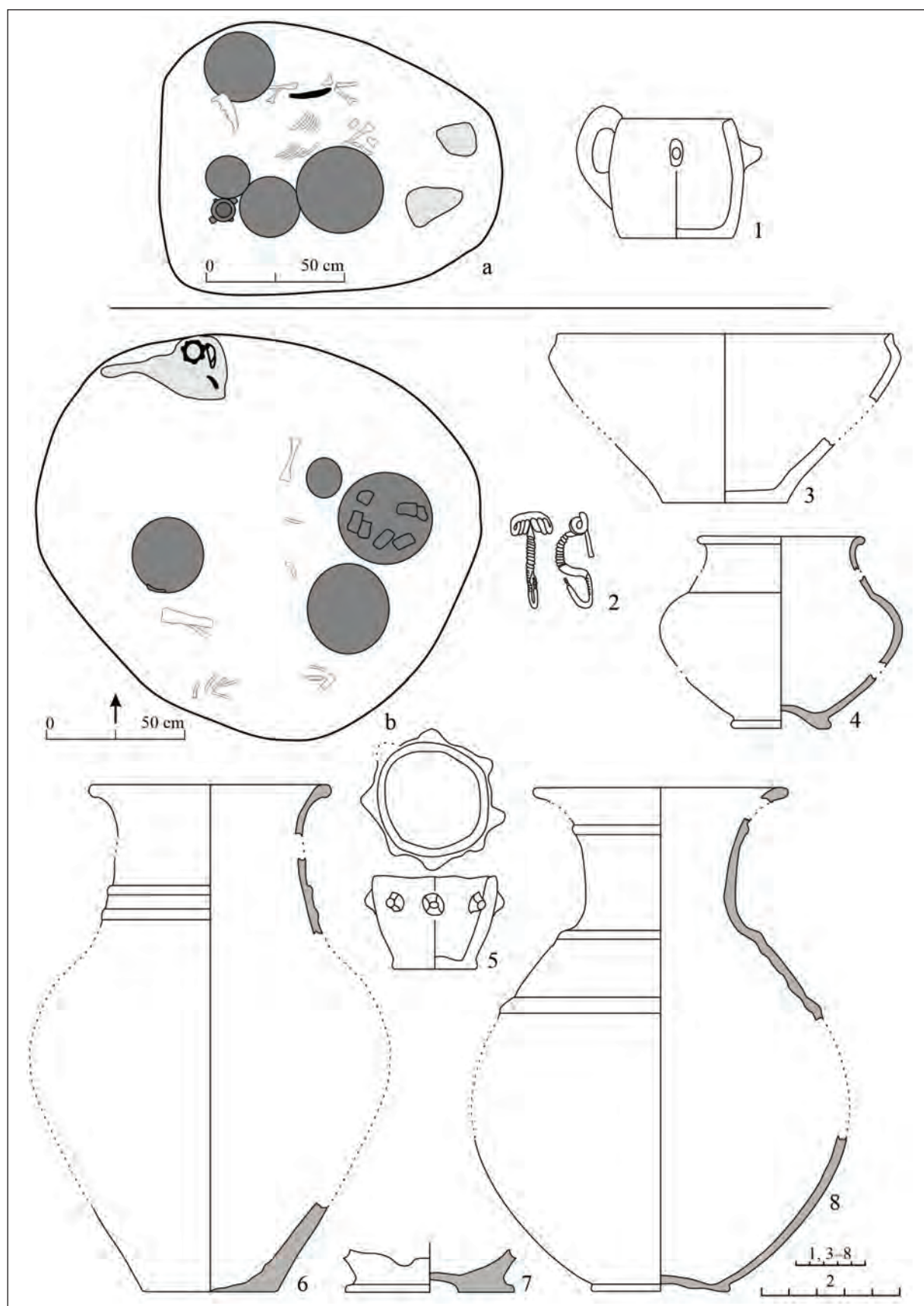


Plate XLVIII. a, 1. Grave 60; b, 2–8. Grave 61.

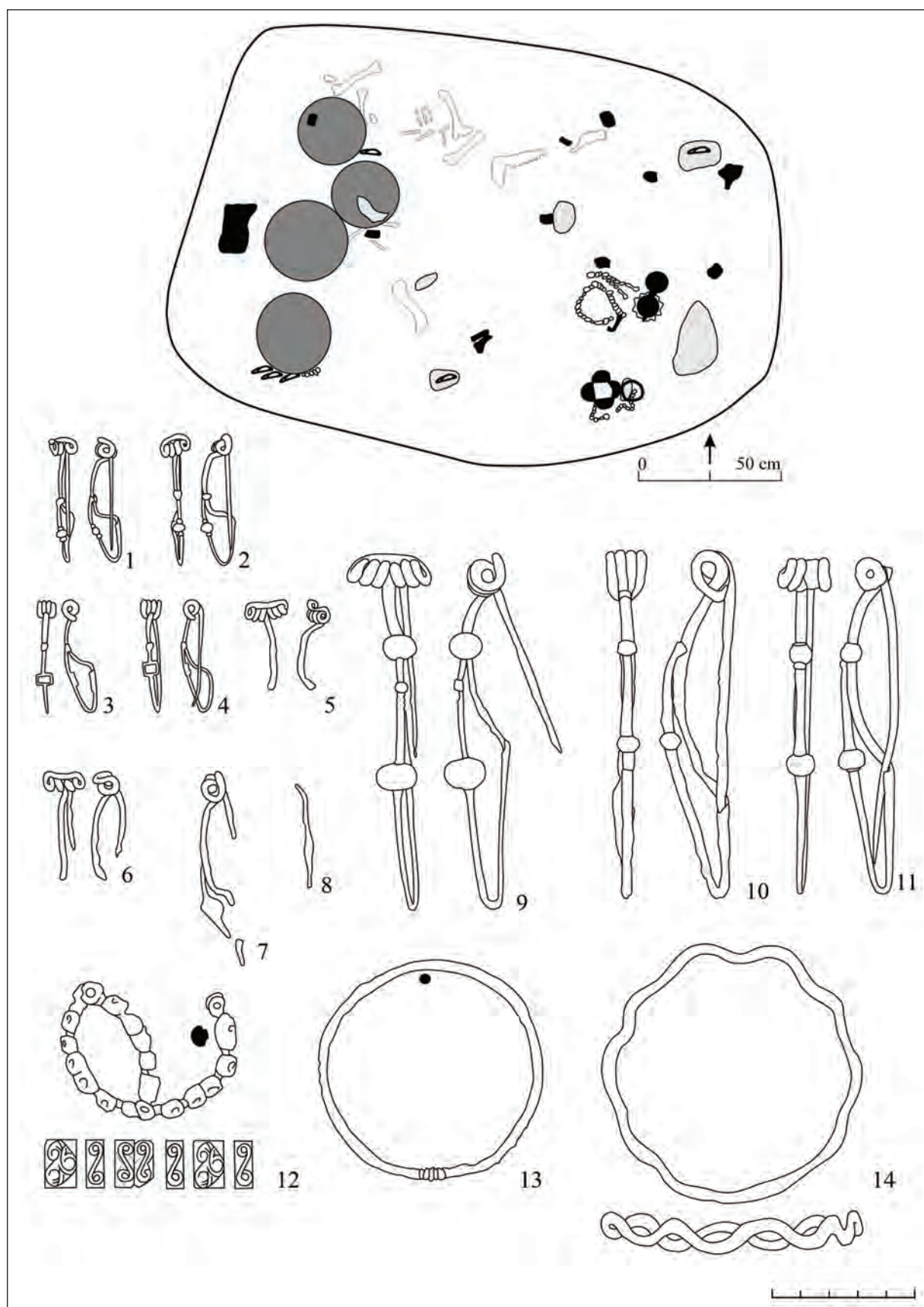


Plate XLIX. Grave 62.

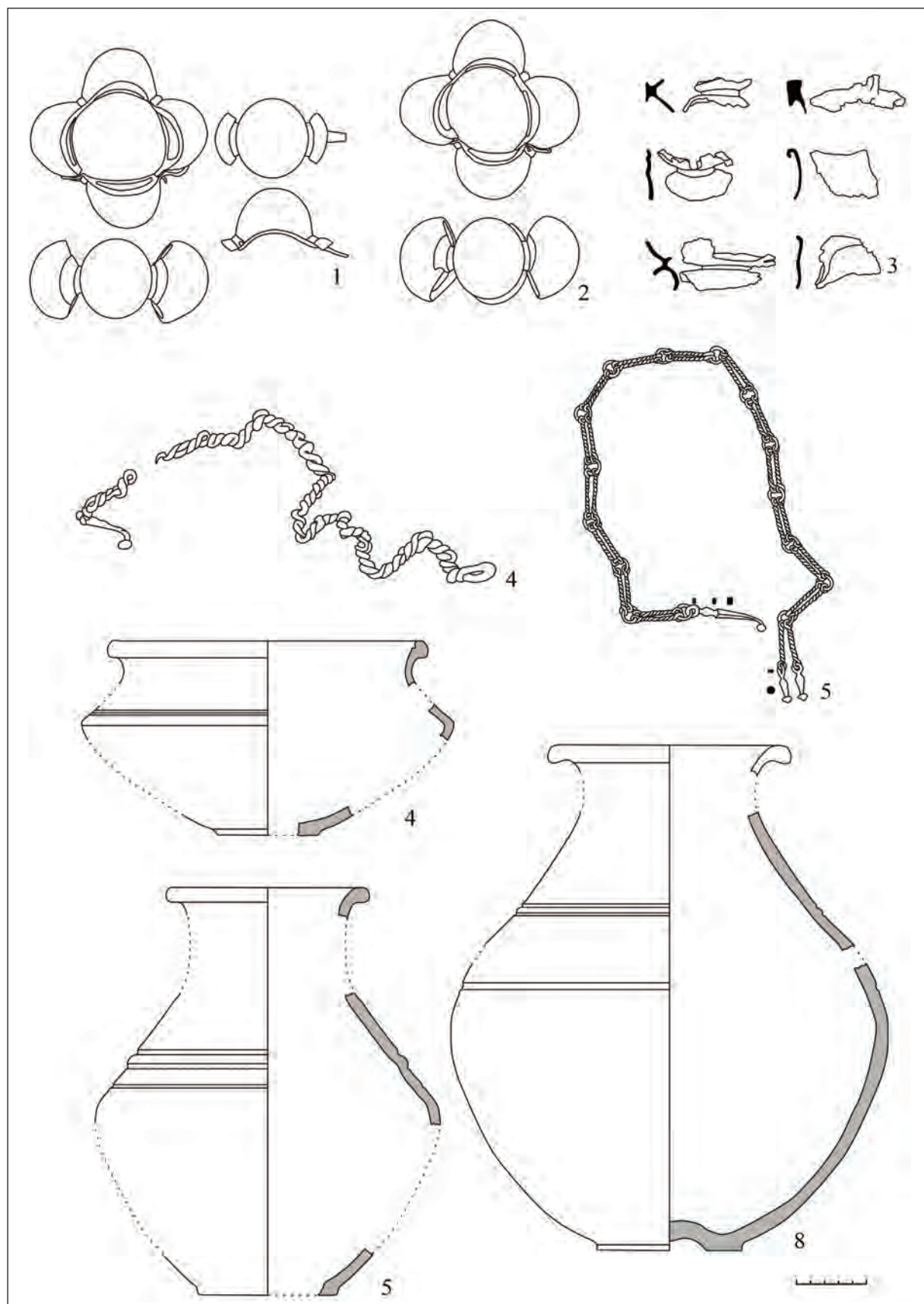


Plate L. Grave 62.

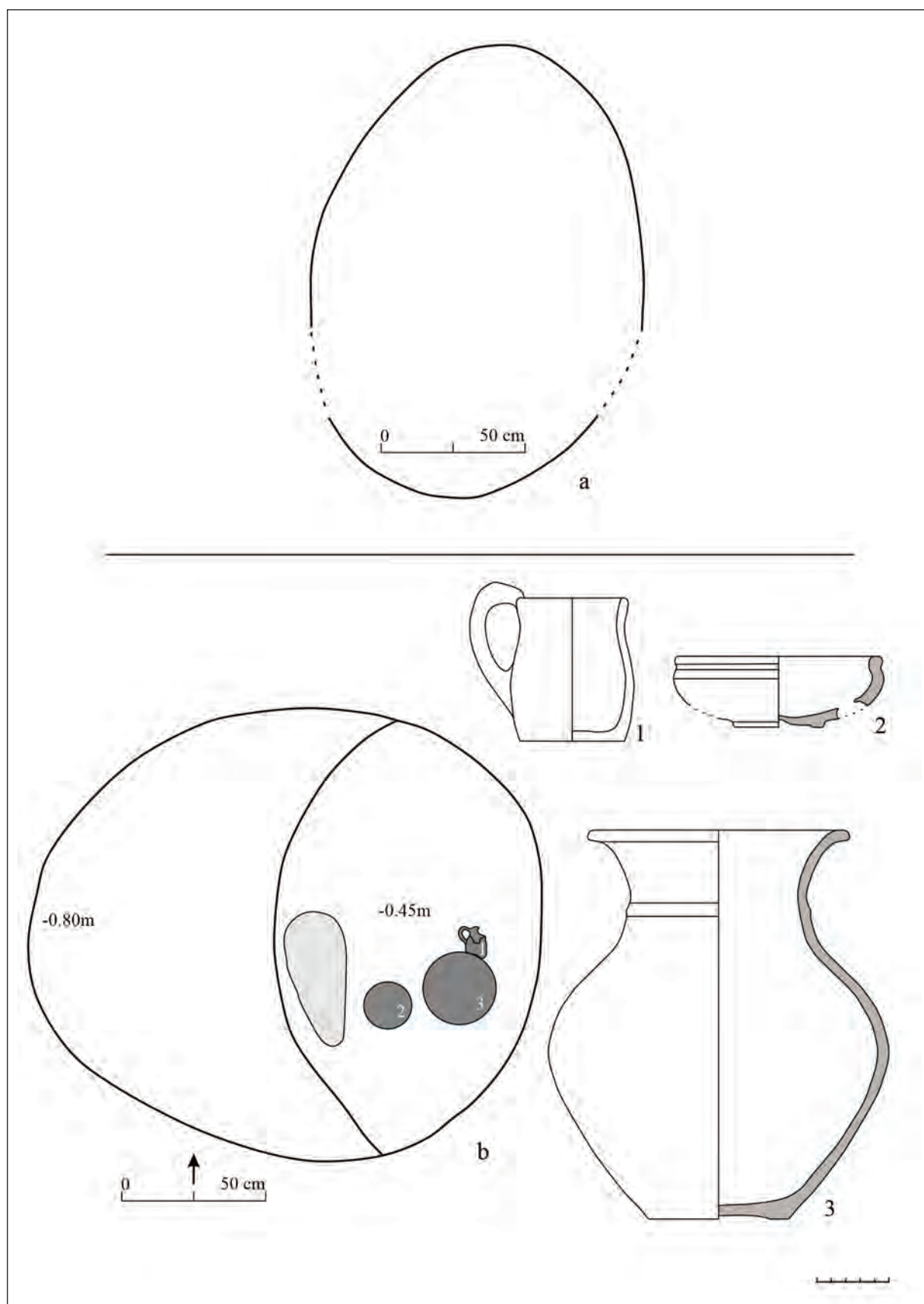


Plate LI. a. Grave 63; b, 1-3. Grave 64.

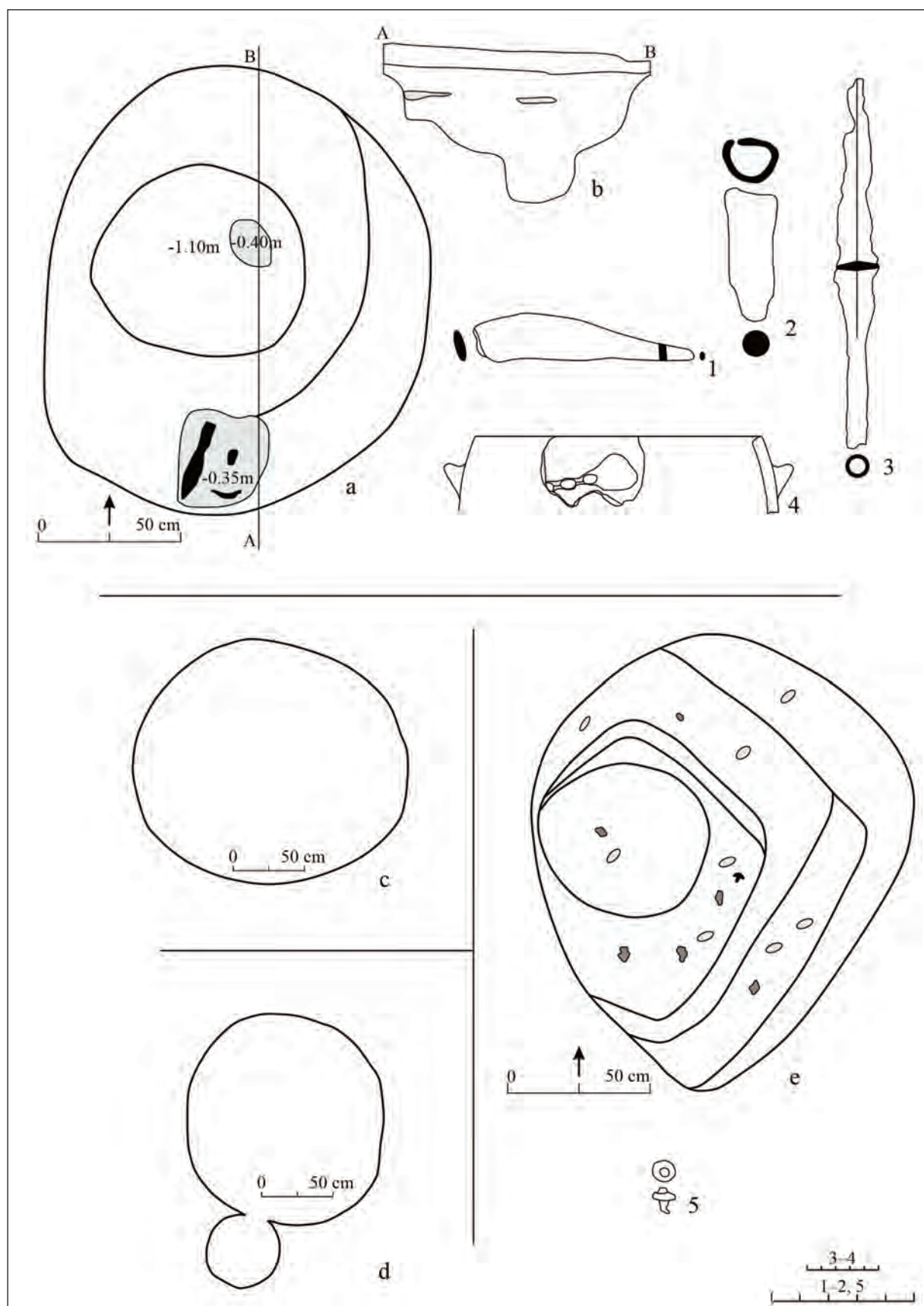


Plate LII. a-b, 1-4. Grave 65; c. Grave 66; d. Grave 67; e, 5. Grave 68.

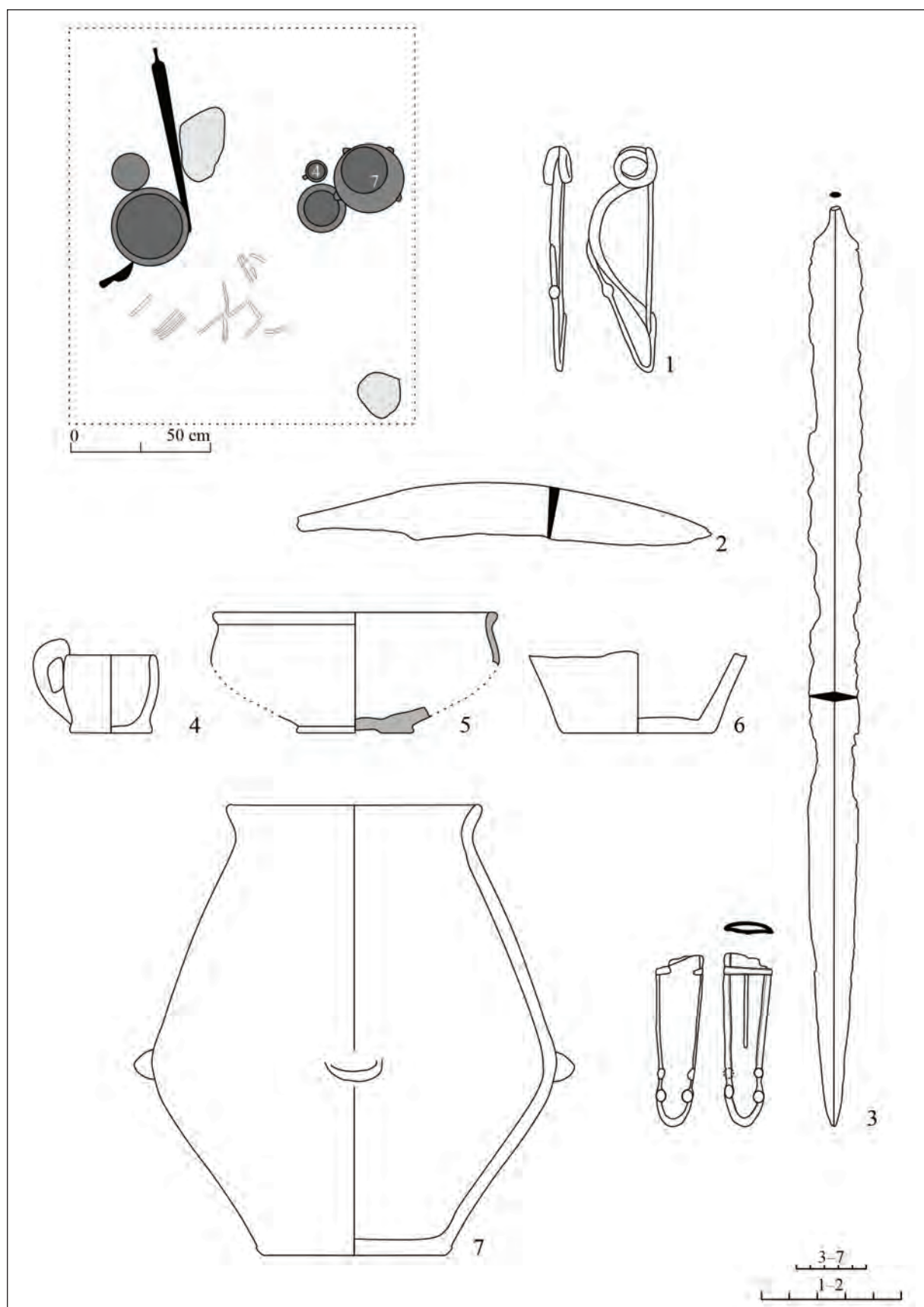


Plate LIII. Grave 69.

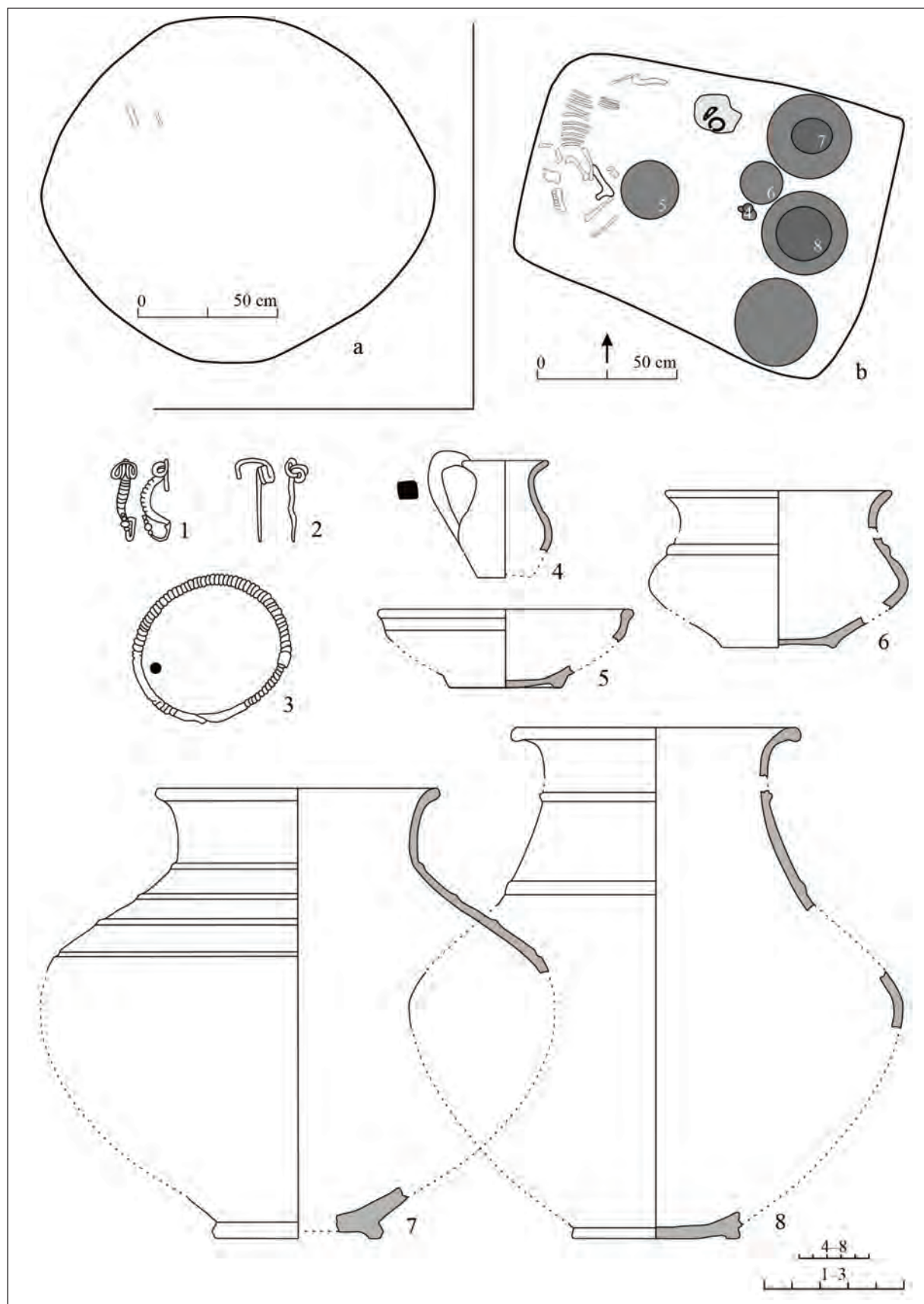


Plate LIV. a. Grave 70; b, 1-8. Grave 71.

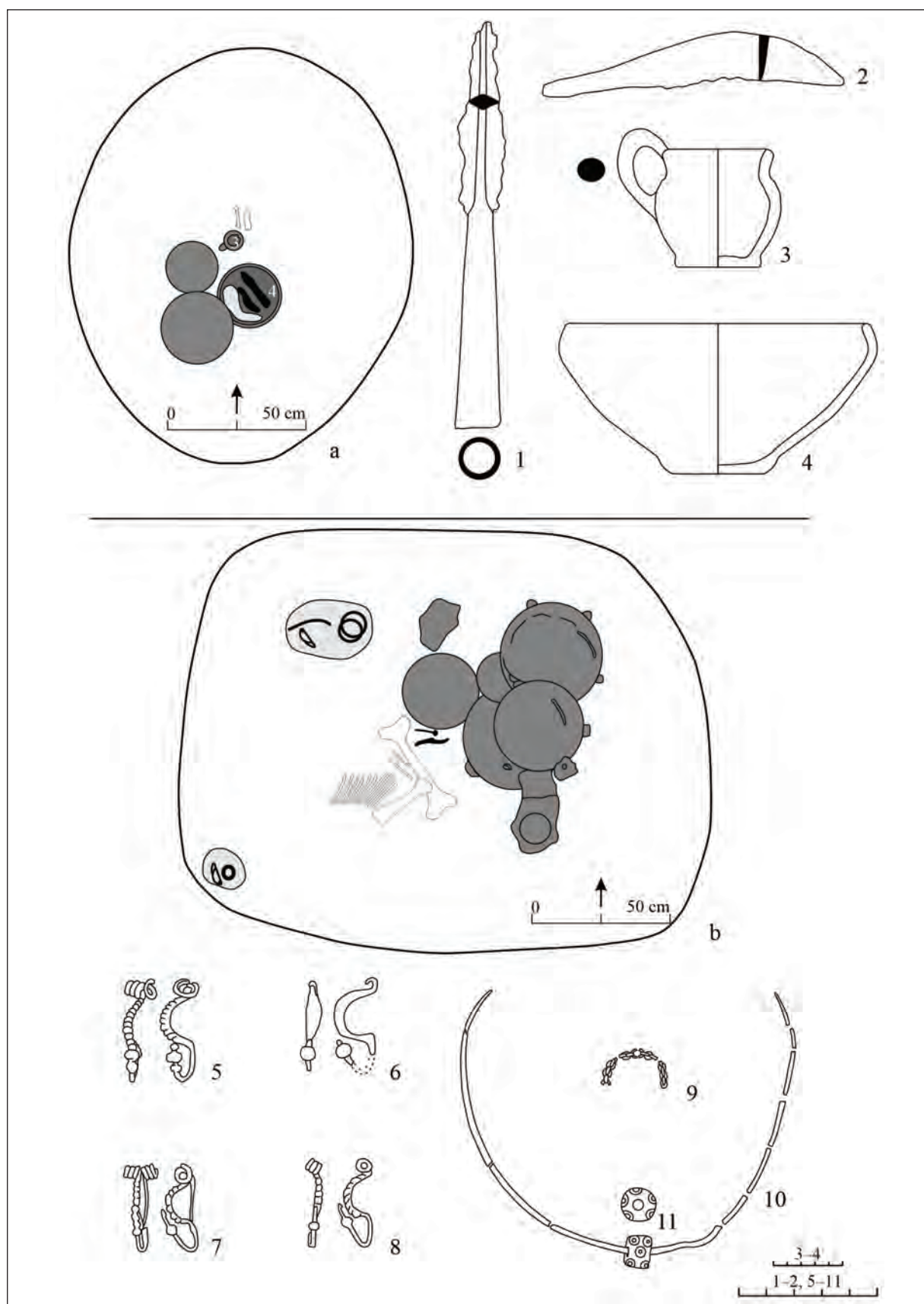


Plate LV. a, 1-4. Grave 72; b, 5-11. Grave 73.

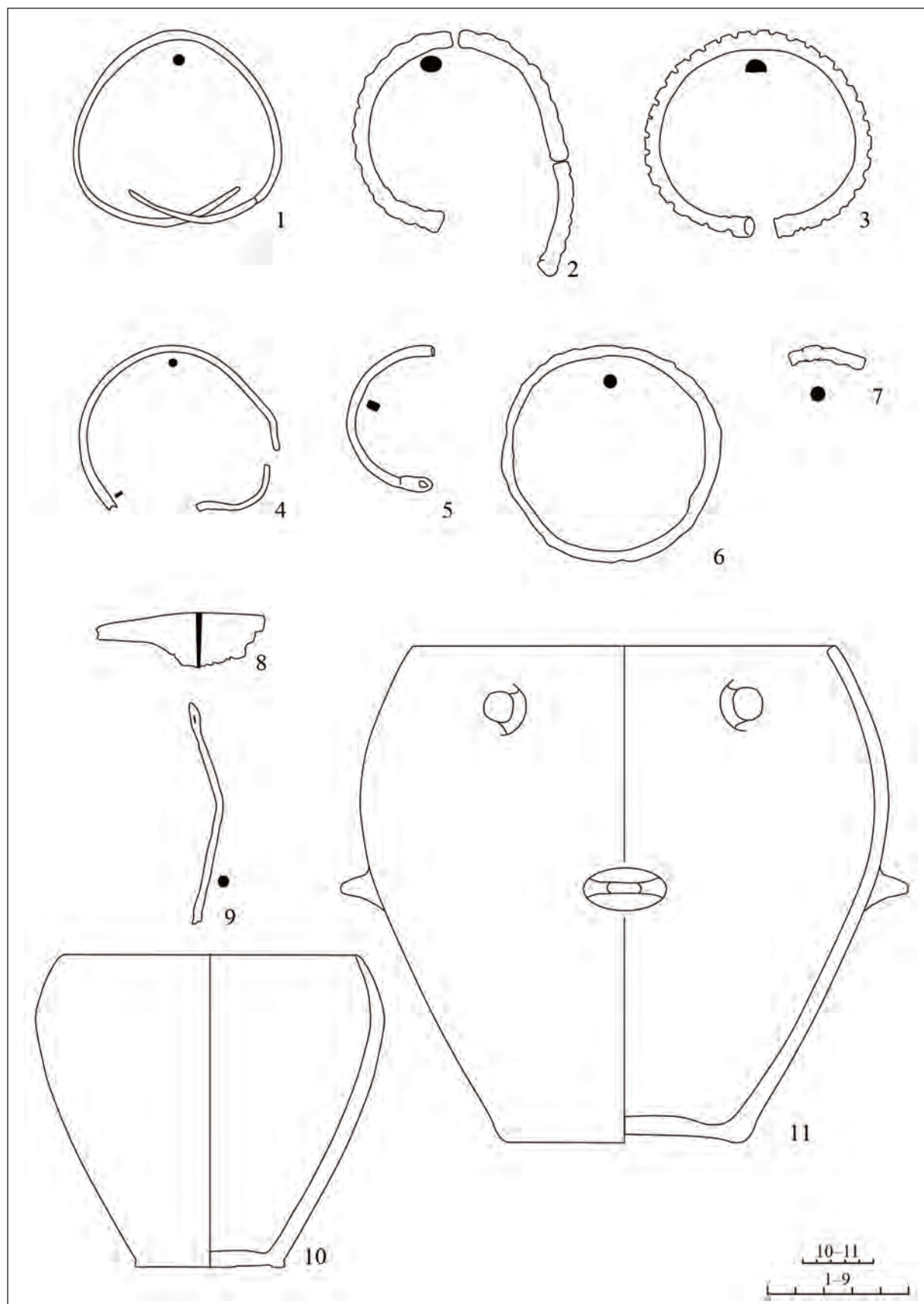


Plate LVI. Grave 73.

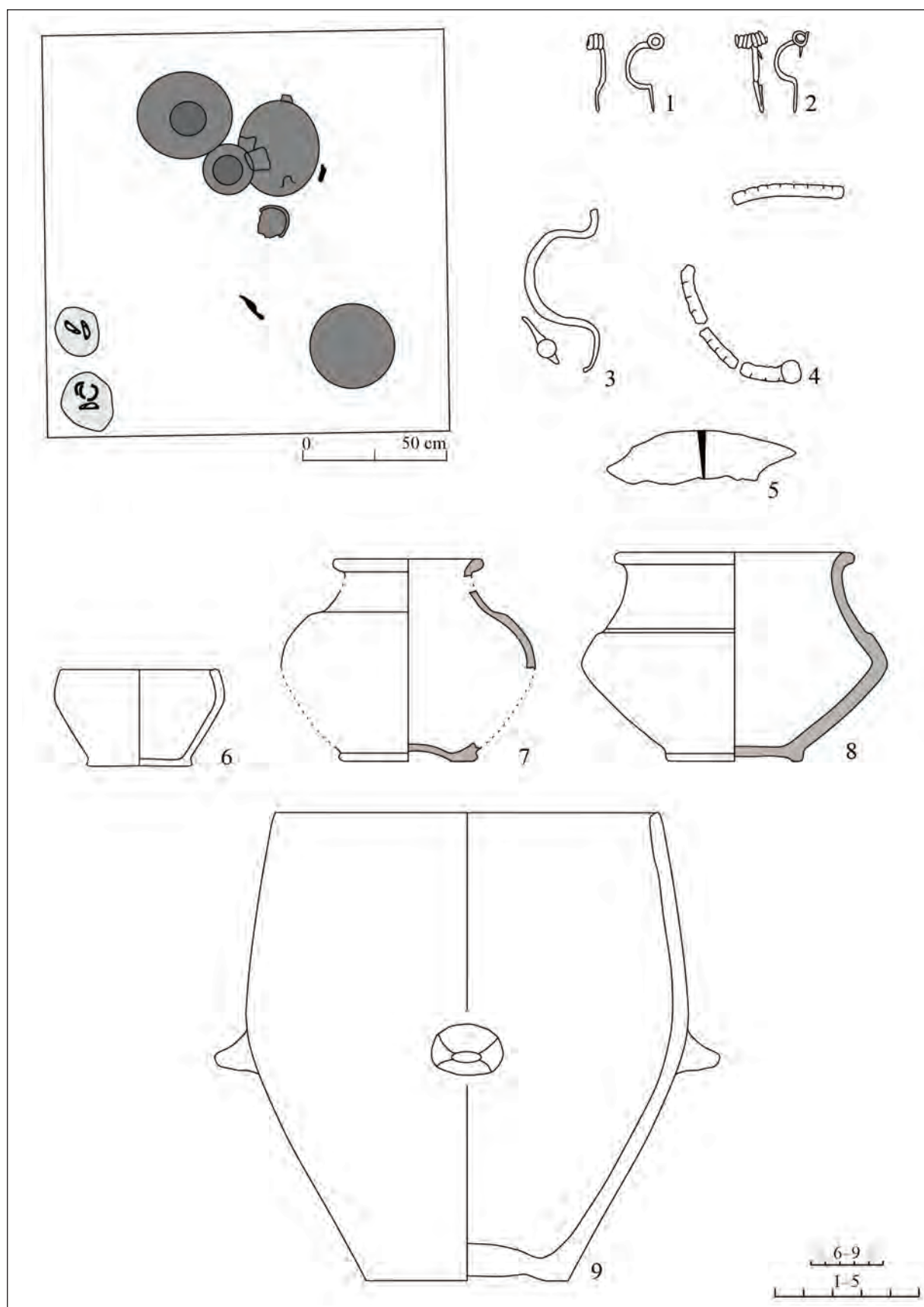


Plate LVII. Grave 74.

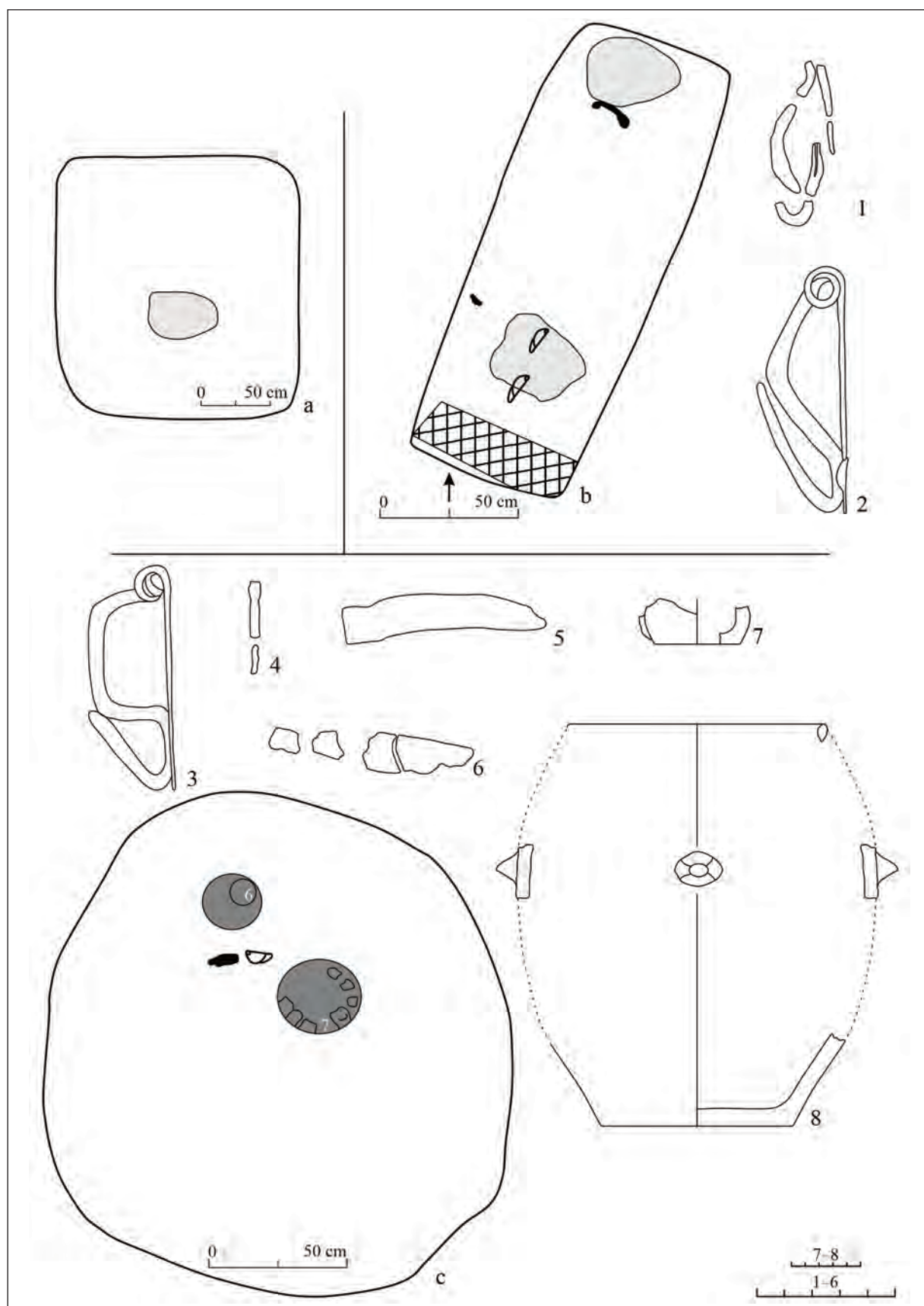


Plate LVIII. a. Grave 75; b, 1-2. Grave 76; c, 3-8. Grave 77.

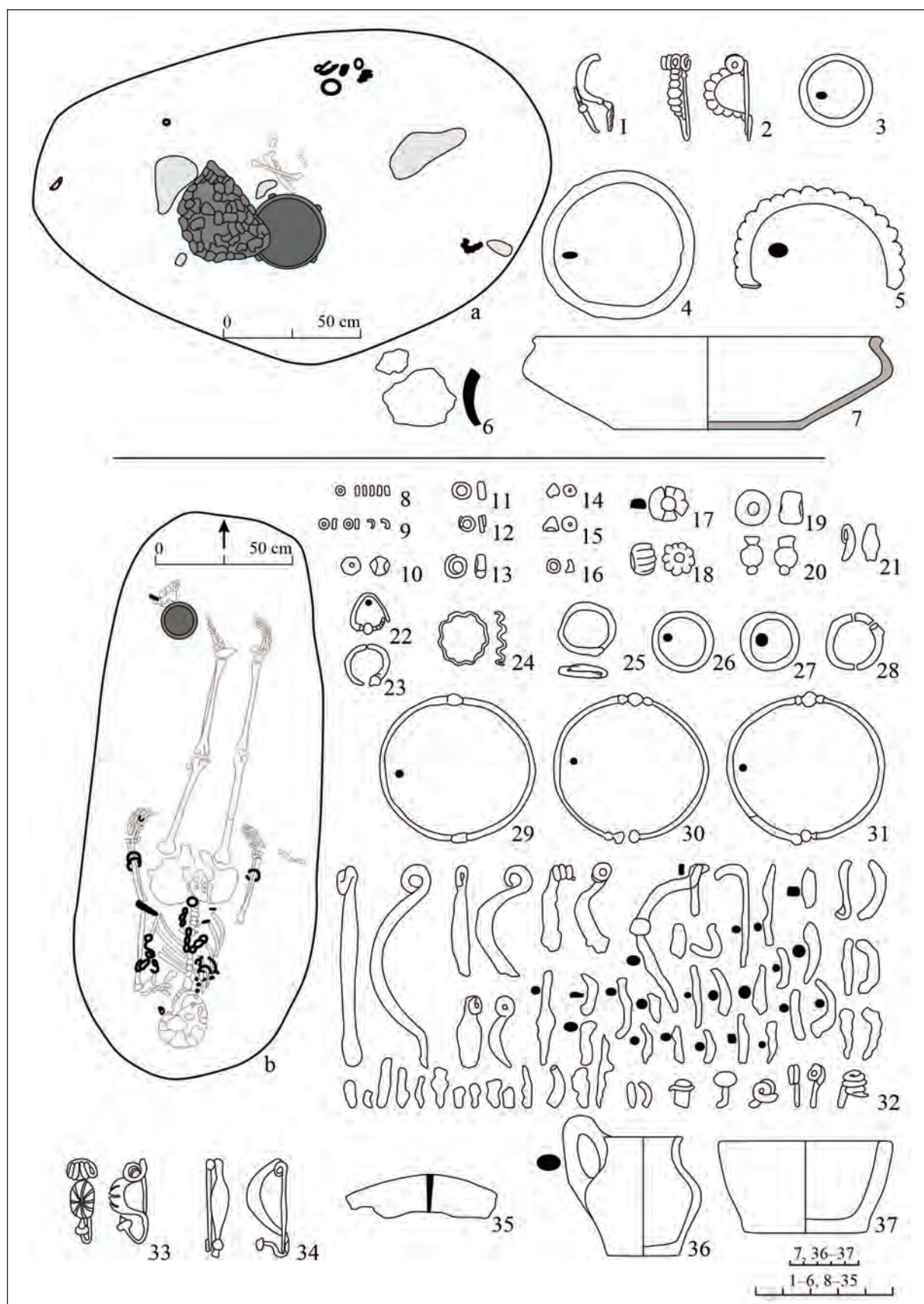


Plate LIX. a, 1-7. Grave 78; b, 8-37. Grave 79.

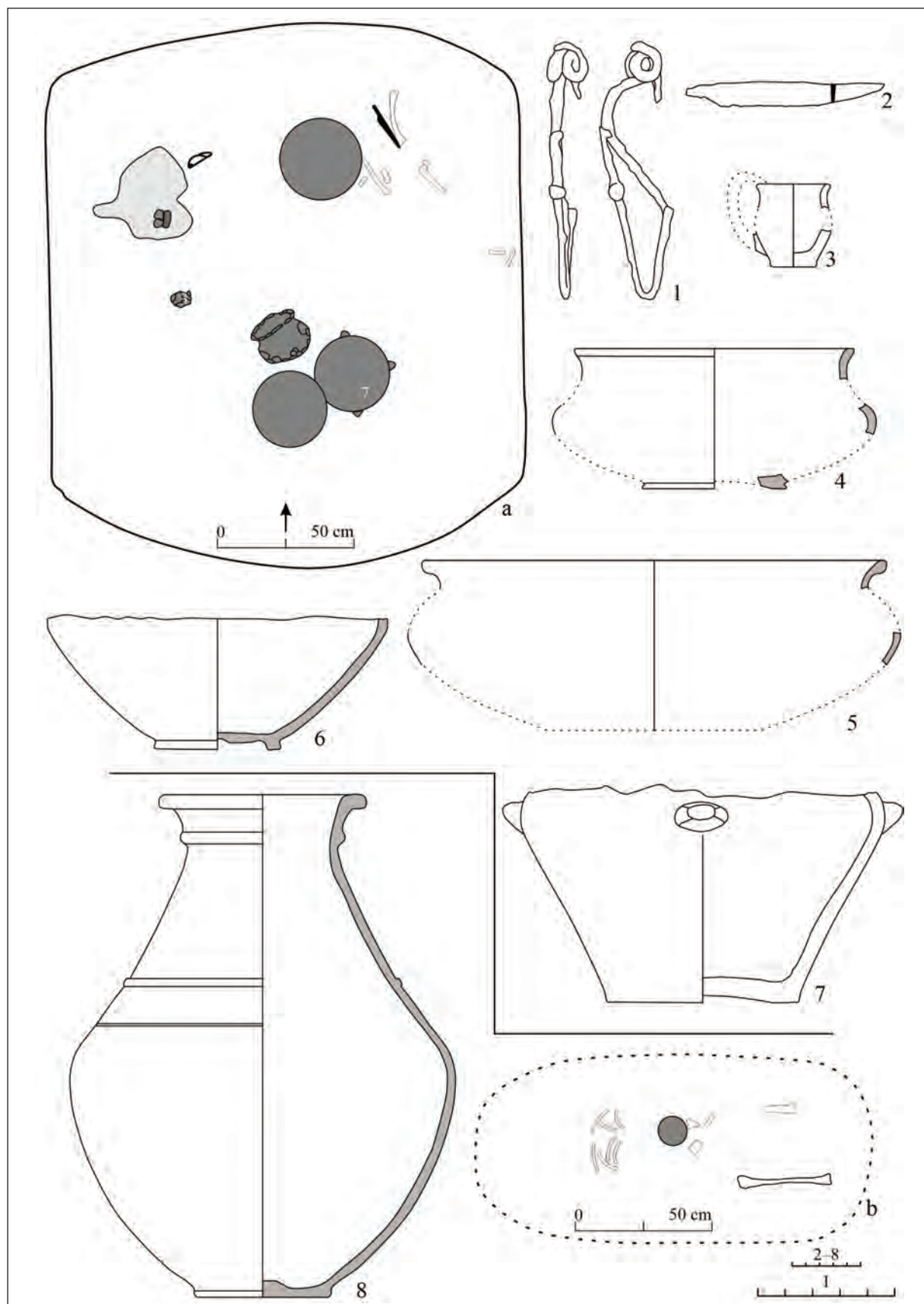


Plate LX. a, 1-7. Grave 80; b, 8. Grave 81.

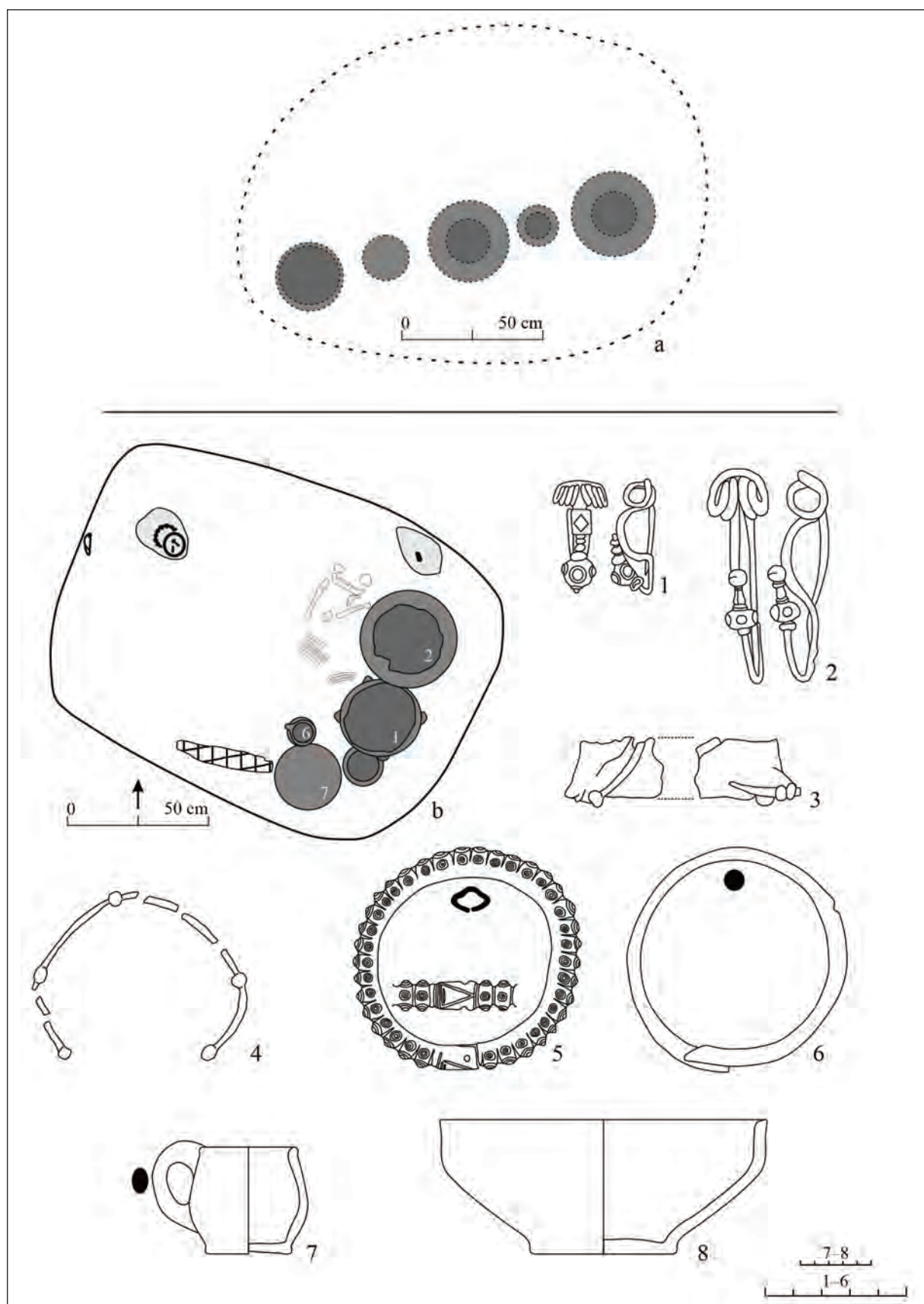


Plate LXI. a. Grave 82; b, 1-8. Grave 83.

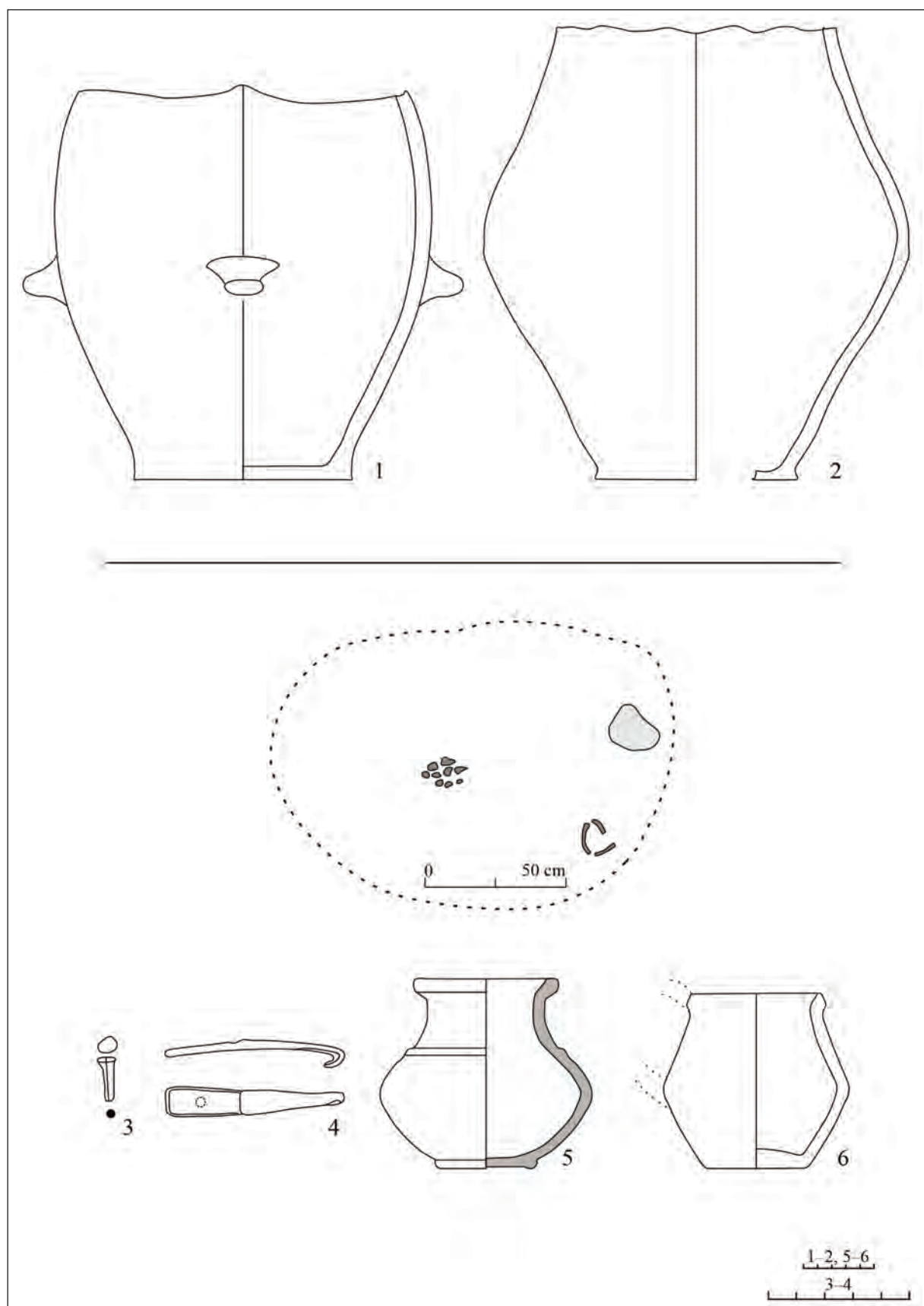


Plate LXII. 1-2. Grave 83; 3-6. Grave 84.



Plate LXIII. 1, 4-5. Grave 73; 2-3. Grave 78; 6, 8. Grave 71; 7. Grave 61; 9-10. Grave 4; 11, 14, 18. Grave 79; 12, 16-17. Grave 74; 13. Grave 19; 15. Grave 83; 19. Grave 34; 20-21. Grave 35; 22. Grave 69; 23. Grave 80.



Plate LXIV. 1–2, 14. Grave 62; 3, 21. Grave 21; 4, 12. Grave 5; 5, 9. Grave 45;
 6–7. Grave 38; 8. Grave 8; 10–11, 15. Grave 13; 13. Grave 6; 16. Grave 31; 17.
 Grave 53; 18. Grave 41; 19. Grave 48; 20. Grave 50; 22. Grave 32.



Plate LXV. 1, 6–7, 14–15. Grave 62; 2, 13. Grave 21; 3. Grave 51; 4, 17. Grave 7; 5, 12. Grave 41; 8. Grave 53; 9. Grave 6; 10. Grave 49; 11. Grave 5; 16. Grave 42.

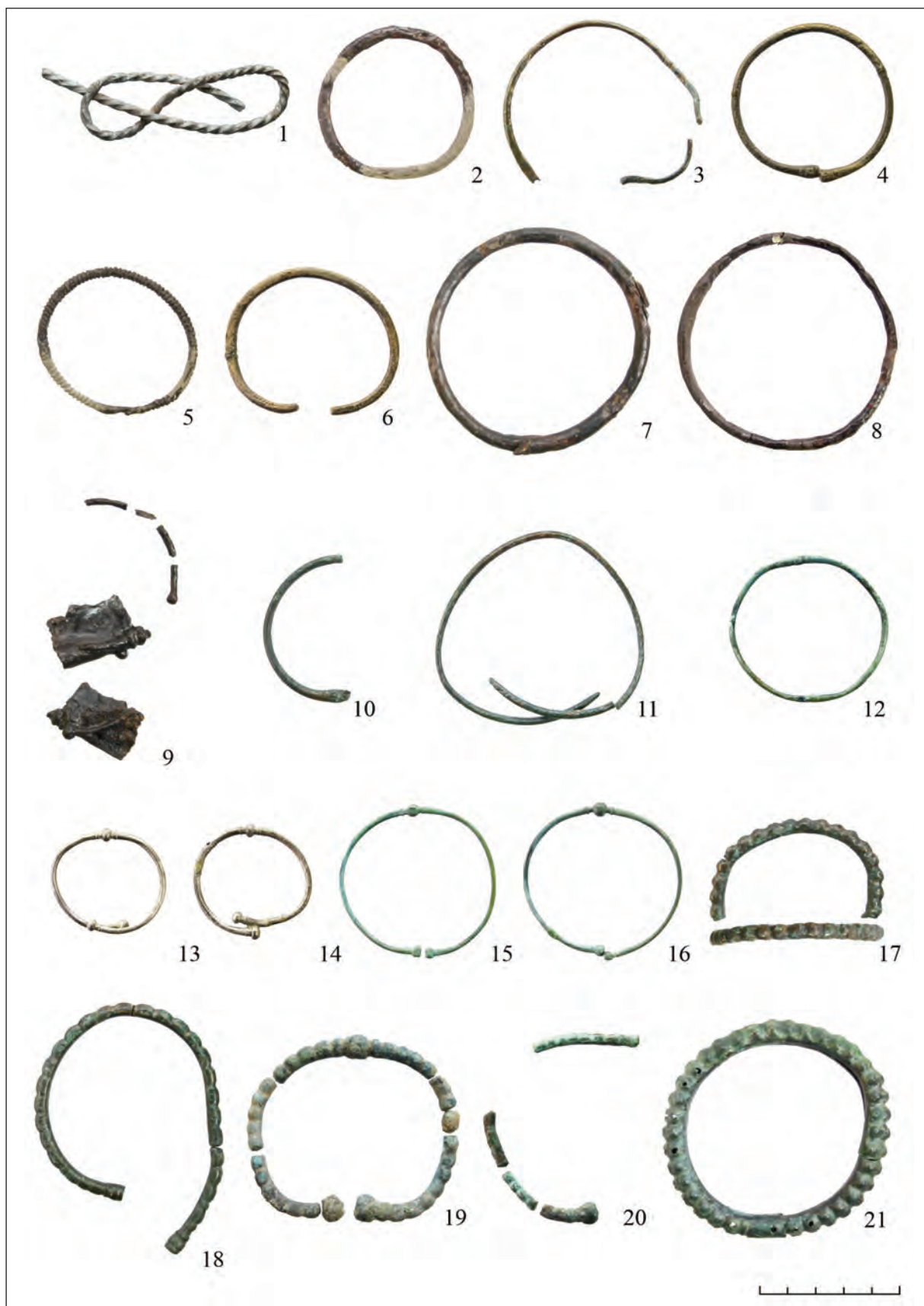


Plate LXVI. 1. Grave 11; 2, 17. Grave 78; 3, 8, 10–11, 18. Grave 73; 4, 6, 13–14. Grave 4;
5. Grave 71; 7, 9, 21. Grave 83; 12, 15–16. Grave 79; 19. Grave 11; 20. Grave 74.



Plate LXVII. 1-2, 13-14. Grave 5; 3. Grave 2; 4. Grave 21; 5, 15. Grave 45; 6. Grave 30; 7. Grave 8; 8-9. Grave 40; 10-12. Grave 62.



Plate LXVIII. 1-3. Grave 62; 4. Grave 40.

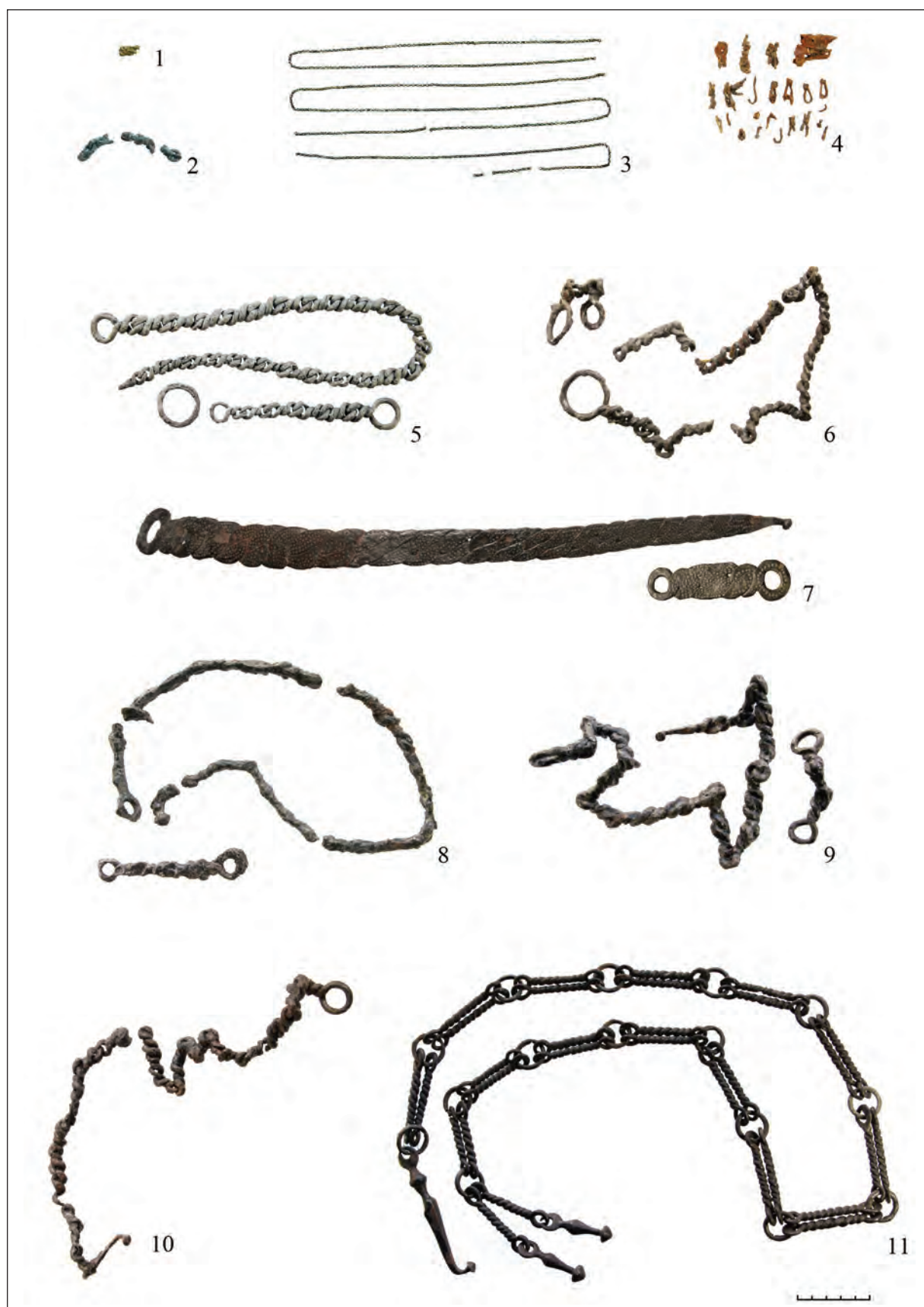


Plate LXIX. 1. Grave 40; 2. Grave 73; 3–5. Grave 5; 6. Grave 21; 7. Grave 28; 8. Grave 40; 9. Grave 45; 10–11. Grave 62.



Plate LXX. 1–10, 14–15, 18–20. Grave 79; 11–13. Grave 35; 17. Grave 78; 21. Grave 8; 22. Grave 35; 23. Grave 13; 24. Grave 41.



Plate LXXI. 1, 4. Grave 28; 2. Grave 69; 3. Grave 41; 5, 11. Grave 49;
6. Grave 18; 7, 10. Grave 65; 8. Grave 72; 9. Grave 58.



Plate LXXII. 1. Grave 51; 2. Grave 8; 3, 11, 17. Grave 1; 4, 6-7. Grave 34; 5. Grave 49; 8. Grave 68; 9, 12. Grave 73; 10. Grave 53; 13. Grave 79; 14. Grave 74; 15. Grave 21; 16. Grave 38; 18. Grave 31; 19. Grave 56; 20. Grave 72; 21. Grave 10; 22. Grave 69; 23. Grave 80.



Plate LXXIII. 1. Grave 7; 2. Grave 53; 3. Grave 59; 4. Grave 47; 5. Grave 51; 6. Grave 8; 7-8. Grave 17; 9. Grave 18.



Plate LXXIV. 1. Grave 4; 2. Grave 69; 3. Grave 83; 4. Grave 23; 5. Grave 60; 6. Grave 72; 7. Grave 79; 8. Grave 19.



Plate LXXV. 1. Grave 26; 2. Grave 32; 3. Grave 64; 4. Grave 58; 5. Grave 84.



Plate LXXVI. 1. Grave 40; 2. Grave 38; 3. Grave 4; 4. Grave 17; 5. Grave 41; 6. Grave 47; 7. Grave 59.



Plate LXXVII. 1. Grave 79; 2. Grave 56; 3. Grave 74; 4. Grave 11; 5. Grave 4; 6. Grave 83.



Plate LXXVIII. 1. Grave 72; 2. Grave 10; 3. Grave 34; 4. Grave 16.



Plate LXXIX. 1. Grave 48; 2. Grave 4; 3. Grave 1; 4. Grave 28; 5. Grave 51; 6. Grave 21.



Plate LXXX. 1. Grave 46; 2. Grave 17; 3. Grave 29; 4. Grave 19.



Plate LXXXI. 1. Grave 50; 2. Grave 18; 3. Grave 46; 4. Grave 2; 5. Grave 34; 6. Grave 84; 7. Grave 13.



Plate LXXXII. 1. Grave 31; 2. Grave 23; 3. Grave 32.



Plate LXXXIII. 1. Grave 11; 2, 4. Grave 34; 3. Grave 58; 5. Grave 7; 6. Grave 19.



Plate LXXXIV. 1. Grave 69; 2. Grave 13; 3. Grave 10; 4. Grave 74.



Plate LXXXV. 1. Grave 83; 2. Grave 10; 3. Grave 7; 4. Grave 73.



Plate LXXXVI. 1. Grave 17; 2. Grave 46; 3. Grave 38; 4. Grave 40; 5. Grave 36; 6. Grave 42.



Plate LXXXVII. 1. Grave 81; 2. Grave 48; 3. Grave 44; 4. Grave 2; 5. Grave 28.



Plate LXXXVIII. 1. Grave 18; 2. Grave 59; 3. Grave 17; 4. Grave 2; 5. Grave 16; 6. Grave 31.

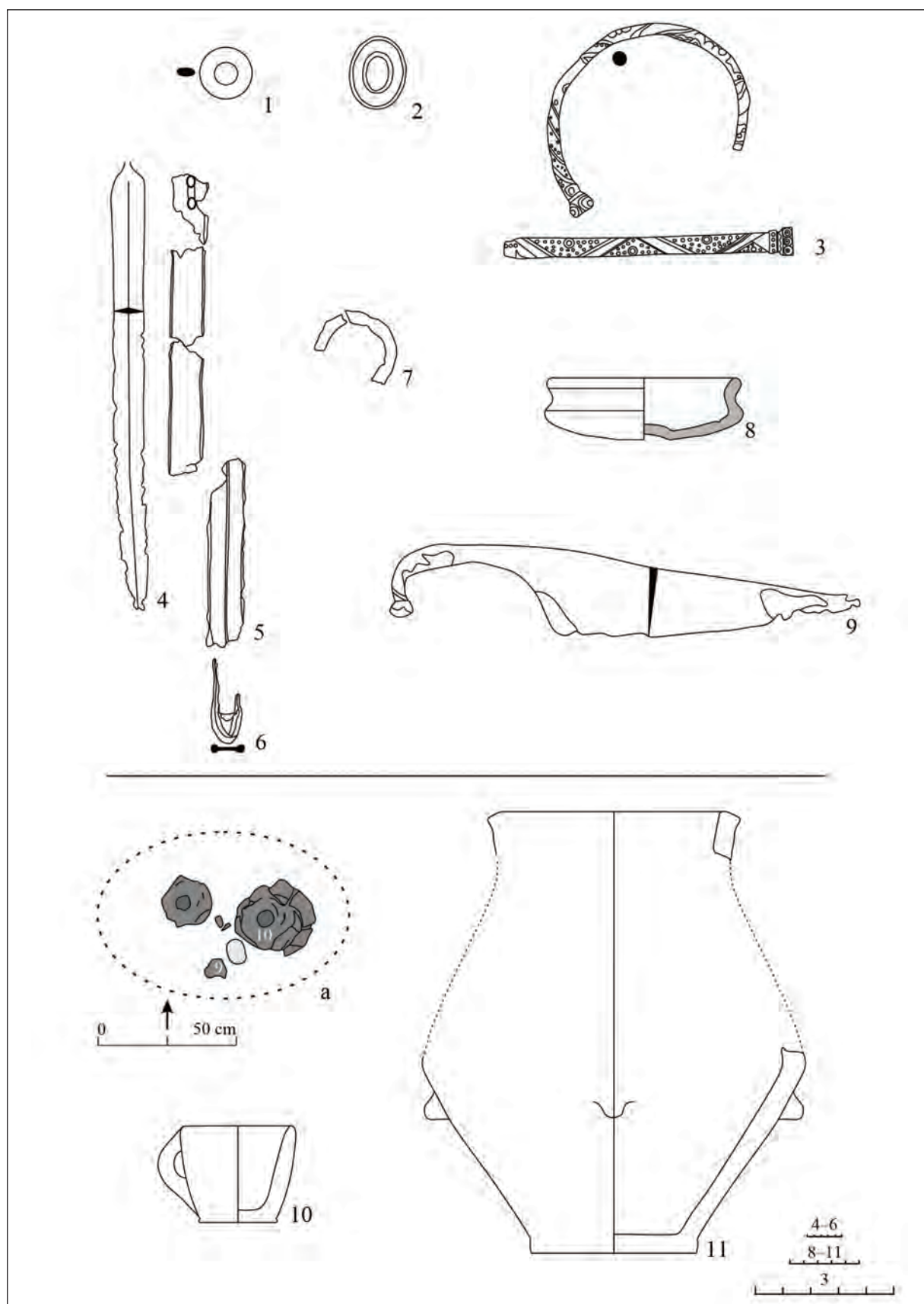


Plate LXXXIX. 1-2. Fieldwalking 1965; 3. stray find; 4-7. Grave 1/1961 [D]; 8-9. Grave 2/1961 [D]; a, 10-11. Grave 3/1967 [D]; (1-2 and 7 without scale).

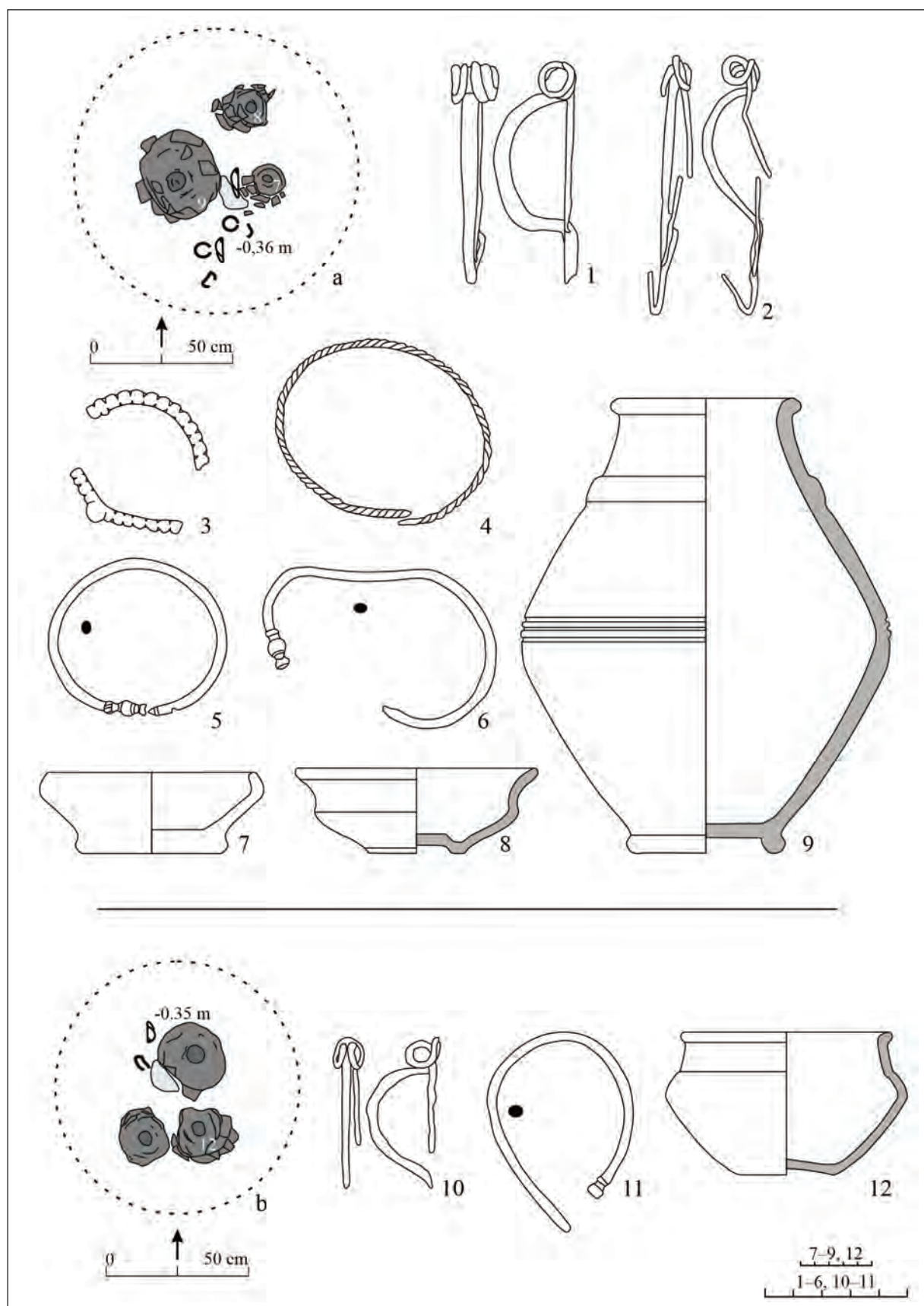


Plate XC. a, 1-9. Grave 4/1967 [D]; b, 10-12. Grave 5/1967 [D].

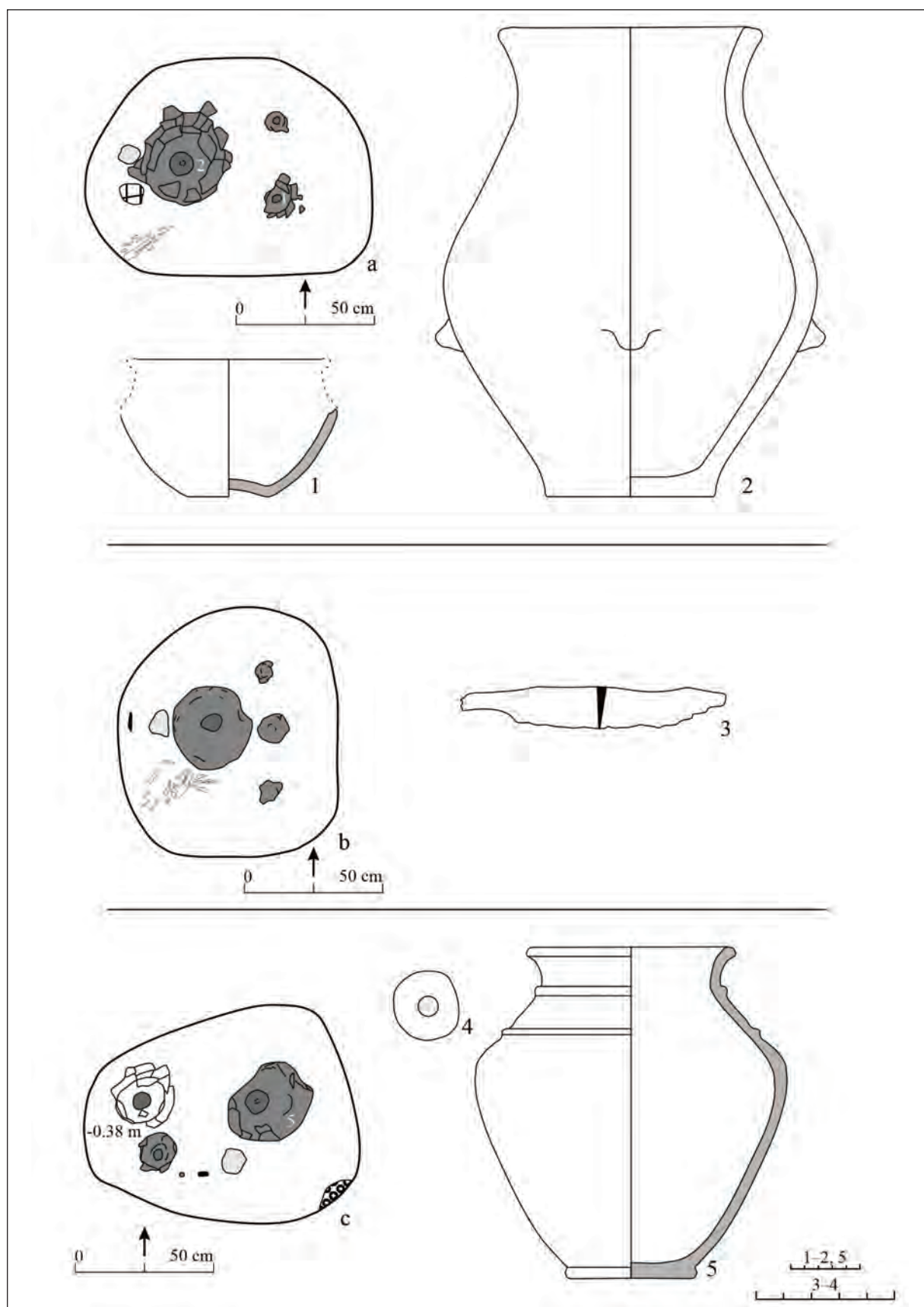


Plate XCI. a, 1-2. Grave 8/1967 [D]; b, 3. Grave 9/1967 [D]; c, 4-5. Grave 10/1967 [D].

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