IV. BURIAL RITES AND CHRONOLOGY

Independent cemeteries can be conceptualised as ritual spaces separate from the world of the living, regulated by traditions and a reverence of the past and of the ancestors. The artefacts associated with burials, whether placed in the graves or found in the cemetery, were part of this ritual space. Unusual or prominent features of the landscape (such as a mountain, a larger body of water, a river, and the like) probably played a role in the selection of the burial ground in ancient cultures since they signified and embodied the separation of life from death and of this world from the otherworld.

We know little about the beliefs of the Late Copper Age, just as we must often resort to educated guesses about the one-time function of various artefacts; however, we can be quite certain that the articles found in the graves, the artefacts recovered from a cemetery, were not deposited in the burials by chance and were not placed beside the deceased on a momentary whim. In the absence of written sources, we do not have even a rough idea of what a funerary ceremony looked like or whether the rules of ritual conduct were strictly adhered to, or of who conducted the funeral ceremony; we know nothing about the role played by the deceased's relatives and kin, and by the community in general. We know even less about the attitudes to death, whether the loss of a loved one was as distressing as it is today, or whether death was considered a natural occurrence in view of the relatively short life span, with the inevitable demise viewed rationally and the funeral conducted as prescribed by tradition.

While ethnographic fieldwork among aboriginal peoples has contributed a wealth of information on a wide variety of funeral ceremonies and burial practices, these intriguing customs can hardly be used as direct analogies because we have not been afforded even a glimpse of the perhaps most important dimension: the spiritual culture, the unwritten traditions and beliefs of prehistoric communities, their perception of, and attitudes towards, the world around them, their values, their social structure, or the complexities of their interactions.

Given the many uncertainties, it might seem something of a futile exercise to even attempt a venture into the "archaeology of death", but this is what we must do when we embark on the analysis of a burial ground and its graves. We can study our primary sources, the grave inventories, and the various phenomena observed during the excavation. We can turn to the findings of experimental archaeology and to the results of archaeometric studies, and we can enlist mathematical procedures and statistics, all of which can shed some light on various dimensions of the life of prehistoric communities.

However, we must always be aware that in the symbolic realm of prehistoric societies, "valuables" may have been articles that seem like insignificant trinkets to us. We can hardly project the values of our modern world into the prehistoric past. What we can do is to meticulously review what evidence we have and to gather and analyse as much reliable, well-documented information as we can. By exercising the necessary patience and by searching the database of the burials according to various criteria, I hope to have gained some new insights, to have discovered new patterns among the cemetery's burials and to have extracted sufficient evidence to challenge a few mistaken assertions made in the past.

1. The preliminary interpretation of the cemetery by István Torma

In his conference presentation, István Torma briefly presented his views on the burial rite practiced in the cemetery and highlighted a few interesting phenomena observed during the excavation.[391]

He described the graves as scattered cremation burials, mentioning only two burials in which the cremains (the cremated remains) had been placed in a bowl (one of these was Grave 385, the other was

[391] TORMA 1973, 484–488.

not specified).[392] The calcined bones were generally partially or wholly covered with one or more bowls (sometimes with as many as five, as for example in Grave 338) deposited with their mouth downward, and a jug or mug, or both, were generally also placed beside the bowls. More rarely, the cremains were covered with some other vessel (two-handled cordon- or knob-ornamented vessels), or with broken vessels. A small, no more than 5–10 cm deep hollow was sometimes scooped out in the ground for the cremains which had been collected at the pyre location. The burial and the grave offerings were then covered with andesite rocks gathered in the cemetery's broader area or with a small heap of earth. A sacrificial vessel was sometimes placed beside the heap of stones or earth. One of the animal figurines and the fragments of a clay rhyton, two of the more remarkable finds from the cemetery, had also been set beside the stone packing (Grave 359). The uppermost stones of the heaps tumbled down and rolled away with time and the small heaps became flatter. The earth washed down from the mountains gradually accumulated over the burial ground and the graves, which at the time of the excavation lay 120–200 cm deep, were covered by a 50–70 cm thick layer of earth by the end of the Celtic period on the testimony of various features dating from that period. The base of the stone packing lay immediately above the cremains and the rocks that had rolled down from the top of the heap lay at the same depth, meaning that if there had been a grave pit, the stones would not have rolled away.

In this preliminary report, Torma based his reconstruction and interpretation of the burial rite on the observations made during the first two excavation seasons. His field diaries were an excellent source of information from which I could gather the archaeologically observable elements of funerary activities, and thus I am able to complement his initial observations and preliminary report with additional data.

2. Approaches to cemetery analyses

With its high number of graves, rich grave inventories and stone-packed cremation burials, the Pilismarót cemetery remains an unparalleled burial site in the Carpathian Basin. Thus, I could hardly rely on or draw from previous analyses of similar burial grounds from this period for the contextual study of the archaeological finds or for the interpretation of seemingly uninteresting, quotidian artefacts.

The interpretation of what has survived of ritual phenomena in the archaeological record and of the artefacts from the cemetery, and the identification of possible cultural patterns was not an easy task. One of my starting points was the time of death. I examined the possible rationale behind the cemetery's location, the archaeologically visible elements of the burial rite and the typical traits of the burials themselves. I mapped the distribution of each artefact type within the cemetery in the hope that I would discover certain patterns.

In addition to the typological assessment of the artefacts recovered from the burials, I searched for other markers in order to determine the chronology of the burials relative to each other and to determine the cemetery's possible regional significance.

I encountered few difficulties regarding pottery because more or less similar or wholly identical forms and decorative elements, occasionally even an exact counterpart, could be found over an extensive territory, but this turned out to be of limited value in unlocking the cemetery's secrets. The interpretation of the other finds was more difficult, either because they were so quotidian that it seemed virtually hopeless to find analogies or, on the contrary, they lacked good counterparts in the immense number of find assemblages exactly because were unique and unusual. I also collated the typochronology with the radiocarbon dates.

I made every attempt to identify the extraordinary, unusual artefacts expressing status and prestige that would shed light on the deceased's position in the community or his/her personal importance. My

[392] Torma 1973, Abb. 1. 3. The other one was Grave 343.

assumption was that if I could determine the finds whose special role is also underpinned by other evidence, it could be reasonably supposed that the grave which contained these finds was the burial of an individual who differed in some respect from the other, average members of the community. This difference may have been spiritual, physical or perhaps one of economic wealth or power in comparison to the community's other individuals. I was aware that aside from the artefacts deposited in the graves there may have been several other symbols of status or attributes of prestige that leave no trace in the archaeological record (such as bird feathers, animal hides, textiles, wooden artefacts, ornamental or utilitarian objects woven or made from twigs or plant fibres, colours and the like). The very location of a grave within the cemetery may have expressed an individual's status.

One of my goals was to outline the cemetery's "peopling" and its regional significance by clarifying the chronological and spatial patterns in the cemetery through a meticulous analysis. Still, it must be repeatedly emphasised that given the high number of uncertainties – especially as regards the cognitive sphere – every analysis and conclusion is no more than a small strand from the magnificent tapestry of the prehistoric past.

3. The funeral ceremony

In the final report on the biritual cemetery of Budakalász, I strove to reconstruct the sequence of events from the moment of death to the conclusion of the funeral based on the archaeological evidence: the preliminaries to the funeral, the interment and the post-funeral activities.[393] I shall attempt to do the same in the case of the cremation cemetery uncovered at Pilismarót: a reconstruction of the funeral ceremony drawing from the information contained in the archaeological record.

3. 1. The preliminaries to the funeral

The first act of the funeral ceremony, the "treatment" of the deceased after the onset of death and the preparation of the body, cannot be studied because the cremation rite leaves no traces whatsoever of these activities in the archaeological record in this respect.

3. 1. 1. Choosing the location of the burial ground

The Pilismarót burial ground, the area selected as the ritual space, was located on a plain near the one-time floodplain of the Danube Bend, at the foot of the Pilis Mountains *(Fig. 8)*. The cemetery lay far from the area's currently known Late Copper Age settlements, which no doubt enhanced the mystic aura of the location near the great river and the special position of the cemetery. This may have been one of the criteria for choosing this location. There were no superimposed burials in the Late Copper Age cemetery and neither were there any indications that the burials had been looted. The Late Copper Age communities apparently showed respect for the graves marked by the stone packing – the few Copper Age burials with intrusions were disturbed when the Celtic Age settlement had been established in the same location.

The selection of the cemetery's location, the respect shown for the graves are reflections of one particular dimension of the community's attitudes towards death.

3. 1. 2. Selection of the grave locations

We know nothing about the criteria for the selection of a particular grave location. When analysing the topography of the grave goods, I found that the spatial patterning of several vessel types indicated that

[393] Bondár 2009b.

the deceased had not been interred beside one another according to the sequence of their death, but that certain individuals had been buried in a pre-allocated location within the cemetery.

The graves lay quite close to one another despite the abundant availability of space in the selected location of the cemetery. I shall return to this issue below. The association of the stones that had been dislodged and rolled away with a particular burial, the exact extent of a particular grave could not always be accurately determined during the excavation of the burial ground *(Pls 57–58)*.

3. 1. 3. Selection and manufacture/collection of the grave offerings

The selection of the grave location was followed by choosing the articles which would accompany the deceased and their manufacture or collection, another activity preceding the funeral itself. If the vessels placed in the grave were not hastily and haphazardly gathered from among the household vessels, the pottery and other artefacts placed in the grave had to be manufactured according to the community's traditions. Vessels fired in pits[394] could be quickly made and may therefore have been part of the funerary rite. Another decision made before the funeral was whether the deceased would be given food and beverages, as was the mode of how the food offerings should be deposited.

We do not know whether the deceased was interred with his or her personal utilitarian articles and clothing, or whether the funerary rite prescribed another practice. We have no way of knowing whether the stone axes and chipped stone implements found in some graves and the antler and the boar tusk found in others had been used as implements in life or were artefacts associated with the burial rite.

The stones and rocks needed for covering the grave after the funeral too had to be gathered before the ceremony.

3. 1. 4. Disposal of the body

Another decision made before the funeral was whether the deceased would be cremated or inhumed. In the case of the dead interred in the Pilismarót cemetery, this was an obvious choice for the community: they cremated their dead and buried the remains in a specific location, in accordance with the ceremony prescribed by their traditions.

3. 2. The funeral ceremony

3. 2. 1. Cremation and the collection of the cremains

Following the selection of the grave location and of the grave goods to be deposited in the grave, the body was cremated. The wood necessary for the pyre was readily available in the cemetery's broader area. A pyre can be practically built anywhere and does not require any special preparation or the felling of a high number of trees,

The cremation of the deceased, as already noted by István Torma, was not performed in the area of the cemetery because no traces of pyre locations were found during the excavation. This would suggest that the body was first transported to the pyre and that the burnt remains were gathered and then taken to the grave after the body had been cremated, indicating that the funeral ceremony was conducted according to a routine scenario.

However, we know nothing about the ritual itself, for example, of how the deceased was transported to the pyre, how the cremains were collected (whether the burnt bones were gathered in containers made

[394] BONDÁR et al. 2000, 98.

from textile, wickerwork, animal hides or clay vessels), how the container was taken to the grave and what community activities accompanied the event.[395]

From her examination of the cremains, anthropologist Kitti Köhler concluded that the deceased had been cremated at a high temperature shortly after the onset of death (see pp. 319–347), meaning that the pyre had been constructed from wood and perhaps other material in a manner to ensure a high, over 800 ºC temperature and a relatively quick incineration. The duration of the incineration can only be estimated; however, experimental incinerations have shown that the cremation of a body on a pyre with a sufficiently high temperature takes about nine hours.[396]

The remains of two individuals were found in a single grave only: one of the bowls in Grave 409 was used for covering the cremains of a man. As it turned out during the anthropological examination of the cremains, the calcined bones in the bag inscribed "under vessel 4" represented the remains of a small child. The separation of the calcined bones and their covering with two separate bowls perhaps indicates that the two individuals had been cremated on the same pyre and that care had been taken to gather and deposit the remains of the man and the child separately.

The careful collection of the cremains is reflected by the fact that only in a few cases was other material mixed with the calcined bones (two burnt mussels in Grave 336, a burnt stone in Graves 340 and 343, and a lump of burnt limestone in Grave 337, while a few pieces of charcoal in Graves 365 and 454, and a larger amount of charcoal in Grave 452). At the same time, it is noteworthy that if such care was taken in the collection of the cremains, why no more than a few bone splinters were deposited in some burials (Graves 340, 413, 427, 430, 455, 456), while others contained a substantially higher amount (Graves 348,[397] 451, 453). The anthropological assessment of the human remains indicated that only the calcined remains of certain bodily regions (the skull and the long bones) were collected and deposited, a practise which undoubtedly had some ritual reason and symbolic meaning.

It would appear, then, that after the pyre had burned down and cooled, the remains of the bodily parts intended for burial were carefully selected, meaning that the cremains were treated with special care and according to certain prescriptions.

In the light of the above, it is possible that the graves that did not contain any calcined bones were symbolic burials, lacking the remains of a human body. Obviously, it is equally possible that the cremains were destroyed by taphonomic processes (including the pH level of the soil) or that very small amounts of calcined bones were not detected during the excavation, although the latter seems unlikely because even the tiniest bone splinters were carefully packed away and there was no indication of the harmful properties of the soil in the burials that had contained cremains. The fact that over one-third of the burials lacked even a tiny bone splinter is an intriguing and noteworthy phenomenon, another cognitive element in the prehistoric perceptions of death.

3. 2. 2. Deposition of the cremains and the funeral ceremony

The remains collected from the pyre were taken to the selected grave location and placed in the centre of a circular area together with the grave goods. No pit was dug for the calcined bones – they were simply strewn on the ground, as noted by István Torma in his preliminary report. The archaeological record

[395] Sándor Soproni's field notes made during his excavation of the Budakalász cemetery indicated that the size of the area where the cremains were deposited was roughly identical, suggesting that the cremains were gathered into a container made from organic material such as a basket and then taken to the grave where they were spilled on the ground by turning the container upside down and then covered by the container, whereby the cremains remained in a heap during the ensuing millennia (Bondár 2009b, 233–234).

[396] Lazăr–Băcuet-Crișan 2011, Fig. 10.

[397] István Torma collected almost 1 kg of cremains; however, these were unavailable for study because they could no longer be found.

offers no clues as to how the community bade farewell to the departed, or about the funeral procession, the community's activities when the remains were deposited, or where some of these activities took place. What we do know is that the grave inventories are made up of different numbers of artefact types and have a widely differing composition (*Table 3* offers an overview of the number of grave goods according to graves, while *Fig. 17* shows the distribution on the cemetery map).

Table 3. Number of grave goods according to graves

No. of grave goods	No. of graves	Graves (italics denote radiocarbon-dated graves)
0	3	404, 410, 425
1	10	342, 383, 397, 412, 417, 431, 437, 438, 440, 446
2	8	337, 347/a, 384/a, 407, 413, 421, 426, 430
3	11	343, 344, 347, 357, 389, 420, 429, 441, 452, 456, 458
4	17	341, 346, 350, 352, 356, 360, 382, *390/a*, 392, 394, 400, 406, 415, 427, 432, 436, 459
5	8	384, *385*, 398, 405, 419, 424, 428, 455
6	11	339, 348, 361, 395, 396, 408, *414*, 422, *443*, 449, 450
7	9	340, 349, 354, 387, *418*, 444, 447, 448, 454
8	10	363, 365, 386, *390*, 393, 402, *411*, 423, 433, 442
9	9	353, *358*, 362, 391, 403, 416, 435, 439, 457
10	5	338, 401, *434*, 445, 451
11	1	*399*
12	3	*364*, *388*, *409*
13	1	355
14	3	336, 359, 453
17	1	351

There is a widespread consensus in the archaeological literature that the vessels deposited in or on the graves during various prehistoric periods contained the food and beverages for the journey to the otherworld. This generally accepted view is discussed at greater length below.

3. 3. Post-interment activities

The covering or marking of the grave was most likely the final act of the funeral ceremony. Most graves in the Pilismarót cemetery were marked with a stone packing *(Fig. 5, Pls 57–58)*. The observations made during the excavation suggest that this concluding act of the funeral was performed according to certain norms.

István Torma's field diaries record that the cremains generally lay in the middle of the stone packing. A few larger stones were placed around the funerary deposit (the calcined bones and the grave goods), then smaller stones were used for creating the small heap marking the grave. In several instances, only a ring of stones was laid around the area where the cremains and grave goods had been deposited, without making a stone packing. Torma also recorded that a certain portion in the middle of a few stone-packed graves was sometimes left uncovered (Grave 344: seven larger stones, Grave 349: five to seven larger stones, Grave 358: eight to ten larger stones), or that the area strewn with the cremains was enclosed by larger stones (e.g. Graves 354, 426). Some burials lacked stones in their middle (Graves 393, 396, 444). In the case of Grave 416, the vessels had been placed under the edge of the stone packing, about a metre away from the cremains.

Torma suggested that the stone packing covering the graves had been collected in the surrounding mountains. The stone packings, whose size and form varied, had a diameter ranging between 1 and 3.5 m. He noted that the stones formed two or three layers in some cases (Graves 442, 447, 451).

The stone packing was most likely erected shortly after the deposition of the cremains on the ground, probably as part of the funeral ceremony or not long afterwards, otherwise the calcined bones would soon have been blown away by the wind or washed away by rain.

The placement of a broken vessel or vessel fragment(s) on the stone packing (Grave 409), beside it (Graves 352, 395), or on its edge was probably part of the concluding act of the funeral ceremony (or an act performed sometime later), which can be seen as a reflection of the beliefs and ritual traditions embodied by the act of intentional fragmentation (Graves 351, 354, 362, 363, 365, 403, 408, 409, 436).

It would appear that animal figurines were accorded special treatment and that they had been deposited among the stones of the stone packing during its construction. The stone packing of Grave 359 covered a roughly circular area with a diameter of *ca.* 2 m. Fragments of the animal figurine lay in part under one of the outer stones on the packing's western side, at a depth of 125 cm. The figurine was crushed into four fragments. The two fragments of the body remained roughly in their original position and an additional fragment lay some 10 cm from the head. The two forelegs were not found. Several fragments of a horn-shaped vessel decorated with a herringbone pattern likewise lay outside the stone packing, at a similar depth (unfortunately, no photos or drawings could be found of this grave). Grave 413 did not contain any pottery, save for a few indistinct sherds. An animal figurine broken in two lay by the eastern side of the stone packing *(Pl. 54. 1)*. Four fragments of an animal figurine lying 15–15 cm apart were found by the western edge of the stone packing of Grave 414 *(Pl. 54. 2)*. A broken animal figurine lay among the upper stones in the middle of the stone packing of Grave 418. It is possible that the hind leg of this figurine came to lightly under the stones near the stone packing's southern edge. A handful of sherds from three or four pots and bowls were found by the edge of the stone packing on the southern and western side. A cattle mandible broken in half lay by the stone packing's south-western edge (regrettably, these details are not visible on the grave photo).

We know nothing about possible community activities that were perhaps part of the concluding act of the funeral ceremony, whether the funeral's attendants participated in a funerary feast or placed food and drink offerings on or in the grave. This custom is certainly abundantly documented in later periods, as are the rituals associated with funerary feasts, and much could be written about it; however, my focus was on what can be gleaned from the archaeological record regarding the Pilismarót cemetery. As part of the analysis of the graves, I examined the position of the vessels in the grave as recorded in the field documentation, which might perhaps offer clues as to their one-time function. What must be noted in this respect is that the cemetery lay far from the period's settlements and that there were no indications of pyre locations, suggesting that the funerary feast was held in a location outside the burial ground, if at all. This, in turn, perhaps indicates that the realm of daily life (the settlement) and the realm of death (the cemetery) were strictly separated in the beliefs of the community (or communities) using the cemetery.

4. The graves

István Torma uncovered 110 graves in the Pilismarót-Basaharc cemetery, 96 (88%) of which had a stone packing, while 14 (12 %) lacked one. No cremains were found in 37 graves. With the exception of two burials, the graves containing calcined bones all had a stone packing. Cremains were recovered from 73 burials, of which the remains of 50 individuals from 49 burials were available for the anthropological assessment.

4. 1. Stone-packed graves

According to the field diary, thirty-five stone-packed burials lacked human remains (Graves 339, 341, 344, 351, 353, 360, 365, 384/a, 386, 389, 397, 401, 402, 405, 406, 415, 419, 421, 428, 431, 432, 433, 436, 437, 438, 439, 440, 444, 445, 447, 449, 452, 457, 458, 459).

A minimal amount of cremains were documented in sixteen burials (Graves 338, 347/a, 349, 352, 361, 385, 395, 407, 413, 423, 425, 427, 430, 446, 455, 456), of which a few bone splinters from Graves 385, 395, 423, 425 and 446 could still be found at the time the evaluation, but only the cremains from Grave 385 were suitable for analysis.

A smaller amount of calcined bones were recovered from forty-three burials (Graves 342, 343, 350, 354, 355, 356, 358, 359, 362, 363, 364, 382, 390, 390/a, 391, 392, 393, 394, 396, 398, 399, 400, 403, 404, 408, 409, 410, 411, 412, 414, 416, 417, 418, 420, 422, 426, 429, 434, 435, 441, 442, 443, 445). The cremains from Graves 342, 343, 350, 355, 356 and 362 could no longer be found when the work for this report was undertaken.

The field diary records that the cremains from Grave 348 weighed roughly 1 kg. However, we did not find these remains. The amounts of cremains recovered from the burials and the results of their analysis are shown on *Fig. 18*.

Grave goods were recovered from almost every burial: the grave inventories were made up of vessels, vessel fragments and a few other articles. Animal figurines were without exception recovered from the stone-packed graves.

The cremains were generally covered with a bowl or some other vessel (Graves 338, 350, 355, 356, 359, 361, 362, 399, 420, 427); however, in several graves, the bowls were set upside down even if there were no cremains underneath (Graves 341, 344, 352, 353, 358, 360, 382, 386, 390, 390/a, 393, 397, 403, 409, 412, 419, 422, 426, 432, 434, 435, 436, 439, 441, 442, 443, 444).

4. 2. Graves lacking a stone packing

Fourteen burials lacked a stone packing (Graves 336, 337, 340, 346, 347, 357, 383, 384, 387, 388, 402, 424, 448, 450; *Fig. 19*). These burials, covering a small area, show a concentration west of an imaginary north to south axis (Graves 336, 337, 340, 347, 346, 383, 384, 388) and lie quite close to one another, Grave 387 lies on the imaginary axis, while only four burials (Graves 402, 424, 450, 448) can be found in the cemetery's eastern half.

The deposition of the cremains in the burials lacking a stone packing varies. Although Graves 336, 346 and 347 had contained calcined bones according to the field documentation, these were unavailable for study because they could no longer be found. Graves 384, 388 and 450 yielded several calcined bones, while others contained no more than a few bone splinters or a few calcined bones (Graves 337, 340, 357, 383, 387) at the time of their excavation. Graves 402, 424 and 448 did not contain human remains, while the minimal cremains from Graves 337, 340 and 357 were unsuitable for an anthropological analysis.

Although the amount of cremains recovered from Graves 383, 384, 387, 388 and 450 could be examined, only the calcined bones of the individual from Grave 388 were suitable for age determination (a 15–30-year-old, juvenis-adultus individual whose sex could not be determined).

Each of these burials contained grave goods, which, in effect, outlined the grave. Graves 336 and 388 contained a rich array of grave goods, Graves 340, 346, 387, 402, 424, 448 and 450 were relatively abundant in finds, while Graves 337, 347, 383 and 384 had few grave goods. Two elements of the funerary rite could be reconstructed in the case of the graves lacking a stone packing: the first, that the

cremains strewn on the ground were covered with a bowl, the second, that although some graves lacked a stone packing, they had nonetheless been marked with a few larger stones.

The calcined bones were most often covered with a bowl (Graves 336, 337, 340, 346, 347, 383, 384, 387, 388), suggesting that the cremains had perhaps been gathered into these bowls and then simply turned upside down in the designated area, after which additional vessels were placed around the remains of the deceased *(Pl. 59. 1)*. The cremains covered with a bowl that was already broken at the time of its deposition in Grave 383 were enclosed by six stones arranged in a semi-circle, while Grave 388 was enclosed by four stones.

The grave inventories of the burials lacking a stone packing included several uncommon or unusual items such as miniature vessels (Graves 387, 388), a clay spoon (Grave 387), a dish-pot (Grave 388), an amphora fragment with a herringbone pattern (Grave 357), and stone axes (Graves 336, 340, 387). Grave 387 stands out from among the burials lacking a stone packing with its high number of remarkable artefacts.

There was no obvious chronological difference between the stone-packed burials and the ones lacking a stone packing.

4. 3. Food and drink offerings

According to the observations recorded in the field diaries, the vessels generally interpreted as food or liquid containers such as bowls, mugs and jugs were often deposited upside down even when they were not used for covering the cremains. This would suggest that these vessels had not contained food or beverages, or that they had been emptied if they had. Regrettably, we lacked the resources to have these vessels analysed for possible residues of their one-time contents and therefore we do not know what had been stored in them prior to the funeral, whether they had contained anything at all, or whether they were simply grave pottery.

Although we have no data on what the bowls, mugs and jugs deposited in the burials had contained, we do know how they had been placed in the burials. The following observations were made regarding the stone-packed graves:

Grave 338: four or five bowls set upside down, with the calcined bones lying underneath or beside the vessels;
Grave 340: a mug set upside down, although it was not recorded whether the single calcined bone found in the burial was covered by this vessel *(Pl. 60. 1)*;
Grave 341: fragments of a bowl and a cup, both set upside down, in the burial lacking any cremains;
Grave 344: fragments of a bowl and a pot, both set upside down, in the burial lacking any cremains;
Grave 350: the calcined bones were covered with a bowl;
Grave 352: fragments of two bowls placed on one another upside down under the stone packing in the burial lacking any cremains;
Grave 355: three bowls covered the cremains;
Grave 356: a large bowl covered the cremains, and there was another bowl set upside down in the grave;
Grave 358: two bowls deposited upside down, although it was not recorded whether the cremains were covered by these vessels;
Grave 359: the cremains were covered with several bowls;
Grave 360: a bowl set upside down in the burial lacking any cremains;
Grave 361: fragments of a bowl set upside down, covering a few calcined bones;

Grave 363: the cremains were covered with a bowl;
Grave 382: a jug and a broken bowl, both set upside down, although it was not recorded whether the cremains were covered by these vessels *(Pl. 60. 2)*;
Grave 386: a bowl set upside down in the burial lacking any cremains;
Grave 390: a large amphora set upside down, although it was not recorded whether the cremains were covered by this vessel;
Grave 390/a: a broken bowl deposited upside down beside the cremains;
Grave 393: a pot set upside down, although it was not recorded whether the cremains were covered by this vessel;
Grave 397: a bowl set upside down in the burial lacking any cremains *(Pl. 59. 9)*;
Grave 399: the cremains were covered with a large storage jar and three bowls;
Grave 400: two bowls deposited upside down, although it was not recorded whether the cremains were covered by these vessels;
Grave 401: two bowls deposited upside down in the burial lacking any cremains;
Grave 403: four bowls deposited upside down under the stone packing and a miniature beaker, also set upside down, by the edge of the stone packing, although it was not recorded whether the cremains were covered by these vessels;
Grave 409: two bowls set upside down, both covering the cremains;
Grave 419: a cup and two bowls placed on one another, all three upside down, in the burial lacking any cremains *(Pl. 60. 3)*;
Grave 420: the cremains were covered with two bowls and an amphora, all three deposited in a fragmented condition: *(Pl. 59. 6)*;
Grave 422: the cremains were covered with a bowl and a bowl or pot, both deposited upside down, and there was a third bowl, similarly deposited upside down;
Grave 426: a lobed jug set upside down, perhaps covering the cremains found during the washing of the finds;
Grave 427: the cremains were covered with a bowl;
Grave 432: a pot deposited upside down under the stone packing and a bowl, also set upside down, lay about 1 m south of the burial lacking any cremains;
Grave 434: a jug and a cup set upside down, but not covering the cremains *(Pl. 60. 4)*;
Grave 435: the cremains were covered with a bowl;
Grave 436: a bowl set upside down in the burial lacking any cremains;
Grave 439: a bowl set upside down in the burial lacking any cremains;
Grave 441: an intact mug and a broken bowl, both set upside down, perhaps covering the cremains *(Pl. 60. 5–6)*;
Grave 442: a bowl, broken in two, set upside down, but not covering the cremains;
Grave 443: the cremains were covered with a bowl;
Grave 444: two bowls set upside down in the burial lacking any cremains;
Grave 452: a bowl set upside down in the burial lacking any cremains;
Grave 457: a bowl set upside down in the burial lacking any cremains.

Only in the case of two burials were the cremains placed in bowls that had been set upright (Graves 343 and 385). The grave photo of Grave 385 shows that the cremains were placed in the larger bowl set upright and then covered with a smaller bowl *(Pl. 59. 2–4)*.

A similar practice could be noted in the burials lacking a stone packing. In Grave 336, the cremains were strewn in the middle of the burial and covered with two small mugs, while five bowls deposited

upside down formed a circle measuring 1 m in diameter around the cremains. A jug and a mug were set upright by the grave's southern and northern edge, and the grave inventory also included two stone axes. The two burnt mussels were probably deposited in the grave together with the calcined bones. In Grave 388, the cremains were strewn on the ground and covered with a bowl. A miniature lid lay upside down beside the bowl, while a jug set upright was found in the burial's northern part. Another jug in the grave was deposited upside down.

Very few of the bowls found in the graves had been set in an upright position; most were deposited upside down, similarly to the cups and jugs and, in some cases, to the larger vessels such as amphoras and storage jars. At the same time, Torma recorded that some jugs, mugs and cups had been deposited in an upright position (Graves 336, 337, 347, 353, 388, 403, 441). I disregarded the mugs and cups tilted to one side because these might have been dislodged from their original position by the weight of the stones. However, the jugs and mugs found upside down clearly indicate that these had not been placed in the grave as liquid containers. Only a few graves contained animal bones originating from the animal's meaty parts,[398] but the exact position of the animal bones in the grave and their position relative to the vessels were not recorded, and thus they provide no additional information in this respect.

Borbála Nagy made a number of interesting observations during her excavation of the cemetery at Balatonlelle-Felső-Gamász. The twenty-three burials yielded twenty-seven mugs, of which only the contents of one could be clearly determined: the mug from Grave 21 contained flint blades. She argued that the mugs had not been used as liquid containers because several mugs were found lying on their side (with the mouth downward) and because most mugs had a rounded base and could not be set upright. In her view, the importance of the mugs (or of their contents) was reflected by the fact that the mugs in Grave 17 lay deeper than the body and the other grave goods, indicating that these had been buried deeper than the other grave offerings.[399] A similar phenomenon was noted in Grave 21, where a jug lay deeper than the other grave goods.[400] The position of the mugs in several burials suggested that they had been strung together by their handle, which again belies their function as liquid containers. She made similar observations regarding the possible contents of jugs. One of the jugs in Grave 6 contained another jug, while the jug in Grave 17 yielded a boar tusk and a bone implement, and a bundle of mugs and flint blades were found lying under another jug. The jug in Grave 23 had been placed inside a bipartite bowl.[401] She quoted the burials uncovered at Reichersdorf for a similar practice: Christian Mayer, the excavator of the latter site, assumed that the vessels found in the burials were not containers for food and drink, but were the grave offerings proper.[402]

In my view, the vessels placed upside down in the Pilismarót burials too indicate that the deceased were not provided with food and beverages. The vessels placed over or beside the cremains in an upside-down position apparently had a different function, and were perhaps vested with a role to "preserve" or to "keep together, to protect".

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[398] According to Erika Gál's species determination, Grave 359 contained a pig femur, Grave 363 cattle vertebrae, Grave 404 the meaty part of a cattle foreleg, Grave 409 a goat/sheep leg, Grave 418 a cattle mandible and Grave 422 the meaty part of a sheep/goat foreleg.

[399] NAGY 2010, 386.

[400] NAGY 2010, 390.

[401] NAGY 2010, 390.

[402] NAGY 2010, 404, quoting Christian Mayer (MAYER 1991, 44).

5. The "topography" of the grave pottery in the cemetery

In this section, I will discuss the spatial distribution of individual vessel types in the cemetery. I mapped each vessel and artefact type on a separate map *(Figs 20–33)*. The variety and number of the grave goods differed, reflecting a deliberate selection of what was deposited in the grave and, also, that the grave inventories were not "uniform burial packages". The articles deposited in the grave may have reflected the position of the individual in the community (a status based on sex, age, occupation or power).

My assumption was that if a particular vessel type was recovered from burials located in different areas of the cemetery, its distribution could indicate the rough contemporaneity of the graves and thus provide clues for the cemetery's "peopling". The spatial patterning of the vessel types could also outline clusters (groups) or, conversely, isolated graves, indicating that individuals with these vessels or artefacts were interred in pre-allocated locations. The abbreviations used for individual vessel types are identical with the ones in the type charts *(Figs 9–13)*.

5. 1. Amphoras *(Fig. 10: A1–A6)*

Eighteen burials contained amphoras in the Pilismarót-Basaharc cemetery, with some graves containing two different variants of this vessel type (Grave 390: Type A3 and A5; Grave 433: Type A2 and A4), or several examples of the same type (Graves 393, 445, 453: two specimens each of Type A2).

Table 4. Distribution of amphoras according to graves

No. of amphoras in a grave	No. of graves	Graves (italics denote radiocarbon-dated graves)
1	18	338, 350, *358*, 361, *364*, *399*, 400, *409*, *418*, 420, 421, 424, 428, 430, *434*, 437, 444, 449
2	8	351, 362, *390*, 392, 393, 433, 450, 458
3	1	453
4	1	445

The distribution of burials with various amphora types in the cemetery was rather random *(Fig. 20)*, although this randomness would be slightly denser had the indeterminate amphoras recovered from thirteen burials also been mapped (they were excluded because they did not provide additional information). A look at the distribution of the various sub-types reveals some interesting patterns.

The three burials yielding Type A1 amphoras lay in the cemetery's northern (Grave 358), southern (Grave 362) and eastern (Grave 424) part, roughly 20 m apart (Graves 358 and 362, Graves 362 and 424). Neither was the distance between Graves 358 and 424 much larger than 20 m.

Type A2 was by far the most common type in the cemetery, deposited in fifteen burials (Grave 338, 392, 393, 399, 400, 409, 418, 420, 421, 433, 434, 444, 445, 453, 458). Certain patterns can be noted in their distribution: Grave 338 was a solitary burial by the cemetery's western edge, while seven graves forming two (?) clusters can be noted along the two sides of an imaginary axis in the cemetery's middle part: Graves 392 and 393 lay immediately beside one another, and Graves 400, 399, 420, 421 and 418 on the other side were similarly located beside one another. A third cluster can be noted in the cemetery's north-eastern end (Graves 458, 445, 434, 433), and a fourth cluster is perhaps marked by two adjacent burials (Graves 453 and 444) in the cemetery's south-eastern end.

The two burials yielding Type A3 amphoras lay far from each other, but along the same imaginary axis: Grave 390 in the cemetery's western, Grave 457 in its eastern part. The same could be noted in the case of Type A4 amphoras: Graves 450 and 433 lay some 30 m apart along the same axis.

Types A5 and A6 were recovered from a single burial each (Grave 390 and Grave 351, respectively), both of which lay in the cemetery's western half.

In sum, spatial clusters can be discerned in the distribution of some amphora types, while other types had been deposited in burials lying far from one another, suggesting a pattern in their deposition.

5. 2. Pots *(Fig. 10: P1–P6)*

Forty-nine graves in the Pilismarót cemetery did not contain pots (the indeterminate pots were also excluded from this analysis). A number of burials contained several pots of the same type (Graves 355, 382, 398, 418, 435, 454), while others yielded vessels or vessel fragments representing different pot types (Graves 358, 388, 390, 391, 402, 405, 409, 411, 423, 442, 451, 453). Five burials contained both normal-sized and miniature pots (Grave 391, 405, 416, 451, 457). In addition to the above, the pots from the burials containing different types also included indeterminate specimens (Graves 349, 355, 360, 362, 363), which were not included in this analysis. The seven miniature pots recovered from six burials (Graves 361, 391, 405, 416, 451, 457) are discussed in the section on miniature vessels.

Table 5. Distribution of pots according to graves

No. of pots in a grave	No. of graves	Graves (italics denote radiocarbon-dated graves)
1	38	338, 339, 344, 346, 347/a, 348, 351, 353, 354, 356, 357, 361, *364*, 384/a, *385*, 389, 393, 394, 395, 396, *399*, 401, 413, *414*, 416, 419, 422, 432, 433, *434*, 436, 445, 447, 448, 450, 452, 455, 457
2	14	347, 349, 360, 362, 363, 382, *390*, 391, 405, 435, 442, 451, 453, 454
3	6	*358*, *388*, 398, 402, 418, 423
4	3	355, *409*, *411*

The distribution of various pot types in the Pilismarót cemetery *(Fig. 21)* reveals that Types P1, P2 and P3 are scattered across the cemetery. Type P4 was deposited in burials lying quite far from one another along a north to south imaginary line (Graves 358, 388 and 423, 402), while Type P5 in burials lying close to one another in the cemetery's southern part (Graves 409, 411, 451, 455) and in one burial in the eastern part (Grave 391). Type P6 occurs in three burials located near one another in the cemetery's eastern part (Graves 357, 382 and 385). Thus, similarly to amphoras, a spatial patterning can be discerned in the deposition of pots.

5. 3. Storage jars *(Fig. 10: SJ1–SJ2)*

The burials yielding storage jars lay in the cemetery's western part (Grave 341) and in its middle (Graves 384 and 399), in burials lying close to one another *(Fig. 22. 1–2)*. One would assume that this seemingly quotidian vessel would either not be deposited in burials or, if was, it would be found at least as frequently as pots; however, its distribution belied this preconception because it was recovered from no more than three burials.

5. 4. Mugs *(Fig. 11: M1–M7)*

Thirty-two burials of the Pilismarót cemetery yielded mugs, while seventy-eight did not. Some graves contained different types (Graves 336, 408 and 444), while others yielded several mugs of the same type (Graves 336 and 340).

Table 6. Distribution of mugs according to graves

No. of mugs in a grave	No. of graves	Graves (italics denote radiocarbon-dated graves)
1	24	338, 339, 343, 344, *358*, 359, 360, 361, 365, 386, 389, 392, 393, 402, 403, 406, 407, 412, 426, 431, 439, 441, 444, 448
2	6	340, 348, 353, 354, 395, 453
3	2	336, 408

Mapping the distribution of mugs *(Fig. 23)* revealed that they were deposited more frequently in burials in the cemetery's western half than in the eastern one. Burials with Type M1 mugs were found far apart, in a burial in the cemetery's western half (Grave 339) and in another one in the middle (Grave 408). The single Type M2 mug was recovered from a burial (Grave 336) in the cemetery's western part, while Type M3 mugs were deposited in burials lying far from one another: two burials (Graves 344 and 343) in the cemetery's western part and two burials (Graves 439 and 448) in the eastern part. The burials with Type M4 mugs formed a cluster in the western part (Graves 338, 340, 353) and a single burial (Grave 444) in the cemetery's south-eastern corner too yielded a mug of this type. Type M5 mugs were placed in two graves lying far from one another in the cemetery's southern and eastern part (Graves 412 and 441). Type M6 mugs were found in six burials: one of these (Grave 336) lay in the cemetery's western part, two (Graves 358, 393) in the middle part, while three burials (Graves 426, 407 and 408) lay roughly along the same line. Graves 407 and 408 lay fairly close to one another, but far from the other graves. Type M7 mugs were recovered from four burials: three of these lay near one another (Graves 365, 360, 386), while the fourth (Grave 406) in the cemetery's eastern part, far from the other three. The distribution of mugs thus shows some spatial patterning, similarly to the amphoras and the pots.

5. 5. Jugs *(Fig. 11: J1–J8)*

Jugs or their fragments were recovered from seventy-three burials, while thirty-seven graves did not contain this vessel type. Similarly to the other pottery wares, some burials contained different types (Graves 336, 388, 399, 422, 434, 435), while others yielded several pieces of the same jug type (Graves 403, 409).

Table 7. Distribution of jugs according to graves

No. of jugs in a grave	No. of graves	Graves (italics denote radiocarbon-dated graves)
1	38	337, 338, 349, 351, 352, 353, *358*, 362, *364*, 365, 382, 384/a, *385*, 387, 389, 396, 400, 401, 406, 408, 416, 419, 424, 426, 427, 430, 436, 439, 440, 442, 444, 445, 447, 448, 452, 453, 454, 456
2	13	336, 386, 399, 402, *409*, 415, 422, 428, 433, *434*, 435, 457, 458
3	1	*388*
4	1	*403*

The distribution of jugs in the cemetery *(Fig. 24)* shows that Type J1 jugs were deposited in three burials (Graves 338, 364, 403) lying far from one another: one burial (Grave 338) in the cemetery's western part, one in the middle part (Grave 364) and one in the eastern part (Grave 403). Type J2 jugs have a scattered distribution: they were deposited in several burials (Graves 388, 399, 435, 386, 387, 422, 409, 456, 457) in the cemetery's middle zone and in four burials (Graves 445, 440, 433, 444) in the eastern part as well as in four burials (Graves 427, 428, 382, 336) in the western part.

Type J3 jugs were scattered across the cemetery's entire territory (Graves 336, 352, 353, 400, 399, 436, 435, 434, 439, 419, 416, 424, 401, 406). Type J4 jugs were recovered from five burials, two of which lay far from one another in the cemetery's western half (Graves 358, 337), one in the northern part (Grave 458) and two in the eastern part, close to one another (Graves 453 and 415). Type J5 jugs were found in two pairs of neighbouring burials lying along an imaginary line in the cemetery's middle part (Graves 388 and 426, and Graves 402 and 403), as well as in a burial (Grave 447) by its eastern edge. The single Type J6 jug was recovered from a burial (Grave 385) in the cemetery's western part and the single Type J7 jug was found in a burial (Grave 452) in its southern part. Type J8 jugs were deposited in burials lying in the cemetery's middle part (Graves 384/a, 422) and eastern part (Grave 434).

In sum, some jug types show a spatial clustering, while others do not. Two jug types were deposited in a single burial only.

5. 6. Cups *(Fig. 11: C1–C3)*

After mapping the distribution of cups *(Fig. 25)*, I found that Type C1 cups were deposited in two burials (Graves 384 and 433) lying in two distant spots of the cemetery. Type C2 cups were recovered from two burials (Graves 365 and 441) lying far apart in the cemetery's southern part. One burial (Grave 434) yielded two Type 3 cups, and cups of this type were also found in two other burials, one in the cemetery's western part (Grave 341) and one in its eastern part (Grave 419), the latter lying close to Grave 434. The spatial distribution of cups indicates that they were deposited in graves lying far from one another.

5. 7. Beakers/flowerpot-shaped vessels *(Fig. 10: B)*

The two burials yielding beakers lay far from one another in the cemetery's middle part (Grave 390) and its south-eastern part (Grave 454), suggesting that the two burials containing this vessel type possible mark the cores of two future groups *(Fig. 26. 3)*. Miniature versions of beakers were recovered from two burials in the cemetery's eastern half (Graves 403 and 442), which lay *ca*. 20 m apart.

5. 8. Scooping vessels *(Fig. 10: S)*

The single burial (Grave 429) containing a scooping vessel lay in the cemetery's northern part, at the edge of the burial ground *(Fig. 26. 2)*, but close to the other burials in the area (Graves 428, 357, 358, 382, 389).

5. 9. Suspension vessels *(Fig. 10: SV)*

Three amphora-shaped suspension vessels were found in the cemetery: a normal-sized specimen and two miniature versions. The normal-sized vessel was recovered from a burial (Grave 390) in the cemetery's eastern part *(Fig. 26. 1)*, while the miniature versions from its western part, from two burials lying at some distance from one another (Graves 343, 447; *Fig. 29. 7*).

5. 10. Dish-pots *(Fig. 10: DP)*

Three of the burials yielding dish-pots lay in the cemetery's middle part, quite close to one another (Graves 388, 399, 364), while a fourth burial (Grave 353) lay in its western part *(Fig. 22. 3)*. The distribution of this vessel type outlined two clusters.

5. 11. Bowls *(Fig. 12: CB1–CB10, Fig.13: SB1–SB7)*

A look at the joint distribution of the two main bowls types, conical and semi-spherical bowls, reveals that only one of the seventeen different bowl types was deposited in some burials, while others yielded several bowl types (Graves 336, 338, 339, 352, 403, 416) or several examples of the same type (Graves 355, 439), and some burials contained both normal-sized and miniature bowls (Graves 387, 395, 409, 423, 432).

Table 8. Distribution of bowls according to graves

No. of bowls in a grave	No. of graves	Graves (italics denote radiocarbon-dated graves)
0	18	342, 347/a, 384/a, 389, 404, 410, *411*, 412, 413, 425, 426, 430, 431, 437, 438, 440, 458, 459
1	24	337, 341, 344, 346, 347, 357, 360, 382, 383, 384, *390*, *390/a*, 392, 397, 407, 417, *418*, 421, 427, 429, 432, 441, 446, 452
2	23	343, 348, 361, 395, 398, 400, 401, 402, 405, 406, *414*, 415, 419, 420, 428, 433, *434*, 436, 442, 444, 454, 456, 457
3	17	350, 352, 353, 356, *358*, 365, *385*, 393, 394, 422, 424, 435, 439, *443*, 445, 447, 450
4	18	339, 340, 349, 354, 362, 386, *388*, 396, *399*, 403, 408, *409*, 416, *423*, 448, 451, 453, 455
5	4	336, 364, 387, 449
6	3	338, 363, 391
8	1	355
9	1	359
13	1	351

The spatial distribution of conical bowls in the cemetery *(Fig. 27)* shows the following patterns: burials yielding Type CB1 bowls are scattered across the cemetery, with most in the cemetery's northern part and fewer in its southern part (Graves 452, 449 and 448). This picture could be refined if the fragments of Types CB1–3 could be more precisely attributed to one of the types. Type CB2 bowls were recovered from three burials (Graves 347, 384 and 407) in the cemetery's middle zone, while Type CB3 bowls were found in two burials (Graves 351, 340) near one another in the cemetery's western part, in a more distant burial (Grave 388) and in two burials (Graves 402, 451) in the southern part.

A single Type CB4 bowl was recovered (Grave 336). Type CB5 bowls were found in two burials (Graves 390 and 399). However, there were several indeterminate bowl fragments that could not be assigned to a specific type within the Type CB5–9 bowls.

Type CB6 bowls show a concentration in the cemetery's middle third, where they were recovered from three pairs of graves lying beside one another (Graves 365 and 362, Graves 423 and 421, Graves 443 and 444). Another specimen was found in one burial (Grave 439) in the cemetery's north-eastern

corner. However, definite clusters could not be identified, only assumed. One cluster is perhaps made up of Graves 339, 351, 343, 340, 385 and 356, the second of Graves 400, 386, 363, 362, 365, 401, 456, 423 and 421, and a third one of Graves 449, 443, 444 and 414. One of the two bowls still bearing remnants of a red slip was among these bowls (Grave 339, *Pl. 3. 1*).

The distribution of Type CB7 bowls reveals certain patterns. They were recovered from three burials (Graves 338, 351 and 346) lying beside each other and a fourth burial (Grave 358) lying nearby in the cemetery's western part, from a single burial (Grave 364) in the middle part, and from two burials (Graves 416 and 419) in the eastern part. The other of the two bowls preserving the remnants of a red slip was among these bowls (Grave 346, *Pl. 6. 4*).

Type CB8 bowls were found in burials forming two larger clusters, one in the cemetery's western part made up of burials lying beside one another (Graves 350, 351, 338, 344, 355, 427), or near one another (Graves 356, 340, 390), the other comprising burials in the middle part (Graves 386, 399, 423, 403, 432). This bowl type was not deposited in the burials in the cemetery's eastern part.

Type CB9 bowls were found in four burials in the cemetery's middle part (Graves 385 and 397 lying beside one another, and Graves 422 and 435) and in one burial (Grave 450) in its southern part.

The distribution of burials with Type CB10 bowls outlined certain clusters in the cemetery's middle (Graves 359, 395, 396, 422, 364) and southern part (Graves 451, 449, 453, 415). Some burials yielding this bowl type, however, lay apart from these clusters: Grave 388 by the cemetery's northern edge, Grave 403 in the middle part, and Grave 362 near the cemetery's southern edge.

I did not examine the distribution of the indeterminate bowls that could not be assigned to a particular type of CB1–3 and CB5–9 bowls.

The distribution of semi-spherical bowl types in the cemetery *(Fig. 28)* indicated that burials yielding Type SB1 bowls were clustered near an imaginary north to south axis in the cemetery's western (Graves 355, 356, 352, 382, 384, 385) and middle part (Graves 400, 420, 403), and that none of the burials in the eastern part contained bowls of this type. Graves 335, 352 and 356 lay beside one another, while Graves 382, 385 and 384 as well as Graves 400 and 402 lay near one another. Grave 336 lay farther from the imaginary axis, near the cemetery's western edge.

Burials with Type SB2 bowls were scattered across a wider zone in the cemetery's western (Graves 336, 341, 343) and middle part (Graves 387, 435). Graves 341 and 343 lay beside one another and Grave 336 lay in their proximity.

The burials yielding Type SB3 bowls formed three clusters: one in the cemetery's western part (Graves 338, 351, 346, 340), one by Graves 408, 402 and perhaps 450 in the southern area of the middle part, and one by Graves 416 and 433 lying near one another in the eastern part.

The distribution of burials containing Type SB4 bowls similarly outlined three clusters: one in the cemetery's western part (Graves 339, 352, 357, 358 and 429), one in its middle part (Graves 422, 403, 409 and 456), and one in its eastern part (Graves 406, 422 and 443). The graves in each cluster lay beside one another (Graves 357, 358 and 429, Graves 409 and 456) or were located no more than 10 m apart. Type SB5 bowls were found in four burials (Graves 348, 399, 445 and 419) lying far from each other in four different areas of the cemetery, as if each marked the core of a future cluster.

Although the distribution of burials with Type SB6 bowls seemed to be randomly scattered, some patterns can be noted. These vessels were recovered from burials lying beside (Graves 336, 339) or near one another (Graves 338, 354, 359, 391, 362 and 396) in the cemetery's western part, and a similar pattern can be seen in the eastern part, with some burials lying beside (Graves 447, 448) or near one another (Graves 444, 414, 449). However, three burials (Graves 403, 436 and 439) in which Type SB6 bowls were deposited lay farther from one another. Three burials yielded Type SB7 bowls: Grave 390 lay in the cemetery's western half, while Graves 416 and 434 lay beside one another in its eastern part.

6. Copper Age "exotica" – Reflections of status and prestige *(Fig. 14)*

I have described and discussed the "average" grave goods (various vessel types) in the previous sections and I also identified the possible spatial patterns in their distribution in the cemetery's burials.

This section will cover the rare and uncommon finds from the cemetery. The finds assigned to this category are objects to which a ritual content is ascribed in the archaeological literature owing to their anthropomorphic and zoomorphic nature, alongside various artefacts – earlier assigned to the category of miscellaneous small finds – which in the light of more recent studies can be regarded as more individualised or personal artefacts expressing or reflecting status and/or prestige.

It is no easy task to determine what counts as uncommon or unusual, and what does not. Most of the vessels recovered from the burials had been deposited in a broken condition. All were hand-thrown, and in this sense, each was a unique creation. Looking at the vessels that had survived in an intact or refittable state, the rarer types include the storage jars, the almost intact oval dish-pot, the scooping vessel and almost every bowl decorated with elaborate patterns in the interior.

Several vessel types were represented by a single piece only (e.g. Type J6 and J7 jugs), but the graves from which these vessels were recovered did not have any other unusual traits.

Vessels

6. 1. Breast pots *(Fig. 9: A6)*

One special type among the amphoras is represented by anthropomorphic vessels, where the vessel body symbolises the human body and the genuine human element is added by accentuating one specific feature. Grave 351 of the Pilismarót cemetery yielded an amphora fragment on which a solid knob symbolised the female breast *(Pl. 9. 1)*.

I have discussed these vessels in detail in an earlier study,[403] in which I offered an overview of the pieces known from the archaeological literature (twenty-seven vessels from twenty-four sites), alongside a review of previous research, their distribution, their chronology, their possible function and their interpretation as well as the differences between these breast pots and other anthropomorphic vessels.[404] My main argument was that breast pots were potent symbolic expressions of female fertility and motherhood,[405] and I assumed that the pieces found in cemeteries had been deposited in the burials of the outstanding female members of a community, women "versed in the secret lore" of initiation or fertility rites.[406] Breast pots were previously generally dated to the first half of the Baden sequence (the Boleráz period and the early classical Baden period), a time period I broadened in view of the known finds to include the pre-Boleráz period (now called proto-Boleráz) and a portion of the late Baden period.[407]

At roughly the same time, Gabriel Nevizánsky also published a study on breast pots and anthropomorphic vessels. He too drew a distinction between vessels depicting female breasts and urns modelled on the human body. He listed breast pots from sixteen sites and anthropomorphic vessels from four sites.[408] He distinguished eight stylistic groups and six types among these vessels.[409] Regarding

[403] Bondár 2002; Bondár 2002a.
[404] Bondár 2002, Fig, 8.
[405] Bondár 2002, 85.
[406] Bondár 2002, 86.
[407] Bondár 2002, 86.
[408] Nevizánsky 2002, 84–89, Obr. 9.
[409] Nevizánsky 2002, 90–91.

their chronology, Nevizánsky too argued that anthropomorphic vessels were current from the early Baden period and that their presence can be noted throughout almost the entire duration of the Baden period.[410]

Several new breast pots have come to light on various sites in Hungary, Slovakia, the Czech Republic, Poland and Bulgaria since 2002, when our studies were published.[411]

Currently, a total of forty-nine breast pots (or their fragments) are known from thirty-seven sites in the Baden distribution.[412] Most came to light on settlements, a smaller portion was recovered from burials. Similar breast pots have been published from cultures that were more or less contemporaneous with the Baden complex, principally from sites in Switzerland and Germany.[413] Their presence can be traced throughout the entire span of the Baden culture.

The single fragment found in the Pilismarót cemetery was recovered from Grave 351, a burial by the cemetery's western edge *(Fig. 20. 6)*. The deposition of the vessel in but a single grave would suggest that only one individual was accorded this item, and even in this case, no more than a few fragments of the vessel were placed in the burial. The other grave goods do not suggest a special status. The burial did not contain any cremains and thus we know nothing about the person interred in the grave.

6. 2. Amphora-shaped suspension vessels *(Fig. 10: SV, Fig. 14. 12–13)*

I regard amphora-shaped vessels as genuine suspension vessels.[414] Suspension vessels were recovered from three burials in the Pilismarót cemetery (Graves 390, 434 and 447), one of which was normal-sized (Grave 390: *Pl. 22. 8*), the other two being miniature variants (Grave 434: *Pl. 42. 3*, Grave 447: *Pl. 46. 13*).

Graves 390 and 434 were adult burials. The normal-sized suspension amphora was recovered from Grave 390, a burial in the middle of the cemetery's western part, while the two scaled-down versions were found in Graves 434 and 447, two burials lying relatively close to one another in the cemetery's eastern part *(Fig. 29. 7)*.

The three suspension vessels represent three different types. The most archaic one is the plain, four-handled miniature vessel from Grave 434, whose best counterparts can be cited from the preceding period, from the cultures of the final period of the Middle Copper Age,[415] suggesting that this burial can be assigned to the cemetery's early phase. The miniature vessel with its upward-pointing, perforated

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[410] Nevizánsky 2002, 97–98.

[411] Balatonlelle-Országúti dűlő (Sófalvi 2004, 16, without any further details), Balatonőszöd-Temetői-dűlő (Horváth 2006, Fig. 14. 3; Horváth 2011, 22, Fig. 19), Balatonszemes-Szemesi berek (unpublished, from Szilvia Honti and Péter Gergely Németh's excavation in 1999), Csákánydoroszló (Károlyi 2004, Fig. 79. 3), Kaposújlak-Várdomb dűlő (Somogyi 2004, 166, intact breast pot; Németh et al. 2010, colour illustration on p. 48), Nagyrécse (Bondár 2008, Fig. 11. 4. fragment of a vessel with a knob pressed out from the interior), Ozora (Nevizánsky 2002, 84), Címburk (Zápotocký–Zápotocká 2001, 599, Abb. 13. 12), Dukovaný (Podborský 1989, Abb. 4. e), Vedrovice (Podborský 1989, Abb. 4. f), Nitriansky Hrádok (Nevizánsky 2002, 87), Zemplínske Kopčany (Horváthová 2010, Tab. 35. 2a-b), Pietrowice Wielkie (Furholt 2009, Abb. 89. b), Drama (Gleser 2010, Abb. 3. 1–2).

[412] Author's database. The number of sites has increased by 40% and the number of vessels by 80% during the past decade.

[413] Petrasch 1984; Schlichtherle 1997.

[414] While the subcutaneous handles on mugs, jugs and cups could have enabled the vessels to be suspended by means of a cord threaded through the handles, the poor workmanship of the vessels and the reinforcement of the handles with a clay pellet in the vessel interior suggests that they were unsuitable as containers and for safely holding whatever was placed inside them if suspended.

[415] M. Virág 2014, Fig. 7. 6.

knobs from Grave 447 represents another type: its proportions and ornamentation are typical for Boleráz vessels. Its form is perhaps best matched by an amphora from Köveskál, although the latter was found together with a footed goblet, which was more current during the classical Baden period, meaning that this burial can be assigned to a later phase in the cemetery's use-life. A similar vessel, dated to the classical Baden period, has been recently published from Bajč.[416]

In my assessment of the Budakalász cemetery, I discussed suspension vessels in detail,[417] and therefore I shall merely recapitulate the main points here. The suspension vessels of the Late Copper Age were first analysed in detail by János Banner, who assembled a map of their distribution[418] and noted that similar vessels were known from Austria too, although without quoting them all. In his study on the Anatolian connections of the Baden culture, Nándor Kalicz devoted a separate section to these vessels.[419] He distinguished two main types among suspension vessels, one with horizontally set, vertically pierced handles, often with a foot-ring, the other fitted with two vertical, tube-like handles. Němejcová-Pavúková published several amphora-shaped suspension vessels from Slovakian sites,[420] discussing these vessels at greater length in her 1991 study on the Aegean connections of the Baden culture.[421]

Several vessels of this type are known from Hungary,[422] Slovakia,[423] Reichersdorf in Austria,[424] and Vučedol in Croatia. Although the latter bears an extraordinary resemblance to the Baden vessels, it is quite certainly a creation of the Vučedol culture.[425] Suspension vessels were also made and used in the Coţofeni[426] and Kostolac[427] cultures.

In her publication of the Late Copper Age cemetery at Balatonlelle-Felső-Gamász, Borbála Nagy argued that, in line with Němejcová-Pavúková's chronological system, most suspension vessels can be assigned to the Baden III period or later. In her view, this vessel type can be expressly linked to funerary contexts, similarly to footed goblets.[428] Tünde Horváth too treated these vessels in detail, noting that several varieties of suspension vessels could be distinguished in the ceramic inventory from Balatonőszöd (cups and jugs with subcutaneous handles, amphoras, anthropomorphic suspension vessels and churns).[429] Following Němejcová-Pavúková's chronology, she assigned suspension amphoras to the Baden IIb–III.

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[416] Bistáková–Nevizánsky 2015, 434. Pl. 3. 4.

[417] Bondár 2009a, 276–277.

[418] Banner 1956, 143–146, Abb. 43. Szombathely (Banner 1956, Abb. 1), Zalaszántó-Tátika (Banner 1956, Taf. IV. 17–19, 22), Köveskál (Banner 1956, Taf. VII. 4–5), Iregszemcse (Banner 1956, Taf. XXI. 31–33), Sárszentlőrinc (Banner 1956, Taf. XXIII. 31), Piliny (Banner 1956, Taf. XXVII. 45), Kiskunhalas (Banner 1956, Taf. XXX. 23), Hódmezővásárhely-Bodzáspart (Banner 1956, Abb. 14. 7), Szentes area (Banner 1956, Taf. LVIII. 18), Oros (Banner 1956, Taf. LXXVIII. 2).

[419] Kalicz 1963, 32–35.

[420] Komjatice (Němejcová-Pavúková 1970, Taf. LXIX. 4), Beladice (Němejcová-Pavúková 1974, Abb. 72. 2), Tekovský Hrádok (Němejcová-Pavúková 1974, Abb. 60. 9).

[421] Němejcová-Pavúková 1991, 78–79.

[422] Segesd-Bogátpuszta (Draveczky 1964, Fig. 1), Esztergom-Diósvölgy (Bondár 1987a, Fig. 3. 2), Budakalász (Bondár 2009, Pl. 21. 44/1, Pl. 139. 361/1), Balatonlelle-Felső-Gamász, cemetery (Nagy 2010, Abb. 34. 7), Balatonőszöd-Temetői-dűlő (Horváth 2011, 24–28, Figs 21–26).

[423] Bajč (Nevizánsky 1987, 646. Obr. 3), Rúban (Němejcová-Pavúková 1991, Abb. 12. 2).

[424] Neugebauer–Gattringer 1986, 74; Hahnel 1992, 84.

[425] Durman 1988, Cat. no. 73.

[426] Roman 1977, Taf. 43.11.

[427] Gomolava 2002, 215, 286.

[428] Nagy 2010, 403, Abb. 34. 7.

[429] Horváth 2011, 15, 17, 19, 21–22, 24–29, 44.

While gathering material for a study on the burials of the Baden culture, I came across a suspension vessel known from Ferenc Tompa's description, which has escaped the attention of prehistorians: "A tall-necked vessel with a deep groove across its base from Rákoscsaba was presented to the National Museum in 1912. The deep groove and the vessel handles served the suspension of the vessel by means of a cord threaded through them. A wholly similar vessel is known ... from the Tátika site."[430]

Although some suspension amphoras have come to light from well-documented contexts on settlements and from burials, most are stray finds without a secure context. Their one-time function remains unknown, and it is uncertain whether they had in fact been suspended during their use and what had been stored in them.

The amphora-shaped suspension vessels from Pilismarót provide additional evidence that this vessel type had appeared by the early Baden period and that it had been deposited in both inhumation and cremation burials, even if very rarely compared to the other vessel types placed in graves,[431] suggesting that vessels of this type were accorded to few individuals in death.

6. 3. Miniature vessels *(Fig. 14. 1–19)*

A high number of miniature vessels were recovered from the burials of the Pilismarót-Basaharc cemetery: twenty pieces from eighteen burials. The burials yielding miniature vessels lay in the cemetery's middle (Graves 361, 388, 391, 395) and eastern part (Graves 387, 432, 423, 409, 403, 457, 451, 405, 434, 443, 444, 416, 442, 447). Even though it would be somewhat far-fetched to distinguish clusters, it is nonetheless striking that miniature vessels were usually deposited in burials lying beside (Graves 451 and 457, Graves 443 and 444, Graves 442 and 447) or near one another (Graves 391 and 361, Graves 395, 387 and 423, Graves 403 and 405, Graves 434 and 416; *Fig. 29*).

There is no generally accepted definition of miniature vessels in Central European archaeological scholarship: the label miniature is used as a synonym of small-sized, but there is no consensus of how small is small.

Alenka Tomaž devoted a separate study to the twenty-eight miniature vessels brought to light at Čatež-Stredno, a Neolithic settlement on the Sava in Slovenia, which yielded a strikingly high number of these small vessels compared to other contemporaneous sites.[432] The assessment of the finds from the 31-hectare-large area investigated between 1998 and 2002, which include the 68,000 vessels and vessel fragments, was still in progress at the time the study was written, and thus she focused on the most striking features. She sought an answer to three questions: What exactly are miniature vessels? What exactly is a vessel? How do we define a vessel? She regarded the scaled-down versions of normal vessels with a diameter or height of less than 6 cm as miniature pieces, noting that most of the settlement's vessel types had been reproduced in miniature form too.[433] These miniature vessels were recovered from several settlement features, although not from all, and they showed a concentration in the settlement's central part. She concluded that the size of the miniature vessels found on the settlement had a symbolic meaning.[434]

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[430] Tompa 1942, 32, without an illustration. Inv. no. HNM 1/1912/2. Sadly, the vessel can no longer be found in the collection of the Hungarian National Museum. I would here like to thank Ildikó Szathmári for her help.

[431] Found in two inhumation burials of the 436 graves uncovered at Budakalász (Bondár 2009, Pl. 21. 44/1, Pl. 139. 361/1), and one inhumation burial excavated at Balatonlelle-Felső Gamász (Nagy 2010, Abb. 34. 7).

[432] Tomaž 2005, 264.

[433] Tomaž 2005, 264, Figs 4–5.

[434] Tomaž 2005, 264.

Anna Simandiraki-Grimshaw examined the miniature vessels from Petras as part of the "Miniature Vessels in Minoan Crete" project launched in 2006. Her research covers the technical aspects of the production of these vessels, their variability and the archaeological contexts in which they were found.[435]

The possible symbolic meaning and significance of miniature vessels have attracted much scholarly attention and several studies have addressed the function and role of diminutive size vessels.[436] In Hungarian archaeological scholarship, the scaled-down versions of various vessels are generally interpreted as ritual finds or toys. Various aspects of the concept, meaning and significance of "miniaturisation" have more recently received much attention and have been explored in archaeological research,[437] and the prominent role of miniature vessels in funerary rites is becoming exceedingly clear.[438]

Despite the abundant research on the Boleráz period and a wealth of published reports from extensively investigated sites, there are few analogies to the miniature vessels (pots, mugs, beakers, bowls and suspension vessels) found at Pilismarót from other Boleráz sites. This would suggest that miniature, scaled-down vessels were probably uncommon, unusual articles during that period.

The age of the deceased interred in the graves containing miniature vessels could be determined for seven burials. The anthropological data indicate that miniature vessels were deposited in adult graves (two of which were male burials). The evidence from the Pilismarót-Basaharc cemetery thus clearly challenges assumptions that miniature vessels were toys – they were clearly funerary goods associated with adult burials.

Miscellaneous clay artefacts

6. 4. Stamp *(Fig. 14. 20)*

Several studies have been devoted to these relatively infrequent artefacts coming in many shapes and sizes, characterised by a wide range of patterns on their face. There is a general consensus that these small objects were used for a variety of purposes such as body painting, decorating textiles or marking sacred bread, in other words, that their primary function was essentially decorative in nature. The single stamp of the Pilismarót cemetery came to light from Grave 427 *(Fig. 30. 1)*.

A good overview of previous research on stamps can be found in Szilvia Fábián's study alongside a list of then known examples[439] and the publication of a new stamp.[440] More recently, Kalicz has re-published the pieces known from Hungary, Slovakia, Austria, Croatia, Slovenia and Italy, together with a newly-found stamp from Petrivente in County Zala. His catalogue is essentially made up of the stamps from the close of the Middle Copper Age, the so-called proto-Boleráz period, and from the ensuing Boleráz period. He listed thirty-seven stamps from twenty-seven sites[441] as well as a number of other pieces, although without including a drawing of the latter. Several types could be distinguished among the newly-published[442] and already known stamps,[443] whose majority dated to the proto-Boleráz period in Kalicz's view. The stamp from the Pilismarót-Basaharc cemetery can be clearly assigned to the

[435] Simandiraki-Grimshaw 2007.
[436] Rammer 2010; Kohring 2011; Balen–Miočević 2012.
[437] In 2015, one of the issues of *World Archaeology* was devoted to various aspects of miniature vessels and miniaturisation.
[438] Allen 2006; Colin et al. 2014; Nanoglu 2015; Gošić–Gilead 2015.
[439] Fábián 2003.
[440] Balatonkeresztúr (Fábián 2003, Fig. 1).
[441] Kalicz–Horváth 2010, Abb. 4. 1–3, Abb. 9–10; Kalicz 2011, Fig. 1. 1–3, Figs 2–3.
[442] Kalicz–Horváth 2010, Abb. 4. 1–3.
[443] Kalicz–Horváth 2010, Abb. 9, 10; Kalicz 2011, Figs 2–3.

Boleráz group, as can the pieces from Bajč, Vrbove, Piliny, Zwendorf, Znojmo and Nitriansky Hrádok-Vysoky Breh.[444] In his study on the stamps of the Copper Age, Kalicz noted that stamps first appeared during the proto-Boleráz phase/group marking the transition to the Late Copper Age and that their use spanned the entire duration of the Boleráz period. He distinguished two major types: stamps with a rectangular face and stamps with a round one. He pointed out that the use of stamps declined by the time of the classical Baden culture.[445] A conical stamp with a rectangular face bearing a pattern of touching, elongated lozenges has been published from Tura,[446] and two stamps were found during the excavations at Balatonőszöd: a conical piece and a fan-shaped one.[447] In her study on magical devices as expressions of the Transcendent, Horváth too published a list of Central European stamps, principally based on János Makkay's book,[448] which she complemented with the new finds.[449] She interpreted these artefacts as ritual devices, ascribing to them a decorative function (body painting, bread stamping), but she also quoted György Cseplák, according to whom these artefacts may have been used for grinding substances such as pigments, suggested by the traces of use-wear and the remnants of red pigment on their face.[450]

The currently known stamps were either found on settlements or their find context is not known. The single piece from a burial is the stamp from Pilismarót-Basaharc, dating from the Boleráz period. The current evidence suggests that the end of the Boleráz period marked the end of the use of stamps for a long time. Stamps began to be used again in the Iron Age: a broken stamp resembling the one from Pilismarót, allegedly found at Piliny,[451] has been recently published.[452]

Most of the works covering stamps focus on the description of the objects, their ornamental patterns, the traces of use-wear and possible remnants of pigments as well as on their possible function(s). Another line of enquiry was a comparison with the stamps of Greece and Asia Minor. These studies were essentially organised around an overview of the history of research, a typological analysis and an identification of their function.

More recently published studies in the archaeological literature – many of them appearing at roughly the same time – have adopted a broader perspective and a different approach to these artefacts.[453] The main focus is no longer on the classification of ornamental motifs or the distribution of stamps, but

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[444] Kalicz–Horváth 2010, 421.

[445] Kalicz 2011, 203.

[446] MRT 11, Site 22/14, 463, Pl. 12. 1.

[447] Horváth 2006, Fig. 21; Horváth 2008b, Abb. 18; Horváth 2010b, Abb. 17; Horváth 2011, Fig. 59, top; Horváth 2013, Fig. 19. 1–2.

[448] Makkay 1984.

[449] She does not quote Nándor Kalicz's studies.

[450] Horváth 2013, 150, note 64. Her suggestion that the stamps might have been used for grinding pigment (such as ochre) is interesting, although it seems impractical to have used stamps with their elegantly decorated face for grinding. She also asserts that "according to archaeological observations, the use of stamps can be associated with funerary ceremonies and fertility rites" (Horváth 2013, 149), but without citing the archaeological evidence.

[451] István Torma kindly provided the following additional information about this stamp: the stamp was first exhibited at Gyula, as part of the exhibition "The Scythian Age on the Great Plain", and it was described under Cat. no. 194 as an Iron Age stamp by Tibor Kemenczei in the catalogue accompanying the exhibition. Apparently, neither Tibor Kemenczei, nor Júlia Kisfaludi was familiar with János Makkay's book (Makkay 1984). József Hampel had published genuine Scythian stamps from Piliny (Hampel 1876, Abb. 86–96, 98–106), which do not include any Copper Age pieces, and thus its actual provenance from Piliny is dubious. An assortment of finds from various sites were inventoried in the Hungarian National Museum in the 1960s (the stamp was inventoried under inv. no. 61.16.68 together with other artefacts).

[452] Kisfaludi 1997, Abb. 6. 6.

[453] Prijatelj 2007; Skeates 2008; Naumov 2008; Ştefan 2009.

rather on their interpretation and on their demonstrable meaning and how they were used, in part based on the findings of experimental archaeology.

In a study reviewing the most important works on Neolithic stamps during the past sixty years, Agni Prijatelj criticised both the positivist and the diffusionist approach in the study of these of artefacts,[454] demonstrating that most inquiries into the decorative motifs and the distribution of stamps generally ended with conclusions on their being part of a Neolithic package, while adding little to questions of origins and the interaction between communities.[455] Prijatelj's critical and overtly provocative study challenges some basic tenets, which might seem self-evident, but have not been expressly voiced previously. She experimented with impressing patterns with replica stamps on three different substances: unbaked bread (or rather, flatbread), textile and the human skin. She found that motifs stamped on unbaked, unleavened bread would be clearly imprinted, but that the motifs would become less visible after baking owing to the air bubbles appearing in the dough during baking. In the case of textiles, she found that they could be stamped if the textile was placed on a solid flat surface and if the stamp had a level surface, a condition that was rarely met because most stamps either have a pattern in high or low relief. Even more important is whether Neolithic communities knew how to fix dyes on textiles in order to prevent discolouration upon contact with water. Being soft, human skin proved to be suitable for stamping with patterns. The question in this case was on what occasions do people adorn their body with stamped patterns, and how many stamps and how much pigment would be needed? In sum, Prijatelj's experiments indicated that stamps were unlikely to have been used on flat and solid surfaces (such as walls and textiles) and quite likely to have been employed for stamping soft substances.[456] From her examination of the imprints, marking role and symbolism of stamps she concluded that the patterns appearing on walls, fences, textiles or any other surface became personalised expressions of identity if an anthropomorphic or zoomorphic content or some other trait alluding to age, sex or an individual trait was associated with them.[457] The secondary importance of the use of stamps is suggested by the possibility that individual markers were perhaps symbols that played an important role in the social networks between Neolithic settlements.[458]

Robin Skeates discussed sixty stamps from Italy, in particular seventeen stamps from Puglia,[459] examining their role from the perspective of the visual arts. In his view, these artefacts could be regarded as "portable art". These artefacts, variously called stamps, stamp seals, pintaderas or glyptic art, were distributed across a vast territory from South-West Asia to South-East Europe and were current over a long period from the Neolithic to the Copper Age. He notes that previous studies of these objects generally focused on typological classifications and stylistic comparisons, accompanied by speculations on their function for imprinting certain materials (such as textiles, leather, bread, clay) and their possible uses in socio-economic transactions to mark identity and ownership, or in socio-ritual performances to signify and enhance spiritual potency, by their repeated application.[460]

In his overview of the Neolithic stamps from Macedonia, Goce Naumov asserted that the basic function of stamps was decorative. Reviewing the various assumptions regarding their use, he notes that stamps are generally believed to have been used for body painting and then goes on to ask why a

[454] Prijatelj 2007, Tab. 1.
[455] Prijatelj 2007, 239–240.
[456] Prijatelj 2007, 240–242. Anyone who has seen *The Pillow Book* (1996), directed by Peter Greenaway, will recall how calligraphic signs are painted onto the human skin and how much remains of them.
[457] Prijatelj 2007, 243–249.
[458] Prijatelj 2007, 253.
[459] Skeates 2008, 190–191, Figs 1–2.
[460] Skeates 2008, 183. Agni Prijatelj cites Skeates' study, and it is hardly surprising that in knowledge of each other's work, they came to similar conclusions.

separate artefact would have been made for this purpose when tattooing could have been performed more conveniently with other tools. Although pigment remains have been preserved on several Macedonian stamps, these artefacts seem unsuitable for body painting given their small size. He cites other opinions according to which stamps were used for colouring textiles or for imprinting pottery with various patterns. While there is no evidence for the employment of stamps for this purpose in the South-East European Neolithic, stamped pottery fragments, among them a vessel fragment bearing a human figure, have been found at Tel Sabi Ayad in Syria,[461] suggesting that the origins of anthropomorphic stamps lay in that region. The figure stamped on the vessel perhaps represented the owner or was a symbol of a person protected by the gods. The "decorative Neolithic alphabet" eased communication between a family and the community, or between settlements in a broader region.[462] Naumov also examined the types of artefacts on which the patterns borne by stamps occur (such as vessels, figurines, various ritual artefacts). He distinguishes a special group of stamps, namely human and animal stamp figurines with a patterned head or legs bearing incised/engraved motifs that could have been used as stamps.[463] He also explored whether the patterns on the stamps occur on other mediums such as painted walls and reliefs.[464] Clay models of bread loafs bearing stamped patterns and ritual symbols have been found at Çatal Höyük and various Bulgarian sites,[465] and clay bread loaf models were also brought to light in Macedonia.[466] From his meticulous analysis of stamps, Naumov concluded that the function and the ideas conveyed by stamps remain enigmatic and that we shall probably never be able to decipher them. Stamps were distributed over a vast territory and they have been recovered from many different contexts, suggesting that they had been used for various purposes. In some cases, stamps bearing an uncanny resemblance to one another were recovered from similar contexts on sites lying at great distances from each other and we may reasonably assume that they expressed a similar meaning. It would appear that stamps were vested with a symbolic meaning and that Neolithic communities used these visual elements in their communication. Later, these signs became symbols associated with personal identity and assumed a dual function: they played a prominent role in the dynamics of social interaction and mediated the complex symbolism of human cognition.[467]

In addition to the functions mentioned in the above (body painting, imprinting or marking various objects), Eduard Ştefan suggest that the patterns borne by stamps had an anthropomorphic association and were used for imprinting personal identity, especially in the case of stamps with a spiral pattern.[468]

The imprints of the Late Copper Age stamps of the Carpathian Basin do not appear among the ornamental motifs of clay vessels and neither have any other objects preserving their imprint been discovered to date.

It follows from the above and from the findings of experimental archaeology that there was not much sense in using stamps on soft materials such as textiles and on oily surfaces such as the human skin, leaving a wide berth for other interpretations and a search for other functions. There seems to be a growing consensus in archaeological scholarship that stamps were artefacts associated with personhood and that they were personal markers. The endowment of the individual with the right to stamp was not a new phenomenon: the use of stamp seals and cylinder stamps in the "cradle of civilisation" was a

[461] Akkermans–Verhoven 1995, Fig. 13.
[462] Naumov 2008, 186.
[463] Naumov 2008, Fig. 9, 194–196.
[464] Naumov 2008, Fig. 10.
[465] Naumov 2008, Fig. 15.
[466] Naumov 2008, Fig. 16.
[467] Naumov 2008, 201.
[468] Ştefan 2009, 151.

long-established means of marking goods and personal property as well as for conveying and expressing other functions associated with the individual.

It seems to me that the stamp found at Pilismarót can definitely be associated with personhood. The individual interred in Grave 427 was buried *together* with the artefact *(Pl. 40. 3)* which had perhaps been exclusively used by that person for marking goods that had been valuable to the entire community, or for imprinting personal or community goods, or for transferring the symbols expressing the community's cohesion to certain articles or to a symbol of power. Following this person's demise, no other was allowed to use this device. The stamp deposited in the burial was not an artefact used for body painting, for decorating textiles or for imprinting sacred bread, but the device/prestige item (?) of a person authorised to "imprint", which expressed a distinguished status.

6. 5. Clay cones *(Fig. 14. 21–24)*

While these artefacts might appear to be stamps at first sight, this interpretation can be definitely rejected because unlike genuine stamps, the base of these artefacts with which the pattern could have been imprinted is not decorated. A function as loom weights and sinkers occurring abundantly in almost every prehistoric period can also be excluded since they differ from these in that they are unperforated.

The four burials yielding clay cones *(Pl. 35. 11, Pl. 43. 5, Pl. Pl. 45. 2–3, Pl. 48. 18)* lay in the cemetery's south-eastern part *(Fig. 30. 2)* and appear to form two clusters (Graves 451 and 443, and Graves 416 and 442).

There are few analogies to these unusual objects. A comparable clay cone decorated with a herringbone pattern, also assigned to the Boleráz group, has been published from Nyergesújfalu.[469] According to the description, the pyramidal clay artefact has a crescentic top and its sides are decorated with a herringbone pattern.[470]

Němejcová-Pavúková cited a stray find from Kamenin-Várhegy[471] as a parallel to the clay cone fragment from Cervený Hrádok (Feature 7/G);[472] the decoration of the former shares several similarities with the piece from Pilismarót. She did not discuss this artefact type at greater length, but merely noted that they resemble the loom weights and sinkers with a perforation through their upper third known from various prehistoric cultures.[473] She published one-half of a broken clay cone with decorated top from Nitriansky Hrádok,[474] but this piece bears little resemblance to the Pilismarót ones.

A small fragment is known from Bajč-Vlkanovo, recovered from a settlement feature, which was described as a pyramidal figurine decorated with a wolf tooth pattern and interpreted as a ritual artefact. The pieces from Nyergesújfalu and Kamenin-Várhegy were cited as comparable finds.[475]

Similar clay cones painted with bitumen instead of an incised pattern can be quoted from the Early Neolithic in Bulgaria. They were interpreted as some sort of ritual devices by the excavators.[476]

The function and the distribution of these small quotidian artefacts have attracted little attention in research, and neither has their possible use or the chronology of the currently known pieces been

[469] MRT 5, Fig. 41.
[470] Balassa Museum, Esztergom, inv. no. 55.911.1 (Ő 1158). The entry in the accessions register describes it as a fire-dog and specifies is age as dating from the Iron Age, but its findspot is marked as uncertain (H. 11.6 cm, size of base 6.6 × 4 cm).
[471] Němejcová-Pavúková 1974, Abb. 53. 2.
[472] Němejcová-Pavúková 1974, Abb. 26. 3.
[473] Němejcová-Pavúková 1974, 298.
[474] Němejcová-Pavúková 1964, Obr. 25. 10.
[475] Bistaková–Nevizánsky 2015, 435, Pl. 2. 1.
[476] Koukouli et al. 2007, Fig. 23; Ганецовски 2007, Tabl. 17. 1.

studied.[477] The deposition of the five cones in burials undoubtedly reflects their unusualness. In my view, these artefacts were perhaps also material expressions of identity, as indicated by their placement in the grave regardless of their broken condition – whatever their function had been in life, their use came to an end with the demise of the individual possessing the device, suggesting that these clay cones were prestige items. One of the radiocarbon-dated burials (Grave 443) yielded a cone for which we now have a reliable date.

6. 6. Spindle whorls *(Fig. 14. 25)*

Spindle whorls and spools were objects used in spinning and weaving. Although often used as synonyms in some publications, they had a different purpose and thus a precise usage of each term is crucial. Spindle whorls were an accessory of spinning using a spindle, a rod onto which the bundle of fibres was attached from which the yarn was spun. Spindle whorls were used for increasing and maintaining the speed of the spin.[478]

The two spindle whorls from the Pilismarót-Basaharc cemetery were recovered from a single burial (Grave 364; *Pl. 16. 1*), the burial of an adult woman, whose grave goods included also a zoomorphic vessel handle. The grave lay in the cemetery's middle part *(Fig. 30. 4).*

6. 7. Rollers *(Fig. 14. 26–29)*

These small artefacts, typical for the early Baden period, that have been recovered from both settlements and cemeteries over the extensive Baden distribution are generally described as spools.[479] Vertically perforated pieces, i.e. genuine spools, are only known from Nitriansky Hrádok.[480] None of the specimens from Pilismarót-Basaharc are perforated and these cylindrical objects are therefore designated as rollers.

Three different types of rollers were deposited in the graves, with some burials containing several pieces of the same type: six rollers in Grave 401 *(Pl. 29. 1)*, four in Grave 411 *(Pl. 32. 8*) and four in Grave 439 *(Pl. 44. 2)*. The burials containing rollers lay in the cemetery's eastern part, spaced relatively far apart, and forming clusters of two graves (Graves 411 and 401, and Graves 434 and 439, respectively) that lay quite close to one another *(Fig. 30. 3)*. Similar "clusters" could be noted in the distribution of burials containing clay cones *(Fig. 30. 2).*

The few calcined bones from Grave 411 were unsuitable for sexing or for age estimation, while the cremains from Grave 434, yielding a single roller *(Pl. 42. 1)*, came from an adult individual (the other burials did not contain cremains). The grave goods from Grave 434 included also a miniature suspension vessel which, as we have seen above, can be assigned to the cemetery's early period. The other burials yielding rollers had an average assortment of grave goods.

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[477] Tünde Horváth cites the clay cones from Pilismarót, describing them as parts of house models depicting pile dwellings (Horváth 2010b, 100; Horváth 2013, 145). In my view her interpretation of the clay cones and of the similar finds cited as parallels is wholly mistaken because these clay cones differ substantially from the flat, richly adorned house or altar models. Additionally, the pieces from Pilismatót were recovered from burials, which would belie an interpretation as a house model.

[478] István Torma kindly called my attention to how spinning yarn with a spindle, for which spindle whorls were a necessary accessory, was still practiced in Moldavia up to the twentieth century. I am most grateful to him for clarifying this point. For archaeological contexts, see Capitani–Leuzinger 1998, Taf. 3. 10 (Arbon-Bleiche 3) and Kültepe 2011, Cat. nos 182–183 (Kültepe).

[479] I have already noted that the term "spool" is incorrect because the currently known spool-like artefacts are not perforated and were not devices around which yarn was wound, but are solid rollers of varying thickness.

[480] Němejcová-Pavúková 1964, Obr. 25. 5.

These cylindrical artefacts with a slender or chunkier body ending in two flat discs were current from the Early Copper Age to the Late Bronze Age over a vast territory. However, few have been recovered from well-documented contexts from excavated sites.

I have already discussed these unusual little artefacts in connection with wagon models,[481] in my assessment of the similar finds from the Budakalász cemetery[482] and in a study specifically treating these artefacts in which I reviewed the known pieces.[483] Most rollers came to light on settlements. They are known from the period preceding the Baden complex, from the Funnel Beaker culture of Poland.[484] Comparable pieces have been reported from Bulgaria,[485] Romania,[486] former Yugoslavia,[487] Austria,[488] Slovakia,[489] Bohemia[490] and various Hungarian sites[491] as well as from the Aegean, Anatolia and the Near East.[492] In my previous study, I reviewed the various suggestions on their possible uses and the evidence for their possible functions, and I shall only recapitulate the main points here.

Based on my examination of the wagon model from Szigetszentmárton, I suggested that some rollers may have been structural elements of wagon models, symbolising the combination of the axle and the wheels, a possibility supported by some of the known metal wagon models.[493] Another possible function is indicated by the similar artefacts used as gable ornaments on house-shaped urns from Anatolia, and by the decorative mosaics created from painted clay cones driven into the walls of buildings in the ancient Near East (*Stiftmosaik*).[494] Another possible function is illustrated by a clay figurine found at Gilat (Jerusalem), dating from 4500–3800 BC, portraying a naked woman sitting on a stool, holding a roller-like object under her left arm and balancing a churn-like vessel on her head. The portrayal no doubt had some symbolic meaning.[495]

Tünde Horváth explored the possible function of rollers in several studies. She suggested that the stone and clay rollers were used in salt production by evaporation of saline water and as pestles for

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[481] Bondár 2004, 15–16; Bondár 2006, 233–234; Bondár 2012a, 44–45.

[482] Bondár 2009a, 286–288. Grave 403 yielded one broken and four intact rollers (Pl. 156. 403/3–403/7).

[483] Bondár 2013, Fig. 1–2.

[484] Przybil 2015, Fig. 8. 11.

[485] Slatino (Cochadziev 1986, Abb. 2), from the Early Copper Age.

[486] Cilnik (Roman 1977, Pl. 52. 27; Roman 1977a, Taf. 39. 10); Bocşa Montană (Roman 1977, Pl. 52. 30); Dubova-Cuina-Turcului (Roman 1977, Pl. 52. 36), all finds of the Coţofeni culture.

[487] Brza Vrba (Medović 1976, Taf. 5. 19, Taf. 11. 14; Medović 1976a, Taf. VI. 5), finds of the Cernavoda culture; Sarvaš (Balen 2006, Tab. 58. 220–222), from the Copper Age.

[488] Mödling-Jennyberg (Ruttkay 1995, Abb. 16. 8); Pleissing (Ruttkay 2000, Taf. 6. 66); Schwechat (Ruttkay 1971, Taf. A. 11), all finds of the Boleráz group.

[489] Malá nad Hronom (Němejcová-Pavúková 1974, Abb. 54. 22–23); Nevidzany (Němejcová-Pavúková 1974, Abb. 42. 22); Žlkovce (Němejcová-Pavúková 1984, Obr. 22. 15), Bratislava (Baxá-Kaminská 1984, Tab. 2. 2); Mužla (Kuzma 1995, Obr. 80. 2); Nizný Žipov (Dano et al. 1994, Obr. 20. 3), Šarišské Michaľany (Horváthová 2010, Tab. LI. 12–13, 15–16, Tab. LXVII. 9, Tab. LXXII. 2–3), Hronovce (Pažinová 2013, Obr. 9. 16), Bajč-Vlkanovo (Bistáková–Nevizánsky 2015, Pl. 3. 5), all finds of the Boleráz group and the Baden culture.

[490] Cimburk (Zápotocký 2000, Taf. 4. 20).

[491] Pilismarót-Basaharc, Nagykanizsa-Billa (P. Barna 2003, Fig. 23. 13), Nagyút-Göbölyjárás (Bondár 2010, Fig. 6. 3), Balatonőszöd-Temetői-dűlő (Horváth 2006, 105, note 38, Fig. 12), all finds of the Boleráz group and the Baden culture.

[492] Rahmstorf 2004 (listing the rollers known at the time together with the relevant literature); Rahmstorf 2006, 73–81; Rahmstorf 2009; Rahmstorf 2010.

[493] Bondár 2004, 15–16, Fig. 1. 3b.

[494] Bondár 2009a, 287; Bondár 2013, Fig. 4.

[495] Bondár 2009a, 287 (Land der Bibel 1998, Cat. no. 19); Bondár 2013, Fig. 5.

crushing salt based on finds from Germany and their reconstruction.[496] More recently,[497] she proposed six possible functions for these artefacts. She quotes evidence that they may have been thread spools used in spinning and weaving,[498] or stands for vessels during cooking or pottery firing,[499] or for separating vessels to be fired.[500] In her view, these cylindrical artefacts may also have been used as braid clamps,[501] or as back-rests and head-rests.[502]

In his discussion of the distribution of various commodities and innovations of the Early Bronze Age (*depas amphikypellon*, Syrian flasks, decorated bone cylinders, cylinder seals, weights, spools, scales, etc.), Lorenz Rahmstorf pointed out that rollers represented one of the many new innovations and that one particular variant may have functioned as scale weights, reflecting an advanced mathematical knowledge.[503] Pieces made from marble and *Spondylus* were probably prestige items. Discussing their other possible functions, he raised the possibility that they had been used as pestles or rubbing stones, or that they had functioned as polishers used by metalsmiths, or as the head-rest of Cycladic figurines.[504] In his view, the chunky rollers may have functioned as loom weights.[505]

As we can see, several functions have been ascribed to this seemingly insignificant artefact. Still, the low number of the currently known rollers indicated that this ceramic artefact was an uncommon object.[506] Their deposition in burials at Pilismarót and Budakalász even in a broken condition no doubt had some special reason or meaning. The occurrence of rollers in association with other uncommon finds such as wagon models, breast pots, Bratislava type bowls and churn-shaped vessels on Late Copper sites belies an everyday, utilitarian use and rather suggests an artefact vested with some special significance,[507] which could only be possessed by a select few. It would seem, then, that these artefacts too embodied some form of prestige.

Zoomorphic finds

Zoomorphic depictions on vessels are represented by a vessel handle terminating in an animal head from Grave 364 *(Pl. 16. 2)*, which was described as a sheep head by Torma,[508] and the cemetery's single clay spoon from Grave 387 *(Pl. 20. 2)*, whose handle he interpreted as a bird depiction.[509]

Animal figurines were recovered from Graves 359, 413, 414, 418 and 451 *(Pl. 12. 2, Pl. 34. 1, 3, Pl. 36. 6, Pl. 49. 1, Pl. 51. 13)*. The wagon model from Grave 445 *(Pl. 47. 9)* and the clay drinking horns from Graves 359 and 405 *(Pl. 12. 4, Pl. 28. 5)* can be indirectly associated with animals.

[496] Horváth 2006, 105, note 38, 106, Fig. 12.
[497] Horváth 2008; Horváth 2011; Horváth 2012.
[498] Horváth 2008, Fig. 5.
[499] Horváth 2008, Fig. 4.
[500] Horváth 2008, 158.
[501] Horváth 2008, Fig. 6.
[502] Horváth 2008, Fig. 7.
[503] Rahmstorf 2006, 76; Rahmstorf 2010, 690.
[504] Rahmstorf 2006, 74.
[505] Rahmstorf 2004, Fig. 18.
[506] Bondár 2009a, 288.
[507] Bondár 2013, 611.
[508] Torma 1973, 494.
[509] Torma 1973, 494.

6. 8. Clay spoon

Grave 387, the burial containing the single clay spoon *(Pl. 20. 2)*, lay in the cemetery's middle part *(Fig. 30. 5)*. The grave inventory included also a miniature vessel and a stone axe as well as vessel fragments.

This simple artefact is a rare find on Late Copper Age sites. János Banner listed fragments of clay spoons from Kánya,[510] Ózd-Kőaljatető[511] and Palotabozsok.[512] A spoon fragment with a slightly curved handle resembling the piece from Pilismarót has been recently published from the hilltop settlement at Veľká Lomnica-Burbrich/Kakaslomnic [513] and Balatonőszöd.[514] These plain spoons with a long handle, modelled from a single lump of clay, differ from the decorated ladles with two perforations on the handle brought to light in the Alsónémedi[515] and Budakalász cemeteries.[516] Clay spoons have so far only been found in cemeteries.

Torma described this artefact as terminating in a bird head. His interpretation, the single occurrence of this artefact in the cemetery and the other uncommon artefacts found in association with it support the singular role of clay spoons and its significance, which remains elusive to us.

6. 9. Rhytons

The clay rhytons imitating animal horns are in themselves rare and exceptional finds. Their uniqueness is confirmed by the finds accompanying them. The broken rhyton from Grave 359 *(Pl. 12. 4)* lay on top of the grave's stone packing, and the burial itself yielded also an animal figurine. Only a small fragment of the other rhyton was deposited in Grave 405 *(Pl. 28. 5)*. The special status of the burial is indicated by the deposition of the fragment of a miniature vessel. Grave 359 was the burial of a young adult; Grave 405 did not contain any cremains. The burials containing rhytons lay in two different parts of the cemetery: Grave 359 in the cemetery's western part, while Grave 405 in its eastern part, both roughly in the middle of their respective areas. The two burials lay some 30 m apart *(Fig. 31. 2)*.

Rhytons made from cattle or buffalo horn were genuine utilitarian objects, used for a practical purpose. The drinking horn was one of Dionysus' attributes in later periods, and the very name of this object evokes the Persian, Scythian and Hunnic drinking horns of gold, the Avar drinking vessels, and the famed horn of Lehel, one of the tribal leaders of the ancient Hungarians.

Drinking horns (rhytons) and drinking bowls were two very different objects. Drinking horns were horn-shaped liquid containers as eloquently expressed by their English and German name (*Trinkhorn*). One group of drinking horns terminated in animal heads. The form of drinking bowls can be less easily categorised: wide-mouthed scooping vessels fitted with a handle and the well-known bull-headed cup of the Nagyszentmiklós Treasure are both often denoted as drinking bowls.

I found a good counterpart to the clay rhyton from Pilismarót among the finds from the eponymous site of the Late Neolithic Gumelniţa culture. Vladimir Dumitrescu published two drinking horns, each having a different form and ornamentation: one is long and slender with a small curved handle in the middle of the shorter side, an excellent evocation of the shape of cattle horns. It is decorated with white

[510] Banner 1956, Taf. XXI. 14.
[511] Banner 1956, Taf. LXXII. 10–11.
[512] Banner 1956, Taf. CIX. 12.
[513] Novotná–Soják 2013, Abb. 106. 1–3, 8.
[514] Horváth 2011, Fig. 57, second row from bottom, spoon handle (an exact counterpart of the handle of the Pilismarót spoon). The lack of numbering makes it impossible to cite the artefact in the customary manner.
[515] Banner 1956, Taf. XLV. 7, Taf. XLVI. 5.
[516] Bondár 2009a, 274–275.

painted bands running parallel to the vessel mouth on a red base.[517] The other clay horn is bulkier, with a wider mouth, and it was also provided with a handle. Instead of a painted decoration, this clay rhyton bears a frieze of incised chevrons combined with punctates on the vessel's upper and lower half. Its end is flat, the handle was assembled from several pieces.[518]

A fragmentary clay rhyton of the Bodrogkeresztúr culture was found at the Császártöltés 10 site in County Bács-Kiskun.[519] The drinking horn is described as a tube-like artefact with a curve towards its tapering end, decorated with bundles of combed-in lines running parallel with and perpendicular to the mouth.[520] Its mouth diameter is *ca*. 12 cm, the length of the surviving part is 24–28 cm. The finds collected from the extensive, ploughed-up site during its survey included also a milk jug.[521]

The lower part of a rhyton decorated with a zig-zag pattern was brought to light at Balatonőszöd,[522] to which Tünde Horváth cited parallels from Pilismarót[523] and Pécsbagota.[524] However, in my view, these finds do not compare well with the Balatonőszöd rhyton, which is more closely matched by the flattish drinking bowl resembling a slipper toe that was described as a clay shoe, as the fragment of an anthropomorphic figurine from the Boleráz settlement investigated Cimburk.[525] Horváth likened the Balatonőszöd fragment to *Triton* shells;[526] in her view, "the Pilismarót fragment ... imitates the form of *Dentalium badense*, rather than *Triton* conch trumpets."[527]

Clay drinking horns are known from later periods too, for example from the Late Bronze Age;[528] one particularly fine example crafted from bronze comes from northern Poland.[529] The few cited examples attest to the use of drinking horns over a long period during prehistory. Animal horns were vested with a practical function as drinking vessels, whose imitations were made from clay, bronze, ivory, silver, gold, wood and leather by skilled craftsmen. Although rhytons were essentially vessels, their use can be associated with the special secondary exploitation of animals – instead of slaughtering the animal solely for its horn, a clay copy was made of it that was eventually deposited in a burial. The clay drinking horn was adorned with the same decorative motifs as the ones used for embellishing vessels, which would again confirm that decorative motifs were used for conveying a community's culturally significant concepts.

The observations made on certain sites of the Baden complex have led to a generally accepted view that cattle were ritually slaughtered in masses, which was in turn interpreted as an indication of this species' worthlessness and expendability because cattle herds could be reproduced in sufficient numbers.

There is no sign that cattle were slaughtered in the Pilismarót cemetery where, instead, a clay imitation of a cattle horn was placed in the grave. The question naturally arises, what were genuine cattle horns used for?[530] Were they used as drinking vessels during the community's ceremonies and on festive

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[517] Dumitrescu 1974, Fig. 83.
[518] Dumitrescu 1974, Fig. 84. Unfortunately, its dimensions are not specified.
[519] Knipl 2009, Figs 2–4.
[520] Knipl 2009, 98.
[521] Knipl 2009, Fig. 5.
[522] Horváth 2006, Fig. 20. 2; Horváth 2008a, Abb. 18; Horváth 2011, 43; Horváth 2011a, 50; Horváth 2014, 621, on the DVD.
[523] Torma 1973, Abb. 5. 1.
[524] Kalicz 2001, Abb. 4. From a site assigned to the proto-Boleráz horizon.
[525] Zápotocký 2000, Taf. 19. 1; Zápotocký–Zápotocká 2001, Abb. 13. 13; Zápotocký 2013, Fig. 27. 3.
[526] Horváth 2006, 119.
[527] Horváth 2014, 621, on the DVD.
[528] Rábacsécsény, Patice, Kecskéd, Papkeszi, Szakály, Kölesd and Szeremle (Reich 1997, Abb. 2. Liste 1), Bonyhád (Szabó–Hajdu 2011, Fig. 1).
[529] Gedł 1996, Abb. 1, Abb. 8, Abb. 9, Abb. 11.
[530] Erika Gál identified a cattle horn-core fragment in Grave 416.

occasions, did every distinguished person have a rhyton that was attached to a belt or the costume, or was this unimaginable because of a prohibition against mutilating cattle skulls? The bull cult of prehistory had a millennium-long tradition, one spectacular expression of which was the practice of hanging bull heads on houses. It is possible that this tradition survived into the Baden culture, which would explain why the drinking horn was made from clay and decorated with the motifs used for adorning vessels. We shall probably never know.[531]

6. 10. Animal figurines *(Fig. 15, Pl. 55)*

While several types of zoomorphic depictions were current in the Late Copper Age, very few are actually known from the Baden complex. Although I have discussed animal depictions elsewhere,[532] several new dimensions arose in relation to the Pilismarót depictions, which shall be discussed in the following.

The currently known free-standing animal figurines are small, strongly stylised statuettes modelled from clay coils that are unsuitable for a species determination. Banner published four "animal figurines", all stray finds, from Ózd-Kőaljatető.[533] He was uncertain regarding the species determination of a fifth fragment,[534] which he regarded more of a human depiction. Banner contended that the recognisable species portrayed by the small figurines modelled from clay coils were dogs and noted that although the small figurines recalled Bronze Age statuettes, the excavation on the site yielded solely the finds of the Baden culture and thus the finds collected earlier can also be assigned to that period.[535] He published a broken animal figurine from Kánya,[536] which was identified as a pig by specialists.[537]

The animal figurines published by József Korek from Salgótarján-Pécskő resembled the ones from Ózd,[538] and they were similarly stray finds collected prior to his excavation at the site. His dating of the figurines followed the same logic as Banner's cultural attribution of the Ózd figurines: he assumed that they came from the Baden occupation.[539] Korek quoted zoologists who thought to have recognised sheep and dog in the animal figurines from Ózd and Salgótarján.

According to Pál Patay, the six animal figurines from Piliny,[540] allegedly found earlier on the site, which were acquired by Jenő Nyári for his collection and then reached the Hungarian National Museum, could have originated from the Early Bronze Age occupation layers of the site, but he nonetheless assigned them to the Late Copper Age, to the late phase of the Baden culture, following the same reasoning as in the case of the figurines from Ózd-Kőaljatető.[541] Patay did not discuss the species possibly portrayed by the figurines.

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[531] The assessment of larger animal bone samples from extensive settlements will perhaps direct the attention of archaeozoologists to this problem, of the proportion of cattle, of whether there are any horns detached from the horn-cores. I am grateful to Erika Gál for her useful comments and help regarding horns.

[532] Bondár 2012a, 48–56.

[533] Banner 1956, Taf. LXVIII. 3–6.

[534] Banner 1956, Taf. LXVIII. 13.

[535] Banner 1956, 97.

[536] Banner 1956, Taf. XXI. 15.

[537] Korek 1983, 130.

[538] Korek 1968, 57, Taf. XII. 4, Taf. XIII. 1–7.

[539] Korek 1983, 130.

[540] Patay 1999, 53, Fig. 7.

[541] Patay 1999, 53. Pál Patay mentions 123 animal figurines from Piliny, which had been collected by Albert Nyáry. Forty-five figurines from Jenő Nyáry's collection reached the Hungarian National Museum (inv. no. 44/1898.109–153). An additional twenty pieces were taken to the museum later as part of his collection (inv. no. 44/1898.1845–1864), which were inventoried as unprovenanced pieces.

Tünde Horváth addressed various issues of animal depictions in several studies.[542] In her article on Late Copper Age animal burials, she reviewed the archaeological evidence according to species and quoted sheep figurines from Pilismarót-Basaharc, Salgótarján-Pécskő and Veľká Lomnica/Kakaslomnic[543] as well as what she interpreted as a pig figurine from Grave 364[544] and as a dog figurine from Grave 359 of the Pilismarót cemetery.[545]

Highly stylised animal figurines closely resembling the ones from Ózd have been recently published from Stránska-Mogyoróska by Gabriel Nevizánsky,[546] who briefly reviewed the Late Copper Age animal depictions known from Slovakia. He listed zoomorphic finds from eleven sites,[547] which he assigned to the category of ritual artefacts together with human figurines, breast pots, urns modelled on the human body, masks and wagon models.[548]

Klára Kővári too discussed the currently known animal figurines, citing free-standing examples from Moravia (Hlinsko, Olomouc), Austria (Mödling and Zerndorf)[549] and Slovakia (Veľká Lomnic/Kakaslomnic),[550] the latter since published also in the site report of the hilltop settlement.[551] She also mentions a small animal head from Balatonlelle-Országúti-dűlő that has not been published yet.[552]

Nine animal figurines were found at Lieskovec-Hrádok in Slovakia.[553] The figurines were made using the coil technique; all are highly stylised portrayals, making a species determination near impossible. While the nine figurines can be securely dated because they come from the settlement's Late Copper Age occupation level, they were all unstratified finds without a known archaeological context.[554]

The corpus of zoomorphic finds is enriched by the additional free-standing figurines mentioned in the chapter covering animal depictions in Martin Furholt's monograph: he cites examples from Zelená Horá, Obrova, Laškov, Ohrozim, Bílovice, Vážany, Zvířátko, Jevišovice C1, Brno-Líšen, Smižany and Chloumek. Furholt assigned the figurines to two main categories: pieces without a realistically modelled head and ones with a head.[555]

Another type of animal depiction can be associated with wagon models, usually taking the form of animal figures applied to the wagon box,[556] or of free-standing animals yoked to the wagon, from which it is obvious that the animals had been used for traction.[557]

Another category is represented by animal depictions attached to vessels. The Radošina site yielded an animal head fragment described as coming from a "zoomorphic vessel".[558] The animal head, believed

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[542] Horváth 2006a; Horváth 2010b; Horváth 2013.
[543] Horváth 2006a, 126.
[544] Horváth 2006a, 128. It must here be noted that according to István Torma, the figurine from Grave 364 depicted sheep. Its identification as a pig figurine is probably Tünde Horváth's personal opinion, unconfirmed by an archaeozoologist.
[545] Horváth 2006a, 129.
[546] Nevizánsky 2009, Tab. 1. 1–5.
[547] Nevizánsky 2009, Abb. 1.
[548] Nevizánsky 2009, 33.
[549] Kővári 2010, 393, with the earlier literature.
[550] Kővári 2010, 394.
[551] Novotná–Soják 2013, 129–141, Abb. 100–105.
[552] Kővári 2010, 394.
[553] Malček 2010, Tab. 1–2; Malček 2013, Obr. 52–53.
[554] Malček 2013, 126.
[555] Furholt 2009, 124–127, Abb. 81–82.
[556] Radošina, Boglárlelle, Moha, Kaposvár (Bondár 2012a, 46), of which the animal pair, portraying a species without horns, perhaps resembling sheep, has only survived on the Radošina protome. In the publication, the animals are identified as dogs, rams or bears (Němejcová-Pavúková–Bárta 1977, 443).
[557] Bondár 2012a, 48–55.
[558] Němejcová-Pavúková–Bárta 1977, 442, Abb. 6.

to have broken off a vessel that cannot be reconstructed, bears little resemblance to the wagon model protomes. Two animal head fragments were brought to light at Jevišovice C, which had similarly been attached to vessels.[559]

An animal head fragment resembling the ones on the Boglárlelle wagon model has been published from Balatonőszöd. In Horváth's interpretation, the animal head was a protome, either from a miniature wagon or from an amphora adorned with animal heads.[560] However, genuine animal head protomes have only survived on the Radošina wagon, but these have little in common with the piece from Balatonőszöd, and it therefore remains uncertain whether the Balatonőszöd fragment had once adorned a clay wagon or an amphora – the latter seems more likely to me because both protomes and animal heads applied to vessels have been found at Radošina.

In her study on animal depictions, Klára Kővári reviewed the animal heads that broke off Late Copper Age vessels. She quotes three pieces from Moravia, two animal heads perhaps depicting sheep from Jevišovice and Opava, and a goat head from Vysočany.[561] She mentions a stylised animal head on a vessel rim discovered at Abony,[562] This depiction, a highly abstracted, triangular animal head, is a new element in zoomorphic elements applied to vessels, which, judging from the archaeological record, appears on sites lying far from one another. The animal head on the Abony vessel was created by pinching the vessel rim into a triangular shape in one spot and adding two lines denoting the eyes. An amphora fragment with a triangular animal head applied to the belly is known from Balatonőszöd.[563] A comparable vessel fragment adorned with a triangular animal head has come to light in France at the Chalain 3 site, assigned to the Horgen culture and dated around 3200 BC,[564] which has been interpreted as a ritualised portrayal of how animal power was harnessed for traction, as embodied by the stylised animal depictions from the westerly regions of Switzerland and the Jura Mountains, which remained current for roughly a century.[565]

One of the perhaps loveliest examples of animal figures applied to vessels is the bowl decorated with an elegant design in its interior and six evenly spaced animal figures set on the rim from Žlkovce (Zsalkóc, Zsúk).[566] A close-up photo of one figure appears in the publication.[567] The small animal figure is rather clumsily modelled, appearing to be almost lifeless. Its head is disproportionately large, its long legs dangle down the side of the bowl, and its eyes appear to be closed. Its species can barely be determined. Viera Němejcová-Pavúková regarded the figures as horse depictions. Although remains of this species are rarely found in Baden contexts. horse bones were recovered during the excavation of the Baden settlement at Komjatice and from Features 55a and 55b/80 at Žlkovce, which makes this interpretation plausible.[568]

Vessels modelled in the shape of animals represent yet another category in the archaeological corpus of zoomorphic finds. Several examples are known from earlier periods, with most coming from various sites in the extensive Lengyel distribution. The many different bird-shaped askoi and rattles of the Bronze Age can similarly be assigned here.

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[559] Medunová-Benešová 1984, Taf. 137. 1, Taf. 139. 1.
[560] Horváth 2010a, 19, Abb. 7. 1.
[561] Kővári 2010, 394, Fig. 10.
[562] Kővári 2010, 394. Originally published in the site's excavation report: Fábián et al. 2008, Fig. 3.
[563] Horváth 2010, Fig. 4. 4.
[564] Pétrequin et al. 2006, Fig. 17.
[565] Pétrequin et al. 2006, 103.
[566] Němejcová-Pavúková 1984, Obr. 16. 3, Obr. 25. 1–2.
[567] Němejcová-Pavúková 1984, Obr. 25. 3.
[568] Němejcová-Pavúková 1984, 145.

A single zoomorphic vessel is known from the Late Copper Age: an exceptionally beautiful amphora adorned with a cow head,[569] which according to Klára Kővári can be associated with the cult of the Mother Goddess.[570] The realistically modelled head has finely rendered eyes, muzzle, mouth and inward curving horns. A finger-impressed triple cordon encircles the neck. Both sides of the upper third of the vessel body are decorated with incised zig-zag lines terminating under the neck and at the rear, which are plain. The potter applied a tiny tail to the rear end. The vessel's opening with a short rim is set in the middle of the back.

The above brief overview of Late Copper Age animal depictions indicates that the clay figurines whose head has survived are generally interpreted as portraying sheep,[571] goat,[572] dog[573] or pig.[574] The corpus of animal figurines includes also sheep with twisted horns.[575] The figure of a bear was one suggestion for the animal species represented by the Radošina protome, while the figure of horses seems likely on the Żlkovce bowl.

Given the prominence of the cattle cult in the Baden complex and its wide range of manifestations (interment of humans and animals in the same grave, interment of animals in cemeteries, dumping of slaughtered animals in pits and wells, interment of animals in anatomical order in pits), one might expect that cattle would also be translated into clay. Curiously enough, no cattle figurines have yet been found – this species is represented by a single zoomorphic vessel from Vác.[576] Clay drinking horns are the single other finds that can be linked to cattle, at present only known from the Pilismarót cemetery.

The free-standing animal figurines from Pilismarót represent a new genre in the Copper Age zoomorphic depictions: stocky, large-sized statuettes that more or less resemble their genuine live counterparts.

The figurines from the cemetery were first described in István Torma's preliminary report[577] and in the catalogues accompanying the exhibition of Neolithic and Copper Age art from Hungary shown in Vienna and Munich.[578] He tentatively identified the fragmentary figurine from Grave 359 *(Pl. 12. 2)*, whose two forelegs, shoulder, the left hind leg and the left ear are missing, as a calf. The figurine from Grave 413 *(Pl. 54. 1)*, found broken in two *(Pl. 34. 1)* and lacking all four of its legs. was interpreted as the depiction of a lamb, with the rough surface of its back perhaps an indication of the young animal's wool. The figurine from Grave 414 *(Pl. 34. 3*) was similarly broken in several pieces and lacked a part of the body and its tail *(Pl. 54. 2)*. Torma pointed out the remarkable resemblance between the two latter pieces and suggested that both had perhaps been made by the same hand. The long legs were possibly an indication of a young animal. A fragment of the shoulder and of one of the hind legs of an animal figurine were placed in Grave 418 *(Pl. 36. 6*). The position of the hind leg suggested to Torma that the figurine portrayed the animal resting on its hind legs in a half-lying posture.[579] Several fragments of an

[569] Kővári 2010, Figs 3–7

[570] Kővári 2010, 397. In my view, the vessel was perhaps used during initiation rites and rituals celebrating rebirth, a ceremony of the type still practiced in India in the 19th century. The initiate was led into a cow shaped golden receptacle and after re-emerging from the receptacle, the initiate was regarded as having been reborn. The cow was one epiphany of the Great Goddess, with the cow symbolizing the womb-shaped receptacle, an expression of mythical rebirth (Eliade 1999, 111–112).

[571] Salgótarján, Pilismarót, Veľká Lomnicá, Jevišovice, Pilismarót.

[572] Vysočany.

[573] Ózd, Salgótarján, Pilismarót.

[574] Kánya, Pilismarót.

[575] Chloumek.

[576] Kővári 2010, Figs 3–7.

[577] Torma 1972.

[578] Torma 1972; Torma 1973a.

[579] The reconstruction drawing was made by Magdolna Éber.

animal figurine were found in the area between Graves 416 and 418 *(Pl. 51. 13)*, which lacked half of its right hind leg and the tip of its tail *(Pl 54. 3–4)*, while its right ear was damaged during the excavation. This is the best-preserved figurine, which also portrays a young lamb. One important observation made by Torma was that all the body fragments have a hollow with a diameter of 0.5–07 mm – which could no longer be seen on the refitted and restored figurines – the imprint of a rod. The impression of the rod survived by the right eye of the figurine from Grave 414 and on the neck of the figurine found in the area between Graves 416 and 418. It seems likely that the rod had served as the core around which the figurines had been modelled.[580]

According to the field diaries, the animal figurines from the graves had all lain broken by the outer edge of the stone packing covering the burial (Grave 359: western edge, Grave 413: eastern edge, Grave 414: western edge, Grave 451: south-western edge), the single exception being the figurine from Grave 418, which "lay among the upper stone in the middle of the stone packing". This would suggest that the already broken and fragmented animal figurines had been deposited by the grave *after* the interment of the cremains and the construction of the stone packing. In Torma's view, the animal figurines were substitutes for the animals sacrificed in honour of the deceased.[581]

The animal figurines from Pilismarót *(Pl. 55, Fig. 15)* are unusually large and stocky statuettes. Their length ranges between 11.7 cm *(Pl. 49. 1)* and 22.5 cm *(Pl. 34. 3*), their height between 4.6 cm *(Pl. 34. 1)* and 10.6 cm *(Pl. 51. 13*), while their body thickness between 3 cm *(Pl. 34. 3*) and 4.6 cm *(Pl. 12. 2)*.

The clay animal figurines were not creatures yoked to wagon models, nor had they been applied to wagon models. Neither were they hastily modelled from clay coils. They are carefully sculpted, scaled-down version of genuine animals. Some are realistically rendered, while others are more abstracted, whose species eludes us. The sheep figurines from Graves 413 and 414 portray small-bodied young lambs with pointed ears *(Pl. 61. 2)*. The figurine found in the area between Graves 416 and 418 *(Pl. 51. 13)* was modelled on fat-tailed sheep, a species bred principally for its thick wool *(Pl. 61. 1, 3)*. While the other figurines from Pilismarót apparently portray existing creatures, perhaps sheep, goat or dog, none actually reproduce the typical traits of the depicted species. It is quite evident that the well recognisable lamb figurines and the other statuettes were made by different hands, except for the pieces recovered from Graves 413 and 414, which, as Torma had already pointed out, were modelled by the same hand. Unfortunately, the animal heads have not been preserved intact – all are fragmentary – and therefore their present form was essentially determined by the conservators' fantasy. If the restored figurines are regarded as accurate, we may contend that with the exception of the unstratified piece, the makers of the other figurines either had no affinity for, or were unskilled in, working with clay, or that they were not familiar with the creatures they tried to reproduce and depict. We could hypothesise that the purpose in creating the figurines was not a realistic portrayal, but the creation of a schematised quadruped that could be deposited in the burial or on the grave instead of a live creature, the implication being that the animals portrayed by the figurines were valued by the community, which was reluctant to slaughter them. It seems likely that there were few of these creatures around at the time and that the real animals were not a usual daily sight. It is also possible that the potter sculpting the figurines had reproduced the clay likeness of the creatures from memory. Although we know of a multitude of imaginary creatures from later mythologies (such as dragons, griffins, sphinxes and the like), it seems to me that the Pilismarót figurines were not the products of a fertile imagination exactly because of their modelling and their portrayal of recognisable species.

The distribution of burials yielding zoomorphic finds *(Fig. 31)* reveals that one burial (Grave 359) lay in the cemetery's western part and five burials in its eastern half (Graves 364, 418, 413, 414, 451).

[580] Torma 1972, 24.
[581] Torma 1972, 26.

Including also the unstratified figurine from the area between Graves 416 and 418 indicates a clear concentration of these burials in the cemetery's eastern half. Adding the burials containing animal bones (*Fig. 32)*, the picture becomes more nuanced: burials with animal bones too were more frequent in the cemetery's eastern part (Graves 409, 403, 404, 418, 416, 434, 439), although a cluster can also be noted in the middle part (Graves 363, 422, 387, 399) and in the western part (Graves 359, 382, 429). Graves 359 and 418 contained animal bones in addition to the animal figurines: a pig bone was recovered from Grave 359 and a cattle bone from Grave 418.

In her assessment of the animal bones, Erika Gál identified two horse bones from Grave 434 (see pp. 367–379). The few animal bones found in the graves came from pig, cattle, dog, sheep/goat, horse, wild boar and red deer, and mussels and shells were also found in some burials.[582]

6. 11. Wagon model

The rectangular clay object from Grave 445 *(Pl. 47. 9, Pl. 56, Fig. 16)* is consistent with the series of Boleráz wagon models such as the ones found at Boglárlelle,[583] Mödling,[584] Plessing,[585] Pezinok[586] and Chrovátsky grob,[587] even though it lacks the prominent axle so typical for the other wagon models of the Late Copper Age such as the ones from Balatonberény[588] and Moha.[589] I have discussed clay vehicle models in detail elsewhere, and thus the interested reader is referred to these studies.[590]

Lithics

The cemetery's 110 graves yielded four stone axes and seven chipped stone implements, which were analysed in detail by Katalin T. Biró (see pp. 355–366). Here, I shall merely cover their archaeological context.

6. 12. Stone axes

Three burials yielded intact or broken stone axes (Graves 336, 340, 387; *Pl. 1. 4, 7, Pl. 4. 2, Pl. 20. 4*), with one burial (Grave 336) containing two axes. The axes are of the shaft-hole, shoe-last-shaped type with a length ranging between 7.5 and 9 cm.

In contrast to the Neolithic, when the deposition of stone axes in burials was a much more frequent practice and had a greater significance, stone axes are not typically part of Late Copper Age grave inventories. However, the reverence of their assumed magical and apotropaic powers survived into later periods and axes were placed in the graves of some Baden burial grounds too.

In her assessment of the Balatonlelle-Felső-Gamász cemetery, Borbála Nagy briefly discussed the stone axes found among the grave goods,[591] noting that shaft-hole axes were deposited in both cremation

[582] I am grateful to Pál Sümegi for the species determination.
[583] Bondár 2012a, Fig. 8.2.
[584] Bondár 2012, Fig. 10. 1.
[585] Bondár 2012a, Fig. 10. 2.
[586] Bondár 2012a, Fig. 16. 2–3.
[587] Bondár 2012a, Fig. 16. 1.
[588] Bondár 2012a, Fig. 11.
[589] Bondár 2012a, Fig. 12.
[590] Bondár 1990, Abb. 7. 3; Bondár 1992, 115, Fig. 7. 3; Bondár 2004, Fig, 2. 3; Bondár 2006, 229. Fig. 5. 3, Bondár 2012a, Fig. 8. 3.
[591] Nagy 2010, 409.

burials (Fonyód, Grave 3, Viss, Sajógömör, Grave 9) and inhumation graves (Budakalász, Grave 164, Franzhausen I, Grave 206, Nitriansky Hrádok, mass grave, Lichtenwörth, mass grave, Wolfersdorf). Her list can be enlarged with the following sites where stone axes or their fragments were recovered from burials: Petőháza,[592] Köveskál,[593] Szob-Verbicek[594] and Viss.[595] Although she only quotes Grave 164 of the Budakalász cemetery, stone axes had been placed in several other burials too (Graves 91, 194, 227 and 294, i.e. five burials yielded seven stone axes, with Graves 91 and 164 containing two each).[596]

6. 13. Chipped stone implements

Seven burials yielded nine chipped stone implements (Grave 346: *Pl. 6. 2*, Grave 386: *Pl. 19. 13*, Grave 429: *Pl. 41. 7*, Grave 444: *Pl. 46. 5*, Grave 451: *Pl. 48. 19*, Grave 453: *Pl. 50. 10*, Grave 454: *Pl. 50. 14*), of which Graves 453 and 454 contained two pieces.

Chipped stone implements have been recovered from most of the known Late Copper Age cemeteries. Ten of the twenty-three burials uncovered at Balatonlelle-Felső-Gamász contained chipped stone implements or cores, whose number totalled forty,[597] while fifty-nine of the 436 graves in the Budakalász cemetery yielded a total of 154 implements. A single piece was deposited in fifty-six graves, ten pieces in two graves and seventy-eight were placed in one burial (Grave 91).[598] Seven of the forty graves excavated at Alsónémedi contained a total of eight chipped stone implements.[599]

The distribution of burials with lithics *(Fig. 33)* indicates that of the three burials containing stone axes, two burials (Graves 336, 340) lay in the cemetery's western part and one in its middle part (Grave 387). A roughly similar pattern can be noted in the case of the burials with chipped stone implements: two burials lay in the western part (Graves 346, 429), one in the middle (Grave 386), with a third cluster of burials lying near one another in the south-western part (Graves 451, 453, 454, 444). A similar concentration can be seen in the distribution of animal figurines and rhytons *(Fig. 31)*. Little is known about the deceased: Grave 451 was the burial of an adult (perhaps a male) who was accorded an animal figurine, a chipped stone implement and a broken clay cone in addition to various vessels. Graves 453 and 454 contained the cremains of adults; the special status of the deceased interred in Grave 454 was reflected also by the miniature suspension vessel in the grave inventory.

7. The internal chronology of the cemetery

Traditional cemetery publications usually have the following format: a description of the graves, a description of the grave inventories, a theoretical reconstruction of cultural and trade contacts with other regions based on artefacts regarded as "imports" and the physical anthropological data of the deceased (age and sex). This traditional procedure has more recently been complemented by radiocarbon dating which, owing to its costliness, is generally restricted to samples from a few graves. The few radiocarbon dates thus gained have become the main anchors for dating a cemetery, with the lowest and highest dates determining the span of its use. This is the reason for the "appearance" of Copper Age cemeteries used for six to eight hundred years, even if this range is often at strong variance with the archaeological

[592] Bella 1892, 347, Fig. 9.
[593] Bondár 1987, Fig. 11.
[594] MRT 9, Site 26/34.
[595] Banner 1956, 106.
[596] Bondár 2009a, 295.
[597] Nagy 2010, 405.
[598] Bondár 2009a, 295.
[599] Korek 1951, 56.

record, which does not confirm the existence of large settlements occupied for several centuries, a demonstrably identical population, unchanging beliefs, etc.[600]

Currently, the very concepts of archaeological typology and archaeological culture have come under a barrage of criticism and are being re-evaluated.[601] Most prehistorians have accepted Martin Furholt's proposal to use the term "complex" or "ceramic style", which, while based on traditional archaeological typology, is bolstered by mathematical methods.[602]

The re-assessment of the Baden culture was begun several years ago. It is often quite difficult to find one's way through the maze of new sub-groups, phases and chronological schemes. I voiced my practical reservations about Viera Němejcová-Pavúková's generally accepted and employed chronological system in the assessment of a larger settlement material.[603] One persistent problem is that the same site is often assigned to a different phase in terms of relative chronology in different schemes[604] and that the sequence of certain phases (such as proto-Boleráz and Boleráz) is not confirmed by absolute dates, which instead tend to indicate their contemporaneity.[605]

Absolute dates raise a different spate of problems. One of these is posed by the synchronisation of dates from different laboratories, another by the comparison and synchronisation of dates gained from different types of samples (human or animal bones) subjected to different calibration procedures (OxCal, CalPal, 1σ: 68% confidence level, or 2σ: 95% confidence level, etc.). The Bayesian modelling of radiocarbon dates has also come under critical fire[606] and thus a familiarity with and understanding of different dating procedures becomes increasingly difficult.

There has been a welcome increase in the large radiocarbon series for the Late Copper Age of various regions.[607] Most prehistorians date the early Baden (Boleráz) period to 3650–3350 cal BC,[608] while the classical period is generally assigned to 3350–3100/2900 cal BC. However, given that chronological sequences differ from one country to the next, this problem too needs to be resolved somehow when defining in the age of a particular site in calendar years. In addition to bridging the chronological fault-line (the roughly millennium-long discrepancy between the short and long chronology), regional chronological sequences also have to be reconciled.[609]

We were lucky in that we could submit samples for radiocarbon dating from the Pilismarót cemetery (see pp. 349–354). It was clear from the very beginning from István Torma's preliminary report and his typological analysis of the finds that the Boleráz cemetery at Pilismarót had an earlier and a later phase. The date of the cemetery's use-life is additionally coloured by the pottery decorated in the *Furchenstich* style, which in Torma's opinion pre-dated the Boleráz period and became secondarily redeposited and mixed with the grave inventories at the time the cemetery was established.[610]

When selecting the graves to be sampled for radiocarbon dating, my main goal was to choose graves from different parts of the cemetery and to pick burials containing a rich array of finds and/or uncommon objects (*Fig. 34*). Although I had to slightly modify my initial candidates in the light of the available

[600] For a critical assessment of earlier chronological schemes, see Raczky–Siklósi 2013.
[601] Furholt 2008a; Raczky 2009; Furholt 2009a; Furholt 2011; Harding 2013; Kristiansen 2014; Porčić–Nešić 2014; Sørensen 2015.
[602] Furholt 2008; Furholt 2008a; Furholt 2009.
[603] Bondár 2010, 324–327.
[604] Bondár 2010, Table 4; Schier 2014a, Figs 1–6.
[605] Wild et al. 2001, 1062; Bondár 2010, 329–330; Bondár 2010a, note 29; Furholt 2013.
[606] Sraka 2012; Sraka 2014; Zastawny 2015, 203–205.
[607] Trifonov 2004, Tab. 1; Baldia et al. 2008, Tab. 1; Siklósi 2009; Furholt 2013; Horváth–Svingor 2015; Peška 2015, Tab. 1; Zastawny 2015; Szmyt 2015, Tab. 1–2
[608] Wild et al. 2001; Furholt 2008; Furholt 2009, 230–241; Bondár 2010, 327–330; Furholt 2013.
[609] Trifonov 2004; Ivanova 2007; Stein 2012; Kavtaradze 2013.
[610] Torma 1973, 503.

calcined bones suitable for dating, but even so, I was able to meet the basic criteria. Thirty-seven burials did not contain any cremains, while twenty-one burials yielded no more than a few calcined bone splinters; more substantial amounts of cremains were recovered from fifty-two burials *(Fig. 18)*, of which twelve were selected for sampling. The AMS measurements were performed by Derek Hamilton in the Scottish Universities Environmental Research Centre in Glasgow. During the assessment of the animal bones, Erika Gál identified two horse bones in Grave 434, from which samples were sent to the Debrecen laboratory for radiocarbon dating.[611] The 1σ calibrated dates from these samples fit in well with the dates received for the human cremains.

There are absolute dates for thirteen graves in the Pilismarót-Basaharc cemetery (twelve on human remains and one on animal bone), which accounts for 11% of all the graves and for one-quarter (25%) of the graves yielding a sufficient amount of cremains.

The radiocarbon measurements gave widely differing dates for Graves 390 and 390/a. While the typology of the two grave inventories suggested that the two burials were roughly contemporaneous, the radiocarbon dates indicated a difference of several hundred years. The measurement was repeated for Grave 390, which gave a date of 3100–2920 cal BC, while the date for Grave 390/a was substantially earlier with its date of 3500–3340 cal BC.

We cannot be certain about the reason for the widely differing dates; one might be that the calcined bone from which the sample was taken was not well cremated and thus gave later dates; another might be the chemical properties of the soil, or the post-excavation storage conditions, which can affect the results of measurements. Whichever the case, I took into consideration the typochronological assessment in the dating of Grave 390. The measurements for Graves 399 and 411 were similarly repeated with fresh samples and were then co-combined; the dates thus gained were consistent with the other dates and could be fitted into the cemetery's overall sequence.

According to current scholarship, pottery in the *Furchenstich* style is earlier than the Boleráz period. The *Furchenstich*-decorated pottery fragments from Graves 365, 390 and 459 as well as the pieces from Trenches d/5–e/5 can be assigned to an earlier period. The *Furchenstich*-decorated fragments came to light in the cemetery's western part. In line with István Torma's opinion, it seems likely that there were a few settlement features and/or graves of the earlier period in this area prior to the opening of the Boleráz burial ground. Given the dispersed layout of *Furchenstich* settlements (pits lying 20–30 m apart), this scatter is hardly surprising. Torma's field observations suggested that the *Furchenstich* finds became secondarily redeposited in the Boleráz burials.[612] There were probably no visible traces of the earlier settlement at the time the cemetery was opened. The grave inventory from Grave 365 includes demonstrably Boleráz pottery in addition to the *Furchenstich* vessels and since the contemporaneity of the two can definitely be excluded, I assigned this grave to the Boleráz burials in the analysis.

The assessment of the radiocarbon dates made on the samples and the typological analysis of the finds was performed simultaneously, parallel to each other. This was an exciting exercise because – subsequently – I had the opportunity to compare Torma's earlier typology and my own typochronological system with the radiocarbon dates.

In my assessment of the relative chronology of the Late Copper Age burials, I assumed that the items in the grave inventories had been deposited simultaneously and were therefore co-eval. The deposition of the grave offerings marked the *terminus post quem*. Obviously, the form of some artefacts such as pots, axes and stone blades remained unchanged for a long time and these cannot be used as chronological anchors. It is also possible that earlier graves had been disturbed when new ones were established, but

[611] The radiocarbon measurements were funded by a grant from the National Scientific Research Fund (OTKA project NF 104792). The AMS analysis was performed Mihály Molnár (Isotop Zrt, Debrecen).
[612] Torma 1973, 503–506.

this was a rare event in the Pilismarót cemetery and observations to this effect are meticulously recorded in the field diaries (e.g. in the case of Graves 365 and 390). It is also feasible that some articles were heirlooms or had been preserved for a long time by the community's members before their deposition in a burial.

I excluded from my analysis the burials lacking any grave goods (Graves 404, 410, 425, 438) as well as the ones that contained atypical vessel fragments (Graves 342, 347/a, 389, 417, 430, 431, 446) and the burial of the obviously earlier *Furchenstich* period (Grave 459). My analysis thus covers the grave inventories of ninety-eight burials.

Although highly popular and very spectacular, computer seriations yield a barely intelligible sequence for the average reader. It is based on probability estimates with all its limitations and consequences. If the starting point, the typological system (which is in itself based on a series of subjective criteria) is adequate, the seriation programme orders the finds into a sequence. There are certain conditions to running seriation programmes: it is expedient to omit atypical artefacts, objects that occur only once and the burials without grave goods. If these limitations are performed automatically, then, in the case of the Pilismarót cemetery, we would have to exclude finds with a dating value such as the bowls of Graves 385 and 397 *(Pl. 19. 3, Pl. 27. 7)*, the lavishly ornamented mug from Grave 412 *(Pl. 31. 2)*, the scooping vessel from Grave 429 *(Pl. 41. 6)* and other such finds. The seriation sequence will not reflect a chronological order, but an ordered combination of finds. In other words, the spectacular diagram will reveal little about which were the earliest and latest burials in the cemetery.

The number of artefacts deposited in the burials varies *(Fig. 17)*. The rationale underlying this practice remains unknown and therefore I saw no good reason for a seriation based on the combinations of finds. I asked my colleague János Jakucs to perform an experimental seriation using WinBASP (Bonn Archaeological Software Package),[613] but the results did not contribute to clarifying the internal chronology of the Pilismarót cemetery and I therefore decided to use a different approach for determining the burial ground's internal chronology.

7. 1. Typochronology and radiocarbon dates: the ordering of the graves into chronological horizons

The radiocarbon dates for the Pilismarót cemetery are consistent with the other dates for the early Baden (Boleráz) period, which is generally dated between 3650–3350 cal BC. The calibrated radiocarbon dates outlined three main horizons: the earliest fell between 3645 and 3525 cal BC, the middle one between 3500 and 3360 cal BC, and the latest one between 3330 and 2920 cal BC, indicating a mean interval between 3500 and 3360 cal BC, i.e. a span of roughly 140 years (corresponding to three or four generations) that covers the entire Boleráz period.

It must be again emphasised that the calibrated radiocarbon dates merely mark the beginning and end of a chronological horizon that spans a long period of time, often one of several hundred years. In the case of burials, we would have to pinpoint a specific day, namely the day of the funeral, which is obviously impossible using either archaeological or archaeometric methods. All we can claim with more or less certainty is that the funeral occurred on a day between the two absolute dates.

Given that it is impossible to date the burials more accurately, we cannot exclude the possibility that some funerals perhaps took place before 3500 cal BC and some after 3330 cal BC, although most burials fall within these two dates or near them. The task, then, was to determine the chronological sequence of the burials, the temporal sequence of the graves, and whether there were any spatial patterns in the cemetery reflecting this sequence.

[613] I would here like to thank János Jakucs for his help.

Table 9. Radiocarbon-dated vessel types

Graves	cal BC	A1	A2	A3	A5	P1	P2	P3	P4	P5	F6	SJ2	M3	J1	J2	J3	J4	J5	J6	J8	C2	C3	B	SV	DP	SB1	SB4	SB5	SB6	SB7	CB1	CB3	CB5	CB6	CB7	CB8	CB9	CB10	miniature mug	miniature bowl	miniature amphora	miniature lid	clay cones	rollers	spindle whorls	animal figurines
411	3645–3525																																													
434	3630–3530		■				■	■		■						■				■		■							■	■																	
409	3630–3370						■			■																				■																	
414	3630–3360						■																							■																	
418	3630–3360		■			■																																								
385	3500–3350										■								■																													
443	3500–3350																																														
390/a	3500–3340						■																																							
388	3370–3090								■																																						
399	3360–3090		■									■																																		
358	3350–3020	■					■	■	■				■				■																													
364	3330–2920						■							■												■																				
390	3100–2920			■	■	■	■	■	■	■			■		■	■	■	■		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

The classification of the finds from the Pilismarót cemetery and their typological analysis outlined the typochronology of the vessel types. Bowls, jugs, mugs and the dish-pot were the most "useful" types in the typochronological assessment. As part of the typological assessment of the finds, one of my goals was to outline the main boundaries of the internal chronology of the Boleráz period. I found that some types occur both in earlier and later burials.

In knowledge of the radiocarbon dates, several vessel types and some of the rare and uncommon finds could be assigned to periods fixed by absolute dates *(Table 9)*. The finds from the radiocarbon-dated burials were useful for establishing the date of other types and graves. I examined which other burials yielded vessels resembling the pottery types recovered from the securely dated burials and the find combinations in these graves to identify any new elements occurring in them. I checked whether any of the "new" types occurred in any of the radiocarbon-dated burials and whether my typochronology was consistent with the absolute dates.

Using this procedure, which might be labelled "manual seriation", and by searching the database of the graves according to different criteria, I believe I have established a reliable chronological sequence for the cemetery's burials.

I could rely on a few additional anchors for determining the cemetery's internal chronology. One of these was the contemporaneity of Graves 450, 451 and 457, indicated by vessel fragments from the former two burials that could be refitted with a bowl from Grave 457 *(Pl. 50. 5)*. Another was the striking similarity between the animal figurines from Graves 413 and 414, initially pointed out by István Torma, who suggested that they had been made by the same hand, and therefore these two graves could also be regarded as roughly co-eval. The same holds true for the rollers from Graves 401 and 411. I believe that the rhytons from Graves 359 and 405 are an indication of the contemporaneity of the two burials because the fragment from Grave 405 is virtually identical to the drinking horn from Grave 359 (although it must be borne in mind that this "contemporaneity" can cover a difference of thirty to forty years, and that it merely means that the two objects had probably been made by the same potter in a style unique to him/her).

In his report on the finds from Pári, Torma demonstrated that certain vessels from the Pilismarót cemetery indicated a late date at the close of the Boleráz period for the burials they were recovered from. Torma dated Graves 385 and 397 to the late burials on the strength of their bowls *(Pl. 19. 3, Pl. 27. 7)*.[614] The bowls in question (Type CB9) have a rim interior decorated with channelling, a row of punctates encircling the shoulder and an incised herringbone or zig-zag pattern underneath. The base interior is divided into four fields filled with channelling. Some bowls have a string-hole lug or small knobs on the shoulder. Aside from the above two burials, bowls of this type were recovered from Graves 422, 424, 435, 447 and 450.

Torma dated Grave 390 to the end of the Boleráz period in view of its amphora *(Pl. 22. 3)*.[615] This type (A3) was also attested in Grave 457, which, as indicated above, was probably co-eval with Graves 450 and 451.

Jugs of Type J1 were shown by Torma to date to the close of the Boleráz period.[616] The jugs have an outturned rim, an incurving neck and a squat, globular body. Their belly is divided into fields separated by symmetrically set, barely prominent, slender, vertical ribs. The fields between the ribs are filled with oblique channelling in alternating directions combined with three symmetrically set, vertical subcutaneous handles. Jugs of this type were recovered from three burials (Graves 338, 364, 403).

The same decorative principle can be noted on Type J5 jugs and Type M7 mugs decorated with channelled fields separated by lobes pressed out from the vessel interior and vertically perforated

[614] Torma 1977, 47.
[615] Torma 1977, 54.
[616] Torma 1977, 51.

subcutaneous handles (Grave 388: *Pl. 21. 6*, Grave 402: *Pl. 29. 13*, Grave 403: *Pl. 30. 8*, Grave 426: *Pl. 9. 18*, Grave 447: *Pl. 46. 12*, Grave 360: *Pl. 14. 3*, Grave 386: *Pl. 19. 9*, Grave 406: *Pl. 32. 3*). The three vessel types (Type J1 and J5 jugs, Type M7 mugs) can be regarded as being more or less contemporaneous.

In the typological analysis, I assigned the scooping vessel of Grave 429 *(Pl. 41. 6)* to the end of the Boleráz period, to the transition to the classical Baden period. I noted that similarly to the Type J1 jugs found in Grave 364, the dish-pots from Graves 364, 388, 399 and 353 *(Pl. 7. 11, Pl. 16. 12, Pl. 21. 10, Pl. 24. 2)* were ceramics representing a late type. The miniature suspension vessel from Grave 447 *(Pl. 42. 3)* dated this burial to the end of the Boleráz period in view of its resemblance to the amphora from Köveskál, which was found together with a footed goblet that was more current during the classical Baden period.

Thus, by integrating the radiocarbon dates and the typological assessment, I was able to determine the earliest and the latest burials in the cemetery. Next, I examined whether the finds from the remaining burials displayed a closer affinity with the earlier or with the later burials whose finds reflect a transition to the later Baden period. Obviously, some grave inventories contained artefacts that could be assigned to both the early and the late phase. If the typological classification of the ceramic material is well-grounded (despite being based on subjective categorisation criteria), these types indicate one of two possibilities: either the vessel type remained unchanged for a long time, or the vessel type (and the burial) can be assigned to the boundary of the two chronological horizons.

Using this approach, I was able to order the burials into chronological horizons, illustrating which burials could be clearly assigned to the cemetery's early and late phase, and which to the boundary between the two. I tabulated the burials according to their chronology relative to each other *(Table 10)*. The three columns actually mark two chronological horizons owing to the overlaps. I arranged the graves in three columns because it illustrates more clearly how some burials represent a transition from the early to the late phase, marked by the graves on the two sides of the column boundaries. It must be borne in mind that the burials could form one cluster because there is no way of dating the burials more accurately, i.e. of determining the day when the funeral was held.

Table 10. Chronological horizons in the Pilismarót cemetery

Horizon I	Horizon II	Horizon III
3645–3525	3500–3360	3330–2920
3500 – 3360 – 3330 cal BC		
Graves	Graves	Graves
337	336	
340	338	
341	339	
343	346	353
344	354	
347	*358*	
348	359	
349	360	
350	362	
351	382	*364*
352	*385*	
355	386	
356	387	*388*
357	*390/a*	

Horizon I	Horizon II	Horizon III
3645–3525	3500–3360	3330–2920
3500 – 3360 – 3330 cal BC		
Graves	Graves	Graves
361	*390*	
363	391	397
365	392	
383	393	
384	395	
384/a	396	
394	398	
400	402	*399*
401	403	
407	405	
408	406	
412	*409*	
411	413	
419	*414*	
421	415	
432	416	
437	*418*	
434	420	
441	422	
442	423	
452	424	
455	426	
	427	
	428	
	433	429
	435	
	436	
	439	
	440	
	443	
	444	
	445	
	447	
	448	
	449	
	450	
	451	
	453	
	454	
	456	
	457	
	458	

In the foregoing, I have discussed in detail the typological traits of each vessel type and its best analogies. Here, I shall address the most striking tendencies of each chronological horizon. The abbreviations are identical with the ones used in the typological analysis (for the type charts, see *Figs 9–14*).

The burials of the early horizon (Horizon I) did not contain Type A1, A3, A4 and A5 amphoras, Type P4 pots, Type SJ2 storage jars, Type M2 mugs, Type J1, J5 and J6 jugs, beakers, scooping vessels, suspension vessels, dish-pots, Type SB6, CB4, CB5, CB9 and CB10 bowls, certain types of miniature vessels (mugs, lids), and certain types of prestige items (stamps, spindle whorls, clay spoon, rhytons, animal depictions or wagon model), and they also lacked chipped stone implements.

The vessel types solely occurring in this horizon are as follows: Type A6 amphoras (Grave 351), Type C2 (Graves 365, 441) and C3 cups (Graves 341, 419, 434), Type SJ1 storage jars (Grave 384), Type J7 jugs (Grave 452) and Type CB2 bowls (Graves 347, 394, 407).

Frequent vessel types in Horizon I are represented by Type P1 (Graves 344, 347, 363, 401, 442) and P3 pots (Graves 349, 355, 394, 434, 442), Type J3 jugs (Graves 352, 400, 401, 419, 434), Type SB1 bowls (Graves 352, 355, 356, 384, 400, 401), Type CB1 (Graves 337, 348, 349, 355, 383, 434, 452) and CB 8 bowls (Graves 340,344,350, 351, 355, 356, 432), and Type CB6 bowls (Graves 340, 343, 351, 356, 363, 365, 400, 401, 421).

I assigned three burials containing rollers to this horizon (Graves 401, 411, 434), while the fourth (Grave 439) was assigned to the boundary of Horizon II. Grave 442, yielding a clay cone, was placed on the boundary of Horizon I, while the other burials with clay cones (Graves 416, 443) were assigned to Horizon II and one burial (Grave 451) to Horizon III.

Types current in both Horizon I and II are the following: Type M1 (Graves 339, 408), M3 (Graves 343, 344, 439, 448), M5 (Graves 358, 393, 412, 441), M6 (Graves 336, 407, 408, 426) and M7 mugs (Graves 360, 365, 386, 406), Type C1 cups (Graves 384, 433), Type SB1 (Graves 336, 352, 355, 356, 382, 384, 400, 401, 420) and SB7 bowls (Graves 390/a, 416, 434), Type J4 (Graves 337, 358, 415, 453, 458) and J8 jugs (Graves 422, 434, 452), miniature bowls (Graves 432, 387, 395, 409, 432), miniature beakers (Graves 403, 442), miniature suspension vessels (Graves 434, 447) and stone axes (Graves 336, 340, 387).

Horizon II lacked the following types: Type A3, A5 and A6 amphoras, Type SJ1 and SJ2 storage jars, Type M7 mugs, Type J1, J6, J7 and J8 jugs, Type C2 and C3 cups, scooping vessels, suspension vessels, dish-pots and Type CB2 and CB9 bowls.

Popular types in Horizon II are as follows: Type A2 amphoras (Graves 392, 393, 409, 418, 420, 433, 444, 445, 453, 458), Type J2 jugs (Graves 336, 382, 387, 409, 427, 428, 433, 440, 444, 445, 456), Type CB1 (Graves 336, 387, 391, 392, 420, 423, 433, 448, 449), CB6 (Graves 339, 362, 414, 423, 439, 443, 444, 449, 456), CB10 (Graves 359, 362, 395, 396, 415, 449, 453) and SB6 bowls (Graves 336, 339, 354, 359, 362, 391, 396, 414, 436, 439, 444, 448, 449), and Type P2 pots (Graves 339, 358, 362, 390/a, 395, 396,398, 402, 409, 414, 416, 423, 448, 453, 454).

This period saw an increase in the prestige items, as shown by the stamps, cones, different types of rollers, zoomorphic finds (animal figurines, rhytons, wagon model, spoon with a perhaps bird-headed handle) and lithics deposited in the burials.

The vessel types occurring solely in this horizon are Type M2 mugs (Grave 336), Type CB4 bowls (Grave 336) and miniature mugs (Grave 443, 444).

Types occurring in both Horizon II and III are as follows: Type A1 (Graves 358, 362, 424) and A4 amphoras (Graves 433, 450), Type P4 pots (Graves 388, 358, 402, 423), Type J5 jugs (Graves 338, 402, 403, 426, 447), Type SB6 (Graves 336, 338, 339, 354, 359, 362, 391, 396, 403, 414, 436, 439, 444, 447,

448, 449), CB5 (Graves 390/a and 399) and CB10 bowls (Graves 359, 362, 364, 388, 395, 396, 403, 415, 422, 449, 451, 453), and beakers (Graves 390, 390/a, 454).

The burials dating from the late phase of the cemetery's use-life (Horizon III) lack the following types: Type A6 amphoras, Type SJ1 storage jars, Type M1, M2, M3 and M5 mugs, Type J4 and J7 jugs, Type C1, C2 and C3 cups, Type SB1 and SB7 bowls, miniature mugs and bowls, rollers and stone axes. No more than two burials yielded zoomorphic finds. Only a single example of Type CB5 bowls (Grave 399), miniature beakers (Grave 403) and miniature amphoras (Grave 447) were found in the burials of this horizon. A clay cone was recovered from one burial (Grave 451) and two spindle whorls from another (Grave 364).

The types occurring solely in Horizon III are as follows: Type A3 (Graves 390, 457) and A5 amphoras (Grave 390), Type SJ2 storage jars (Grave 399), Type J1 (Graves 338, 364, 403) and J6 jugs (Grave 385), scooping vessels (Grave 429), suspension amphoras (Grave 390), dish-pots (Graves 353, 364, 388, 399), Type CB9 bowls (Graves 385, 397, 422, 424, 435, 447, 450) and miniature lids (Graves 388, 457).

The types occurring in all three horizons (Type A2 amphoras, Type M4 mugs, Type SB2, SB3, SB4, SB5 bowls, Type P1, P2, P3, P5 and P6 pots, Type J2 and J3 jugs, Type CB1, CB3, CB6, CB7 and CB8 bowls) were recovered from burials that lie on the boundary of a particular chronological horizon and they indicate the fluidity of horizon boundaries and their chronological proximity.

The radiocarbon date of 3100–2920 cal BC for Grave 390 (from the repeated measurement) would suggest that this burial was the latest in the cemetery; however, this date can be rejected on typological grounds. Graves 390/a and 390 were assigned to the same chronological horizon after again reviewing the typology of the finds and the radiocarbon dates

7. 2. The "peopling" of the cemetery

Finds of the *Furchenstich* period preceding the Boleráz period came to light in the cemetery's western part.

Rollers were one of the find types occurring in the earliest burials of the Late Copper Age cemetery (Graves 401, 411, 434); these burials all lay in the cemetery's eastern and southern part, which would confirm my assumption, first formulated when examining the spatial patterns in the distribution of certain artefact types, that the location of the burials was pre-allocated. In other words, the deceased were not simply interred beside each other in the order of their death, but in different location according to some pattern.

This pattern is reflected in the distribution of prestige items in the cemetery *(Figs 29–31)*. Eight of the burials containing uncommon artefacts are radiocarbon dated, providing a secure chronological anchor for the other artefacts in their grave inventories. Over 33% of the burials, thirty-seven in all, yielded sixty-six rare and uncommon artefacts *(Table 11)*, reflecting the special status of the individuals interred in these graves.

Two of the burials containing rollers (Graves 411**,** 434) can be assigned to the earliest graves in the cemetery (3645–3530 cal BC). Both lie in the cemetery's eastern part *(Fig. 30. 3*) and their virtual contemporaneity suggests that the two interments were either roughly co-eval or that the location of the graves for the interment of individuals accorded this artefacts was pre-allocated. The typological and chronological differences between burials lying beside one another (Graves 401 and 411, and Graves 434 and 439) rather indicate that while the form of artefacts might have changed, the prestige/status attached to them did not or was inheritable.

There are two radiocarbon dates for the burials containing animal figurines (Graves 414 and 418, both yielding a date of 3630–3360 cal BC). Grave 413 can be regarded as roughly co-eval with Grave

Table 11. Distribution of uncommon in the graves

Grave	Breast pot	Miniature vessels	Suspension vessels	Stamp	Clay cones	Spindle whorls	Rollers	Clay spoonl	Rhyton	Animal figurines	Wagon model	Stone axes	Other lithic finds
336												■	
340												■	
346													■
351	■								■				
359										■			
361		■											
364						■				■			
386													■
387		■						■				■	
388		■											
390			■										
391		■											
395		■											
401							■						
403		■											
405		■							■				
409		■											
411							■						
413										■			
414										■			
416		■			■								
418										■			
423		■											
427				■									
429													■
432		■											
434		■	■				■						
439							■						
442		■			■								
443		■			■								
444		■											■
445											■		
447		■	■										
451		■			■					■			■
453													■
454													■
457		■											

424 on typological grounds. Animal figurines were also recovered from two other burials (Graves 359 and 451). Grave 359 was assigned to the same chronological horizon as the above, while Grave 451 perhaps represents the transition to the close of the Boleráz period. The graves with animal figurines in the cemetery's eastern part represent early burials. Grave 359 lay far from these early burials (Graves 413, 414, 418), in the cemetery's western part *(Fig. 31. 1)*, again confirming that individuals who were "honoured" with animal figurines were interred in two different areas of the cemetery, in pre-allocated locations. I have already noted in the above that in literate cultures with written records, the animal figurines used in funerary rites were designed to be substitutes for live animals and thus we may assume that the community's funerary traditions did not call for the slaughter of live animals – a clay figurine was deposited in the grave instead and thus we may regard animal figurines as a reflection of status and/or prestige.

I also assigned the clay cones to the category of prestige items. Clay cones were exclusively found in burials in the cemetery's south-eastern part (Graves 416, 442, 443, 451), of which one is radiocarbon-dated (Grave 443: 3500–3350 cal BC). The date indicates that these burials lie on the boundary of two chronological horizons, on the boundary of the earlier and later Boleráz period.

Miniature mugs were recovered from two burials lying beside one another, from Graves 443, a radiocarbon-dated burial (3500–3350 cal BC) and Grave 444. I assigned both burials to the same chronological horizon.

When examining miniature bowls, my springboard was the piece from Grave 409, which gave a date of 3630–3370 cal BC. The joint presence of Type P2 pots and similar miniature bowls in Graves 395, 409 and 423 indicated that these burials were roughly contemporaneous.

Miniature amphoras were deposited in two burials in the cemetery's eastern part, in Graves 434 (yielding a date of 3630–3530 cal BC) and Grave 457, which, however, can be assigned to the later Boleráz period. It would appear that while the function of the two miniature vessels was identical, their chronological position was not, perhaps a reflection of the longevity of the cognitive content embodied by these small vessels in the funerary rites.

The miniature pots recovered from the burials were all fragmentary and the other items in the grave inventories offered few secure anchors for dating these burials.

Miniature beakers were deposited in two burials (Graves 403 and 442). It has been shown in the above that Grave 442 can be assigned to the cemetery's earlier burials on account of its clay cone. The other finds from Grave 403 suggest that this burial represents a later interment.

Miniature lids were likewise found in two burials (Graves 388 and 457), of which Grave 388 yielded a date of 3370–3090 cal BC. I assigned both burials to the boundary of Horizons II and III.

The spatial distribution of various grave good types in the cemetery shows a rather random pattern, with individual types apparently located in various spots within the cemetery. I found no indication whatsoever that the interments followed one another from east to west or north to south, or the other way round, reflecting a regular spatial pattern in the sequence of interments. I could only determine the location of the earliest burials in different areas of the cemetery's eastern and southern part based on the radiocarbon dates. As we have seen, several co-eval artefact types were recovered from burials lying in different part of the cemetery, suggesting that the main principle in the cemetery's spatial organisation was the pre-allocated location of the graves.