

ROBERT GINDELE

The Gepidic settlement and cemetery from Carei-Bobald



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and cemetery  
from Carei-Bobald**

With contributions of Claudia Radu and Georgeta El Susi

Nyíregyháza/Satu Mare  
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## Introduction - Cuvânt înainte – Előszó

The publishing of the rescue archaeological excavations conducted at Carei-Bobald furthers our effort to monographically introduce in scientific circulation the results of certain large rescue excavations. Rescue excavations are spatially limited, being hindered by the boundaries set by the projected investments. For such reason, these excavations are rarely further developed in the form of multianual systematic excavations, firstly for financial reasons but also from other logistic shortcomings. In our view, the archaeologists who have brought to light and rescued the finds and archaeological contexts from the excavating machines of the construction sites must be responsible of their “scientific faith” and have the moral obligation to make such information available to the broad audience and the specialty environment. We believe that only exhaustive publishing honestly concludes a rescue archaeological excavation and it is only this way that one may believe that the rescue procedure of the archaeological remains affected by the construction works has been fully completed.

We wish to bring thanks this way for their field documenting work in the research of burials to Ioan Stanciu and Diana Iegar, for the drawings to János Bakai and last but not least, to our colleagues with the museums of Satu Mare and Nyíregyháza for the successful implementation of the COMODI project, which financially aided this book's publication.

\*\*\*\*\*

Publicarea cercetărilor arheologice preventive de la Carei-Bobald continuă efortul nostru de a introduce în circuitul științific sub formă de monografie rezultatele unor săpături de salvare de mari dimensiuni. Cercetările preventive sunt limitate din punct de vedere spațial, ele fiind îngrădite de limitele investițiilor proiectate. Din această cauză aceste cercetări sunt rareori dezvoltate mai departe sub forma unor săpături sistematice multianuale, în primul rând din cauze financiare dar și din alte lipsuri de logistică. După părerea noastră arheologii care au adus la lumina zilei și au salvat descoperirile și contextele arheologice de excavatoarele șantierelor de construcții trebuie să fie răspunzători de “soarta științifică” ale acestora și au obligația morală de a face cunoscute publicului larg și mediului de specialitate aceste informații. Considerăm că doar cu publicarea exhaustivă se poate închide în mod onest o cercetare arheologică preventivă și doar astfel putem considera că s-a realizat în mod integral procedura de salvare ale vestigiilor arheologice afectate de construcții.

Pe această cale doresc să aduc mulțumiri pentru munca de documentare în teren la cercetarea mormintelor lui Ioan Stanciu și Diana Iegar, pentru desene lui János Bakai și nu în ultimul rând colegilor din muzeele din Satu Mare și Nyíregyháza pentru implementarea cu succes al proiectului COMODI, din care a fost finanțată publicarea cărții.

\*\*\*\*\*

A Nagykároly-Bobáldon végzett előzetes régészeti kutatás eredményeinek közlése folytatja azon erőfeszítéseinket, melyekkel a nagy felületű leletmentő ásatások eredményeit szeretnénk monográfia formájában a tudományos közönség számára bemutatni. A leletmentő ásatások térben eleve korlátozott területre, a megtervezett beruházás területére szorítkoznak. Éppen ezért ezeket ritkán folytatják tervásatások, több éves kutatás formájában, elsősorban anyagi okokból, illetve egyéb logisztikai okok miatt. Véleményünk szerint az építkezések munkagépei elől megmentett leleteket és régészeti jelenségeket a felszínre hozó régészek felelősséggel tartoznak ezen lelőhelyek „tudományos sorsáért” és az az erkölcsi kötelességük, hogy a közönség és a szakemberek számára bemutassák ezeket az információkat. Úgy gondoljuk, hogy csak ezek átfogó közlése után zárható le tisztességesen egy régészeti leletmentés és csak így valósulhat meg az építkezések által érintett régészeti leletek megmentésének teljes folyamata.

Ezúton szeretnék köszönetet mondani a feltárt sírok terepi dokumentálásában nyújtott segítségért Stanciu Ioan-nak és Iegar Diana-nak, az elkészített rajzokért Bakai Jánosnak és nem utolsósorban a Szatmárnémeti és a Nyíregyházi múzeumban dolgozó munkatársaknak a könyv megjelenését támogató COMODI című projekt sikeres lebonyolításáért

The Gepid settlement and cemetery from Carei, termed site Bobald I, was archaeologically investigated prior the construction of the city's bypass. The road intersected the archaeological site on a length of 620 m and 20-25 m in width. Approximately on 300 m, the road runs parallel to the high terrace of the Mergheș stream (Pl. 41). The terrace's water side was often inhabited by populates starting with the Stone Age until the medieval date abandonment of the place of Bobald. The area's western side was crossed by the road. Except the 18 Gepid features, there were also examined 10 Bronze Age features, 16 features of Celtic date – of which 2 pottery firing workshops, 24 Gepid burials and 27 16h – 17th century features (Pl. 42).

## I. The cemetery

The settlement's related burial ground was only partially outlined in our excavations between inhabitancy settlement areas I and II, on the western slope of a mound. In fact, we identified the graveyard's southern edge, where 24 inhumations were investigated (Pl. 42). Graves are oriented west-east with little variation. Both their orientation and parallel row position include them in the 6th century AD row-grave burial horizon, well known in Central and Western Europe. In north-western Romania, this horizon is less investigated, settlements and funerary finds being geographically limited to the Ier, Nir and Carei Plains<sup>1</sup>. These settlements and funerary finds are in connection with a broader group from the plain area of Bihor county and a few finds from the Barcău valley on Hungarian territory. On a more recent map by I. Stanciu (with all reserves related to the corresponding state of research), finds seem to geographically cluster between the two "classical" blocks from the Hungarian Plain and intra-Carpathian Transylvania. The cemetery discussed here lies by the northern extremity of such cluster of finds and beside also other sites, unfortunately unpublished from Hungary (Hajdúnánás Fürj halom), counts among the few where archaeological excavations were conducted. Although the research of the 6th century AD cemetery of Carei-Bobald is incipient, given the logistic difficulties linked to furthering the excavations, we decided to introduce the graves insofar identified in the scientific circulation.

The examination of the partially investigated burial ground of Carei's layout evidences that the 24 graves do not divide in several groups<sup>2</sup>, yet also, that separate rows are not obvious either. The investigated graves spread in a ca. 10 x 30 m area, the northern and western sides of the cemetery being identified (Fig. 1.). Its southern and eastern limits lay very likely outside the excavated area. The graveyard seems to have evolved uniformly, no grave overlapping being noted.

<sup>1</sup> STANCIU 2011, 69.

<sup>2</sup> This cannot be compared for example with the layout of the cemetery at Morești (HOREDT 1979, 177).

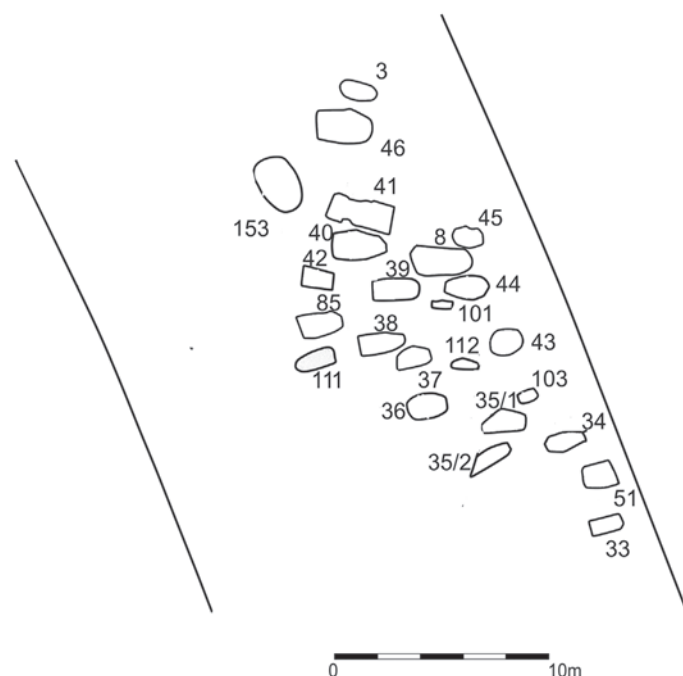


Fig. 1. The general plan of the partially surveyed cemetery. On the east and south sides the burial continues outside the area affected by the construction of the bypass road. / Planul general al cimitirului cercetat parțial. Pe partea de est și sud înmormântările continuă în afara arealului afectat de construcția drumului de ocolire. / A részben kutatott temető összesítő rajza. A keleti és déli oldalon a temetkezések az elkerülő út építése által érintett területen kívül folytatódnak.

## I.1. The funerary rite and ritual

### I.1.1. Grave reopening

The graves, except for two infant graves (101, 112), were looted. These non-looted graves lay relatively close to each other, in the central area of the grave group we investigated. It is impossible to infer that non-looting of infant graves is specific to this burial ground, since infant graves 35/2 and 103 were later disturbed. The non-looting trend of infant graves may be noted in the Gepid cemeteries of Transylvania at Bratei-cemetery 3, where out of five later non-disturbed graves (only 1.72% of total graves) three were infant graves<sup>3</sup>.

The custom of reopening graves is well known to the period, with vast bibliography on the topic<sup>4</sup> extant for Central and Western Europe. Most scholars agree that graves were reopened by looting, as also shown by looting pits targeting areas with rich funerary goods. On Gepid territory, in intra-Carpathian Transylvania, the percentage of graves damaged by subsequent disturbances is overwhelming, for instance: Bistrița 88.33%, Vlaha-Pad 90%, Bratei-Cimitir 2 98.28% to all the damaged burials of Band<sup>5</sup>. Where observations on looting pits' position could be made, it was noted they focused on the deceased from pelvis up, likely where valuable objects were placed (jewellery). Very likely, the

<sup>3</sup> DOBOS 2014, 137.

<sup>4</sup> Most recently for this topic see ASPÖCK 2018.

<sup>5</sup> DOBOS 2014, 137-139.

graves had been somehow marked on the surface, otherwise, the precision of the looters' interference is unexplained<sup>6</sup>.

Several theories are known for reopening the graves<sup>7</sup>, although in most cases, especially in the case of previous excavations, subsequent interference pits were not documented. For the burial ground here, the trace of the looting pit could be observed in a few instances. In graves 3, 34, 44, 46, 85, the looting pit was distinguished in the middle of the burial pit, occasionally exceeding its limit. In graves 37 and 8, the looting pit was dug out on the western side of the grave pit, in the latter case deepening below the grave's pit level. The looters targeted the chest and pelvis areas, generally the upper body half of the deceased. In the case of graves 3 and 37, only a few small human bone fragments survived in the grave filling, which means that the entire body was likely removed via the looting pit, the displaced parts being later thrown back in the pit. Such hook-robbing method (*Hakenberaubung*) (Fig. 3.) is known in the speciality literature and we are most definitely dealing with this disturbance type in the case of grave 41. Although the looting pit could not be traced, we may reconstruct the disturbance procedure. The looting pit was excavated very likely aiming at the upper body half of the deceased, the body being removed from the coffin, while the quiver, placed in the coffin on the right side of the feet, remained there. Over the course of the archaeological excavation, the coffin trace could be well noted on the eastern side of the grave pit. After looting, the body parts were thrown back inside the looting pit.

Of the total researched graves 20% (5) were entirely looted, with small bones discovered in the grave pit filling, still 20% (5) is the percentage of the graves where no skeleton parts could be found in anatomical location. In a few graves (5), legs or leg parts remained in anatomical location, representing still 20% of total graves. In only two cases the skull and arms' upper bones survived in anatomical location, representing 8.5% of total graves. In four graves, the looters disturbed only the chest and pelvis area (17%), these being the contexts upon which we may rely in our analysis concerning the funerary customs. Two infant graves were very likely not looted (8.5% of the graves), and in one infant grave 35/2, the skull and right femur survived in anatomical location (Fig. 2). The spread analysis of these anatomical position types of skeleton parts indicates that three graves in which only the chest and pelvis areas were disturbed. Furthermore, these graves lay by the southern edge of the group of researched graves, while grave 111, also looted in the chest and pelvis area is located by its south-western edge. Graves with a few bones in the grave pit filling and graves where all bones were disturbed emerge towards the northern and north-eastern side of the grave group. If future research will be able to establish a horizontal chronological evolution of the burials, it is not excluded that in the graveyard discussed here, looting practice changed over time.

The anthropological analyses yielded interesting information on grave looting. In graves 41 and 44, after looting, parts of two individuals were thrown back in the grave pit. This shows that very likely, several graves were looted at the same time, body parts being thrown back in the grave pits often mixed.

<sup>6</sup> BÄRZU 2010, 15.

<sup>7</sup> DOBOS 2014, 140-141.



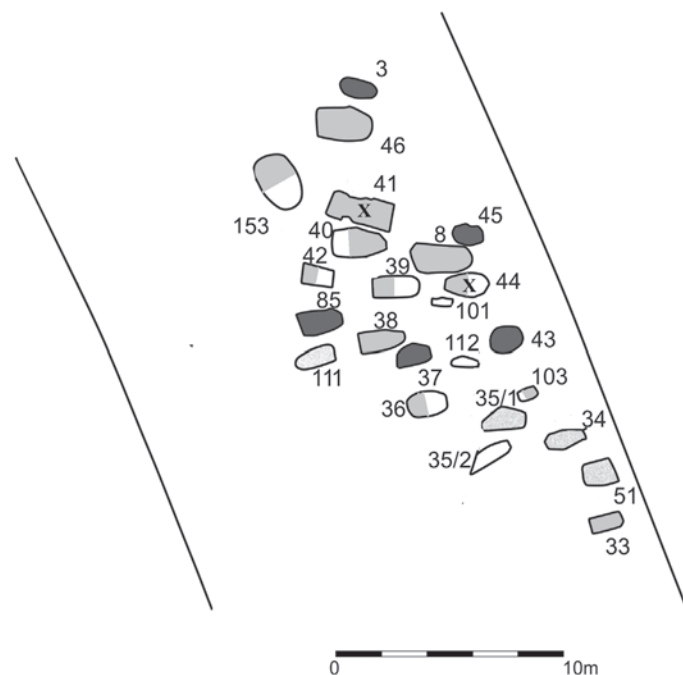


Fig. 2. The general plan with the degree of plunder / Planul general cu gradul de jefuire a mormintelor. / Összesítő rajz a sírok raboltsági fokával:

- entirely looted, with small bones discovered in the grave pit filling / jefuit complet cu oseminte mici în umplutura gropii de mormânt / teljesen rabolt, kis csont darabokkal a sírgödör betöltésében
- no skeleton parts could be found in anatomical location / fără părți al scheletului în conexiune anatomică / a csontok nincsenek anatómiai pozícióban
- partial (gray position) looted / jefuit partial (partea cu grii) / részlegesen rabolt (a szürke részben)
- only in a pelvis area looted / jefuit doar în zona bazinului / a medence környékén rabolt
- not looted / nejefuit / rabolatlan
- X

 graves in which bones from several individuals appear / morminte în care apar oseminte de la mai multe indivizi / sírok melyben több egyén csontjai vannak

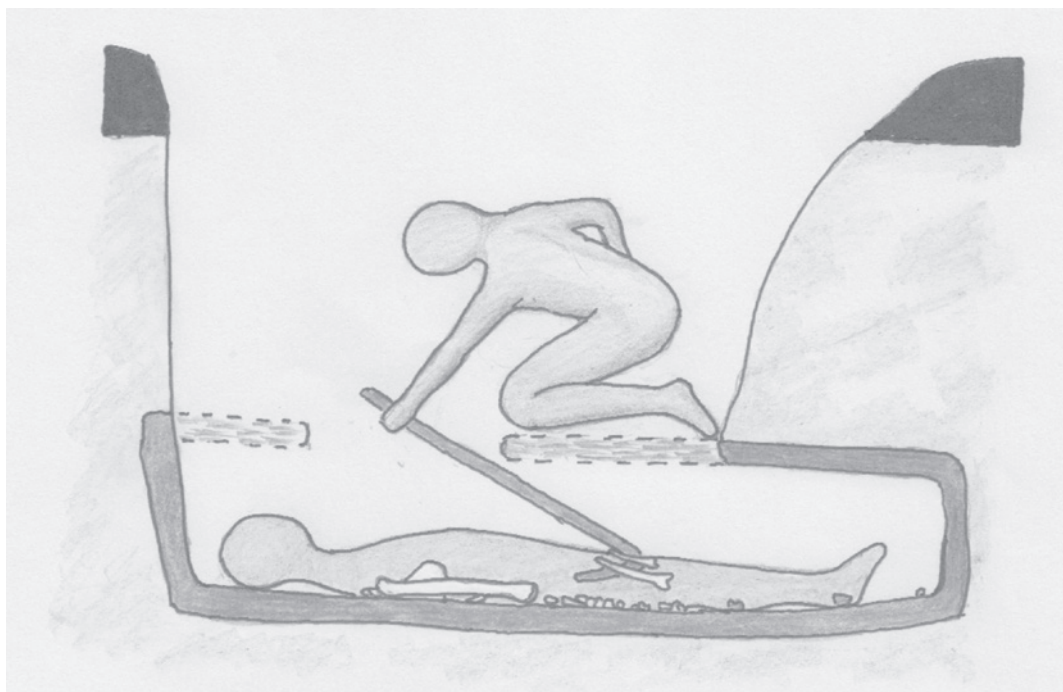


Fig. 3. Graphic reconstruction of the plundered mode of Grave 41 (drawn by János Bakai). / Reconstituire grafică a modului de jefuire a mormântului 41 (desenat de János Bakai). / Grafikai rekonstrukció a 41-es sír rablásáról (Bakai János rajza).



### I.1.2. Grave orientation

The graves were oriented west-east, head westwards, with a slight deviation of the graves' axis towards north-west. Deviation from these rules may be noted in a few graves from the southern side of the investigated burial ground, where the axes of graves 33 and 34 are slightly displaced south-westwards. A significant differentiation from the common orientation of the period was also observed in the case of grave 153 from the north-western edge of the researched grave group. The north-north-west/south-south-east orientation is atypical, yet from the point of view of the grave goods (fragment of a bone comb in the skull area), we may not exclude from the grave group we investigated. Burials in Gepid cemeteries are oriented west-east with slight deviation from this axis, which certain authors explained as the different point of the sun's setting<sup>8</sup>.

Similarly orientated to grave 153, on a north-west-south-east axis, are four graves from the cemetery at Szőreg, of which three nearby the cemetery's outline<sup>9</sup>. Graves with other orientation type are rare, in Transylvania, a grave oriented north-south<sup>10</sup> being known from Band. It seems that orientation different than that customary west-east is specific to four graves from the Gepid cemetery at Viminacum, counting amongst the earliest<sup>11</sup>. At Hódmezővásárhely-Kishomok only one grave (38) has a clear south-north orientation (head southwards)<sup>12</sup>. At Galații Bistriței, out of the 35 graves, only one, grave 46 is oriented north-south<sup>13</sup>, at Morești still one (103) is oriented on a north-north-west south-south-east direction<sup>14</sup>. Such orientation mirrors, according to some authors, a contrary of the identity of the deceased<sup>15</sup>. Starting from the position of graves differently oriented than the west-east axis by the edge of cemeteries (Carei, Viminacum, Hódmezővásárhely-Kishomok, Galații Bistriței, Morești) or relatively closely grouped within the cemetery (Szőreg), we believe that the orientation difference is not accidental. The explanation must be sought either in possible chronological differences or the custom of placing the "different" dead by the edge of burial grounds.

### I.1.3. Skeleton positions

In theory, the study of skeleton positions may firstly start from non-looted graves, yet in this case, these count infant graves, which may not mirror the burial ritual in the case of adults. The skeleton in G101 is placed on the right side, with knees slightly crouching. Unfortunately, because of the bones' frailty, it is impossible to say anything about the position of the hands. It seems this position repeats in infant grave G103, where despite the high frailty of bones, the femur's position evidences a possible crouching of the legs. In the third infant grave, G112 the skeleton was placed stretched on the back, with left arm close to the pelvis.

In Gepid cemeteries, the dead were usually buried stretched on the back with legs in the body's extension. Since looting pits excavated for their despoilment destroyed the pelvis or upper half of the skeleton area, in the cemetery discussed here, in many cases, leg bones remained in position. In G34, 35/1, G39, G42, G44, G111 legs are stretched. G36 with joint knees and G51 with left leg knee pushed outwards slightly differentiate from this rule. It is impossible to say whether these slight differences

<sup>8</sup> BĂRZU 2010, 21

<sup>9</sup> CSALLÁNY 1961, Abb.18.

<sup>10</sup> KOVÁCS 1913, Abb.2, 347-349.

<sup>11</sup> ZOTOVIČ 1994, 183.

<sup>12</sup> BÓNA/NAGY 2002, 50.

<sup>13</sup> HARHOIU 2008, 185.

<sup>14</sup> HOREDT 1979, Abb. 92.

<sup>15</sup> BÓNA/NAGY 2002, 82.

are due to differentiated positioning of the dead or if they are accidental, caused by the position at burial or earth pressure. Another detail of skeleton positions is that of the arms, which in the case of a few graves, despite their looting, is traceable. In G111 the radius evidences that the right forearm was placed on the pelvis, the left humerus suggesting a position similar to that of the left forearm. In G51, it is clearly visible that the two arms lay along the body. A position with the right forearm placed on the pelvis and the left set alongside the body could be noticed in case of G34. We believe that fore-arms position is not accidental or looting related, this being reflected by other publications of Gepid cemeteries<sup>16</sup> as well. In the case of the three graves of Carei, no regularity in the forearms position is noticeable. These appear bent on the pelvis in both a female (G111) and a male grave (G34).

#### I.1.4. Graves with determined gender

A detailed analysis of graves ascribed upon gender is found in the chapter concerning the anthropological analysis, with a few general notes here. Noticeably, within the burial ground's layout, graves which could be genetically ascribed cluster in the southern part of the studied grave group (Fig. 4). We believe this is related to the customary grave looting, graves being more disturbed in the northern side of the burials' group. Undoubtedly though, the clustering of infant graves in a relatively restricted area may mirror a funerary custom of the community.

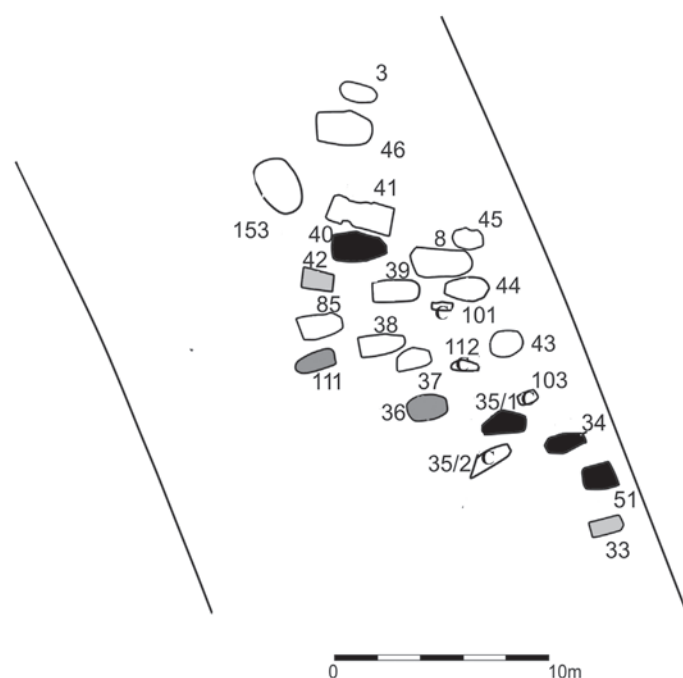


Fig. 4.

The general plan with the gender attribution of the graves. Those without a mark are not attributable.

/ Planul general cu atribuirea de gen a mormintelor. Cele fără marcaj nu sunt atribuibile. /

Összesítő rajz a sírok nemi hovatartozásával. A jelöletlenek nem meghatározhatóak.

■ male/ bărbat/ férfi ■ female/ femeie/ nő ■ subadult □ child/ copil/gyermek

Relevant conclusions on community members from a gender view are impossible to draw up, in our view, in this current state of research, because of the high looting degree of the burials. The

<sup>16</sup> BÓNA/NAGY 2002, 89-90.

double number of male graves (4) compared to female graves (2) may be possibly due to the higher looting degree of female burials.

### I.1.5. Grave depths

The depths of grave pits were measured from their outline level after the mechanical removal of the topsoil. In order to obtain depths from the current topsoil we must add ca. 70 cm to the measured data. It is impossible to know for certain where the 6th century AD surface level lay, since the land (Table 1) was transformed by subsequent farming works and furthermore, soil erosion towards lower elevations may not be excluded. In terms of grave depths compared to graves from the Tisza Plain, those at Carei are deeper. Average depths in the cemetery studied here is of 169 cm, slightly above that mentioned in Hungarian publications (Szentcsanak-Kökényzug 129 cm, Szentcsanak-Nagyhegy 145 cm, Kiszombor 133 cm, Szőreg 150 cm)<sup>17</sup>. In the case of grave depths from Transylvanian burial grounds, data provided by excavators must be cautiously analysed. We believe that in some cases, small depths and larger depth differences within a graveyard may be due to the erosion of hill slopes. The example of Fântânele is eloquent in this respect, where less deep graves cluster on rows from the northern cemetery, while those deeper, in its south-east<sup>18</sup>. In the case of the Cluj-Polus burial ground, the land was worked several times, thus three small depths are less relevant. The excavator of Cluj-Polus, noted the difference between grave depths from Transylvania and the Hungarian Plain<sup>19</sup>.

The examination of grave depths and sizes notes a first difference between infant and adult graves. Such great difference is not to be taken as a rule in Gepid cemeteries. At Hódmezővásárhely-Kishomok, infant graves are less deep than those of the adults, emerging at 110-120 cm yet also reaching 210 cm in depth<sup>20</sup>. Infant graves 101, 103, 112 have depths between 80-110 cm, yet infant grave 35/2 deepens similarly to adult graves, down to 185 cm deep. The analysis of grave depths in increasing order shows that groups upon depths do not clearly form. Except for infant graves, depths vary between 128 cm and 226 cm, such large difference being partially due to soil erosion. Although at first sight the table does not seem to mirror certain groupings, nevertheless, certain features of grave looting according to depths may be noticed. Complete looting of graves is specific to those that lay at smaller depths (85, 45, 3), still, the deepest grave (43), was also looted entirely. Graves where looting targeted the chest and pelvis area (111, 34, 35/1, 51) group in the table of grave depths increasing order between the depths of 188-206 cm. The hypothesis that in Gepid cemeteries, the richest graves were also implicitly the deepest<sup>21</sup> is difficult to substantiate in the cemetery of Carei. According to the table, the three deepest graves were looted either in the upper half of the skeleton or completely.

<sup>17</sup> BÓNA/NAGY 2002, 77.

<sup>18</sup> DOBOS/OPREANU 2012, 29, Fig. 3.

<sup>19</sup> FERENCZ/NAGY/LĂZĂRESCU 2009, 422 and note 10.

<sup>20</sup> BÓNA/NAGY 2002, 78.

<sup>21</sup> BÓNA/NAGY 2002, 78.

NR.	DEPTH	DIMENSIONS	GENDER	DEGREE OF LOOTING
3	166 cm	192 x 66/79 cm	-	Entirely
8	184cm	260 x 90 cm	-	Dislocated bones in the grave pit
33	169 cm	172x68 cm	subadult	Dislocated bones in the grave pit
34	195 cm	195x53 cm	male	Very slightly affected, only chest area and right shoulder
35/1	196 cm	233x70 cm	male	Very slightly affected, chest area, right arm and hand and shoulders
35/2	185 cm	138x45 cm	subadult	Only the skull and right femur in anatomical position
36	174 cm	179x67 cm	female	Only the femur and tibia in anatomical position
37	177 cm	198x82 cm	-	Entirely
38	200 cm	186x74 cm	-	Dislocated bones in the grave pit
39	210 cm	184x60 cm	male	Only the femur and tibia in anatomical position
40	185 cm	179x56 cm	male	The skull and the two humeruses in anatomical position
41	205 cm	190 x 60 cm	-	Dislocated bones in the grave pit
42	186 cm	172x79 cm	subadult	Only the two femurs and the right tibia in position
43	226 cm	147x62 cm	-	Entirely
44	220 cm	232x81 cm	-	Only the femur and tibia in anatomical position
45	146 cm	186x90 cm	-	Entirely
46	174 cm	166x71 cm	-	Dislocated bones in the grave pit
51	206 cm	217x81 cm	male	Chest area and pelvis affected
85	178 cm	150x88 cm	-	Entirely
101	80 cm	91x41 cm	child	Probably not looted
103	110 cm	111x48 cm	child	Only the skull in anatomical position
111	188 cm	161x61 cm	female	Chest area and pelvis affected
112	97 cm	130x48 cm	child	Probably not looted
153	-	205x70 cm	-	Only the two tibiae and the left femur in position

Table 1. Comparison table with the depth, dimension, gender and degree of looting of the graves /  
Tabel comparativă cu adâncimea, dimensiunea, genul defunctului și gradul de jefuire a mormintelor /  
Összehasonlító táblázat a sírok mélységével, méretével, az elhunyt nemével és a bolygatás mértékével.

### I.1.6. Grave shapes

The analysis of grave shapes is hindered by subsequent disturbance looting pits, which in many cases made impossible the accurate establishment of the grave pit. In general, grave pits are rectangular, with rounded corners. Comparing grave pit sizes with depths, in the case of the grave group studied here, there is no direct connection between these data. The percentage between the length and width of grave pits, except for infant grave 35/2 (1,53) and the entirely looted grave 85 (1,7), varies between 2 and 3,67.

Relative to other cemeteries, grave pits of Carei are in general smaller than those at Hódmezővásárhely-Kishomok, where adult graves are between 220-250 cm long and 60-70 cm wide. In

the latter, graves with coffins were larger, reaching lengths over 300 cm, the longest being 350 cm<sup>22</sup>, data which are not confirmed at Carei, where coffin graves do not exceed average lengths and have higher percentages between length and width, which means that in general they are narrower than the others.

### **I.1.7. Graves with coffins**

Within the grave group investigated at Carei, the presence of a coffin could be clearly recorded in a few instances. Alas, graves' reopening in the majority of cases rendered any observation regarding the presence or absence of the coffin impossible. In one grave, we noted the practice of excavating a pit precisely for the coffin on the grave bottom. In grave 34, the coffin pit emerged at -174 cm from the topsoil, in the form of a grey perimeter stripe, of 6-8 cm average width, occasionally disturbed by animal pits. Grave pits are sized 195x53 cm, while the coffin pit is 181x53 cm. The coffin trace is visible in grave 41 on its eastern side. In this case, the coffin width was of 74 de cm, while the arrow quiver was placed by the feet of the deceased inside the coffin. In grave 44, coffin traces were noticeable still on the lower, undisturbed part of the grave, in the feet area. Coffin traces also survived well in grave 111, where the looters disturbed only the chest and pelvis bones. Likely, the coffin line is represented by the ca. 8-4 cm wide greyish-white shape, poorly visible on the entire southern side of the grave pit and partially on that northern. The rectangular shape of the coffin shape as well as its base may be distinguished by the skeleton feet, partially surviving on two 5x6, respectively 2x3 cm portions between the skeleton's shinbones. The approximate coffin sizes (indecisive for the head area) are of 159x38 cm. In one case, the likely existence of a burial shroud could be assumed. On the bottom of grave 43, strongly looted, a dusty, greyish-white crust, petrified here and there, survived on two portions located approximately in its middle. In the investigated graves, no metal objects that might have been used to attach the wooden part of the coffins were discovered. As evidenced by the coffin traces in grave 41, these were likely made of planks. We may conclude that in the case of the studied grave group, coffin traces survived depending on the looting degree of the graves. Given their small percentage of survival, it is impossible to establish relations between the coffin burial custom and other funerary habits. At Hódmezővásárhely-Kishomok, grave pits exceed head side coffin limits by 20-30 cm and by 30-15 cm<sup>23</sup> at the feet. Data are resembling in the case of Carei, with 25-30 cm in excess by the feet, while in the head area, data are available only for grave 111, where the distance is relatively small, of only 14-15 cm.

Relative to coffins, there is the issue of the iron clasps or fittings attaching them. In the burial ground discussed here, they are missing, which we believe, is not accidental. Although the graves are looted, still, at least one iron clasp should have been discovered in the filling of a grave. Very likely, plank coffins were attached with wooden pegs or dowel pins. The lack of iron coffin fitting pieces is not rare. They are missing too from the graveyards of Cluj-Polus<sup>24</sup> and Fântânele. In older excavations, notes regarding coffin trace were inaccurate compared to nowadays, hence, it is very difficult to compose a relevant image on the coffin burial custom. Very likely, coffins were more frequently used than what available archaeological information<sup>25</sup> documents. At Band, a trace of rotten wood was identified in grave 128<sup>26</sup>, however the excavator argued that the deceased were buried without

<sup>22</sup> BÓNA/NAGY 2002, 78.

<sup>23</sup> BÓNA/NAGY 2002, 79.

<sup>24</sup> FERENCZ/NAGY/LĂZĂRESCU 2009, 422.

<sup>25</sup> BÓNA/NAGY 2002, 83.

<sup>26</sup> KOVÁCS 1913, 342.

coffin<sup>27</sup>. In some of the Band graves emerge iron clamps that may be associated with iron elements of the coffins (for instance in graves 159, 165, 179, 185 etc.). At Moreşti, coffins were not accurately identified, however their presence was supposed in two graves<sup>28</sup>. Iron clasps or clamps for attaching coffin wooden elements were not discovered. Notably, iron coffin elements are missing from the cemeteries in Transylvania.

## I.2. The grave-goods

### I.2.1. Deposition of offerings

Vessel deposition as offering is recorded in the graveyard discussed here in only a single case, namely a biconical, wheel-thrown vessel decorated with burnished patterns. The vessel was discovered in grave 43, in its original position, nearby the grave's western wall, to the left of where the skull would have lain. Since most graves were looted, it is not excluded that vessels were deposited in other burials as well. Currently, there are no archaeological data available for other offering types, however, these might have also been of perishable materials. In general, Gepid burials lack of other offerings that those placed in wares. An exception to this rule is the example at Kiszombor, where in a young woman's grave a goose egg was deposited<sup>29</sup>. The case of Gepid graves dated to the Avar period, which contained horse bone depositions<sup>30</sup>, may not be included here.

Offerings deposited in wares are a custom broadly spread in the Gepid cemeteries, missing from only a few burial grounds<sup>31</sup>. Analyses regarding the percentage of burials that yielded vessels from within various cemeteries evidence relatively great differentiations. In the Tisza Plain, at Kiszombor, 6.3% of the burials yielded deposited vessels, at Szentes-Nagyhegy, Kökényzug, Berekhát percentages varied between 10-19%, while at Hódmezővásárhely-Kishomok these were 27.4%<sup>32</sup>. At Bratei 3, the percentage of burials containing deposited vessels amounts to 32%<sup>33</sup>. At Hódmezővásárhely-Kishomok, the author noted that of total vessel depositions, these emerge mostly in infant graves (35.7%), yet also in female (33.3%) and male (25%)<sup>34</sup> graves.

Differences related to offerings deposited in wares may also be noticed in their number and location within the burials, as well as in ware types. Depositing a single vessel mainly in the head area is specific. A divergence from this custom is recorded at Bratei 3, where in 8.6% of the burials two vessels are deposited, while within the graves where vessels survived in their original locations, in 30 cases they were placed by the feet in contrast with 46 cases where they lay in the head/shoulders area<sup>35</sup>.

<sup>27</sup> KOVÁCS 1913, 367.

<sup>28</sup> POPESCU 1974, 193.

<sup>29</sup> CSALLÁNY 1961, 173.

<sup>30</sup> BÓNA/NAGY 2002, 93.

<sup>31</sup> Cluj-Polus, see FERENCZ/NAGY/LĂZĂRESCU 2009, 425.

<sup>32</sup> BÓNA/NAGY 2002, 94.

<sup>33</sup> BĂRZU 2012, 25.

<sup>34</sup> BÓNA/NAGY 2002, 94.

<sup>35</sup> BĂRZU 2012, 27.



## I.2.2. The custom of depositing weaponry

The custom of depositing weaponry is generally well spread in Gepid cemeteries. A recent study has shown that the percentage of male burials containing weaponry varies between 14 and 100% within burial grounds and burial groups, the average being of 42%. This percentage is similar to the other Germanic populations from Central and Western Europe<sup>36</sup>. The analysis of burials with weapons is yet hindered by their high looting degree, thus, in only a few cases we have a complete image of the weaponry of the deceased warrior.

In the Carei cemetery, weaponry pieces were discovered in two graves: a spearhead (39) and four arrowheads (41). The location of the finds corresponds to that original, they not being moved during the looting operation. In both graves, the looters destroyed the upper half of the graves, thus it is difficult to say whether only these pieces were deposited during burial. In the Tisza Plain cemeteries, the percentage of graves with a single weaponry piece rises to 73% of total graves with weapons. Of the graves with a single weapon, in a third emerge only arrowheads and in another third only spearheads<sup>37</sup>.

### I.2.2.1. Spearheads

The spearhead in grave 39 at Carei was placed with tip downwards, on the left side of the skeleton where the leg would have lain. Spears were generally deposited in Gepidic burials nearby the deceased, parallel to the body, either to the left or right side, with the spearhead tip towards either the head or leg. If the spearhead was discovered in another location, it may be assumed that the spear lay deposited broken or stuck into the ground. Obviously, today it is impossible to know whether the location of the spear within the grave mirrors the position in which it was used by the deceased in their life time, nevertheless, there is a clear tendency to place them to the right side of the skeleton, with the spearhead tip either nearby the skull or by the feet. Since most of the warriors were right-handed, we believe that the spear location within the grave somewhat reflects the position of its use on the battle field.

The analysis of the position of spearheads in the Gepid burial grounds evidences an obvious trend among the Tisza Plain cemeteries to place the spear to the right side of the deceased, with the spearhead tip towards the skull area. The spear emerges in the face area in G7 (according to Móra Ferencz), with upward tip to the right side of the skull in G96 at Hódmezővásárhely-Kishomok<sup>38</sup>, outside the coffin at Szolnok-Zagyva part-Alcsi<sup>39</sup>, or near the right shoulder at Szolnok-Szanda in G113<sup>40</sup>, to the right of the skull, Szolnok-Szanda outside the coffin in G125 or near the gravepit wall in G62, G88<sup>41</sup>, still to the right of the skull with upward tip at Szentes-Kökényzug G57<sup>42</sup>, Hódmezővásárhely-katona István halom G10<sup>43</sup>, Szőreg-Ziegelei GIII (1907)<sup>44</sup>, G38<sup>45</sup>, Szentes-Nagyhegy G31<sup>46</sup>, Kiszombor G24, G30, G229<sup>47</sup> and in the right arm area with tip skullwards in G64 and G56, G74<sup>48</sup>,

<sup>36</sup> Kiss P. 2015, 177.

<sup>37</sup> Kiss P. 2015, 177.

<sup>38</sup> BÓNA/NAGY 2002, 72, Abb. 36. 96

<sup>39</sup> CSEH 2005, 21.

<sup>40</sup> BÓNA/NAGY 2002, 216.

<sup>41</sup> BÓNA/NAGY 2002, 210, 218.

<sup>42</sup> CSALLÁNY 1961, 33.

<sup>43</sup> CSALLÁNY 1961, 124.

<sup>44</sup> CSALLÁNY 1961, 148.

<sup>45</sup> CSALLÁNY 1961, 157.

<sup>46</sup> CSALLÁNY 1961, 51.

<sup>47</sup> CSALLÁNY 1961, 170, 173, 184.

<sup>48</sup> CSALLÁNY 1961, 54, 56.

at Szőreg-Ziegelei GXXVI (1928)<sup>49</sup> and in the right shoulder area at Szőreg-Ziegelei G73<sup>50</sup> and Kiszombor in G29, G63<sup>51</sup>.

A few spearheads emerge on the right side of the skeleton by the feet. A spearhead in the lower part of the gravepit, to the right, near the right coffin corner appears in G135 at Szolnok-Szanda<sup>52</sup>, in the right knee area with downward tip in G68 at Szőreg-Ziegelei<sup>53</sup>, in the right shinbone area in G300 Kiszombor<sup>54</sup>. In Transylvanian Gepid burial grounds, spearheads commonly emerge near the right leg, with tip towards the lower part of the gravepit. They emerge in 7 burials from four cemeteries (Band G49, G52; Târgu Mureş G9; G24; Bistriţa G34, G46; Bratei 3 G192)<sup>55</sup>.

Less common is the deposition of the spear to the left side of the deceased. A spearhead in the skull area was discovered in the corner of the gravepit left to the skull in G40 and G70 at Szolnok-Szanda<sup>56</sup>, to the left side of the skull at Vereşmort G5<sup>57</sup>, Band G115<sup>58</sup>. The spearhead placed tip downwards near the deceased feet, like in G39 at Carei, is also rare among Gepid burials. Parallels for such location are found at Szolnok-Szanda G72<sup>59</sup>, Bistriţa G40<sup>60</sup> and Bratei 3 G218<sup>61</sup>, to the left side of the skeleton in G44, or below the sword tip in G128 at Szőreg-Ziegelei<sup>62</sup>.

In a less usual position, with downward tip, near the forearm emerge the spearheads in burials 8 and 9 at Szolnok-Szanda<sup>63</sup>, near the left hand in G8 at Magyarcsanak-Bökény<sup>64</sup> or in a double grave at Kiszombor G337, between the two skulls<sup>65</sup>.

Two spearheads with downward tip, inside the coffin, near the right feet appear in grave 43 at Kisköre-Pap tanya<sup>66</sup>, between the shinbones in G22 at Bratei<sup>67</sup> or to the right of the skull at Hajdúszoboszló-Bajcsy-Zsilinszki u.60<sup>68</sup>.

#### ***1.2.2.2. Arrowheads***

In grave 41, three arrowheads are deposited grouped, with downward tip, in the area where the right knee of the deceased would have lain. We believe such location mirrors the position of the arrows in the quiver, likely attached to the waist belt of the deceased. An arrowhead was discovered lower than the other, with the tip still towards the lower side of the grave pit. Arrowheads are rarely mixed with other weapons in the burial grounds from the Tisza Plain<sup>69</sup>. The examination of arrowheads position within the graves is hindered by the graves' looting or the faulty description of the grave goods. Nonetheless, they were noticeably deposited either grouped in the quiver, singularly or together with other objects.

<sup>49</sup> CSALLÁNY 1961, 149.

<sup>50</sup> CSALLÁNY 1961, 163.

<sup>51</sup> CSALLÁNY 1961, 173, 176.

<sup>52</sup> BÓNA/NAGY 2002, 219.

<sup>53</sup> CSALLÁNY 1961, 161.

<sup>54</sup> CSALLÁNY 1961, 188.

<sup>55</sup> DOBOS/OPREANU 2012, 43.

<sup>56</sup> BÓNA/NAGY 2002, 207, 210.

<sup>57</sup> CSALLÁNY 1961, 201.

<sup>58</sup> KOVÁCS 1913, 341.

<sup>59</sup> BÓNA/NAGY 2002, 211.

<sup>60</sup> GAIU 1992, 118.

<sup>61</sup> BÄRZU 2010, 240.

<sup>62</sup> CSALLÁNY 1961, 167.

<sup>63</sup> BÓNA/NAGY 2002, 204.

<sup>64</sup> NAGY 2005, 100.

<sup>65</sup> CSALLÁNY 1961, 190.

<sup>66</sup> BÓNA/NAGY 2002, 195, Abb.81.

<sup>67</sup> BÄRZU 2010, 178.

<sup>68</sup> ISTVÁNOVITS/NEPPER 2005, 46.

<sup>69</sup> BÓNA/NAGY 2002, 116.



Compared to Transylvania, the custom of depositing arrowheads in the quiver emerges in more cases in the Tisza Plain graveyards. Mostly, these quivers were deposited within the graves in the leg area. The trace of a 63-70 cm long quiver was discovered in G59 at Szolnok-Szanda, 12 different arrowheads being identified near the left ankle, with tips downward, the quiver trace being observed up to the left knee<sup>70</sup>. At Szentés-Nagyhegy 4 arrowheads were discovered near the right shinbone and other three near the right femur<sup>71</sup>. Near the left femur were discovered grouped 9 arrowheads in G73 from the cemetery at Szőreg-Ziegelei<sup>72</sup>. From between the two femurs come 2 arrowheads from G2 at Klárafalva-József utca<sup>73</sup>. At Szentés-Nagyhegy in G37, 5 barbed arrowheads were identified near the right foot<sup>74</sup>. In some cases, grouped arrowheads were found in the hands and arms area. At Szentés-Kökényzug, 11 grouped arrowheads were deposited near the left hand<sup>75</sup>, at Szentés-Nagyhegy in G31, 5 arrowheads shaped as a spear were placed near the right hand<sup>76</sup> or in G47, four arrowheads near the right forearm<sup>77</sup>. At Kiszombor in G310 in the right elbow area, were discovered 12 arrowheads<sup>78</sup>. Two arrowheads, with upward tip, come from G30, from the left shoulder area, inside the coffin<sup>79</sup>. In the area of the right shoulder were discovered 6 arrowheads in G5 at Unirea-Vereşmort<sup>80</sup>.

Arrowhead deposition in the skull area is a rare custom recorded in the Gepidic environment. In a case, 14 arrowheads were deposited around the skull in G191 at Szolnok-Szanda<sup>81</sup>. Grouped in the skull area, "in a pile" emerge 11 specimens also in G23 at Szentés-Kökényzug<sup>82</sup>. From the right side of the skull in G13 at Unirea-Vereşmort come two arrowheads<sup>83</sup>, from the cemetery at Band five arrowheads were discovered on the right side of where the skull would have lain<sup>84</sup>.

Arrowheads appear deposited within burials also outside the quiver. At Szolnok-Szanda in G6 a three-barbed arrowhead was deposited in a leather pouch together with a striker, flint and knife in the pelvis area of the deceased<sup>85</sup>, a similar custom being recorded at Szentés-Kökényzug in G76<sup>86</sup>. At Szőreg-Ziegelei an arrowhead together with other corroded metal objects were discovered to the right side of the pelvis of the deceased in G10<sup>87</sup>. On the left shinbone of the deceased in GLXV from the Band cemetery, an arrowhead is grouped with a knife and other small pieces, assembled together in a pouch<sup>88</sup>.

In the Tisza Plain, singular arrowheads emerge especially in the feet area of the deceased. An arrowhead comes from the left foot, with tip oriented though to the upper side of the grave pit at Kardoskút G3<sup>89</sup>. One arrowhead with upward tip was found near the left knee in G11 and that right in G17 at Tiszafüred-Nagykenderföld<sup>90</sup>. This custom is though not exclusive. A single barbed ar-

<sup>70</sup> BÓNA/NAGY 2002, 210.

<sup>71</sup> CSALLÁNY 1961, 47.

<sup>72</sup> CSALLÁNY 1961, 163.

<sup>73</sup> CSALLÁNY 1961, 168.

<sup>74</sup> CSALLÁNY 1961, 52.

<sup>75</sup> CSALLÁNY 1961, 33.

<sup>76</sup> CSALLÁNY 1961, 51.

<sup>77</sup> CSALLÁNY 1961, 53.

<sup>78</sup> CSALLÁNY 1961, 188.

<sup>79</sup> BÓNA/NAGY 2002, 206.

<sup>80</sup> CSALLÁNY 1961, 201.

<sup>81</sup> BÓNA/NAGY 2002, 228.

<sup>82</sup> CSALLÁNY 1961, 27, Taf. VII.

<sup>83</sup> CSALLÁNY 1961, 202.

<sup>84</sup> KOVÁCS 1913, 324.

<sup>85</sup> BÓNA/NAGY 2002, 204.

<sup>86</sup> CSALLÁNY 1961, 37.

<sup>87</sup> CSALLÁNY 1961, 152.

<sup>88</sup> KOVÁCS 1913, 328.

<sup>89</sup> CSALLÁNY 1961, 137.

<sup>90</sup> BÓNA/NAGY 2002, 251.

arrowhead was discovered near the right arm of the deceased at Szentes-Nagyhegy G20<sup>91</sup> and a single arrowhead is mentioned to the left side of the skull in G269 at Szentes-Berekhat<sup>92</sup>.

Circumstances in the Bratei 3 burial ground are different from the cemeteries in the Tisza Plain. There, arrowheads emerge in 51 burials, meaning 17% of total burials in the cemetery. In only one grave were discovered in one place 7 arrowheads (G121), in a destroyed area from the left side of the skull. The three grouped arrowheads emerge in graves (6, 110, 182) in the left femur area and other three (G281) to the left side of the pelvis. Except for two burials, arrowheads are not mixed with other weapons at Bratei 3<sup>93</sup>. If one examines the position of the arrowheads deposited singularly at Bratei 3, it may be noted that there is no rule in their deposition and that they do not emerge in closely related contexts with other objects like the pouches from the pelvis area in the Tisza Plain graveyards. In the other Gepid cemeteries from Transylvania, in general, fewer graves with arrowheads emerge. At Fântânele, four grouped arrowheads were identified midway the grave pit, in its eastern part (G8), alike in the case of a single arrowhead in G44<sup>94</sup>. At Bistrița in G34, six arrowheads were found near the right femur<sup>95</sup>, being not discovered singularly within the burials there. At Cluj-Polus, in a female grave (G28B) appear two arrowheads near the right humerus<sup>96</sup>. In the Morești-Hulă graveyard in only three burials emerge arrowheads, six being grouped to the right side of the pelvis in the adult grave G8 and one in each of the juvenile graves G9 and G24, custom differently explained by the author by the age difference of the deceased<sup>97</sup>. The idea of depositing one spearhead in infant/juvenile burials has been recently resumed, on a western pattern, however in the Tisza Plain only three cases were noted, where one arrowhead was discovered in the ankle area<sup>98</sup> in each burial.

### I.2.3. Jewels and dress accessories

#### I.2.3.1. Bone combs

Bone combs were discovered in a relatively large number of the burials studied here. The custom of depositing within the grave bone combs is known in Pannonia over the 4th and 5th centuries AD<sup>99</sup>, hence it may not be related only to Germanic populaces, however, the custom is missing from the Sarmatian space, combs emerging sporadically once with the 4th century in the area they inhabited<sup>100</sup> as well. Very likely, owing to their relatively little value they remained in burials often even after looting. In the seven burials of Carei the comb was discovered in various locations, in the skull area (42, 51, 112, 153), the pelvis area (35/2, 39) or by the feet (101). If we analyse burial types, it may be easily noted that of four infant burials, three contained combs. This is likely due also to the small looting degree of such graves. Bone combs emerge in large numbers in Gepid burials, from a percentage of 20.5% in the Szentes-Nagyhegy burial ground to 61.3% at Kiszombor. In certain cases, combs tend to emerge in infant graves (Morești, Szőreg, Szentes-Kökényzug, Kiszombor), nonetheless, this should not be considered a general rule for the Gepidic space<sup>101</sup>. The image of the Carei graveyard

<sup>91</sup> CSALLÁNY 1961, 49.

<sup>92</sup> CSALLÁNY 1961, 94.

<sup>93</sup> BĂRZU 2010, 29.

<sup>94</sup> DOBOS/OPREANU 2012, 46.

<sup>95</sup> GAIU 1992, 118.

<sup>96</sup> FERENCZ/NAGY/LĂZĂRESCU 2009, 448.

<sup>97</sup> HOREDȚ 1979, 191.

<sup>98</sup> KISS P. 2015, 183.

<sup>99</sup> BÍRÓ 1994, 36.

<sup>100</sup> PINTYE 2009, 166.

<sup>101</sup> BÓNA/NAGY 2002, 171, Tab. 17, 18.

with combs emerging in 29% of the graves with almost half graves being infant graves frames in the general image of the investigated Gepid burials grounds.

Comb position in Gepid burials firstly depends on their disturbance degree upon looting, yet in general, they lay in the skull area. In the case of the Hódmezővásárhely-Kishomok cemetery, it was concluded that such deposition custom was related to comb wearing as hairdo accessory, if identified nearby or by the skull, and if further from the skull, they were worn in the braided long hair of the deceased. Combs were discovered either on the left or the right side of the skull, however underneath it as well<sup>102</sup>. Such theory is yet contradicted by B. Tóth Ágnes, based on grave G84 at Szentes-Nagyhegy, where a hairpin also emerged together with the comb, which in fact ensured stable hairdo<sup>103</sup>. Another view compared comb depositions in Germanic burials with the traditional custom of depositing the comb used to comb the deceased during the ceremony prior the proper interment<sup>104</sup>. In the burials from the Carei cemetery, combs in the head area were discovered by the skull, in the place where the latter is missing (G42, 153) and below the skull (G51, 112). We believe that in graves where combs may be related to the skull, the deceased used to wear them in the hair pulled back on the head, in a sort of bun.

The emergence of combs within graves in other locations than the skull area was related by Nagy Margit to the custom of ritual offerings, not as a dress objects worn in hair. These exceptions are very few in the Tisza Plain, where combs were perseveringly deposited in the head or shoulder area. An eloquent example to this effect are burials where the deceased held the comb in the hand used to comb the hair, like for instance in G8 at Szőreg-Ziegelei, where an elderly man was buried with the comb in the right hand<sup>105</sup>. This location also emerges in G53 at Szentes-Kökényzug<sup>106</sup>, below the shinbones, near the right hand in G19 or in the right hand in G32 at Szentes-Nagyhegy<sup>107</sup>, near the right hand at Kiszombor in G62<sup>108</sup> or left hand at Szolnok-Szanda in G64<sup>109</sup>.

In the burial ground investigated here, in G101, of an infant, the comb was set by the feet, and since the grave was not looted, such position is most certainly that original at the time of the burial. Location by the pelvis or feet is rather rare in Gepidic graves<sup>110</sup>, tending to emerge especially in infant graves<sup>111</sup>. This custom appears at Szentes-Kökényzug G81 on the right knee<sup>112</sup>, at Hódmezővásárhely-Gorzsa G23(6) near the left shinbone<sup>113</sup>, at Szőreg-Ziegelei in G19 (female) underneath the feet, G44 (male) between the ankles, G26 (infant), right leg in G36 (infant), by the end of the legs in infant grave G35, near the left leg in G78 (infant) or near the left shinbone in the juvenile grave G52<sup>114</sup>. Still in an infant grave, the comb appears in the right knee area in G60, G142 from Kiszombor<sup>115</sup>. At Hódmezővásárhely-Kishomok in infant grave G71 the comb emerges among the femur bones<sup>116</sup>, at Szolnok-Szanda in G102 between the ankles<sup>117</sup>, on the left femur in G127 at Szolnok-Szanda<sup>118</sup>, near the left ankle in the infant grave G187, near the left knee still in an infant grave G205, in infant grave

<sup>102</sup> BÓNA/NAGY 2002, 97.

<sup>103</sup> B. TÓTH 1994, 29.

<sup>104</sup> CSALLÁNY 1961, 251.

<sup>105</sup> NAGY 2015, 145.

<sup>106</sup> CSALLÁNY 1961, 32.

<sup>107</sup> CSALLÁNY 1961, 49, 53.

<sup>108</sup> CSALLÁNY 1961, 176.

<sup>109</sup> BÓNA/NAGY 2002, 210.

<sup>110</sup> B. TÓTH 1994, 260.

<sup>111</sup> NAGY 2005, 145.

<sup>112</sup> CSALLÁNY 1961, 38.

<sup>113</sup> CSALLÁNY 1961, 127.

<sup>114</sup> NAGY 2005, 127, 129

<sup>115</sup> CSALLÁNY 1961, 176, 180.

<sup>116</sup> BÓNA/NAGY 2002, 62.

<sup>117</sup> BÓNA/NAGY 2002, 215.

<sup>118</sup> BÓNA/NAGY 2002, 218.

G208 at Szolnok-Szanda<sup>119</sup> in the left pelvis area, by the right shinbone in an infant grave at Magyarcsanak-Bökény, G39<sup>120</sup>. Comb depositions by the feet in infant graves are also known in Transylvania, namely G44 in the Galații Bistriței graveyard<sup>121</sup>.

In the Morești-Hulă cemetery, beside the common skull area, combs also appear in many cases in other locations as well. They appear by the end of the feet in G33, by the right heel in G55, a comb fragment by the knee in G35, one between the femurs in G42 and to the right side of the pelvis in G77<sup>122</sup>.

The location of the comb in the pelvis area in G35/2 and G39 at Carei is equally unusual, however it emerges in another few cases as well: to the right side of the pelvis in G57 at Szentes-Kökényzug<sup>123</sup>, on the chest at Szőreg-Ziegelei G74<sup>124</sup> or Kiszombor G43, G115<sup>125</sup>, among right ribs in G61 or on the pelvis in G102 at Hódmezővásárhely-Kishomok<sup>126</sup>, in the left knee cap area in G36 at Szolnok-Szanda<sup>127</sup>. Regarding the comb's location in the pelvis area details are provided by burial 199, a juvenile grave from Szolnok-Szanda, where the comb was discovered by the right hip in a small bag together with buckles, striker and flint or G214, a female grave, where it lay still by the right hip<sup>128</sup>. The custom of depositing the comb together with other objects in a pouch is also known in male burials, like for instance G28 at Magyarcsanak-Bökény, in the right forearm area, beside small knives, pincers, striker and flint<sup>129</sup>.

The idea that the comb was preserved in a pouch in the knee area was expressed when the Gepid burials of Miercurea Sibiului-Pietriș<sup>130</sup> were published. Cseh János expressed another view in connection with a female burial from the Szolnok-Zagyva part-Alcsi cemetery, namely that the comb discovered between the femur bones was part of the objects set from the belt end hanging on the belt<sup>131</sup>.

### ***1.2.3.2. Buckles***

Most numerous finds in the Carei burials are the variously sized buckles made of iron, bronze or silver. In G34 and G35/1 emerge several specimens, while in the other graves they emerge as single examples. The presence of several buckles (3-4)<sup>132</sup> is specific to male burials from the Gepidic burial grounds. Unfortunately, because most of the skeletons in the graves from the Carei graveyard were disturbed, the accurate location of the buckle is impossible to establish.

An iron buckle (3.9 x 2.5 cm) was identified in the left shoulder area in grave 34, another comes from the grave pit filling. From the right shoulder area comes a bronze buckle (3 x 2 cm) in grave 39.

Grave 35/1 contained several buckles: a bronze buckle (3.2 x 2.4 cm) comes from the right arm lower bones, the other in silver (3.8 x 2.7 cm) from near the right leg shinbone. Another silver buckle, unfortunately fragmentary, yet surely larger than the other two, was discovered in the grave pit filling.

An iron buckle (3.2 x 2.4 cm) was discovered in the middle of the disturbed bones from grave 41, likely somewhere in the pelvis/chest area. In the pelvis area, near the left forearm was identified

<sup>119</sup> BÓNA/NAGY 2002, 228, 231.

<sup>120</sup> NAGY 2005, 105.

<sup>121</sup> HARHOIU 2008, 201.

<sup>122</sup> POPESCU 1974, 223.

<sup>123</sup> CSALLÁNY 1961, 33.

<sup>124</sup> CSALLÁNY 1961, 163.

<sup>125</sup> CSALLÁNY 1961, 174, 179.

<sup>126</sup> BÓNA/NAGY 2002, 58, 75.

<sup>127</sup> BÓNA/NAGY 2002, 207.

<sup>128</sup> BÓNA/NAGY 2002, 230, 233.

<sup>129</sup> NAGY 2005, 101.

<sup>130</sup> LUCA et al 2005, 22.

<sup>131</sup> CSEH 2005, 29.

<sup>132</sup> BÓNA/NAGY 2002, 104.

a small bronze buckle (1.8 x 1.4 cm), in grave 44. Likely similarly was worn the bronze buckle with same sizes (1.8 x 1.4 cm) from grave 46, discovered by the grave edge, approximately midway the southern wall of the gravepit. Still from the pelvis area comes a small bronze buckle (1.7 x 1.3 cm) in grave 111. We may firstly note that these buckles emerge in both male and female burials, lacking though from those of infants. Buckles in pelvis area from male graves were used to fasten the belt (they were of large sizes and often in precious metal), to hang the knife, dagger or sword or for fastening the tools' kit<sup>133</sup>. The attached corroded rivet on the buckle from G44 evidences that buckles were attached to a leather belt.

### **I.2.3.3. Beads**

Beads emerge in five graves, however unfortunately in secondary location in most cases, and if identified on the gravepit bottom, one may suppose their original position. In grave 43 four small beads were found in the pelvis area, left to it. Several beads come from infant graves, in G103 and G112, where they were discovered to the left of the skull and by the neck. Beads were worn also around the ankles, thusly being recorded in graves 103 and 111.

Rather special is wearing beads stringed on a belt as recorded in grave 111, with a pyramid amber pendant by its end. This dress type has yet to be analysed in Gepidic burials. Upon the examination of Gepidic graves, there may be distinguished three functionality types of such belt fittings. Very likely, the Kishomok type<sup>134</sup> *cingulum* was used for decorative purposes, unrelated to the religious beliefs. At Hódmezővásárhely-Kishomok, this dress type emerges in grave 77, of a female. By the belt extremity of the 55-60 year deceased was sewed an amber bead, together with other two beads<sup>135</sup>. Nagy Margit mentioned at Szőreg-Ziegelei two female graves (16, 19), where the *cingulum* extremity was sewed with amber and limestone beads<sup>136</sup>. In the female grave 64 of Szolnok-Szanda, to the belt was hung a chain of bronze links, with a large amber bead by the extremity. The author believes that this dress type may be very likely connected to knife hanging<sup>137</sup>. Neither this case may be related to the world of religious beliefs. Unfortunately, the detailed documentation of the cemetery excavated by Móra Ferenc at Kiszombor is unknown. In infant grave 279 below the pelvis, beside a pierced coin dated to Constantius (323-361) and 25 glass beads and 4 of amber, were discovered 5 bone pyramid pendants, of which one was made of an animal tooth<sup>138</sup>. We believe that in this case these objects may be related to the world of the sacred, however, it is uncertain whether they were part of a *cingulum* or were deposited in a pouch.

### **I.2.3.4. Pendants**

Pendants are present in the graves discussed here in only two cases. From grave 35/1 comes a bronze globular pendant, unfortunately only from the gravepit filling. The deer tooth pendant in G111 was discovered on top of the head of the deceased, being very likely bound around the neck. It is not excluded it was worn beside a simple bead, globular, black, of glass fabric. Deer tooth pendants emerge in Sarmatian burials or later in those Gepidic, lacking though from the Avar period. Of the 14 cases studied for the Carpathian Basin they emerge in the neck area in 9 cases, hence they were mainly worn in this position. Of the studied graves where anthropological analyses were performed, they were infant or juvenile burials<sup>139</sup>.

<sup>133</sup> BÓNA/NAGY 2002, 104.

<sup>134</sup> NAGY 2005, 188.

<sup>135</sup> BÓNA/NAGY 2002, 64,65, Abb.31; 118-120; 295, Taf. 21.

<sup>136</sup> NAGY 2005, 188.

<sup>137</sup> BÓNA/NAGY 2002, 210, Abb. 86, Taf. 36: 1-12, 91: 1.

<sup>138</sup> CSALLÁNY 1961, 187, Taf. CXXXVI, 1-24.

<sup>139</sup> RÁCZ/DARÓCZI-SZABÓ 2016, 180-181.



#### ***I.2.3.5. Studs***

Bronze belt studs are of one type, emerging in four graves. Unfortunately, in only the case of grave 39 three studs emerge together with a buckle in the right shoulder area of the deceased. The use of belt studs is highlighted by the stud attached to the buckle from grave 44, discovered in the pelvis area, near the left forearm. Studs were used to decorate belts in various combinations<sup>140</sup>.

#### ***I.2.3.6. Brooches***

Brooch wearing is recorded in the Carei cemetery in only a single grave. Two brooches were identified near the right leg shinbone, very likely in secondary position. The use of the Roman bronze brooch, strongly profiled is recorded at Band in GXXIII, LXXIII or CIII<sup>141</sup> or in the Tisza Plain at Szolnok-Zagyvart in G21<sup>142</sup>.

### **I.2.4. Tools**

#### ***I.2.4.1. Knives***

Knives were discovered to the left side of the skull with upward handle in grave 34, a similar location also having the knife in grave 51, with the note that it lay to the right side of the skull. The other knives emerge either in the chest area (grave 36) or pelvis area (graves 44, 46). Since of the five knives only two are intact, no connection between their type and position within the grave may be made.

In the case of the burials from the Tisza Plain, the knife emerges in most cases near the hand of the deceased or on the back, in the tools' pouch<sup>143</sup>. In the cemetery of Szőreg-Ziegelei, it was noted that in female graves, knives were set customarily in a pouch in the pelvis area or attached to the belt. In male graves, the knife is attached to the waist belt or on the back, near the pouch with various utensils<sup>144</sup>. Knives may also emerge in male graves in a small bag placed in the pelvis area beside fire lighting utensils or buckles (for instance at Törökszentmiklós- Batthyány utca 54/A G4<sup>145</sup>, Szentes-Gyógyszertár G6<sup>146</sup>, Hódmezővásárhely-Kishomok G1<sup>147</sup>). It seems this is the dominant location in the Tisza Plain burials, for instance in the upper part of the femur emerge knives in all the five graves from Szolnok-Zagyvart-Alcsi<sup>148</sup>.

Knives in the skull area are rather rare, among we may mention G31, two on the right side of the skull in G36 at Szentes-Kökényzug<sup>149</sup> or the knife fragment from beneath the skull at Jászberény G1<sup>150</sup>, in G210 at Szolnok-Szanda<sup>151</sup>. In the case of G81 at Hódmezővásárhely-Kishomokos a knife was deposited in the common pelvis area, the other yet, curved, was set on the right side of the skull<sup>152</sup>.

Among tools may be possibly included the one-sharpened end piercers with rectangular cross-section discovered in grave 35/1. They were likely used to pierce animal skins.

<sup>140</sup> See the reconstruction of flat, circular head studs from the cemetery at Hódmezővásárhely-Kishomok NAGY/BÓNA 2002, Taf. 16/51/3; Taf. 18/64/3 or that at Szolnok-Szanda BÓNA 2002, 312, Taf. 38/76/2.

<sup>141</sup> KOVÁCS 1913, 314, Fig. 34: 7, 8; 334, Fig. 53: 3; 340, Fig. 60: 2.

<sup>142</sup> BÓNA 2005, Taf.4ö, 21/1.

<sup>143</sup> CSALLÁNY 1961, 288.

<sup>144</sup> NAGY 2005, 151.

<sup>145</sup> CSEH 2005, 43.

<sup>146</sup> NAGY 2005, 117.

<sup>147</sup> BÓNA/NAGY 2002, 42.

<sup>148</sup> NAGY 2005, 29.

<sup>149</sup> CSALLÁNY 1961, 28, 29.

<sup>150</sup> CSALLÁNY 1961, 236.

<sup>151</sup> BÓNA 2002, 233.

<sup>152</sup> BÓNA/NAGY 2002, 100.

### I.3. Typology of the finds

#### I.3.1. Ceramic materials. Biconical vessel/beaker

In the Carei cemetery was discovered a single pottery vessel (Pl. 12: 1) that may be very well typologically framed among biconical vessels/beakers, with the maximum diameter larger than the rim diameter, rim angle shorter than 90 degrees, set in the lower third of the vessel. It displays burnished decoration, the surface between the upper part down to the maximum diameter line being covered by vertical lines. The type of biconical vessel/beaker is broadly found in Gepid burial grounds<sup>153</sup>, its diffusion being mapped since two decades ago<sup>154</sup>. Biconical vessels/beakers have a great variety of forms depending on height, maximum diameter and the latter's angle. Almost identical specimens were discovered at Szolnok-Szanda in G61<sup>155</sup> and Andrid-Dealul Morii<sup>156</sup>.

#### I.3.2. Weaponry

##### I.3.2.1. Spearheads

Spearheads emerge in large numbers in the Tisza Plain burials<sup>157</sup>, typologically having a rather significant variability. Bóna István discussed and classified spearheads according to blade shape<sup>158</sup>, while Nagy Margit divided them according to length<sup>159</sup>. We believe that any such typology needs to take into account both aspects. The spearhead from Carei (Pl. 8: 2) is 36 cm long, of which the socket is 12 cm, has a diameter of 1.9 cm at one extremity and 1.2 cm by the junction with the blade, the blade maximum width being of 3.4 cm near the socket, flat in cross-section, with a strongly marked ridge midway. Based on such specificities, there are a few good parallels in both sizes and shape. These parallels lead firstly to the Tisza Plain: G1 (40.5 cm) from Hódmezővásárhely- Kishomok<sup>160</sup>, G128 (40 cm) at Szőreg-Ziegelei<sup>161</sup> or G24 (37.2 cm), G29 (35.1 cm), G330 (37.1 cm) of Kiszombor<sup>162</sup>, the burial discovered at Hajdúszoboszló-Bajcsy-Zsilinszki u.60<sup>163</sup> (37.4 cm). In Transylvania, the Carei type is well represented in the graveyard of Bratei 3, with one specimen 35.5 long (G192) and two shorter from G21 and G22<sup>164</sup>.

##### I.3.2.2. Arrowheads

The four arrowheads in grave 41 (Pl. 10: 3-6) typologically frame into two types: three-barbed with spike and spear-shaped. These two basic types emerge on large scale in the Gepid cemeteries of the Tisza Plain and Transylvania, detailed classification being possible based on their sizes.

The spear-shaped<sup>165</sup> arrowhead from Carei is 10 cm long, of which the socket is 3 cm, with a diameter of 1.2 cm by the extremity and 0.8 cm by the junction with the blade, the blade maximum diameter being of 2 cm approximately midway. Such sizes frame to the most frequent type identified

<sup>153</sup> Type III/B2 at Hódmezővásárhely-Kishomok, BÓNA/NAGY 2002, 134.

<sup>154</sup> CSEH 1990, 60, XXIII térkép, 23. list.

<sup>155</sup> BÓNA 2002, 309, Taf. 35/61/1.

<sup>156</sup> GINDELE/NÉMETI 2001, 285.

<sup>157</sup> Nagy Margit compiled 48 burials (BÓNA/NAGY 2002, 116), Bóna mentions 52 (BÓNA 1974, 62-63).

<sup>158</sup> BÓNA 1979, 41.

<sup>159</sup> BÓNA/NAGY 2002, 179.

<sup>160</sup> BÓNA/NAGY 2002, 41.

<sup>161</sup> NAGY 2005, 134, 294.

<sup>162</sup> CSALLÁNY 1961, Taf. CLIV, CLV.

<sup>163</sup> ISTVÁNOVITS/NEPPER 2005, 47.

<sup>164</sup> BĂRZU 2010, 121.

<sup>165</sup> See their list and distribution maps in the Gepidic environment in CSEH 1990, 44; Kiss 1992, 68 Liste 6, 101 Karte 6.

in the Bratei 3 burial ground of 8-9 cm, with blade length at 2/3 of total length<sup>166</sup>. In the case of the second arrowhead, it lacks the socket and it is smaller, of 5.2 cm, with a maximum width of 1.4 cm. According to Kiss Attila, such arrowhead type is typical to the Germanic milieu and survives in the Avar period<sup>167</sup> as Germanic tradition.

Of the two three-barbed arrowheads<sup>168</sup> of Carei only one survived intact, being 5.4 cm long, of which the spike is 1.5 cm, the other being of similar sizes, missing though the spike. Noticeably, from the size point of view, these count among the small specimens, at Bratei 3 varying between 5-12.5 cm<sup>169</sup>. In Gepid burial grounds, the sizes of the barbed arrowheads are in general of 9-12 cm, the smallest being believed to likely further a Hunnic period tradition<sup>170</sup>. The three-barbed arrowheads are of Eastern origin and emerge in the Carpathian Basin beginning with the Hunnic period<sup>171</sup>, being still fashionable in the Avar period, after the cessation of the Gepid cemeteries.

### **I.3.3. Jewels and dress accessories**

#### ***I.3.3.1. Bone combs***

Typologically, the combs in the burial ground of Carei are of the bilateral teeth type, made of three parts and iron riveted (Fig. 5). This type is broadly spread over the course of the 5th – 6th century AD, extending to the 7th century AD as well<sup>172</sup>. The origin of bilateral combs is Roman, being known in the Roman provinces of Asia Minor and Pontus Euxinus<sup>173</sup>. Bilateral combs were also discovered in the Late Sarmatian environment of the Great Hungarian Plain, there being sized 9.8/11.5 x 4/4.5 cm and generally, iron riveted. Pinyte Gábor noted this differentiation from the bilateral examples of Gepid date, which vary between 10-16 cm in length<sup>174</sup>. Around 9-10 cm in length also vary the bilateral combs from the post-Roman settlement (dated rather to the 4th – 5th century AD) of Alba Iulia-Monolit, however, these are attached with bronze rivets<sup>175</sup>.

In sizes, the two intact specimens from Carei are similar: that in G39 is 9.5 cm long and 3.9 cm wide, while that in G35/2 is 10.2 cm long and 4.3 cm wide. We may note that the Carei combs were decorated only on one side, which underlines the idea that beside their functional use, they also fulfilled a decorative purpose<sup>176</sup>. The variety of decorative patterns on the combs from the Gepid graveyards is rather broad<sup>177</sup>, however in some cases, decoration was not used, like for instance in the Bratei burial ground, where combs are not ornamented as a rule<sup>178</sup>.

#### ***I.3.3.2. Buckles***

The buckles discovered in the Carei graveyard (11 specimens) may be classified according to size, material and shape (Fig. 6). According to sizes, they form three classes. The smallest are sized 1.7 x 1.3/ 1.8 x 1.4 cm, all being oval, with a circular cross-section, all there being bronze made. Two spec-

<sup>166</sup> BĂRZU 2010, 118.

<sup>167</sup> KISS 1992, 52.

<sup>168</sup> See the distribution map in CSEH 1990, 43.

<sup>169</sup> BĂRZU 2010, 118.

<sup>170</sup> KISS 2015, 188.

<sup>171</sup> ANKE 1998, 66.

<sup>172</sup> HARHOIU 1998, 60.

<sup>173</sup> BÍRÓ 2002.

<sup>174</sup> PINTYE 2009, 176.

<sup>175</sup> BOUNEGRU/OTA 298-300.

<sup>176</sup> FERENCZ/NAGY/LĂZĂRESCU, 429.

<sup>177</sup> CSALLÁNY 1961, 253.

<sup>178</sup> BĂRZU 2012, 72.



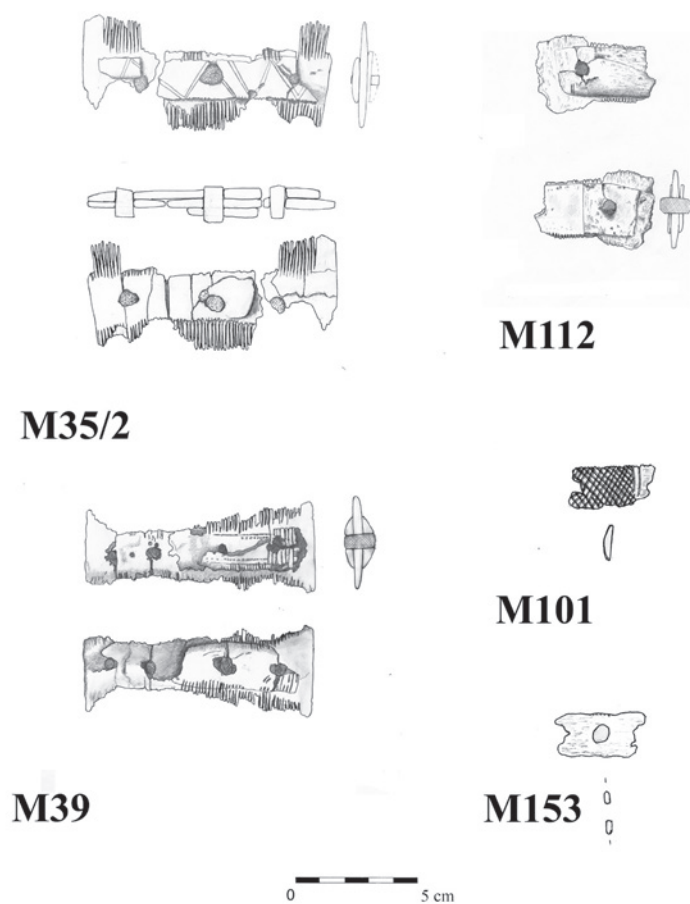


Fig. 5. The bone combs from Carei / Piepteni din os de la Carei / Csontfésűk a Nagykárolyi temetőből.

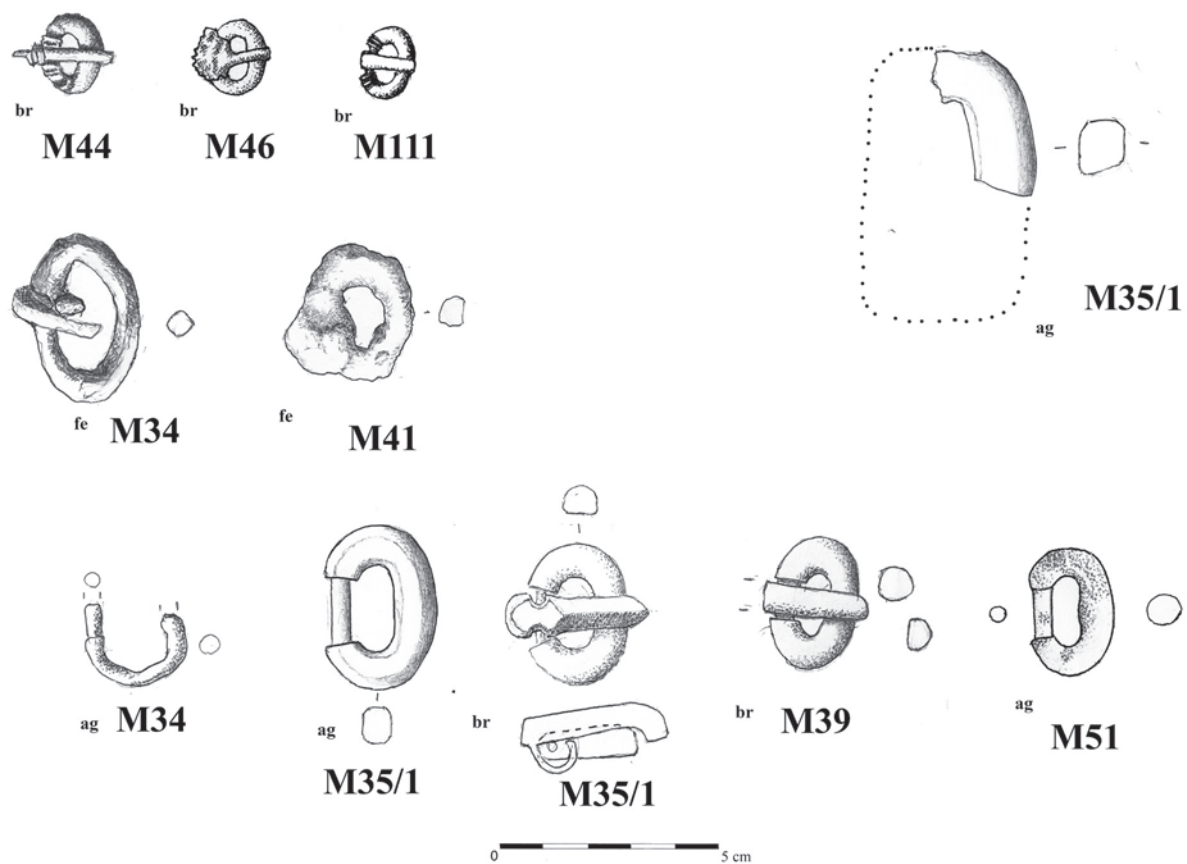


Fig. 6. The buckles from Carei / Cataramele de la Carei / Csatok a nagykárolyi temetőből.

imens individualize by a typological detail, namely the part where the prong attaches to the buckle frame, which is bordered by two grooves on each side of the frame.

Among medium-sized buckles are included 7 examples, the smallest being of 3 x 2 cm and the largest of 3.8 x 2.7 cm. Two buckles (G34, 41) are in iron, two in bronze (G35/1, 39) and three are of silver (G34, 35/1, 51). We may note a relative typological homogeneity of the buckles from Carei, by contrast with other cemeteries<sup>179</sup>. All are oval in shape except for the design of those iron-made, in which the buckle does not taper in the area of the tang attachment to the frame. The iron buckles of Carei frame to type I in the cemetery of Szőreg-Ziegelei, where they emerge in large numbers, representing the basic type<sup>180</sup>.

Parallels for the bronze and silver buckles are found on the entire territory inhabited by the Gepids, typologically framed to type I in the Szőreg-Ziegelei graveyard, where several specimens are of shield-shaped type<sup>181</sup>. In the examples here, the prong survived only with two buckles, of which one is of shield-shaped type. Such design is specific to the Germanic world, different from late Roman traditions<sup>182</sup>. Typologically, the specimen in G35/1 frames to the type with thickened frame<sup>183</sup>. A detailed typology of the examples identified in the Carpathian Basin area was drawn up by Kiss Csaba, the specimen here being framed to type B, with the shield exhibiting one semicircular notch on either sides<sup>184</sup>. The buckle of Carei displays certain individualizing details: the shield and prong form common body and it is not vertically marked.

The silver buckle fragment in G35/1 stands out among the other specimens by size and silver quality of the casting silver. Unfortunately, because of its fragmentary state, it is impossible to establish its sizes with certainty, however it is not excluded it belonged to the Adlerschallen buckle type<sup>185</sup>.

### **I.3.3.3. Beads**

The beads of the period investigated here have not been typologically classified for the Carpathian Basin area, therefore, only previous classifications like for instance those for the Roman period and the first Migration period from the Barbaricum<sup>186</sup> or later, for the Avar period<sup>187</sup> may be used. The beads of Carei may be typologically framed into five types (Fig.7). Of the 33 beads, 8 are in amber, representing 24%, 1 is of bronze and the remaining of white, dull or black glass fabric.

I. Beads with surface that may exhibit several mouldings (I.1) or only moulded extremities (I.2., I.3). The beads in type I.1. are made of black glass, those of type I.2. from G103 and G111 are of white glass, while the specimen in G112 is of black glass. The latter type is paralleled at Hódmezővásárhely-Gorzsa<sup>188</sup>, resembles the examples from Bratei 3, believed a rare type<sup>189</sup> and emerges in the founder grave from the burial ground at Hajdúnánás-Fürjhalomdűlő<sup>190</sup>.

II. Round beads that may be globular in shape (II.1.) are either of white or black glass and may be flat (II.2). The flat specimens were made of white and black glass or amber. The small bead in G103 is in bronze. This is the most spread type in the Gepid cemeteries of the Tisza Plain, being made both of amber and glass or clay.

<sup>179</sup> For instance Hódmezővásárhely-Kishomok or Szőreg-Ziegelei, where bronze and silver buckles are represented by several types (BÓNA/NAGY 2002, 103, Abb.49, NAGY 2005, 155, Abb.18; 157, Abb. 19; 158, Abb.20).

<sup>180</sup> NAGY 2005, 161, Abb. 22.

<sup>181</sup> NAGY 2005, 154-155, Abb.18.

<sup>182</sup> MARTIN 1989, 132.

<sup>183</sup> MARTIN 1989, 136-137.

<sup>184</sup> KISS Cs. 2015, 7-9.

<sup>185</sup> See NAGY 2002.

<sup>186</sup> TEMPELMANN-MĄCZYŃSKA 1985.

<sup>187</sup> PÁSZTOR 1997.

<sup>188</sup> CSALLÁNY 1961, Taf. CCXXIX, 11.

<sup>189</sup> BÄRZU 2012, 84, Abb. 48, type 14f.01.07.01.

<sup>190</sup> RÁCZ 2016, 329, Abb.16.

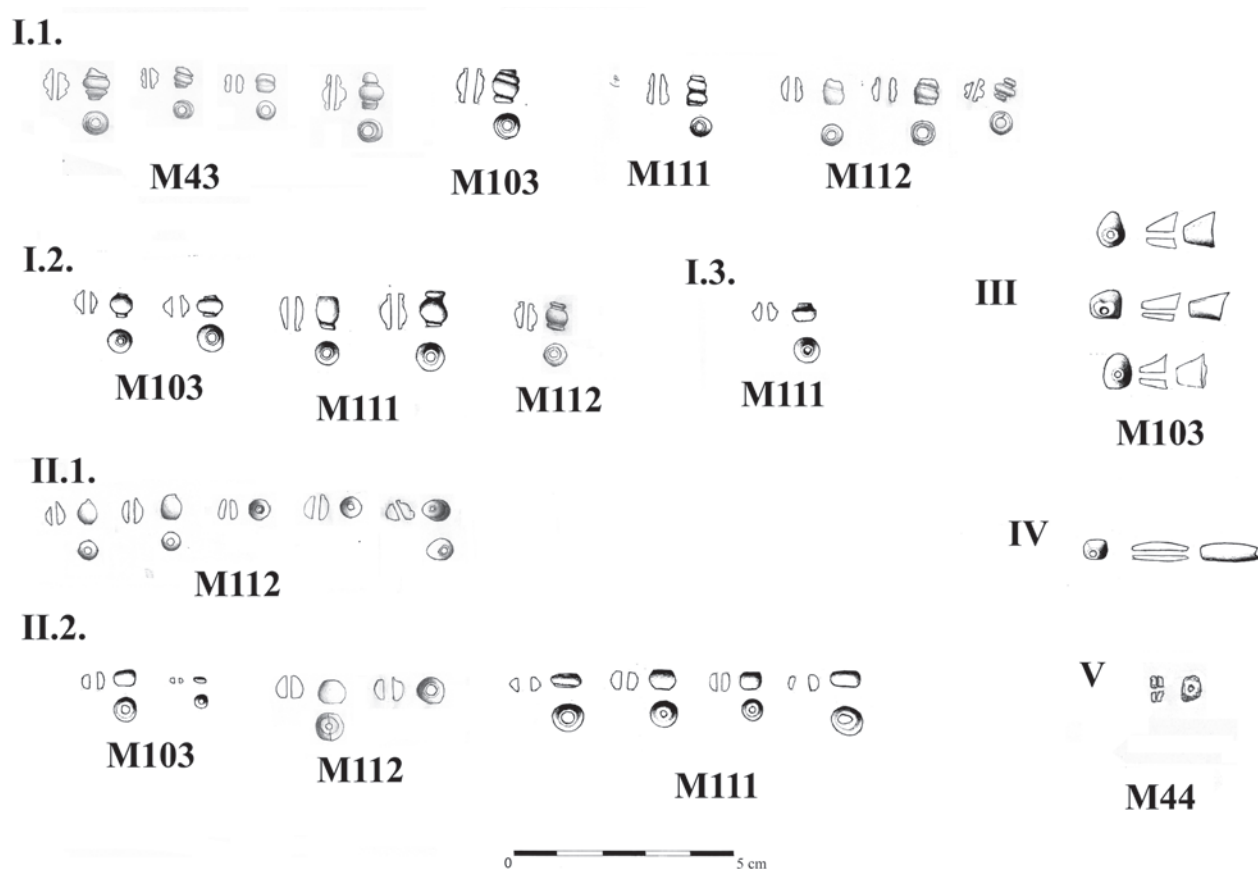


Fig. 7. The beads from Carei / Mărgelele de la Carei / Gyöngyök a nagykárolyi temetőből.

III. Conical beads are made of amber. This type is rare on the Gepid territory, parallels being found at Szentés-Nagyhegy, in G25<sup>191</sup>.

IV. Cylindrical bead, with thinned extremities, in amber. It emerges at Hódmezővásárhely-Kishomok G44, G105 of amber<sup>192</sup>, Magyarcsanak-Bökény G31<sup>193</sup> of glass at Tiszaföldvár GB<sup>194</sup>, in amber at Szentés-Nagyhegy G9<sup>195</sup>, in the founder grave from the cemetery at Hajdúnánás-Fürjhalomdűlő<sup>196</sup>, but also at Morești<sup>197</sup> or Bratei in glass<sup>198</sup>.

V. Amber rectangular bead. The type is common, emerges as early as the Roman period<sup>199</sup> and continues to be used also over the 5th – 6th century AD.

#### I.3.3.4. *Pendants*

The Thor/Donar amulet pendant in G111 (Pl. 19: 5) is part of the class of objects specific to Germanic beliefs. Women used to wear such amulet for protection against demons, but also as a symbol of fertility, aiding families with many children. In general, they emerge as part of buckle sets in female and infant graves with the Germanic peoples on the Elbe, the Anglo-Saxons, the Frizii, the Franks, the Alemanni, the Baiuvari, the Thuringii, the Gepids, the Lombards and in the Chernyakhov cul-

<sup>191</sup> CSALLÁNY 1961, Taf. XXVIII, 2.

<sup>192</sup> BÓNA/NAGY 2002, 119, Abb. 58.

<sup>193</sup> NAGY 2005, 254, Taf. 24, 31, 6.

<sup>194</sup> CSEH 2005, 270, Taf. 40, B.

<sup>195</sup> CSALLÁNY 1961, Taf. XXIV, 31.

<sup>196</sup> RÁCZ 2016, 329, Abb. 16.

<sup>197</sup> HOREDIT 1979, G12, G51, G73.

<sup>198</sup> BĂRZU 2012, 84, Abb. 48, type 14f.01.08.04.

<sup>199</sup> TEMPELMANN-MĄCZYŃSKA 1985, Taf. 15, type 398.

ture, in the latter being worn as earrings<sup>200</sup>. The pendants on the territory of Hungary were listed by Zsolt Gallina, the object's emergence being related to pagan traditions<sup>201</sup>. At Magyarcsanak-Bökény, in G31, the bone pendant emerges in secondary location, to the right side of the skull<sup>202</sup>, at Kiszombor two pendants, still of bone, emerge in the pelvis area, near a bronze buckle<sup>203</sup>. Still in the pelvis area was discovered also the bone pendant from the burial ground of Tápé-Széntégláégető<sup>204</sup>. The specimen of Carei, made of amber, seems to be unique in the Gepidic environment.

#### ***I.3.3.5. Studs***

The studs identified at Carei may be typologically included in the class of studs with circular and flat head. There may also add those with semi-spherical or shield-shaped head<sup>205</sup>. The studs of the type at Carei emerge in large numbers in burial grounds from the Tisza Plain, like for instance Hajduszoboszló- BajcsiZsilinszki út 60<sup>206</sup>, Szőreg-Ziegelei G23, G52<sup>207</sup> or in other graveyards.

### **I.3.4. Tools**

#### ***I.3.4.1. Knives***

The knives in the Gepid burials do not have a large variety of forms, thus they are typologically classified firstly according to sizes. In the graves from Carei (Fig. 8.), only that in G51 is intact, being 14 cm long and with a maximum blade length of 1.4 cm.

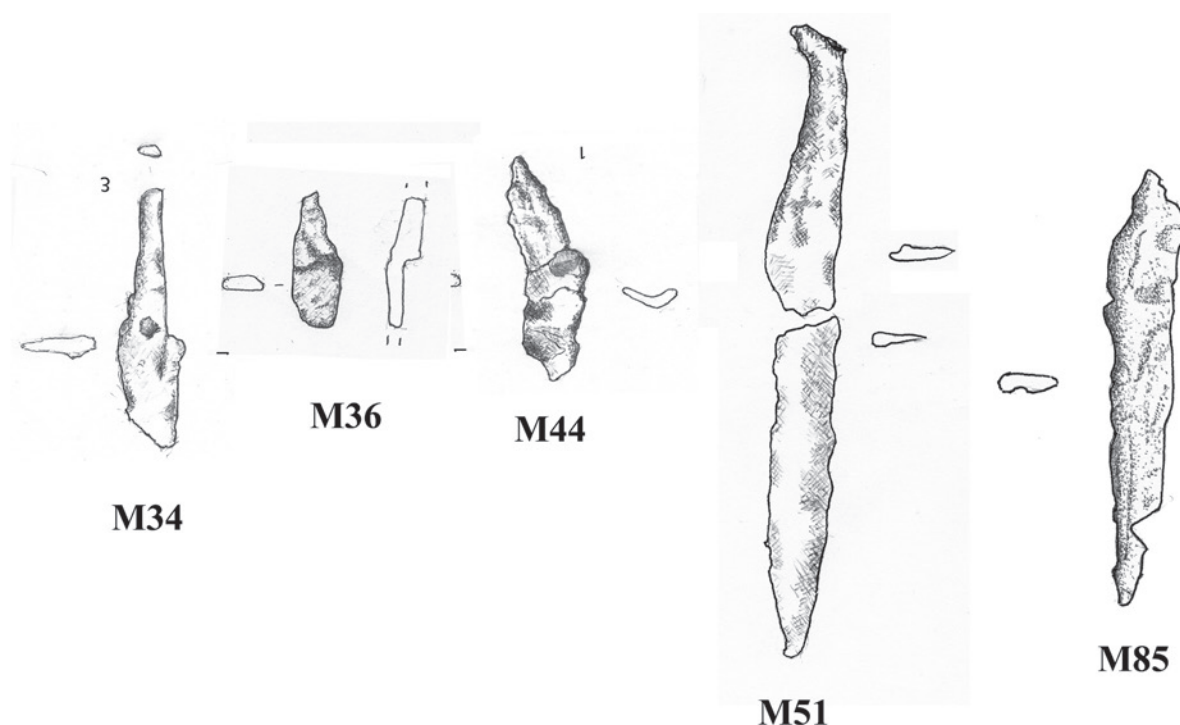


Fig. 8. The knives from Carei / Cuțitele de la Carei / Kések a nagykarolyi temetőből.

<sup>200</sup> BEHM-BLANKE 1973, 152.

<sup>201</sup> GALLINA 1999, 96.

<sup>202</sup> NAGY 2005, 103, 254, Taf.24, 31.1.

<sup>203</sup> CSALLÁNY 1961, 180, Taf. CXXIV, 5-6.

<sup>204</sup> B. TÓTH 1994, 294.

<sup>205</sup> NAGY 2005, 155, Abb. 18:9.

<sup>206</sup> ISTVÁNOVITS/NEPPER 2005, 244, Taf. 14:6.

<sup>207</sup> BÓNA 2005, Taf. 51/18/3; Taf. 56/52/3.

This size aligns with the class of small knives, specific to the female and infant graves at Hódmezővásárhely-Kishomok<sup>208</sup> or to medium-sized knives, most often deposited in the graves from Bratei 3<sup>209</sup>. In the case of the specimen here, it may be noted that the handle extremity is recurved, a typological differentiation from most knives with spike-shaped handle end. From the point of view of this detail and according to sizes, closest parallels emerge in G65 (13.6 cm) at Hódmezővásárhely-Kishomok<sup>210</sup>, an isolate find (15 cm) within the territory of the burial ground of Szolnok-Szanda<sup>211</sup> or at Band, in GLIX<sup>212</sup>. The fragment of recurved knife from G44 is a less common type in Gepid burials, nonetheless, it emerges both in the Tisza Plain area (Szolnok-Szanda G156<sup>213</sup>) and Transylvania (Bratei 3<sup>214</sup>). Another criterion of typological differentiation is the junction type of blade with handle<sup>215</sup>, which may be rectangular in the case of the knife in G34 or straight in the case of the other knives from Carei.

#### I.4. Chronology

Kurt Horedt was the scholar who lay the chronological bases of the period under study here for the Transylvanian space. The Cluj-based specialist defined three find types: the Apahida group (the second half of the 5th century), the Morești group (6th century, with the weighing point in the first half of the century) and the Band-Vereșmort group (first half of the 7th century)<sup>216</sup>. Regarding the Band graveyard, the original dating was nuanced by Csallány Dezső, who maintained that in the northern side of the cemetery, burials started in 540-560 while the group of Avar influence graves dated after 568<sup>217</sup>. The dating of the first burials in the Band cemetery remained subject of debate between the Romanian scholars (Kurt Horedt) and those Hungarian (Bóna István), the first supporting a 7th century dating and the latter, one starting with the second half of the 6th century or even earlier<sup>218</sup>. The issue was resumed in the 90's by Radu Harhoiu, who divided the cemeteries with row burials from Transylvania in two major groups: the Morești group, dated prior the settlement of the Avars and the Band-Vereșmort group, with a start in the second half of the 6th century<sup>219</sup>. After 2000, once publication of Gepid cemeteries from the Tisza Plain was resumed, chronological issues were also re-discussed. For instance, for the Hódmezővásárhely-Kishomok graveyard five successive dating periods were identified, starting with the second half of the 5th century until the first and second third of the 7th century<sup>220</sup>. In the case of the Szőreg-Ziegelei cemetery were defined three periods, from the second half of the 5th century until the mid third of the 6th century<sup>221</sup>. New chronological data<sup>222</sup> entered the scientific circulation subsequent to the processing of the archaeological excavations related to the Bratei 3 burial ground, with two evolutionary stages defined. Stage 1 was framed

<sup>208</sup> BÓNA/NAGY 2002, 102.

<sup>209</sup> BÂRZU 2012, 131.

<sup>210</sup> BÓNA/NAGY 2002, 291, Taf. 17/65/7.

<sup>211</sup> BONA 2002, 328, Taf. 54/D/1.

<sup>212</sup> KOVACS, 327, fig. 45.5.

<sup>213</sup> BONA 2002, 323, Taf. 49/156/3.

<sup>214</sup> BÂRZU 2012, 103, Taf. 25/G153/8.

<sup>215</sup> HORED T 1979, 192.

<sup>216</sup> HORED T 1958, 97.

<sup>217</sup> CSALLÁNY 1961, 349-350

<sup>218</sup> BÓNA 1979, 43-44.

<sup>219</sup> HARHOIU 1999-2001, 127-130.

<sup>220</sup> BÓNA/NAGY 2002, 149-150.

<sup>221</sup> NAGY 2005c, 195-196.

<sup>222</sup> HARHOIU 2010, 153-158; ANTON 2015.



between ca. AD 460/470- 570/580, with a possible division in two sub-stages: sub-stage D3 450-540 and the pre-Avar sub-stage AD 540-570 and stage 2 between ca. AD 570/580-670/690<sup>223</sup>. The burials of Carei may be dated by comparison with the so-called “founder graves” from the Gepid cemeteries. This aspect has been recently approached by Rácz Zsófia, who attempted to sketch their possible identification through certain objects or dress details that were continued from stage D3 in cemeteries with row graves<sup>224</sup>. Based on such chronological framing premises, despite the relatively small number of finds, we may attempt to chronologically frame the Carei-Bobald graves.

The bronze and silver oval buckles frame to type 1 in the Szőreg-Ziegelei cemetery, dated by Nagy Margit to the end of the 5th – early 6th century AD<sup>225</sup>. A good parallel for the buckle with thinner frame than in the other examples is represented by the buckles in the Genf cemetery, believed the earliest specimens of shield-shaped buckles<sup>226</sup>. The shield-shaped buckle frames to type B in Kiss Csaba’s typology for the Carpathian Basin area and is dated by the author to the first two thirds of the 6th century AD<sup>227</sup>. The custom of wearing deer teeth as pendants emerges in burials until the second half of the 5th century - early 6th century AD<sup>228</sup>. The connection with the founder grave in the Hádúnánás-Fürj-Halom dűlő cemetery is ensured by bead types with moulded surface (type I Carei) and those cylindrical with thinned ends (type IV Carei)<sup>229</sup>. Type I of amber beads from Carei emerge in G105 from Hódmezővásárhely-Kishomok, dated to the second half of the 5th century<sup>230</sup>. This type, of glass, was dated to the first stage (AD 460/470-50/580) of the Bratei 3 cemetery<sup>231</sup>. In light of these chronological indications we may conclude that the Carei-Bobald burial ground functioned more or less in parallel with those from the Tisza Plain, in the last third of the 5th century and first two thirds of the 6th century.

## I.5. Conclusions

The archaeological information on 5th – 6th century finds from the Carei area have been recently discussed synthetically by Ioan Stanciu<sup>232</sup>. In the row burials horizon were included the settlements of Berea X-XIIb-XXI, Berea XVI/Ciumești I, Carei- Kozard, Sanislău I-II-III and Valea lui Mihai-Groapa cu lut. The Carei-Bobald II finds are part of the settlement published herein. As funerary finds were mentioned those of Andrid-Dâmbul Morii, Șimian-Groapa cu lut, Valea lui Mihai-Grădina lui Krizsan and the Carei-Kozard cemetery. Owing to the quantity of information, the Carei-Bobald settlement and cemetery features and burials published herein have become the reference point for this geographical area by the northern border of the block of Gepid finds. Undoubtedly, the cemetery and settlement are contemporary, common pieces including ware finds and the bone combs. The relation of the Carei-Bobald settlement with the settlements from the Berea-Ciumești Sanislău area is difficult to investigate, the later being mostly surface finds. The connection of the Carei-Bobald cemetery with the funerary finds of Andrid-Dealul Morii is ensured by the very good

<sup>223</sup> ANTON 2015, 162-163.

<sup>224</sup> RÁ CZ 2016, 325.

<sup>225</sup> NAGY 2005c, 154.

<sup>226</sup> MARTIN 1989, 133.

<sup>227</sup> KISS Cs. 2015, 11.

<sup>228</sup> RÁ CZ/DARÓ CZI-SZABÓ 2016, 179-180.

<sup>229</sup> RÁ CZ 2016, 329, Abb.16.

<sup>230</sup> BÓ NA/NAGY 2002, 150.

<sup>231</sup> ANTON 2015, 174.

<sup>232</sup> STANCIU 2011, 49-70.

analogy with the biconical vessel there<sup>233</sup> and with that from Valea lui Mihai-Grădina lui Krizsan via the iron buckles in GVIII<sup>234</sup>. One difference consists in the lack of polyhedral and bun-shaped earrings from Carei-Bobald. We believe that burials in the Carei-Bobald cemetery differentiate from those at Carei-Kozard by the handmade pottery discovered in the latter, which has a few parallels in the Gepid burials from the Tisza Plain, however such parallels also lead to the Avar period<sup>235</sup>. The distance between these two burial grounds is of only 3 km and both stretch on the Merghes stream terrace, practically in the same inhabitancy micro-area. We believe that in the Kozard cemetery, burials started after that of Bobald were abandoned.

The larger scale excavations of Carei-Bobald provided us with an image of the settlement's internal layout and spatial relation with the cemetery. As shown in the chapter related to the settlement's structure, it was structured in households spread on the bank of two temporary water courses, which also collected surface waters resulted from snow melting on the higher, southern terrace of the Merghes stream, carrying them to its broader floodplain. Spatially, it is impossible to clearly delimit the cemetery's location within the area used for inhabitancy. It stretches on a higher place, well marked in the terrain, between the groups of features I and II-III, at a distance of 80-90 m (group I) respectively 120-130 m (group II) from the houses by the edge of the inhabited areas.

The archaeological material specific to the Gepid material culture from the area studied here stands out by the lack of pear-shaped vessels, stamped decoration, the lack of spouts and knobbed wares. We believe that the lack of these elements specific to the Transylvanian or Tisza Plain Gepid wares has no chronological bearing, they rather representing territorial differentiations. For now, the research of Gepid settlements and cemeteries in the geographical area of Ier and Barcău Plains and the Nir Plain is limited, however, the objectives published herein may be references for future cultural and chronological framings. A future objective would also be to continue the excavations in the Carei-Bobald cemetery, until completion. We do not exclude that once with the quantitative increase of archaeological information for the investigated area, it would be possible to sketch a territorial group in the Gepid cultural block. Until then, it may be concluded that the settlement and cemetery of Carei-Bobald have parallels rather in the Tisza Plain phenomena and seem not to endure past the Avar conquest (AD 567/68) of the eastern Carpathian Basin.

<sup>233</sup> GINDELE/NÉMETI 2001, 285.

<sup>234</sup> STANCU 2011, 625, Pl. 16: 18, 19.

<sup>235</sup> STANCIU/IERCOȘAN 2003, 144.

## I.6. Catalogue of the graves

### ***Feature 3. (Pl. 1A)***

Likely a grave, entirely looted. When delimited, it emerged like a light-grey, unclear patch. The filling was greyish-brown, relatively compact, with clay lenses. Nothing survived of the skeleton. Grave orientation is W-E, its pit having strongly rounded corners and sizes of 192 x 66 cm on the eastern side and 79 cm on the western side. The pit deepens to 166 cm below the topsoil. The looting pit is noticeable midway the grave hole.

Without grave-goods.

### ***Feature 8. (Pl. 2)***

Adult grave, looted. It emerged unclearly, like an elongated patch. Because of the looting holes, the investigation established the grave hole at 35 cm deep from its presentation level. It is oriented W-E, rectangular in shape, with slightly rounded corners and sized 260 x 90 cm. The eastern part descends in steps, on the western side being identified the trace of the looting hole, circular, with a diameter of 166 cm. Of the skeleton survived in anatomical location the shinbones and lower femur parts, in the grave filling being also identified other small skull bones. The grave depth was of 184 cm from the surface, sinking on its western side due to the looting disturbance at 198 cm from the topsoil.

Without grave-goods.

### ***Feature 33. (Pl. 1B)***

Juvenile grave, looted. It appeared like a grey patch, rectangular, in the greyish-brown layer. The filling is gray, loose down to -15-20 cm, then mixed, clayish yellow, with gray lenses. Of the skeleton survived hand bones and rib fragments, in non-anatomical location, grouped on the western side of the hole, and leg bone fragments, anatomically positioned. The skull is missing. Orientation: WSW-ENE. Pit sizes: 172x68 cm, depth -169 cm from topsoil. The looting pit is uncertain, it could not be observed either when emerging or when excavating.

Without grave-goods.

### ***Feature 34. (Pl. 3)***

Adult grave, looted. Partially overlaps the Celtic house Feature 35, in its north-eastern corner. The coffin pit emerged at -174 cm from topsoil, in the form of a gray perimeter stripe, of 6-8 cm average depth, here and there disturbed by animal holes. The filling inside the perimeter strip, just above the skeleton, is formed of reddish sand mixed with gray earth. The looting pit is perpendicular to the grave pit and it almost touches its depth. Grave pit sizes are 195x53 cm, while those of the coffin pit 181x53 cm. The final depth of the hole is -195 cm from topsoil. Disturbed bone fragments started to emerge precisely from 10 cm above the skull level. The preserved skeleton, oriented ESE-WNV, lacks the ribs and spine. The deceased was placed stretched on the back, with the right hand on the pelvis.

Grave-goods:

- 1) iron, oval buckle, 3.9 x 2.5 cm, of rhomboid cross section, with a diameter of 0.6 cm, with prong made of iron strip (Pl. 3: 1). The buckle was placed on the left side of the chest, towards the shoulder, just below the clavicle, with prong towards the skull;
- 2) a poor quality silver buckle fragment, oval, with diameter smaller than 2.3 cm, of circular section with a diameter of 0.4 cm and the attachment part of the prong to the buckle thinned to 0.3 cm, discovered in the grave filling (Pl. 3: 2);



- 3) a fragmentary iron knife, with blade width by the junction with handle of 1.5 cm, tang length of 3.4 cm, placed on the left side of the skull, parallel to it, with handle towards the upper side of the grave (Pl. 3: 3).

***Feature 35/1. (Pl. 4)***

Adult grave, male, looted, cutting the Celtic house Feature 35 on its N-W side. The interference pit is oblique, almost reaching grave bottom. Most of the filling consists in grayish-black earth mixed with yellowish-red clay. Orientation: WSW-ENE. An extant coffin is uncertain, its outline being possibly suggested by the narrowest line of the grund. The sizes of grave pit bottom are of 233x70 cm, while depth descends from -188 cm in the eastern part to -196 cm in the western part of the grave pit (from the current surface). The skeleton was strongly disturbed in the upper half, of which the shoulder bone, the upper half of the right arm and the spine are completely missing. Left arm bones, partially disturbed, suggest that the hand was placed on the pelvis. It is one of the most richly furnished graves.

Grave-goods:

- 1) bronze, oval shield-shaped buckle, 3.2 x 2.4 cm, hemispherical section of 0.8 x 0.6 cm, circular section of 0.4 cm, prong fitted on the buckle frame and protection on the attachment side, discovered together with the lower bones of the right arm (Pl. 4: 1);
- 2) silver buckle, oval, 3.8 x 2.7 cm, rectangular in section, with rounded corners, of 0.8 x 0.7 cm, rounded attachment part of the prong, thinned to a diameter of 0.4 cm, near the right leg shinbone (Pl. 4: 2);

Still on the right side of the skeleton, near the second buckle, were identified two bronze brooches,

- 3) one fragmentary, small-sized, 2.5 cm, very likely of the type with returned foot, made of band, 0.6 cm wide and 0.15 cm thick (Pl. 4: 3);
- 4) one intact, with flat rectangular head, incised with the spiral pattern (Pl. 4: 4);.

In the grave filling were also found the following:

- 5) fragment of a massive buckle, in silver, with rectangular section frame and splayed corners of 1 x 1.2 cm (Pl. 4: 5);
- 6-9) four bronze studs (Pl. 4: 6-9);
- 10) pyramidal strap-retainer (Pl. 4: 10);
- 11) globular bronze pendant, with a diameter of 1.8 cm (Pl. 4: 11);
- 12) fragment of an iron object, of bent sheet, and resulting central orifice (Pl. 4: 12);
- 13) fragment of a bronze pin, sharp, of rectangular section of 0.3 x 0.4 cm (Pl. 4: 13);
- 14) fragment of an iron bar, rectangular section of 0.4 x 0.4 cm (Pl. 4: 14).

***Feature 35/2. (Pl. 5A)***

Infant inhumation, looted. It cuts the Celtic house Feature 35 nearby its north-western side. The looting pit is uncertain, the grave pit being of 138 x 45 cm in sizes and descending to -185 cm from the topsoil. Of the disturbed skeleton survived only the skull, hand bone and leg and pelvis bone fragments. Grave pit orientation is WSW-ENE.

Grave-goods:

- 1) bone comb placed by the surviving part of the pelvis, in the middle of the grave pit. It is composed of triple plates attached with three iron rivets, one of the sides being decorated with double incised lines, in triangle. It is 10.2 cm long and 4.3 cm wide (Pl. 5A: 1).

**Feature 36. (Pl. 5B)**

Indecisive grave, looted. Emerging as a gray, rectangular patch in the grayish-brown layer. The filling is gray, loose down to -15-20 cm deep, then mixed, clayish yellow with gray lenses. Of the skeleton survived in anatomical location only the lower leg bones. The remaining bones are disturbed, while the skull is missing. Orientation: SW-NE. Grave pit sizes: 179x67 cm, depth -174 cm from the surface. The looting pit is uncertain, it could not be noted.

Grave-goods:

- 1) an iron fragment (knife?) in the chest area, between the bones disturbed by the looters (Pl. 5B: 1);
- 2-4) three belt bronze studs from the grave filling (Pl. 5B: 2-4).

**Feature 37. (Pl. 6)**

Indecisive inhumation, looted. It emerged as a gray patch, rectangular, in the grayish-brown layer. The filling is gray, loose, down to -30-40 cm deep, then mixed, clayish yellowish-red with gray lenses. Nothing survived of the skeleton. Orientation: WSW-ENE. Grave pit sizes: 198x82 cm, depth -177 cm from the topsoil. The looting pit, excavated oblique to the grave, is rather visible on its south-western side. Its form is approximately rectangular, with visible sizes of 80 x 60 cm, while its depth is approximately equal to that of the grave pit.

Without grave-goods.

**Feature 38. (Pl. 7)**

Indecisive inhumation, looted. Outlined as a gray patch, rectangular, in the grayish-brown layer. The filling is gray, loose, down to -40 cm deep, then mixed, clayish yellowish-red with gray lenses. Of the skeleton survived two teeth and a few bones clustered midway the grave pit. Orientation: WSW-ENE. Grave pit sizes: 186x74 cm, depth -200 cm from outline level. Uncertain looting hole.

Grave goods: a small bead (destroyed) in the grave pit filling.

**Feature 39. (Pl. 8)**

Adult inhumation, looted. The disturbance pit tops that of the grave, thus invisible when presenting. Upon excavation, the looting pit emerged as almost circular, with an approximate diameter of 70 cm, respectively 50 cm by the base, oriented straight to the upper half of the skeleton. The grave pit filling consists of a mixture of yellowish-red clay with blackish-gray earth lumps. Orientation: WSW-ENE. To the west of the grave pit, approximately midway, a coffin trace was identified, sized approximately 3x2 cm and preserving the natural wood colour. A possible coffin outline could not yet be determined. Grave pit bottom sizes (including the looting pit) are of 184x60 cm, while the depth goes down from -210 cm in the eastern side to -217 cm in the western side of the pit, where the looting hole also lay. The skeleton is strongly disturbed in the upper half, which firstly lacks the skull, and on the left side, including at the level from left leg bones to the foot, which survives in anatomical location. In anatomical location also survived only the long bones and the foot of the right leg. Remaining bones are disturbed and are found, intact or fragmentary, on the entire affected area.

Grave-goods:

- 1) bone comb, assembled of three bone plates, attached with four iron rivets, 9.5 cm, 3.9 cm wide, on one face decorated with a dotted line, identified in the disturbed pelvis area, on the left side of the skeleton, in vertical position (Pl. 8: 1);
- 2) iron spearhead, 36 cm long, of which the socket shaft is 12 cm long, with a diameter of 1.9 cm by the end and 1.2 cm by the junction with the blade, maximum blade width is of 3.4 cm, near-

- by the socket, the blade being flat in section, with a strongly marked rib midway. The spearhead was discovered in vertical position, with socket shaft upwards, by the left foot (Pl. 8: 2);
- 3) bronze buckle, oval, 3 x 2 cm, circular in section, with 0.8 cm in diameter, broken tang, of semicircular section discovered in the right shoulder area, near the disturbed bones (Pl. 8: 3);
  - 4-6) three bronze studs, nearby the buckle (Pl. 8: 4-6);
  - 7) a flint stone fragment in the grave filling (Pl. 8: 7).

**Feature 40. (Pl. 9)**

Adult grave, looted. Emerging as a grayish, oval patch, in the grayish-brown layer. The proper grave pit, rectangular in shape, with mixed filling, clayish yellowish-red with gray lenses, started to be visible in the yellow sterile only from -40 cm the outline level. Of the skeleton survived the skull and upper half of the arms. Orientation: W-E. The looting pit is perpendicular to the grave pit, cutting the skeleton in the chest area. Surviving grave hole sizes: 179x56 cm, depth -185 cm from the topsoil.

Without grave-goods.

**Feature 41. (Pl. 10)**

Adult grave, looted. Part of the grave group with W-E orientation, lying in the northern side of the investigated burial ground. The interference pit is oblique, cutting the grave in its upper half. It is oval in shape, with an approximate diameter of 110x80 cm. The grave pit is 190 cm long (including the looting pit) and 60 cm wide. The final pit depth is of -205 m from topsoil. In the eastern side of the grave pit were identified two thin charred wood stripes that may be most likely associated with the coffin's shape. Thus, it survives on a length of 80 cm and width of 40 cm by the eastern end. The skeleton was strongly disturbed, so that no parts survived anatomically. Bones cluster is the western part of the grave, while the skull is missing.

Grave-goods:

- 1) iron, oval buckle, 3.2 x 2.4 cm, oval in a 0.5 x 0.7 cm section, located in the central part of the disturbed bones group (Pl. 10: 1);
- 2) near the buckle, likely its prong, with the part fitted to the frame strongly curved, circular section of 0.4 cm; among the disturbed bones were also identified other very small iron fragments (Pl. 10: 2).

In the north-eastern side of the grave pit was discovered a bunch of strongly corroded arrowheads (of which three were visible), the surviving part of a quiver whose material was completely destroyed.

- 3) iron arrowhead, three-winged in cross section, missing the tang, blade surviving on 4.5 cm, maximum diameter of 1.2 cm (Pl. 10: 3);
- 4) iron arrowhead, three-winged in section, 5.4 cm long, of which the tang is 1.5 cm (Pl. 10: 4);
- 5) large iron arrowhead, with socket shaft, 10 cm long, of which socket shaft is 3 cm, diameter of 1.2 cm by the extremity and 0.8 cm by the junction with the blade, maximum blade diameter of 2 cm, without midway rib (Pl. 10: 5);
- 6) likely still of the quiver was part another iron arrowhead found in the eastern extremity of the hole, at approximately 25 cm from the others, 5.6 cm long, of which the blade survives intact on a length of 5.2 cm, maximum width of 1.4 cm in the third part towards the tang, which survives fragmentarily (Pl. 10: 6).

**Feature 42. (Pl. 11)**

Indecisive grave, looted. Emerging as a gray patch, rectangular, in the grayish-brown layer. The filling is grayish, loose, to the depth of -40 cm, then mixed, clayish yellowish-red, with gray lenses.

Of the skeleton survived leg bone fragments and a pelvis fragment. Orientation: WSW-ENE. Grave pit sizes: 172x79 cm, depth -186 cm from the topsoil. Uncertain looting hole.

Grave goods: a small bone comb fragment (destroyed), in the area where the skull would have lain.

**Feature 43. (Pl. 12)**

Indecisive grave, looted. Outlined as a grayish-black patch, oval, of approximate diameter of 175x115 cm. Towards the bottom, the pit narrowed considerably so that grave pit sizes, turning rectangular with rounded corners, are of 147x62 cm. The interference pit is uncertain. The hole filling consists of a grayish-black surface layer that tops the mixture specific to the investigated grave pits: yellowish-red clay and brownish-black earth lumps. Pit depth varies between -210 and -226 cm from topsoil. Orientation: WSW-ENE. Of the skeleton survived only a few bone chips. On the grave pit bottom, on two portions lying approximately midway survived a dusty, grayish-white crust, here and there petrified.

Grave-goods:

- 1) biconical vessel with elongated neck of small sizes, blackish, with vertical burnished stripes and a burnished zig-zag pattern. Its height is of 9 cm, the mouth diameter being 8 cm, base diameter is of 4,7 cm and the maximum diameter in the lower third of the vessel is of 11 cm. It was placed in the western corner of the grave pit and except for the chipped rim, it survived intact (Pl. 12: 1);
- 2-5) by the limit of one of the dusty areas were discovered four small beads, from black glass, sized 0,3-0,7 cm (Pl. 12: 2-5).

**Feature 44. (Pl. 13)**

Adult grave, looted. Presenting as a grayish, oval patch in the grayish-brown layer. The filling is grayish, loose, down to -15-20 cm, then mixed, clayish yellowish-red with gray lenses. Of the skeleton survived complete, anatomically, the leg bones, while in the western part of the pit, the disturbed bones were grouped in a small pile. Orientation: WSW-ENE. Grave pit sizes: 232x81 cm, depth -210-220 cm from the topsoil. The looting pit is perpendicular to that of the grave, approximately oval. Its outline slightly exceeds that of the grave pit on the northern and southern sides. On the bottom of the grave pit is also visible the coffin pit, sized 158x54 cm. Coffin traces, in naturally coloured wood, were discovered on the entire area between the legs of the skeleton. Above the knees was identified a dusty, grayish-white crust, possibly related still to a present coffin.

Grave-goods:

- 1) an iron fragment, likely of a curved knife/pocket knife, with concave profile blade, 1.2 cm wide, in the pelvis area (Pl. 13: 1);
- 2) a small, bronze buckle, oval, 1.8 x 1.4 cm, circular in section, with a diameter of 0.5 cm, prong fitted on the buckle frame and a bronze stud tied to the attachment area of the prong to the buckle, in the pelvis area, near the left forearm (Pl. 13: 2);
- 3) rectangular amber bead, 0.4 x 0.43 cm (Pl. 13: 3);
- 4-5) belt bronze studs (Pl. 13: 4-5).

**Feature 45. (Pl. 14)**

Indecisive grave, looted. Emerging as a grayish, rectangular patch in the grayish-brown layer. The filling is grayish, loose, down to a depth of -40 cm, then mixed, clayish yellowish-red with gray lenses. Of the skeleton survived small bone fragments, rolled in the grave pit filling. Orientation: WSW-ENE. Grave pit sizes: 186x90 cm, depth -240-246 cm from the topsoil. Uncertain looting pit.

Without grave-goods.

**Feature 46. (Pl. 15)**

Adult grave, looted. Outlined as a grayish patch mixed with yellow, oval, in the grayish-brown layer. The filling is mixed, clayish yellowish-red with grayish lenses. Of the skeleton, no part survived in anatomical position, the disturbed bones being mostly parts of hand bones, vertebrae, ribs and a pelvis fragment. Missing skull. Orientation: W-E. The outline of the proper grave pit was visible only at -140 cm deep from outline. Grave pit sizes: 166x71 cm, depth -174 cm from outline. The looting pit is oblique, while its outline exceeds that of the grave pit on its southern side.

Grave-goods:

- 1) iron knife blade tip, surviving on a length of 2.5 cm, 1 cm thick, discovered among the disturbed bones in the area where the pelvis should have lain (Pl. 15: 1);
- 2) a bronze, oval buckle, 1.8 x 1.4 cm, circular a cross section of 0.3 cm, identified by the edge of the grave, approximately midway the southern walls of the grave pit (Pl. 15: 2).

**Feature 51. (Pl. 16)**

Adult grave, looted. Surfacing as a mixed earth patch, clayish yellowish-red with grayish lenses, as in fact also the grave filling. Of the skeleton survived anatomically placed the skull, pelvis, arms and leg bones, lacking only the spine and ribs. Orientation: WSW-ENE. Grave pit sizes: 217x81 cm, depth -187-206 cm from topsoil. Uncertain looting pit.

Grave-goods:

- 1) iron knife, 14 cm long, blade width of 1.4 cm, in undisturbed position, to the right of the skull, tip towards the legs (Pl. 16: 1);
- 2) silver, oval buckle, 3 x 1.9 cm, oval in a cross section of 0.8 x 0.7 cm, thinner and circular by the prong attachment area, of 0.4 cm, in the grave pit filling (Pl. 16: 2);
- 3) small bone comb fragments (destroyed), under the skull.

**Feature 85. (Pl. 17.)**

Indecisive grave, looted. Outlined as a grayish rectangular patch in the grayish-brown soil. The filling is grayish down to -30 cm from outline, then mixed, clayish yellowish-red with grayish lenses. Of the skeleton survived small bone fragments in the pit filling. Orientation: WSW-ENE. Grave pit sizes: 150x88 cm, depth -128 cm from the topsoil. The looting pit is slightly oblique, exceeding the grave pit outline on its northern side.

Grave goods:

- 1) Fragmentary iron knife (Pl. 17: 1).

**Feature 101. (Pl. 18A)**

Infant grave. Outlined as a grayish patch in the grayish-brown soil. The grave pit is oval, sized 91x41 cm and shallow, reaching -80 cm from the outline level, with grayish filling. Grave orientation is SW-NE. The skeleton lay on the right side, knees slightly crouching. Bones are poorly preserved.

Grave-goods:

- 1) bone comb, fragmentary, after removal only part of the transversal plate survived, which was 1.8 cm wide and decorated with lines cut in a network pattern, discovered by the skeleton's feet, to its right side (Pl. 18A: 1).

**Feature 103. (Pl. 18B)**

Infant grave. Outlined as a grayish patch in the grayish-brown soil. The grave pit is oval, sized 111x48 cm, reaching -110 cm from topsoil. The filling is gray in the upper part, on a ca. 20 cm thickness, then



just above the skeleton it is mixed, yellowish-red earth with grayish earth lumps. Grave orientation is SSE-NNW. The deceased lay stretched on the back, right hand on the pelvis. Bones are poorly preserved.

Grave-goods: amber beads (Pl. 18B: 1, 3, 6, 9, 10), dull white glass (Pl. 18B: 5, 7, 8), black glass (Pl. 18B: 2) bronze (Pl. 18B: 4) by the chin, to the left side and under the skull also a bead in the south-eastern corner of the grave pit.

**Feature 111. (Pl. 19)**

Juvenile grave, female, looted. The shape and position of the interference pit is uncertain, likely tops that of the grave. It emerged rectangularly, as a yellow perimeter stripe, 6 cm in average width, visible with certain gaps along the entire outline. Within the outline stripe, the filling was formed of grayish-black earth mixed with reddish clay. The filling became homogenous once that the grave pit deepened, consisting of a yellowish-red clay mixture with grayish-black earth lumps. Grave pit sizes by the base are 161x61 cm, while its depth is -188 cm from topsoil. Orientation: WSW-ENE. The likely coffin line is given by the grayish-white outline, ca. 8-4 cm wide, loosely visible on the entire southern side of the grave hole and partially on that northern. By the skeleton feet may be distinguished including the rectangular shape of the coffin, as well as its base, partially surviving on two portions of 5x6, respectively 2x3 cm, between the shinbones. Approximate coffin sizes (indecisive in the skull area) are of 159x38 cm. The upper skeleton half was disturbed by looting, the spine, part of the ribs, the shoulder and left side of the pelvis and the lower bones of the left hand being almost entirely missing. The general preservation state of skeleton bones is poor. The position of the right hand bones, slightly disturbed as well, evidence its possible placing on the pelvis.

Grave-goods:

- 1) black glass bead in the western side of the grave pit, outside the coffin (Pl. 19: 1);
- 2) amber bead in the left forearm area (Pl. 19: 2);
- 3) black glass bead south the right shinbone, inside the coffin trace (Pl. 19: 3);
- 4) brownish-black glass bead near the eastern wall of the grave pit (Pl. 19: 4);
- 5) amber pendant in the shape of a trapezoid pyramid trunk, discovered below the pelvis, between the two femurs (Pl. 19: 5);
- 6) bronze Hercule's "knot link, 2.2 cm in diameter and round cross section width of the wire of 0.2 cm" (Pl. 19: 6);
- 7) black amber bead near the pyramid pendant (Pl. 19: 7);
- 8) brownish-black glass bead, between the link and pendant (Pl. 19: 8);
- 9) brownish-black glass bead, between the link and pendant (Pl. 19: 9);
- 10) brownish-black glass bead on the pelvis (Pl. 19: 10);
- 11) bronze, oval buckle, 1.7 x 1.3 cm, with 0.3 cm circular cross section, with two grooves by the junction of the attachment bar of the prong to the frame (Pl. 19: 11);
- 12) animal tooth above the skull (Pl. 19: 12).

**Feature 112. (Pl. 20.)**

Infant inhumation. Outlined as a grayish patch in the grayish-brown soil. Oval grave pit, sized 130x48 cm, reaching -97 cm from the topsoil. Grayish filling in the upper part, on ca. 10-15 cm thickness, above the skeleton being mixed, yellowish-red earth with grayish lumps. Grave orientation is W-E. The skeleton lay stretched on the back, left hand on the pelvis. Bones are in a poor preservation state, in the west side of the grave pit.

Grave-goods:

- 1-7) beads on the left side of the skull (1, 2, 4, 5, 6 black glass; 3, 7 white, opaque glass) (Pl. 20: 1-7);
- 8) four black glass beads in the grave filling (Pl. 20: 8);

- 9) bone comb, fragmentary, of three plates, attached with iron rivets, 3.2 cm wide, below the skull (Pl. 20: 9);

***Feature 153. (Pl. 21.)***

Indecisive grave, looted. Discovered after the outline level sank, in the north-western extremity of the 6th century graveyard. It emerged as a mixed earth patch, yellow and gray, approximately rectangular. Mixed grave hole filling, yellowish-red with gray. Strongly disturbed skeleton, with only leg bone fragments surviving in anatomical position. Missing skull. Grave pit sizes: 205x70 cm, depth -48 cm from outline. Uncertain looting pit. Atypical grave pit orientation: SSE- NNW

Grave-goods:

- 1) a bone comb fragment, in the area where the skull would have lain (Pl. 20: 1);
- 2) unidentifiable iron fragments.



## II. The settlement

The settlement lies on the north-eastern border of the group of Gepid settlements from the Tisza Plain. To date, we are not aware of any archaeological excavations of Gepid settlements more spectacular than those in this geographical area.

### II.1. Review of the archaeological research of Gepid settlements (Fig. 9.)

Settlements from the Tisza Plain were archaeologically investigated to a lesser degree compared to the cemeteries from the same area. First Gepid houses were excavated by Zsolt Csalog in the sites of Kengyel-Csöbörérpart (1959) and Tiszaszöllös-Csontospart III (1963). At the date, the remains were not identified as of Gepid origin<sup>236</sup>. Relatively late from the first archaeological excavations conducted in Transylvania, in 1969 István Bóna discovered the first house believed Gepidic in the site of Tiszafüred - Külsőfokpart 29/A<sup>237</sup>. The find was followed by other in the 70-80'ies, numerous yet small-sized, with only a few number of identified features<sup>238</sup>. The activity of János Cseh is noteworthy, being the one to document features from Gepid settlements in the area of the places of Kengyel and Tiszafüred<sup>239</sup>. In the 80'ies, János Cseh made a short synthesis of the features known from publications<sup>240</sup>, while between 1980-83, Ágnes B. Tóth drafted her doctoral thesis on Gepid settlements. The large synthesis work on Gepidic features was published in 2006 based on the above work<sup>241</sup>.

<sup>236</sup> CSEH 1987, 37.

<sup>237</sup> BÓNA 1970.

<sup>238</sup> Battonya-Sziondai gyeplő I: SZABÓ/VÖRÖS 1979 (1 house and 1 pit); Battonya- Votsz-Homokbánya: SZABÓ 1978. (2 houses and 7 pits); Biharkeresztes-Ártánd, Január 1 TSZ: NEPPER/MÁTHÉ 1977, 182; B. TÓTH 2006, 18-19 (1 house); Eperjes-Csikós tanya: B. TÓTH 2006, 19-27 (2 houses); Szarvas-Bezina: B. TÓTH 2006, 30-32 (1 house); Szentcsanak-Belsőecser B. TÓTH 2006, 33-35 (1 house and 1 pit); Egerlővő-Homokpart: LOVÁSZ 1986-87(1 house).

<sup>239</sup> Kengyel-Baghymajor-Kengyelpart I: 6 houses, 1 pit (CSEH 1986b, 190-206; CSEH 1993b, 17-28; CSEH 1999b, 61-75); - Baghymajor-Kengyelpart II: 1 house (CSEH 1986b, 190-206; CSEH 2004b, 49-69.); - Baghymajor-Kengyelpart III: 1 house (CSEH 1992b, 9-34.); - Baghy homok: 5 houses, 1 kiln, 1 pottery kiln (CSEH 1986b, 190-206; CSEH 1993b, 5-111; CSEH 1994b, 24-45); - Vígh tanya: 5 houses (CSEH 1986b, 190-206; CSEH 1996b, 7-10; CSEH 1999b, 61-75); Rákóczi-falva-Erdő parti határrész-VIII dűlő: 2 houses (CSEH 1997b, 173-195); Szolnok-Zagyva part: 4 houses, 3 pits, 1 well, 1 pottery kiln (CSEH 1999a); Szelevény-Sweiger tanya: 3 houses, 2 pits, 1 kiln, 1 fireplace, 1 pottery kiln (CSEH 2004c); Szelevény-Sárga part: 1 house, 2 pits (CSEH 1997a); Tiszafüred-Morotva part: 9 houses, 2 pits, 1 kiln (CSEH 1986a, Cseh 1991b); -Tiszaszöllös-Alsórétpart- Aszópart: 7 houses (CSEH 1996a); Törökzentmiklós-Erdős utca 50: 1 pottery kiln (CSEH 1990b).

<sup>240</sup> CSEH 1986b, 203-205.

<sup>241</sup> B. TÓTH 2006.

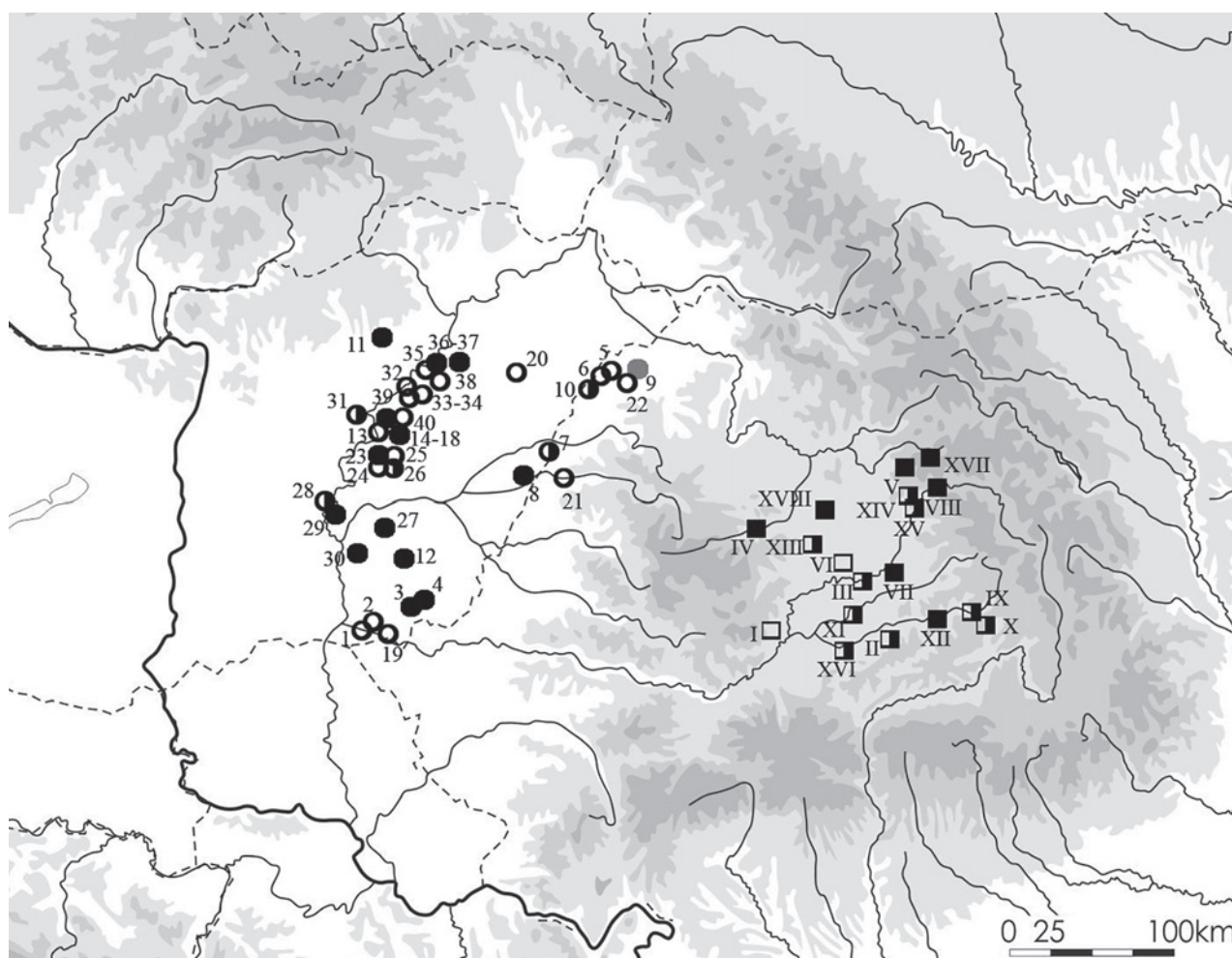


Fig. 9. The Gepidic settlements in the Carpathian Basin, which were researched through archaeological excavations. Circle: Hungarian Plain+ West Romania and quadrat: Transylvania. Full drawing – published; half-full drawing – partially published; blank drawing – reports or mentions. / Așezări gepidice din Bazinul Carpatic cercetate prin săpături arheologice. Cercuri: Câmpia Maghiară și vestul României și pătrați: Transilvania. Colorat- publicat; parțial colorat-publicat parțial; gol-menționat sau raportat. / Régészeti ásatások a Kárpát-medencei gepida telepeken. Kör: Alföld és Nyugat Románia, négyzet: Erdély. Teljes színezett- közölt; félig színezett- részlegesen közölt; üres-jelzett vagy jelentett.

Hungarian Plain + Westromania / Câmpia Maghiară și vestul României/ Alföld és Nyugat Románia

1. Apátfalva– Nagy út–dűlő (Csongrad megye, MOL36. lelőhely), Pópity 2009.
2. Apátfalva–Belezi–csatorna IX, Deák 2009.
3. Battonya–Sziondai gyepl, Szabó/Vörös 1979.
4. Battonya–Votsz–Homokbánya, Szabó 1978.
5. Berea X, Stanciu 2011, 51.
6. Berea XXI, Stanciu 2011, 51.
7. Biharea–Agyagbánya, Dumitrașcu 1982, Dumitrașcu 1994, 167–180.
8. Biharkeresztes–Ártánd, Január 1 TSZ, Nepper/Máthé 1977, 182; B. Tóth 2006, 18– 19.
9. Carei – Bypass, Fst. 1.
10. Ciumesti I. Stanciu 2011, 51.
11. Egerlövő–Homokpart, Lovász 1986–87.
12. Eperjes–Csikós tabla, B. Tóth 2006, 19–27.
13. Kengyel–Csöbörérpart, Cseh 1986b, 190–202.
14. Kengyel–Baghymajor–Kengyelpart I, Cseh 1986b, 190–206; Cseh 1993a, 17–28; Cseh 1999b, 61–75.
15. Kengyel–Baghymajor–Kengyelpart II, Cseh 1986b, 190–206; Cseh 2004a, 49–69.
16. Kengyel–Baghymajor–Kengyelpart III, Cseh 1992, 9–34.
17. Kengyel–Baghy homok, Cseh 1986b, 190–206; Cseh 1993a, 5–111; Cseh 1994, 24–45).
18. Kengyel–Vigh tanya, Cseh 1986b, 190–206; Cseh 1996b, 7–10; Cseh 1999b, 61–75.
19. Magyarcsanak 10. Lh., Deák 2009.

20. Nyíregyháza–Harangod, Markó 2012.
21. Oradea–Salca, Unpublished.
22. Petrești Unpublished.
23. Rákóczifalva–Erdő parti határrész–VIII dűlő, Cseh 1997b, 173–195.
24. Rákóczifalva–Kengyelpart, Csányi 2004a.
25. Rákóczifalva–Kengyeldűlő I, Csányi 2004b.
26. Rákóczifalva–Bagi–földek 5.–8.–8A, Masek 2012.
27. Szarvas–Bezina, B. Tóth 2006, 30–32.
28. Szelevény–Sweiger tanya, Cseh 2004b.
29. Szelevény–Sárga part, Cseh 1997a.
30. Szentcsanak–Belsőcsanak, B. Tóth 2006, 33–35.
31. Szolnok–Zagyva part, Cseh 1999a.
32. Tiszabura– Bónis hát, Vácz 2010.
33. Tiszagyenda– Búzaszerző halom, Kocsis/Molnár 2008.
34. Tiszagyenda, Bárány/Hajnal 2010.
35. Tiszfüred–Külsőfokpart 29/A, Bóna 1970.
36. Tiszafüred–Morotva part, Cseh 1986a, Cseh 1991.
37. Tiszafüred–Tiszaszöllős–Alsórétpart– Aszópart, Cseh 1996a.
38. Tiszaszöllős–Csontospart III, Cseh 1987, 37.
39. Törökszentmiklós–Erdős utca 50, Cseh 1990b.
40. Törökszentmiklós–Surján, Morostó part, Tárnoki 2012.

#### Transylvania/ Transilvania/ Erdély

- I. Alba Iulia–Monolit, Moga et al. 2005; Moga et al 2006; Moga et al 2007; Bounegru/Ota 2006.
- II. Bratei– La Zăvoi–Nisipărie, Bâzu 1994–95.
- III. Cipău– Gârle, Vlasa et al. 1966, 407.
- IV. Cluj–Polus center, Lăzărescu 2009.
- V. Dipșa– Fundoaie, Gaiu 1993.
- VI. Iernut– Pe șes, Ausgrabungen Călin Cosma.
- VII. Morești– Podei/Borșofeld/Ciurgău, Horedt 1979.
- VIII. Ocnița–La Ștefălucă, Gaiu 1994.
- IX. Porumbenii Mici– Galath, Nyárádi 2011, 328–331.
- X. Porumbenii Mari, Nyárádi 2011, 331–332.
- XI. Sânmiclăuș–Grușor, Anghel/Blăjan 1977.
- XII. Sighișoara–Dealul Viilor, Harhoiu/Baltag 2006, 2006b.
- XIII. Sopor de Câmpie– Cutenit/Hodaie, Protase/Țigară 1960; Protase 1962, 534.
- XIV. Stupini–Vătășina, Gaiu 2002.
- XV. Stupini–terasa dintre pâraul Brătienilor și valea Blândă, Gaiu 1999.
- XVI. Șeica Mică– Cetate, Horedt 1964; Horedt 1969.
- XVII. Șirioara–Livada, Gaiu 1984, 59–62.
- XVIII. Țaga–Hrube, Protase 2003, 21.

Once with the 90's, large scale rescue excavations were commenced in the Tisza Plain, leading to the identification of several settlement parts. In the Nyírség area, during the civil works occasioned by road development, were investigated a few features in the site at Nyíregyháza–Harangod<sup>242</sup>, nearby a cemetery of the time. In the sand quarry of Törökszentmiklós–Surján, on the bank of Morostó Lake were discovered four structures and 31 pits<sup>243</sup>. When the Nagykunság reservoir was built, on the Tiszabura– Bónis hill, were found 4 houses and a storage pit<sup>244</sup>. In the site on the Tiszagyenda – Búzaszerző hill<sup>245</sup>, when a gas pipeline was placed, in the site of Rákóczifalva–Kengyelpart was discovered a kiln with work pit<sup>246</sup> and in the site of Rákóczifalva–Kengyeldűlő I two houses<sup>247</sup>. Similarly, while the gas pipeline was laid, Gepid settlements were identified at Apátfalva–Nagy út–dűlő (Cson-

<sup>242</sup> MARKÓ 2012.

<sup>243</sup> TÁRNOKI 2012.

<sup>244</sup> VÁCZI 2010.

<sup>245</sup> KOCIS/MOLNÁR 2008.

<sup>246</sup> CSÁNYI, M. 2004a. Rákóczifalva–Kengyelpart, RKM, 2003 (2004), 275–276, nr. 322.

<sup>247</sup> CSÁNYI, M. 2004b. Rákóczifalva–Kengyel dűlő, RKM, 2003 (2004), 276–277, nr. 325.

grád county, site MOL36.)<sup>248</sup> and the Belezi IX Channel, site Magyarcsanád 10<sup>249</sup>. Regulating works of the Tisza river course yielded a Gepid settlement at Tiszagyenda<sup>250</sup>. The most important hydrographical regulation works in the county of Jász-Nagykun led to the discovery of part of a settlement comprising over 250 features (of which 80 were houses) at Rákóczifalva–Bagi-földek 5.–8.–8A<sup>251</sup>. The processing of these archaeological excavations will most definitely bring significant novelties in the research of Gepid settlements. In the eastern part of the Tisza Plain, on Romanian territory, excavations were conducted at Biharia. Between 1977-81 there were identified 5 houses<sup>252</sup> and a bone processing workshop<sup>253</sup>. At Oradea-Salca during the 90'ies, the archaeological excavations yielded a few houses<sup>254</sup>, while in 2013 at Petrești, the outline of certain household appendages could be documented<sup>255</sup>. Over the course of certain excavations aimed at documenting other historical periods, at approximately 12-15 km distance from Carei city were discovered a house in site Berea X, 3 houses in the sites of Berea XXI and Ciumești I<sup>256</sup>.

In Transylvania, the archaeological research of the 5th – 6th century settlements was initiated since the 50'ies. The excavations of the most extended Gepid settlement from the Mureș and Târnave river basins were conducted at Morești-Podei (37 houses). The investigation, published by Kurt Horedt, is one of the landmarks in Gepid settlement research<sup>257</sup>. Other important excavations took place at Bratei – place 1, where 44 sunken houses and other 6 surface houses were identified – published later, in the 90'ies<sup>258</sup>. A third significant archaeological excavation was performed at Sighișoara-Viilor Hill between 1976-85, and later in 1990-2000, while results were published in an ample monograph<sup>259</sup>.

Between 1956-59 at Șeica Mică and Sopor de Câmpie were discovered a few Gepid houses<sup>260</sup>. Still in the 50'ies were carried out excavations that also counted Gepid remains at Porumbenii Mici and Porumbenii Mari<sup>261</sup>. Between 1965-67 at Țaga-Hrubeni were examined 11 houses, 8 storage pits, 2 kilns and 2 hearths<sup>262</sup>. In the site of Cipău-Gârle in 1953-54 and 1960 was documented the presence of 9 houses and 3 pits<sup>263</sup>, while smaller scale excavations were furthered in 1960-70 at Sânmiclăuș-Gruisor<sup>264</sup> and in 1980 at Șirioara-Rât<sup>265</sup>.

The 90'ies also transformed the research of the Gepid remains from Transylvania, with several synthetic studies being published one after the other. Subsequent to the political changes, János Cseh issued the cadastre of the Transylvanian Gepid settlements. Relying on previous publications, the author mentions 87 sites<sup>266</sup>. Later, Radu Harhoiu also synthesized the state of research of the Transylvanian Gepid settlements<sup>267</sup>. Another cadastre of remains targeted northern Transylvania, practically the county of Bistrița-Năsăud and was drawn up by Corneliu Gaiu, recording 63 places<sup>268</sup>, of which the

<sup>248</sup> PÓPITY 2009.

<sup>249</sup> DEÁK 2009.

<sup>250</sup> BÁRÁNY/HAJNAL 2010.

<sup>251</sup> MASEK 2012.

<sup>252</sup> DUMITRAȘCU 1994, 167-180.

<sup>253</sup> DUMITRAȘCU 1982.

<sup>254</sup> Unpublished.

<sup>255</sup> Unpublished.

<sup>256</sup> STANCIU 2011, 51.

<sup>257</sup> HORED T 1979.

<sup>258</sup> BĂRZU 1994-95.

<sup>259</sup> HARHOIU/BAL TAG 2006, 2006b.

<sup>260</sup> PROTASE/ȚIGARĂ 1960; PROTASE 1962, 534.

<sup>261</sup> NYÁRÁDI 2011, 328-332.

<sup>262</sup> PROTASE 2003, 21.

<sup>263</sup> VLASA et al. 1966, 407.

<sup>264</sup> ANGHEL/BLĂJAN 1977.

<sup>265</sup> GAIU 1984, 59-61.

<sup>266</sup> CSEH 1990, 66-74.

<sup>267</sup> HARHOIU 1999-2001, 108-110.

<sup>268</sup> GAIU 2003.

author had conducted excavations in only a few (Dipșa<sup>269</sup>, Ocnița<sup>270</sup>, Stupini-Vătășina<sup>271</sup>, Stupini- the side of Brătieni stream, respectively Blândă valley<sup>272</sup>). A large work on Transylvanian Gepid remains was published by Gabriel Rustoiu, who identified 111 sites<sup>273</sup>. D. Protase drafted a monograph on the remains from Țaga<sup>274</sup>. The archaeological material identified in the Târnava Mare river basin was most recently processed in summative manner by Zsolt Nyárádi<sup>275</sup>. Recent excavations, in the 90'ies, of Gepid sites were conducted in the site of Iernut – Pe Șes, where a few houses and pits were found<sup>276</sup>. Since the 90'ies, the Transylvanian Gepid archaeological material was enriched thanks to several rescue archaeological excavations. In the site of Alba Iulia - Monolit, over the course of repeated excavation campaigns carried out for several years (starting with 2003) several Gepid houses and other features were discovered<sup>277</sup>. The Gepid settlement part identified during the rescue archaeological excavations performed at Cluj-Polus was processed by Vlad Lăzărescu<sup>278</sup>. In 2011, the Gepid material culture was presented in both Hungary and Romania in exhibitions and exhibition catalogues<sup>279</sup>.

The research of the Gepid settlements from the Banat fell though behind that of the two mentioned regions. At Cladova was identified part of a house<sup>280</sup>. In the southern side of the Transylvanian Plain, on Serbian territory, only a few sites were investigated. Near Čurug, on almost one hectare area, five Gepid houses and three pits were successfully documented<sup>281</sup>.

## II.2. The structure of the settlements

### II.2.1. Settlement sizes

The study of the Carei Gepidic settlement's structure must firstly consider the excavation specificity. The investigated surface, 620 m long and 20-25 m wide, most likely crossed the settlement's eastern edge, thus, over the course of the research, approximately 10-15% of the site could be examined. The excavation-associated fieldwalks covered a much larger territory, 5-6 km long, from the Bobald terrace of Mergheș stream, and as a consequence<sup>282</sup>, we now know that the investigated place is not composed of a string of smaller hamlets, but is instead a unique considerably sized site. The longitudinal cross-section of the researched territory evidenced that the road route crossed the valley of several small, temporary water courses, while features lie on their terraces (Fig. 42.). Unfortunately, there are few available data on the development of Gepidic settlements from the Tisza Plain. Nearby Battonya, close to the state border between Hungary and Romania, on both banks of the Száraz ér river (a former branch of the Mureș), several settlement traces were identified on a ca. 2 km length. In the

<sup>269</sup> GAIU 1993; PROTASE 2000, 140.

<sup>270</sup> GAIU 1994.

<sup>271</sup> GAIU 2002.

<sup>272</sup> GAIU 1999.

<sup>273</sup> RUSTOIU 2005.

<sup>274</sup> PROTASE 2003.

<sup>275</sup> NYÁRÁDI 2011.

<sup>276</sup> Unpublished excavation of Călin Cosma.

<sup>277</sup> MOGA et alii 2005; BOUNEGRU/OTA 2006.

<sup>278</sup> LĂZĂRESCU 2009.

<sup>279</sup> GAIU 2011, HAVASSY 1999.

<sup>280</sup> BORONEANȚ 1980, 119.

<sup>281</sup> BUGARSKI 2012, 25.

<sup>282</sup> NÉMETI 1999, 64-67.



Sziondai-gyep I site, a small sondage found a sunken house and a storage pit<sup>283</sup>. The excavator noted that Gepid settlements stringing along the Szanda river followed the water course and lay on less elevated land. To the contrary, the Sarmatian settlements often lay up to 10 km distance from such mounds<sup>284</sup>. János Cseh investigated by field walks and small sondages the banks of a former course of the Tisza, on an approximately 12 km length between the settlements of Kengyel and Rákócújfalu. Similarly to the Battonya area, the specialist discovered the traces of several smaller settlements at a distance of 200-2000m in-between. According to the diffusion of potsherds, these settlements' sizes varied between 30-40m or 30-40 m and 100-130m or 50-60m<sup>285</sup>. Based on the material collected from the topsoil, the sizes of the concurrently existing settlements may be only supposed, since an internal chronology of the Gepid settlements is missing. On Germanic territories west the Meroving-date settlements, settlements did not exceed 3-4 concurrently existing economic units. The documenting of a number of 5 or even 11 coexisting economic units<sup>286</sup> may be though considered exceptional.

## II.2.2. The settlement's internal structure

The Gepidic site near Carei developed on the terraces of temporary water courses spilling into the Mergheş stream and consisted of several subunits. There, the settlement's internal structure was characterised by house/feature groups located at a certain distance in-between. The study of the internal structure of Gepid settlements identified several settlement types based primarily on the typology of Germanic settlements drawn up by Jahnkuhn<sup>287</sup>. Since often, only smaller or larger parts of settlements could be investigated, the classes below strictly mirror the current state of research.

1. Self-standing "Einzelhof" economic unit. It is the most difficult unit to identify. At Egerlövő-Homokpart, the research of a larger surface yielded only one house<sup>288</sup>, thus recording a self-standing economic unit. At ca. 15 km south-west the place of Carei, nearby Petreşti, on a surface lacking any archaeological trace, a ditch crossed two Gepidic inhabitancy features<sup>289</sup>. Based on the area's specificity, the Gepid site of Petreşti most likely belonged to this class.
2. A typical form of Gepidic communities' network is that of settlements formed of house groups, where a few houses, storage pits, outdoor ovens or wells assemble. These feature groups lie at a few tens of meters from each other. Such a site is that of Carei, those in Transylvania including Cluj - Polus<sup>290</sup>, Sopor de Câmpie<sup>291</sup>, Ocniţa<sup>292</sup> and Sighișoara - Dealul Viilor<sup>293</sup>. On the Tisza Plain, at Tiszafüred – Morotva part, on an approximately 6000 m<sup>2</sup> surface, several groups formed of 2-4 sunken houses were identified. The distance between these groups was of ca. 80 m. Resembling economic units located at 30-50 or 100-150 m distance in-between and composed of several features were also recorded on the mid Tisza valley, in the sites of Tiszafüred-Tiszaszőlős, Szelevény-Bohony part, Szolnok-Zagyva part<sup>294</sup>, respectively the eastern part of the Tisza Plain, at Biharia<sup>295</sup>. This internal structure is well

<sup>283</sup> SZABÓ/VÖRÖS 1979.

<sup>284</sup> SZABÓ/VÖRÖS 1979, 226.

<sup>285</sup> CSEH 1986b, 19ö.

<sup>286</sup> DONAT/ÜLLRICH 1971, 258.

<sup>287</sup> JAHNKUHN 1969.

<sup>288</sup> LOVÁSZ 1986-87, 128, 1. Kép.

<sup>289</sup> Unpublished.

<sup>290</sup> LĂZĂRESCU 2009, 340, Fig. 1.

<sup>291</sup> PROTASE/ȚIGARĂ 1960 Fig. 13.

<sup>292</sup> GAIU 1994, 54, Pl. 1.

<sup>293</sup> HARHOIU-BALTAG 2006, 510, Fig. 963.

<sup>294</sup> CSEH 1996a, 71.

<sup>295</sup> DUMITRAȘCU 1994, fig. 22.

known in the Germanic settlements from central Europe as well (for instance, Jenštejn<sup>296</sup>, Cehia or on the Lombard territory of Balatonlelle<sup>297</sup>).

3. Grouped settlements, where houses form larger, closed groups. This type of Gepid settlements is typical mainly to Transylvania. Such cases are known in the sites of Morești<sup>298</sup>, Stupini - sector B<sup>299</sup>, Dipșa-Fundoaie<sup>300</sup> and likely Cipău-Gârle<sup>301</sup>. At Bratei I, an approximately 50-60 m free land stretch was recorded between the two settlement blocks. There, – site likely existing over several stages – a central area of an approximately 40-50 m diameter was surrounded by houses<sup>302</sup>. The structure is very rare, yet such settlements are known in the imperial date *Barbaricum*, like for instance in northern Poland, at Debczyno.<sup>303</sup>

### II.2.3. Economic units

The study the economic units that form the internal structure of the Gepid settlements is related to Kurt Horedt and the publishing of the excavation carried out at Morești. According to the author, units were impossible to accurately identify in case of the 60x60 m excavated area<sup>304</sup>. We believe that the high number of sunken houses and the few or even absent appendix constructions represent an additional difficulty<sup>305</sup>. In our view, the key to this issue lies still with house group - structured settlements, where such groupings may be the start points for identifying the sought economic units. In Gepidic settlements, the centres of the economic units are the sunken houses. Likely, surface houses also existed, however their traces could not yet be found. In the case of the excavation at Morești, several soil or stone areas covered with a Gepid pottery, identified by the excavator as surface levels<sup>306</sup> were discovered. Such a “paved” level, mixed with Gepidic pottery, was also recognized in the site at Porumbenii Mici-Galath.<sup>307</sup>

Analyses concerning economic units are known mainly in the western Germanic areas. The centre of the economic unit in Alemanni settlements was the large house (Wohnstallhaus) identified by posthole alignments. The size of such an economic unit was defined as of 1000-2000 m<sup>2</sup>, except for those which belonged to the leaders that covered even 4000 m<sup>2</sup><sup>308</sup>. In another instance, in Warendorf, a 7th century site from Westphalia, one economic unit reached even 10.000 m<sup>2</sup><sup>309</sup>.

The sunken house, as centre of the economic unit, is specific to the Germanic settlements of Central Europe in particular (for instance, from the Czech-Moravia area), however even there – though rarely – surface houses<sup>310</sup> may be found. If an economic unit is composed only of sunken houses we may assume that at least one functioned as workshop<sup>311</sup>. In theory, an economic unit consisted of the following: house, stable, storage constructions or pits, outdoor kilns or wells and possibly also other

<sup>296</sup> DROBERJAR/TUREK 1997, Abb. 3.

<sup>297</sup> SKRIBA/SÓFALVI 2004, 156-157.

<sup>298</sup> HORED T 1979, 89, Abb. 38.

<sup>299</sup> GAIU 2002, 132, Fig. 4.

<sup>300</sup> GAIU 1993, 97, Fig. 2.

<sup>301</sup> VĽASA et al. 1966, 406, Fig. 7.

<sup>302</sup> BĂRZU 1994-95, fig.1.

<sup>303</sup> MACHAJEWSKI 1986, 41, Abb. 2.

<sup>304</sup> HORED T 1979, 121.

<sup>305</sup> This is probably a special phenomenon in gepidic settlements. In our opinion, excavation cannot be attributed to technical neglect, since traces of several outbuildings have been identified in earlier Sarmatian or Germanic settlements.

<sup>306</sup> HORED T 1979, 118.

<sup>307</sup> NYÁRÁDI 2011, 329.

<sup>308</sup> BÜCKER et al 1997, 314-317.

<sup>309</sup> WINKELMANN 1958, 516.

<sup>310</sup> PLEINEROVA 2007, 88.

<sup>311</sup> PLEINEROVA 2007, 84.



features related to production activities. In the case of the Carei settlement, delimiting such units in the settlement's structure is rather difficult, since fence traces are missing and the excavated area was only a 20-25 m wide stretch. Some of the economic units, most definitely lie outside the excavated area, reason for which in the current state of research, no independent economic units may be defined.

## II.3. Features

### II.3.1. Houses

In the Gepidic settlement studied at Carei-Bobald, within the excavated alignment we could not identify postholes or burnt walls recording surface houses. Out of the 18 features, 14 were sunken constructions, identifiable as rectangular houses, with rounded corners, except for two cases. The typological classification of the sunken houses was made according to the number and position of postholes. The constructions' style, number and location of the supporting posts are likely related to their sizes. At Moreşti too, it may be noted that postholes did not survive from smaller houses. In those larger, there is one posthole on the shorter sides, while those even larger were provided with posts in corners and around 3-3 posts on the opposite sides or on each side<sup>312</sup>. Given the size of identifiable houses in the site of Carei (Table 2) we may conclude that the smaller are houses without postholes (139, 145), barely exceeding 8 m<sup>2</sup>. House 123 is distinguished by its sizes (16 m<sup>2</sup>), with 3 postholes on each of the short sides. The other houses of the type do not necessarily differ from those with 1 posthole on each short side.

Nr.	SIZE	SURFACE	DEPTHS FROM THE CONTOUR	TYPE
145	270 x 300 cm	8,1 m <sup>2</sup>	60 cm	without postholes
139	320 x 255 cm	8,16 m <sup>2</sup>	47 cm	without postholes
23	300 x 280 cm	8,4 m <sup>2</sup>	85 cm	with 1-1 posthole on each short side
24	304 x 278 cm	8,45 m <sup>2</sup>	58 cm	with 1-1 posthole on each short side
116	328 x 270 cm	8,85 m <sup>2</sup>	52 cm	with 3-3 postholes on each of the short sides
30	300 x 310 cm	9,3 m <sup>2</sup>	55 cm	with 1-1 posthole on each short side
27	334x 296 cm	9,88 m <sup>2</sup>	40 cm	with 3-3 postholes on each of the short sides
124	340 x 315 cm	10,7 m <sup>2</sup>	50 cm	Postholes in each of the four corners of the house
17	300 x 360 cm	10,8 m <sup>2</sup>	45 cm	with 1-1 posthole on each short side
95	350 x 320 cm	11,2 m <sup>2</sup>	40 cm	?
29	396 x 320 cm	12,6 m <sup>2</sup>	56 cm	with 1-1 posthole on each short side
123	480 x 335cm	16 m <sup>2</sup>	60 cm	with 3-3 postholes on each of the short sides

Table 2. Comparison table with the size, surface, depth from the contour and the tipology of the houses  
 / Tabel comparativ cu dimensiunea, suprafața, adâncimea de la conturare și tipologia locuințelor /  
 Összehasonlító táblázat a házak méreteivel, felületével, a konturálástól való mélységével és tipológiájával.

<sup>312</sup> HOREDT 1979, 101.

**Houses without postholes. Donat 1988 F, Leube 2009 type F1. (Fig.10)**

On the side crossed by the excavated strip of the Carei settlement we recorded only two such houses (139, 145). This house type emerges in both the Tisza Plain as well as in Transylvania, yet we may argue that it is mainly typical to a number of Transylvanian settlements (Ocnița-La Ștefălucu<sup>313</sup>, Stupini-Vătășină<sup>314</sup>, Dipșa-Fundoaie<sup>315</sup> and Supuru de Câmpie-Cuntenit<sup>316</sup>).

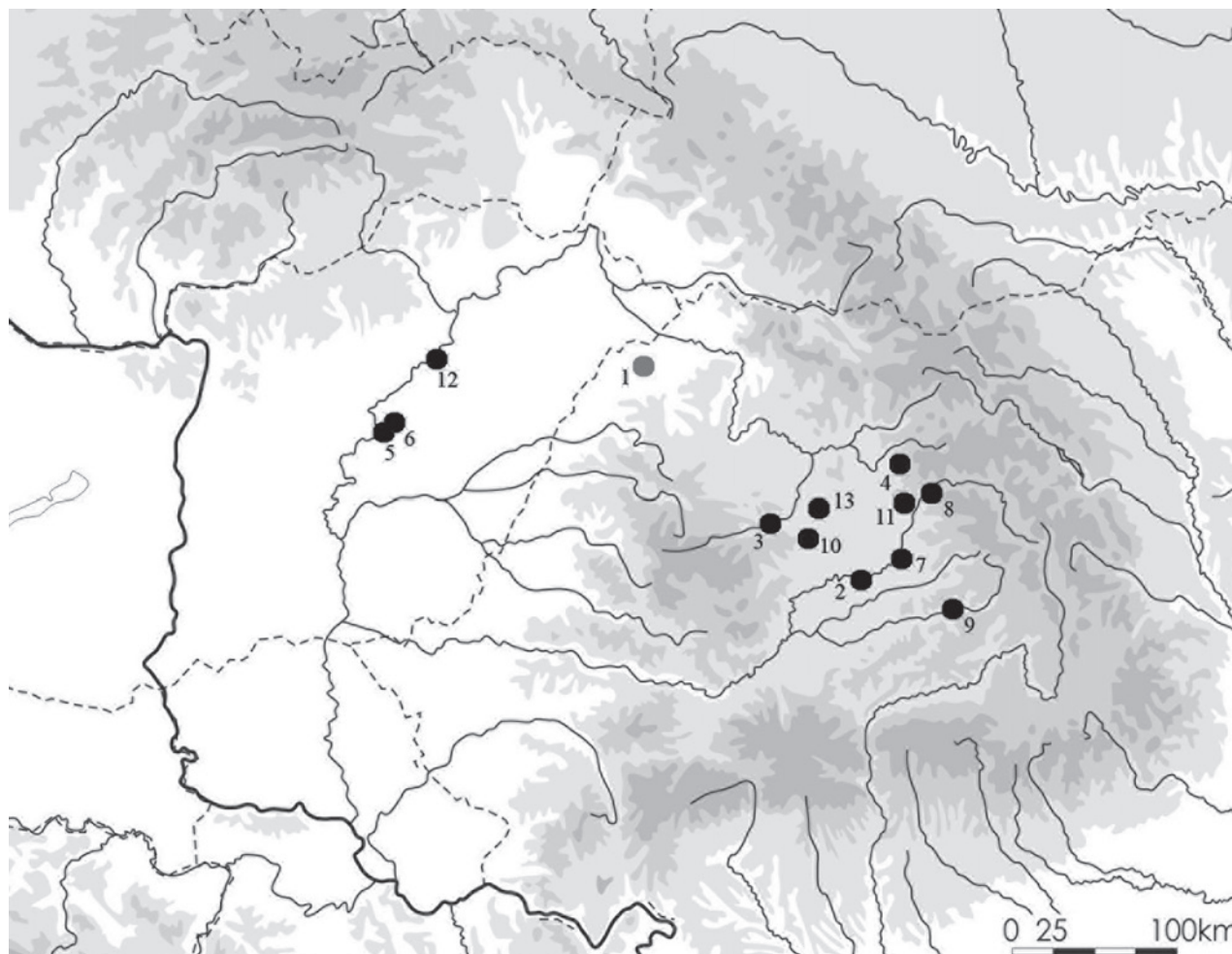


Fig.10. Houses without postholes / Locuințe fără gropi de stâlpi / Cölöplyuk nélküli házak

1. Carei
2. Cipău-Gârle, (B5, B6, B7, B8) Protase 1966, 406, Fig.7.
3. Cluj-Polus center, (Cx09A:3,3x2,8m; Cx33B:3,5x2,47m), Lăzărescu 2009, 326, 336.
4. Dipșa-Fundoaie, (L1: 3,8x3,2m; L5: 4,2x3,3m; L6: 4x3,6m; L7: 3x3,8m; L8: 3,6x4m; L9: 3,8x4,2m; L11: 3,6x4m; L13: 3,3x?m; L14:2,8x3,6m; L17-?:m), Gaiu 1993, 91-93.
5. Kengyel-Boghymajor-Kengyelpart II, (180-200x?m), Cseh 2004a, 58-59, 5-6 kép.
6. Kengyel-Vigh tanya, (3x2,9m), Cseh 1992, 20.
7. Morești (L1: 3,2x3,2m; LG2-3: 3,6x2,9m; LEF3-3: 6x3,3m; LCD-5-6: 3,4x3m), Horedt 1979, 90-99.
8. Ocnița-La Ștefălucu, (L1:3x3,6: Fireplace bordered with stone on the northern side; L6-4x4,2m: River stone oven in the western corner; L10: 3x3,3m), Gaiu 1994, 50-51.
9. Sighișoara-Dealul Viilor, (L40: 4x3m), Harhoiu/Baltag 2007a, 17, fig. 8; Harhoiu/Baltag 2007b, 49-50.
10. Sopor de Câmpie-Cuntenit, (5 Houses), Protase/ȚIGARĂ 1960, 391-392; Protase 1962, 534.
11. Stupini-Vătășină, (Sect.A. L3: 3,3x2,8m; L4: 3,45x2,8m; L5: 3,8x3,2m; Sect.B. L62: 6x3,8m; L9: 3,85x3,6m Fireplace bordered with stone on the northern corner; L10: 3,3x3,7 Fireplace

<sup>313</sup> GAIU 1994.

<sup>314</sup> GAIU 2002.

<sup>315</sup> GAIU 1993, 91-93.

<sup>316</sup> PROTASE 1962, 534.

- bordered with stone; L14: 2,7x3,3m; L17: 3x3,1m Fireplace on the northern corner; L19: 3,3x2,45; L20: 2,8x3,45m; L21: 3x3m; L22: 3x2,8m with fireplace; L23: 3,7x3m; L24: 3,4x2,9m  
 12. Tiszafüred-Külsőfokpart, (2,5x2,5m), B. Tóth 2006, 39, Abb. 24.  
 13. Țaga-Hrube, (L2: 2,3x2,25m; L10: 3,25x3,35m), Protase 2003, 25, fig.5; 27, fig.9.

**Houses with 1 posthole on each short side. Donat 1988 A, Leube 2009 type A2 (Fig.11)**

In the studied settlement, this house type emerges in three cases (17, 17/1, 23), nevertheless, the same structure also emerges in houses with several postholes, in the case of more deepened holes (24, 29, 30). The examination of the diffusion map shows that this house type is specific to lowland settlements in particular.

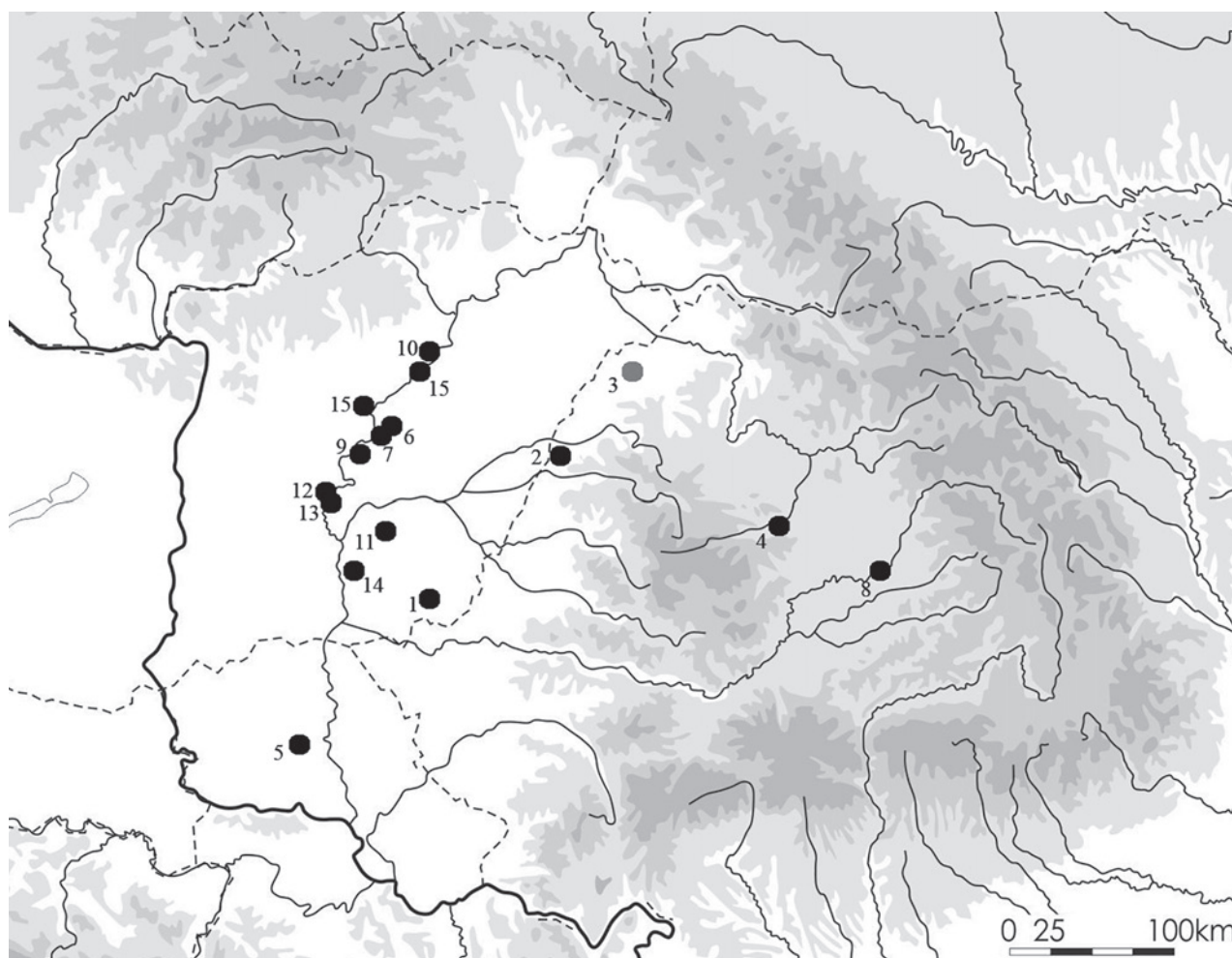


Fig.11. Houses with 1-1 posthole on each short side / Locuințe cu câte o groapă de stâlp pe laturile scurte/ Házak 1-1 cölöplyukkal a rövidebb oldalakon

1. Battonya-Vörös Október TSZ, (3,10x2,96 m), Szabó 1978, 63, 65 4.ábra.
2. Biharea, (3,55x3,25m), Traces of bone processing, Dumitrașcu 1982, 108, fig.1.
3. Carei, Features 17, 17/1, 23
4. Cluj-Polus center, (02B: 3,9x2,77m, 24B: 2,83x2,22; 26B:5,07x3,66m), Lăzărescu 2009, 320, 330, 333.
5. Čurug, BUGARSKI 2012, 27, fig.12.
6. Kengyel-Vigh tanya, Cseh 1992, 12.
7. Kengyel-Kengyelpart I, Cseh 1999a, 66, 7.kép.
8. Morești-Podei, (L2: 2,8x2,6m; LS28: 2,9x2,9m, L2-3: 3,7x3,5m; L-KL3-4: 3,2x3,2m; IK6: 4,4x4m; GH8: 3,6x3,6m; MNIV-V: 2,7x2,7m with Oven?), Horedt 1979, 90-99.
9. Rákóczi-falva-Nyolcas dűlő I, (3,2-3,5x?m), Cseh 1997b, 174, 4. Kép.



10. Tiszafüred-Morotva part, (2,9 x2,9 m), Cseh 1986a, 12, 1 kép; (II/2: 2,92x?), Cseh 1991, 168, 166, 4. ábra; (II/4: 3,26x3,24m), Cseh 1991, 168–169, 167, 5. ábra; (II/5: 3,36x3,40m) Cseh 1991, 170, 171, 6. ábra,
11. Szarvas-Bezina, (3,5x3,3m), B. Tóth 2006, 31, Abb.18.
12. Szelevény-Sárga part, (4x?m), Cseh 1997a, 119, 4. Kép.
13. Szelevény-37.sz. lh. Kistrépart, (1 ház: 2,8x2,8m), Cseh 2004a,106, 9. Kép.
14. Szentcs-Belsőecser, (2,8x3?m), B. Tóth 2006, 34, Abb.20.
15. Szolnok-Zagyva part, (XVI/12, XVI/14 obj.), Cseh 1999a, 43, 3. Kép.
16. Tiszafüred-Tiszaszöllős, (2,95x2,35m), Cseh 1996a, 82, 6 ábra.

***Postholes in each of the four corners of the house. Leube 2009 type B1 (Fig.12)***

At Carei, alike the rare houses without postholes, this type emerges in one instance (124). The type is found in Gepid settlements from both Transylvania and the Tisza Plain, yet in smaller numbers compared to the other types.

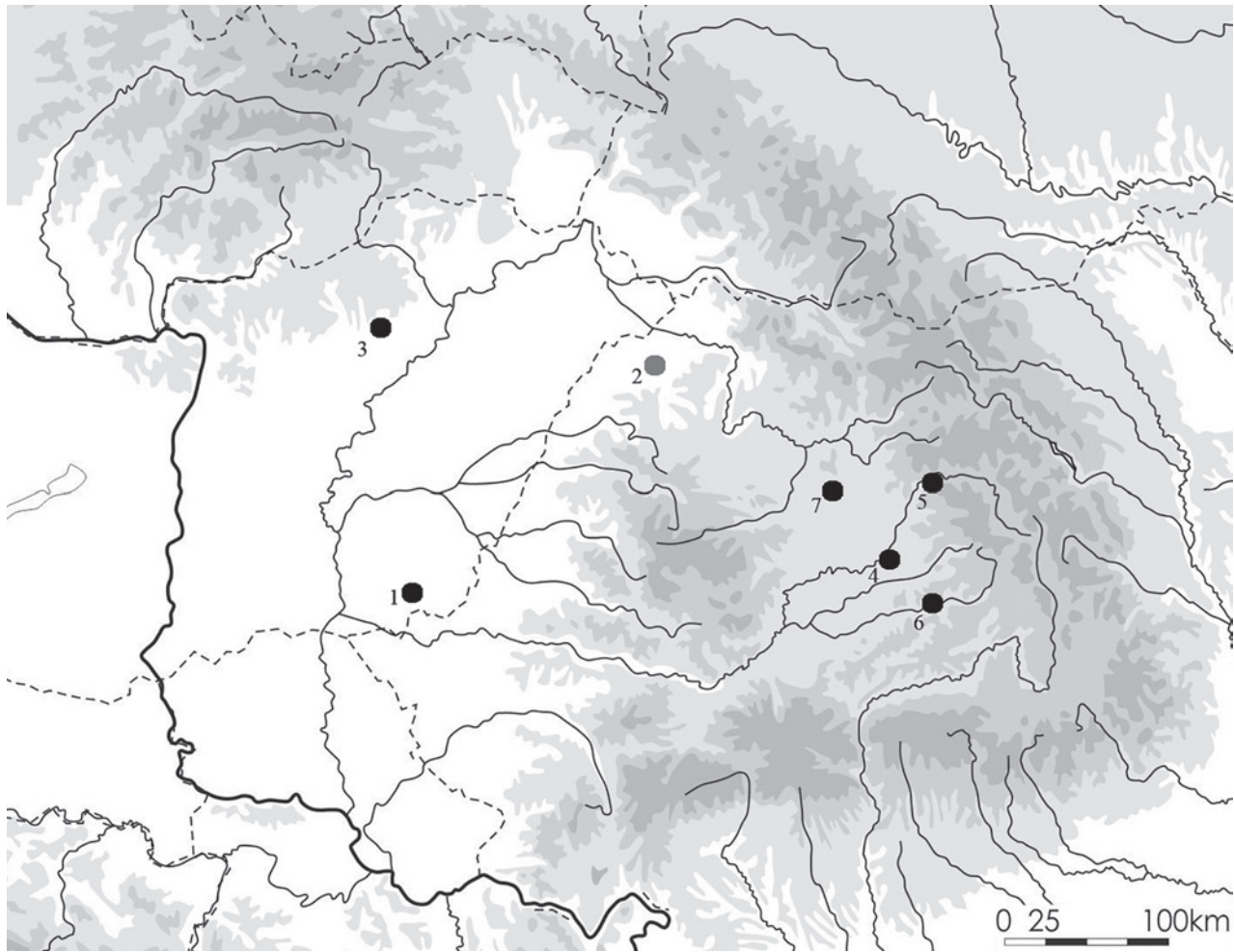


Fig.12. Postholes in each of the four corners of the house / Locuințe cu câte o groapă de stâlp pe cele patru colțuri / Házak cölöplyukakkal a négy sarokban

1. Battonya-Sziondai gyepl, (3,9x3,12m), Szabó 1979, 219–221, 4. kép.
2. Carei/Nagykároly, 124
3. Egerlővő-Homokpart, (2,5x2m), Lovász 1986–87, 129, 2. kép.
4. Morești/Malomfalva-Podei, (MN2–3: 3,9x3,7m, EIV–V: 3,5x3,3m), Horedt 1979, 90–99.
5. Ocnița-La Ștefăluca, (L9: 2,9x3,2 m), Gaiu 1994, 51.
6. Sighișoara/Segesvár-Dealul Viilor, (cx 43: 3,5x2,5m, cx 65: 3,3x2,5 m, cx 112: 3x3m), Harhoiu/Baltag 2007b, 128, Fig. 1100, 134, Fig.1106., 142, fig.1114.
7. Cege/Țaga-Hrube, (L8: 3x2,6m), Protase 2003, 25, fig. 6.

**Houses with 3-3 postholes on each of the short sides. Donat 1988 C1, Leube 2009 C, respectively their variation with additional posthole on the longer side Donat 1988 C2, Leube 2009 D. (Fig.13)**

In the site investigated at Carei we were able to document in three cases (27, 123, 116) this type of houses broadly spread in Gepidic settlements. It may be noted that this house type is specific to the sites from the Transylvanian villages Morești<sup>317</sup> and Țaga-Hrube<sup>318</sup>. Similarly, it is the most spread type in Central Europe. In Boemia appear in Jenštejn<sup>319</sup> and Sobešuky<sup>320</sup>, in the larger excavations conducted at Brezno<sup>321</sup> 70% of the houses were of this type. Similar houses are also known in the Langobard settlement of Balatonlelle<sup>322</sup>.

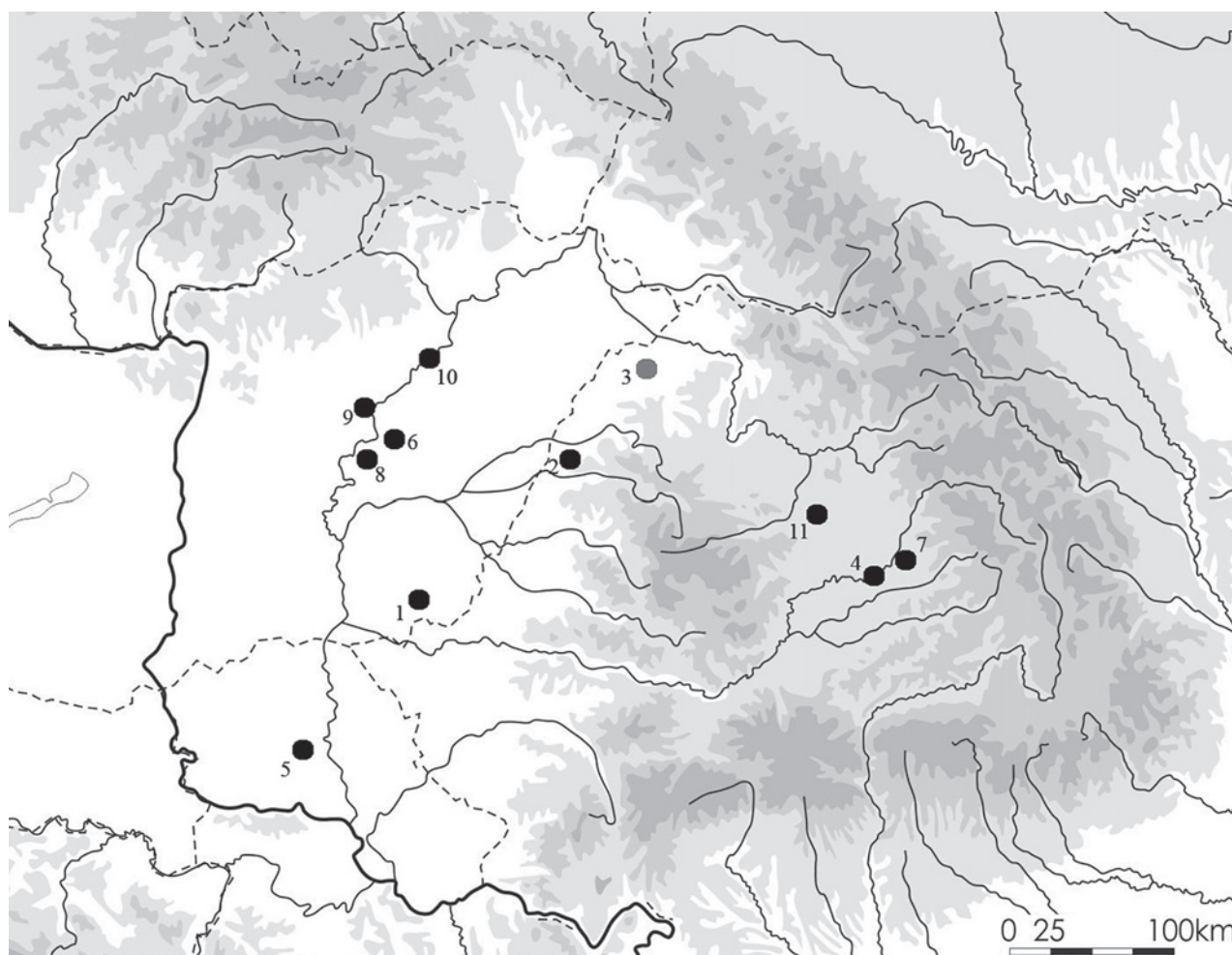


Fig.13. Houses with 3-3 postholes on each of the short sides / Locuințe cu câte trei gropi de stâlpi pe laturile scurte / Házak 3-3 cölöplyukkal a rövidebb oldalakon

1. Battonya-Vörös Október TSZ, (2,72x2,26 m), Szabó 1978, 61–62, 64, 3.ábra.
2. Biharea, (L2: 3,16x2,92m; L5: 3,75x4,5m), Dumitrașcu 1994, 167, 173, 326, fig. 80.
3. Carei
4. Cipău-Gârle, (B2, B3), Protase 1966, 406, Fig.7.
5. Čurug, BUGRASKI 2012, 27, fig.12.
6. Kengyel-Kis tanya, (3,2x3m), Cseh 2007, 346, 355, 1. Kép.

<sup>317</sup> HOREDŤ 1979, 90-99.

<sup>318</sup> PROTASE 2003, 22, fig. 2; 26, fig. 7; 29, fig. 11; 63, fig. 19.

<sup>319</sup> DROBERJAR/TUREK 1997, Abb. 5.

<sup>320</sup> BLAŽEK 1997, Abb. 4-7.

<sup>321</sup> PLEINEROVA 2007, 82.

<sup>322</sup> SKRIBA/SÓFALVI 2004, 122, 1. kép.

7. Morești-Podei, (L3: 4x4,5m; L4: 3x2,8m; L5: 5,1x4,9m (Webhaus); L6: 4x4m; LA: 4x2,9m; LB: 4x3,9m; H4–5: 4x3,6m, DE6–7: 3,2x3m; M7: 3,8x3,4m; KL1: 4x3,6m; IKII: 3,6x2,4m; MNIV–V: 2,8x2,7m), Horedt 1979, 90–99.
8. Rákóczi-falva-Nyolcas dűlő I, (3,5x?m), Cseh 1997b, 176, 7. Kép.
9. Szolnok-Zagyva part, (4x3,5m), Cseh 1999a, 44, 4. Kép; (XVI/10 obj: 3,30x3,50, XI/47 obj: 3,00x3,40 m), Cseh 2000, 92, 1. Kép.
10. Tiszafüred–Tiszaszőlő, (3,2x2,8m), Cseh 1996a, 82, 7 ábra.
11. Ţaga-Hrube, (L1: 3,40x3,35m; L9: 3,35x3,10m; L15: 3,20x3,10m; L16: 3,20x3,10m; L17: 3x2,8m; L21: 3x3m), Protase 2003, 22, fig. 2; 26, fig. 7; 29, fig. 11; 63, fig. 19.

## II.3.2. The fire installations

### II.3.2.1. The fire installations within the houses

In the houses of the Carei settlement, except for one case, fire installations traces were not identified. On the floor of house 123 we documented a rectangular pit, with burnt walls, elongated along the house axis. This feature is unique among feature types specific to this period, being though identical with the earlier, 2nd–5th century north-south oriented burnt holes, well known in Przeworsk culture settlements<sup>323</sup>. A similar, square, hearth plate is also known in the site at Sighişoara-Dealul Viilor<sup>324</sup>, however it cannot be mistaken with the pit with burnt walls from Carei. Similar, square pits, with burnt walls are well known in the Przeworsk culture settlements<sup>325</sup>, however in our country, they were identified only in the site at Stobnica-Trzymor 2. They were sunken in the house floor in the middle or on one of its sides, and were oriented north-south. Still in this site was discovered the square pit, with burnt walls surrounded by a circular ditch, believed by the excavator as a cult place.<sup>326</sup>

Hous of fire installation within houses are not typical to Gepid settlements, emerging only in a few sites from Transylvania (*Fig. 14*) According to the typology drafted by Gabriel Rustoiu, there may be distinguished fireplaces, occasionally delimited by stones, and oven, which may be oval, rectangular, stone delimited, respectively stone, oval or circular ovens.<sup>327</sup> In the site of Morești, traces of the fire technique were found only in exceptional cases, the slab in the corner of house 22 may represent the trace of a temporary fireplace. Just nearby house 34, there was a hearth.<sup>328</sup> The fire technique emerges in Gepid houses from Transylvania in close connection with the house type without post-holes (Ocnița-La Ștefăluțu<sup>329</sup>, Stupini-Vătășină<sup>330</sup>, Dipșa-Fundoaie<sup>331</sup>). Such connection likely mirrors a regional group or a chronological differentiation. In the Tisza Plain, the appearance of certain burnt stains with charcoal traces was interpreted as hearths inside houses<sup>332</sup>. We believe that baking ovens formed into house walls represent a separate group. These resemble outdoor kilns, except that instead of the heating pit, they were fuelled from within the house. They are quite rare among Gepidic settlements, a specimen being known in the site of Kengyel-Boghy major-Kengyelpart I<sup>333</sup>.

<sup>323</sup> GINDELE/ISTVÁNOVITS 2009, 15; Soós 2011.

<sup>324</sup> HARHOIU/BALTAG 2007, 129, fig. 1101.

<sup>325</sup> Summary in GINDELE 2015.

<sup>326</sup> WIKLAK 1984, 179.

<sup>327</sup> RUSTOIU 2005, 50.

<sup>328</sup> HOREDTE 1979, 113.

<sup>329</sup> GAIU 1994.

<sup>330</sup> GAIU 2002.

<sup>331</sup> GAIU 1993, 91–93.

<sup>332</sup> CSEH 1991b, 165, 3 ábra, 167, 5. Ábra.

<sup>333</sup> CSEH 1993d, 19, 2. Kép, 20, 3. Kép, 24, 7 kép.



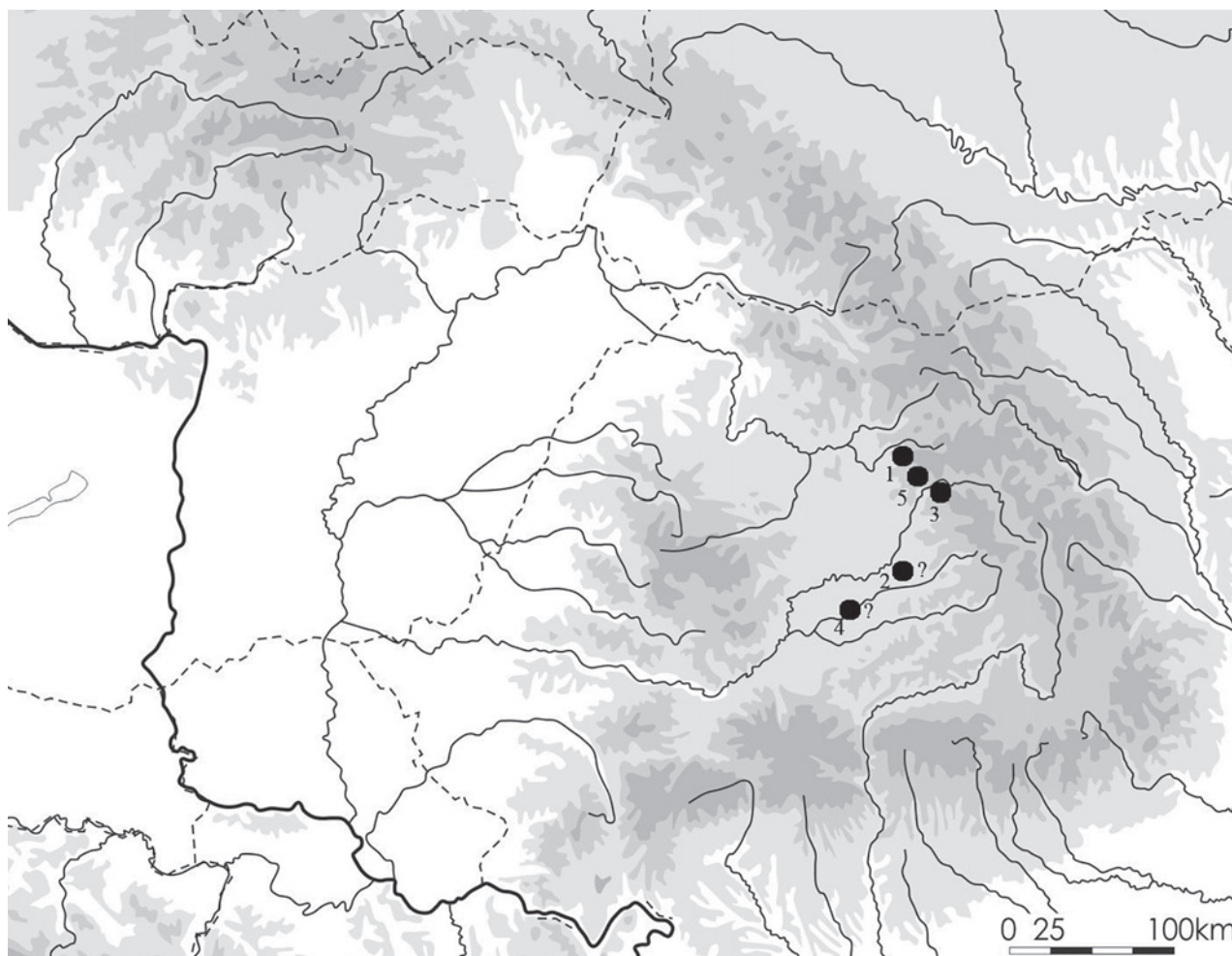


Fig.14. Houses with fire installation / Locuințe cu instalații de foc / Házak tüzelő berendezésekkel

1. Dipșa/Dipse–Fundoaie, Gaiu 1993, 91–93.
2. Morești/Malomfalva –Podei, Horedt 1979, 90–99, 112.
3. Ocnița–La Ștefălucu, Gaiu 1994, 50–51.
4. Sânmiclăuș/Betlenszentmiklós–Gruisor, Anghel/Blăjan 1977, 288–289.
5. Stupini/Mezősolymos –Vătășină, Gaiu 2002, 114–119.

### II.3.2.2. Outdoor ovens

The excavations conducted at Carei yielded two sunken outdoor kilns (70, 99). Both were equipped with workpits and in one (70), the hearth was coarsely plated with wheel-thrown potshards. Outdoor kilns were discovered in the settlements of Porumbenii Mici - Galat<sup>334</sup>, Țaga-Hrube<sup>335</sup>, however, their workpits could not be documented. In site Brateiu 1, two outdoor kilns were found<sup>336</sup>. A kiln similar to that of Carei, including with workpit was discovered in the site of Szelevény-rét, without yet the layer of pottery plated fireplace<sup>337</sup>. A similar outdoor kiln, sized 100x80 cm, provided with workpit on the southern side, was recorded in the site at Tiszafüred-Morotva-part<sup>338</sup>.

<sup>334</sup> NYÁRÁDI 2011, 330.

<sup>335</sup> PROTASE 2003, 37.

<sup>336</sup> BĂRZU 1994-95, 246.

<sup>337</sup> CSEH 2004c, 82-83, 118, 21. Kép.

<sup>338</sup> CSEH 1991b, 175.



### II.3.3. Pits

In the Carei site, only one pit (143), oval, with uneven bottom and unclear function, was discovered. The pits emerge in much smaller numbers in Gepidic settlements compared to previous settlements of imperial date. They also differ much in sizes and forms. There are circular or oval pits, with diameters of 1-2 m and oblique walls in the sites of Battonya-Vörös Október TSZ<sup>339</sup>, Battonya-Szionda Gyep I<sup>340</sup> and Ţaga-Hrube<sup>341</sup>. Another type is that of traditional storage pits in a hive shape documented in the sites of Tiszafüred-Morotvapart<sup>342</sup>, Szentes-Belsőecser<sup>343</sup> and Ţaga-Hrube<sup>344</sup>. A storage pit sunken in the house floor was identified in one case, in the corner of house 7<sup>345</sup> at Moreşti. The storage pit discovered in a house corner identified at Tiszafüred-Tiszaszóllós did not go under the floor level, being likely used as a niche<sup>346</sup>, however in other cases they descend by approximately 40 cm below<sup>347</sup>. Sunken storage pits below house floors were also reported in the Gepid settlement of Biharia<sup>348</sup>.

### II.4. Production activities (weaving, bone, iron and metalworking)

In the site of Carei we identified several weights used for looms, evidencing the practice of this craft, typologically perfectly framing among the forms commonly used by the Gepids. Some were identified on the floor, others in house fillings, without yet composing a network recording a loom “in situ”. The question of loom houses was posed by Kurt Horedt, in relation with the two houses at Moreşti (13, 27) and the clay weights found nearby the walls<sup>349</sup>. These houses are large (6.2x5.6 m and 5.1x4.9 m) and belong to the same type (3-3 postholes on the shorter sides, in one with additional postholes along each of the long sides). In the Tisza Plain, still the clay weights aided the identification of such a house also at Tiszafüred-Morotva-part<sup>350</sup> (where bone working was also carried out), one smaller, sized 2.9x2.9 m, with one posthole each midway the sides. Another house used for weaving was supposed at Szolnok-Zagyva-part (Alcsi area), sized 3.30-3.50 x 3.00-3.40 m, with 3-3 postholes on the short sides, respectively at Kengyel-Baghy-homok<sup>351</sup>. G. Rustoiu argued that such weaving workshops might have serviced with fabrics the entire community<sup>352</sup>.

The remains discovered in the Carei site also include deer antlers and other bones that exhibit cutting prints, scrap or unfinished pieces of bone comb making process, all indications of bone working activities. Such traces (Fig.15, D) were identified in 7 features (29, 30, 123, 17, 90, 116, 141), which is rather surprising if we compare these remains with known Gepidic workshops. Objects evidencing

<sup>339</sup> SZABÓ 1978, 67, 6 ábra.

<sup>340</sup> SZABÓ/VÖRÖS 1979, 222, 5. Kép.

<sup>341</sup> PROTASE 2003, 36, fig. 13.

<sup>342</sup> CSEH 1991b, 180, 11 ábra.

<sup>343</sup> B. TÓTH 2006, 34, Abb. 20.

<sup>344</sup> PROTASE 2003, 36, fig. 13.

<sup>345</sup> HORED T 1979, 113.

<sup>346</sup> CSEH 1996a, 82, 6 ábra.

<sup>347</sup> CSEH 1996a, 82, 7 ábra.

<sup>348</sup> DUMITRAŞCU 1994, 167.

<sup>349</sup> HORED T 1979, 93-97.

<sup>350</sup> CSEH 1986a.

<sup>351</sup> CSEH 2000, 91-94.

<sup>352</sup> RUSTOIU 2005, 51.

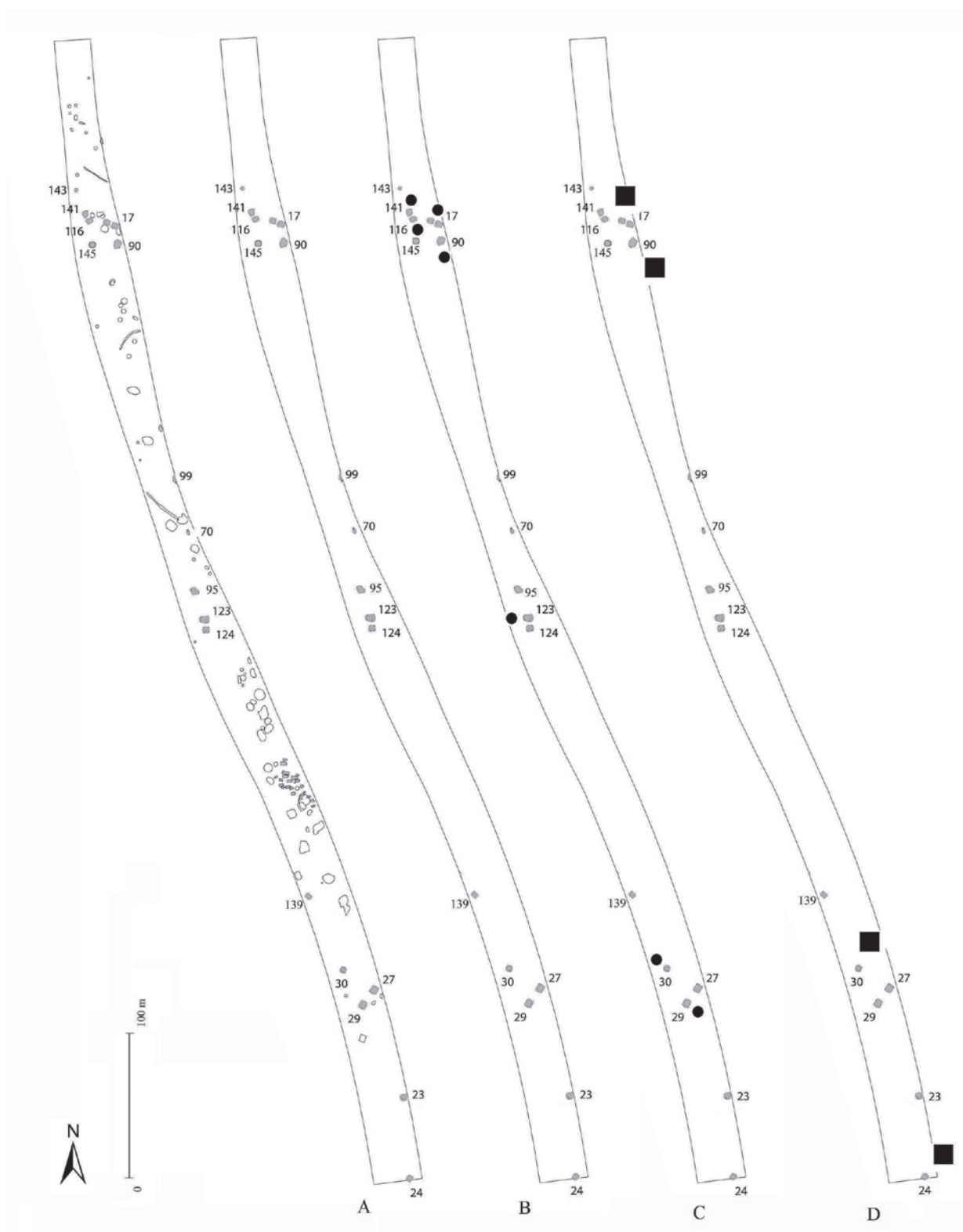


Fig.15. A. General plan / Planul general / Összesítő rajz  
 B. The Gepidic features from the settlement / Complexele gepidice din așezare / Gepida telep objektumok  
 C. Traces of iron processing (slag) in the features/ Urme de prelucrare a fierului (zgură) în complexe/ Vas feldolgozás nyomai (salak) az objektumokban  
 D. Traces of knock processing in the features / Urme de prelucrare a osului în complexe / Csont feldolgozás nyomai az objektumokban

bone working traces were discovered insofar at Tiszafüred-Morotva-part<sup>353</sup>, Kengyel-Baghy-major Kengyelpart I<sup>354</sup>, Kengyelpart II<sup>355</sup>, Tiszagyenda<sup>356</sup> and Biharia<sup>357</sup>.

Iron working is recorded by the traces of iron slag discovered in the site of Carei in 4 features (23, 30, 17, 90) (Fig. 15. C). The research of Gepidic settlements has yielded insofar iron working traces only at Tiszafüred-Morotva-part<sup>358</sup>, Sopor de Câmpie<sup>359</sup> and Moreşti<sup>360</sup>.

The small punching hammer (approximately sized 7.5 cm), identified in feature 17 (Pl. 39: 5) may be a good indication of precious metalworking practice. This tool type is very rare among the surviving Gepidic archaeological materials. The iron hammer discovered in burial 10 in the site at Band is identical in shape, however larger in sizes<sup>361</sup>. The hammer discovered in the site of Moreşti is of a different type<sup>362</sup>.

## II.5. The archaeological material

### II.5.1. Ceramic materials

#### II.5.1.1. The pottery

The pottery culture of the Gepids is less known compared to that of the preceding periods, of 2nd – 5th century date. Pottery firing kilns are known at Szolnok- Zagyva-part<sup>363</sup>, Törökszentmiklós<sup>364</sup> (with a central supporting post), Kengyel-Baghy-homok<sup>365</sup>, Szelevény<sup>366</sup>, Brateiu 1<sup>367</sup> and Dipsa<sup>368</sup> (with central supporting wall).

Since pottery is the most significant material quantitatively, several pottery types are known in the Gepid site. During the processing of the grave goods yielded by the Szőreg cemetery, Margit Nagy drafted a typology<sup>369</sup>. Based on the objects' functionality, the pottery material identified within settlements is traditionally divided into two major groups: the finer, tableware and the coarser, cooking ware. Storage vessels are an exception<sup>370</sup>. These theoretically well defined classes are not always found as such among the archaeological materials. There emerge trays and jugs degreased with coarse material, respectively handmade pots, used in the kitchen to serve food and drinks.

In the site of Carei we identified potshards in more significant quantities in the filling of certain features (Table 3), sufficient enough for a relevant statistical assessment of percentages upon different technologies. In feature 23, we identified fine pottery of different gray hues in a proportion of

<sup>353</sup> CSEH 1986a.

<sup>354</sup> CSEH 1999b, 65.

<sup>355</sup> CSEH 2004b, 52.

<sup>356</sup> BÁRÁNY/HAJNAL 2010.

<sup>357</sup> DUMITRAŞCU 1982.

<sup>358</sup> CSEH 1991b, 194.

<sup>359</sup> PROTASE/ȚIGARĂ 1960, 392.

<sup>360</sup> HOREDŢ 1979, 150.

<sup>361</sup> KOVÁCS 1913, 289, 16. Kép, 1-1a.

<sup>362</sup> HOREDŢ 1979, Taf. 43: 5.

<sup>363</sup> CSEH 1999a, 48, 9. kép., 49.

<sup>364</sup> CSEH 1990a.

<sup>365</sup> CSEH 1999a, 61, 4. Kép.

<sup>366</sup> CSEH 2004b, 85-87, 121-132, 24-35 képek.

<sup>367</sup> BĂRZU 1994-95, 278, fig. 4:5

<sup>368</sup> GAIU 1993, 93, 98, fig. 3.

<sup>369</sup> NAGY 2005, 192, Abb. 47.

<sup>370</sup> B. TÓTH 2006, 78, 260. note.

9%, half-coarser pottery in a proportion of 4%, coarser pottery, gray in 78%, brick-red in 3%, while other handmade specimens in 5%. In feature 29 the ratio of the fine, gray hued pottery is 7%, that brick-red is 7%, half-coarser pottery is 3%, while the coarse pottery with gray hues is present in 79% and that brick-red in 3%. The high percentage of the gray, coarse pottery is noticeable in contrast with the fine pottery, while that brick-red is scarce. An exception is feature 99, where the brick-red pottery predominates, however they are the result of secondary firing on the fireplace. The handmade pottery emerges in very small percentages, only occasionally and in only 7 features.

FEATURE	FINE, GRAY	FINE, BRICK-RED	HALF-COARSER GRAY	HALF-COARSER BRICK-RED	COARSER GRAY	COARSER BRICK-RED	HANDMADE	TOTAL.
17	4	-	1	-	105	-	2	110
17/3	-	-	2	-	10	-	-	12
23	34	-	14	-	281	11	20	360
24	6	-	3	-	6	-	-	15
27	4	-	3	-	8	-	-	15
29	7	6	3	-	72	3	-	91
30	4	-	2	-	103	-	-	109
70	-	-	2	-	232	6	2	242
90	3	-	3	-	8	-	-	14
95	12	-	2	-	36	-	1	51
99	13	15	16	3	11	12	-	70
116	1	-	2	-	18	-	-	21
123	9	-	-	-	24	-	2	35
124	13	-	-	-	36	-	-	49
139	7	-	2	-	5	-	6	20
141	10	-	4	-	2	-	-	16
143	2	-	4	-	2	-	10	18
145	1	1	-	-	16	-	-	18
	130	22	63	3	973	32	43	1266

Table 3. Comparison table with the number of ceramic fragments by features and the technological category. / Tabel comparativ cu numărul fragmentelor ceramice pe complexe și categoria tehnologică. / Összehasonlító táblázat a kerámia töredékek objektum szerinti számával és a technológiai csoportokkal.

Likely, the most typical Gepid vessel is that biconical or pear-shaped, used to serve drinks. In the site of Carei are specific biconical vessels, with the body at angle, small rim diameter and maximum diameter in the lower third of the vessel body (Fig. 16). They are richly decorated with smoothened patterns (vertical lines, network pattern, zigzag lines) (Fig. 16: 1, 2, 8, 9). They are paralleled by the pottery material discovered in a grave in the site at Andrid-Dealul Morii, beside a massive polyhedral bronze earring<sup>371</sup>. Biconical vessels also have a larger variation, with greater rim diameter and midway maximum diameter. Similarly to those smaller, they are decorated with smoothened lines and network patterns (Fig.16: 6, 7, 11). We may note that in the site at Carei, biconical vessels are more typical for the pottery material yielded by house groups I and II. János Cseh mapped almost 50 types of biconical ves-

<sup>371</sup> GINDELE/NÉMETI 2001, 285, Abb. 1.

sels in the Tisza Plain and Transylvania<sup>372</sup>. Among the materials collected subsequent to the excavations conducted at Carei we could not identify pear-shaped vessels, the small specimen in house 116 rather belonging to the biconical group, with more bulging lines by the middle and maximum diameter line midway the vessel body (Fig.16: 12). The biconical vessels from Carei belong without exception to the technological group of fine pottery and are – except for two specimens (Fig.16: 8, 11) – black or gray.

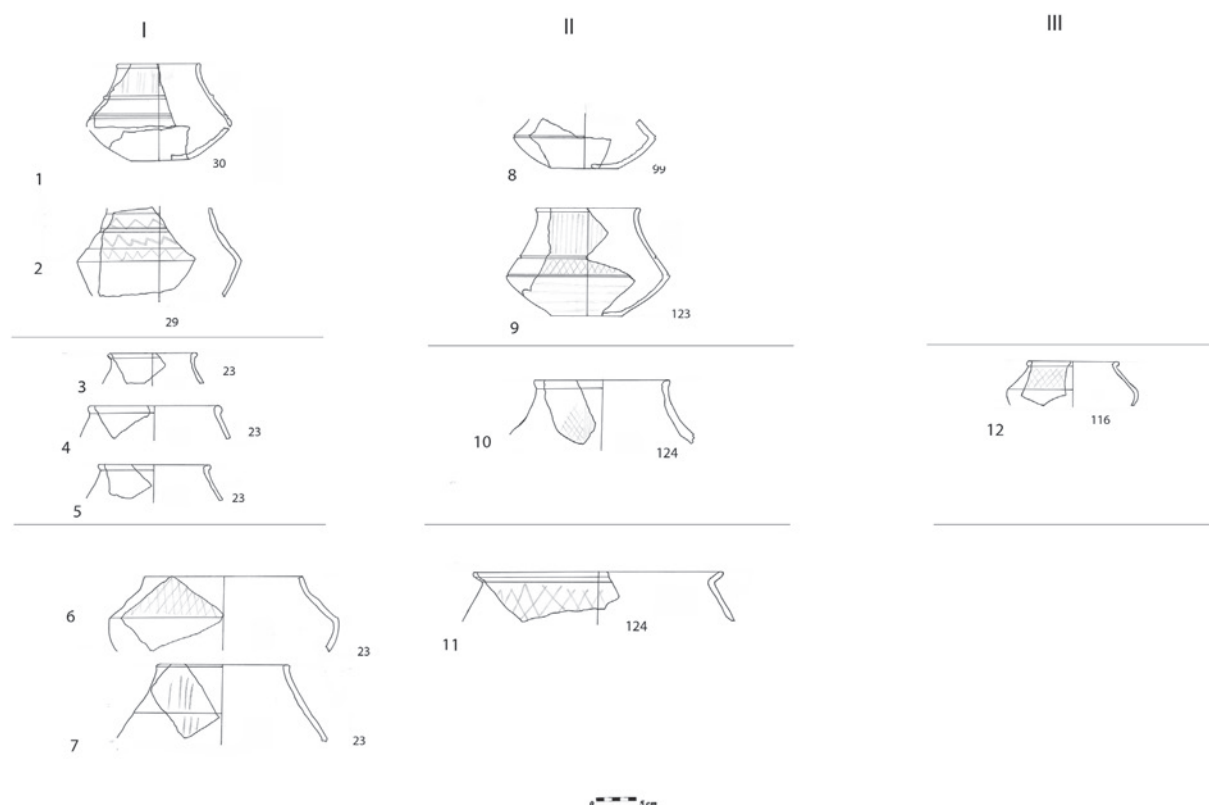


Fig. 16. The typology of the biconical vessels after the three group of the features. / Tipologia vaselor biconice după cele trei grupuri de complexe. / Bikónikus edények tipológiája a három objektum csoport szerint.

Jugs are present in the site of Carei in a relatively small number, none of the specimens being possible to be graphically reconstructed (Fig. 17). Most interesting is a light gray fragment, finely degreased, decorated in the neck area with a string of holes in the form of large alveoli. (Fig. 17: 1). From the site on the Oradea-Salca terrace comes a jug decorated similarly with an alveoli string, however on the lower part of the junction between handle and vessel body, which was discovered dislodged yet very likely originating in a grave<sup>373</sup>. Similar decoration is also found on a bowl, with piercings instead of alveoli, identified in the site at Berea - Soci<sup>374</sup>. Other jugs were decorated with a burnished network pattern or with horizontal lines (Fig. 17: 2, 6). The fragment discovered in feature 141 likely belonged to a smaller jug, with a more marked shoulder curvature (Fig. 17: 7). A few handle fragments evidence that in the Gepid settlement of Carei were also used jugs degreased with coarse material (Fig. 17: 4, 8). The handles belong almost without exception to the same typological group, with a groove on the upper or lower side (Fig. 17: 3, 4, 8, 17), with only one specimen exhibiting two grooves on the upper half (Fig. 17: 5).

Bowls typologically belong to those semi-spherical (Fig. 18). Except for two specimen (Fig. 18: 1, 6), all are degreased with coarse material. Differences may be noted in how their edge was made,

<sup>372</sup> CSEH 1990a, 60-61, XXIII térkép.

<sup>373</sup> Roşu 1965, 404, Abb. 1: 6.

<sup>374</sup> STANCIU 2011, 617, Pl. 8: 7

being either rounded (Fig. 18: 1), sharp (Fig. 18: 2) or provided with a lid slit, alike also certain pots (Fig. 18: 3, 4, 5). These are specific firstly to house groups I and III. Analogies are broadly known in the Gepidic sites of the Tisza Plain, for instance at Ártánd<sup>375</sup>, and from Transylvania, at Morești<sup>376</sup> and Dîpșa-Fundoaie<sup>377</sup>.

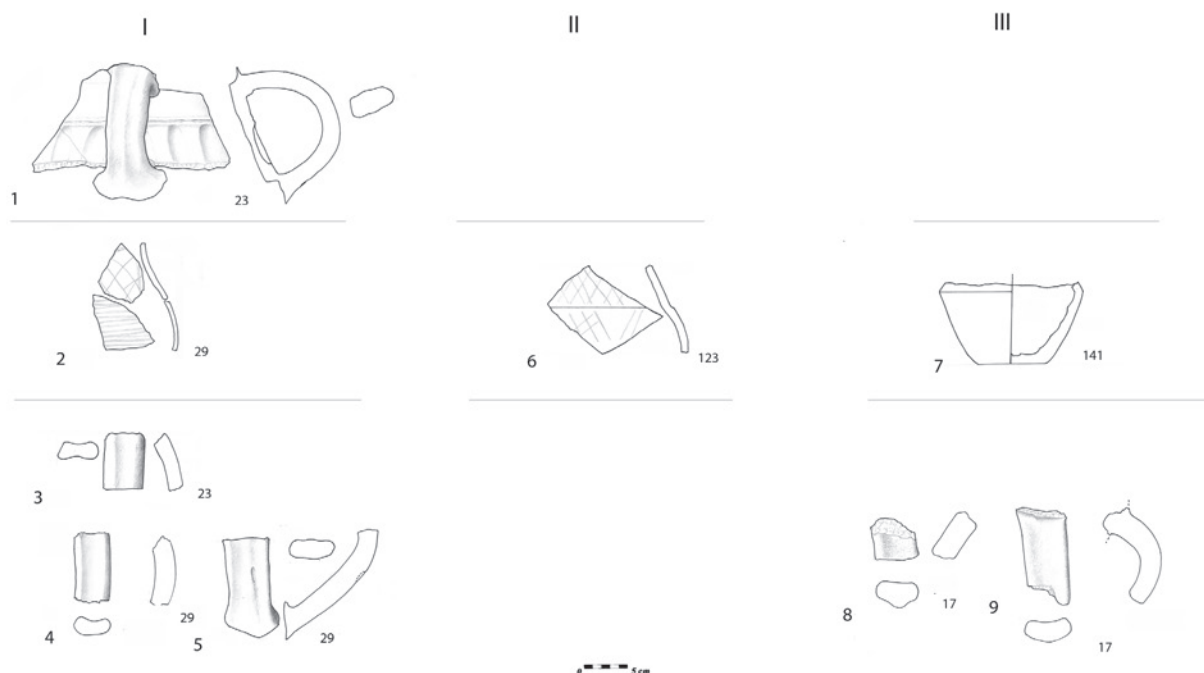


Fig. 17. The typology of the jugs and handles after the three group of the features. / Tipologia ulcioarelor și a toartelor după cele trei grupuri de complexe. / Korsók és fülek tipológiája a három objektum csoport szerint.

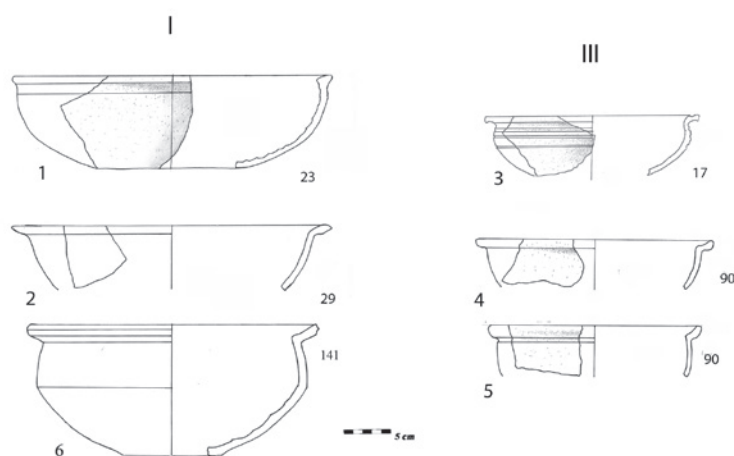


Fig. 18. The typology of the bowl after the three group of the features (In the group II here not discovered the typologically reconstitutable forms). / Tipologia străchinilor după cele trei grupuri de complexe (În grupul de complexe II nu au fost descoperite forme reconstituibile din punct de vedere tipologic). / Tálak tipológiája a három objektum csoport szerint (A II-es csoportban nincsenek tipológiai azonosítható formák).

Fragments of storage vessels were discovered in almost all features, some degreased with semi-fine material, other with coarse material. Specific is the emergence of wavy lines bundles (Pl. 22: 7; Pl. 27: 8; Pl. 28: 5,6; Pl. 29: 4; Pl. 33: 4). Only one rim fragment was identified, very pulled out (Pl. 40: 5).

<sup>375</sup> B. TÓTH 2006, Taf. 19: 4,7.

<sup>376</sup> HOREDT 1979, 131, Abb. 64:1.

<sup>377</sup> GAIU 1993, Fig. 5: 9.

There was also identified a vessel of a special form, with heightened handles (Table 23: 7), a very rare example, with analogies in Gepid sites only at Ártánd<sup>378</sup>.

The most frequent ware type in the site at Carei is the pot. Almost without exception, they are degreased with coarse material, types being defined according to shape and rim forms. Kurt Horedt, based on the maximum diameter line of the vessels identified in the site at Morești defined three large groups: I. In the upper third of the vessel, II. In the middle third and III. In the lower third<sup>379</sup>. This typology was completed by Ágnes B. Tóth: I. – broad shoulder, II. – spherical shape and III. – pot with elongated body<sup>380</sup>. In the case of the pottery from the site of Carei, given also the fragmentary nature of the archaeological inventory (most often the pot's maximum diameter is missing), vessels may be also grouped based on their mouth diameter. Based on such parameter, pot sizes may also be appreciated.

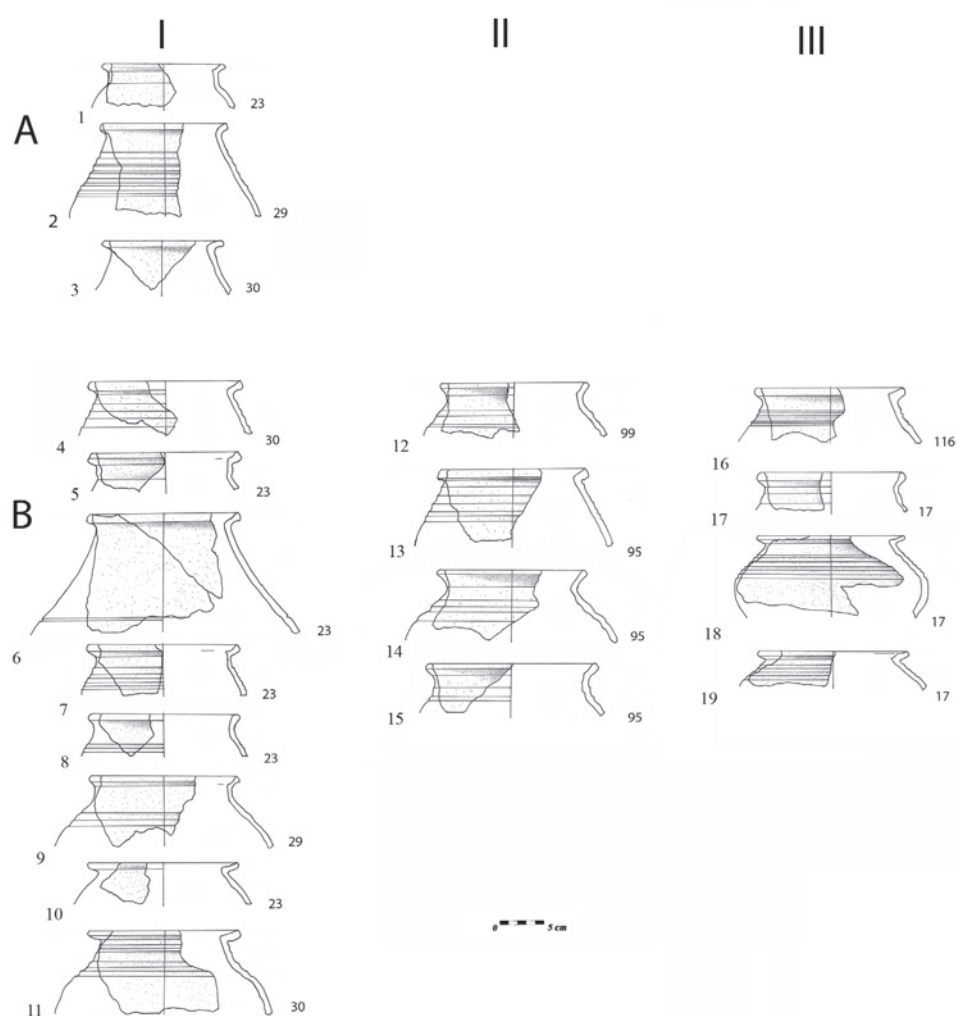


Fig. 19. The typology of the pots after the three group of the features. A: with a mouth diameter of about 10 cm, B: with a mouth diameter of about 12 cm. / Tipologia oalelor după cele trei grupuri de complexe.

A: cu diametrul buzei în jur de 10 cm, B: cu diametrul buzei în jur de 12 cm. / Fazekak tipológiája a három objektum csoport szerint. A: 10 cm körüli peremátmérő, B: 12 cm körüli peremátmérő.

<sup>378</sup> B. TÓTH 2006, Taf. 20: 14.

<sup>379</sup> HORED T 1979, 123-125, Abb. 59-60.

<sup>380</sup> B. TÓTH 2006, 96-97, Abb. 27.



- A. Pots with a mouth diameter of approximately 10 cm - 6%. They are known only from the remains of the first house group and likely belong to type III defined by B. Tóth, with elongated body. (Fig. 19: 1-3.)
- B. Pots with a mouth diameter of ca. 12 cm - 31%. Emerging in all three house groups, likely all pot types may be included in this size. (Fig. 19: 4-17.)
- C. Pots with a mouth diameter of ca. 14 cm - 44%. Emerging in the archaeological material of house groups I. and III. Likely all three pot types may be included in this size. (Fig. 20)
- D. Pots with a mouth diameter of approximately 16 cm - 16%. They are known only in the archaeological inventory of the first house group. (Fig. 21: 1-8.)
- E. Pots with a mouth diameter of almost 18 cm - 3%. Only two specimens were identified in the 99 features. Beside their sizes, they are also distinguished by the bundle of wavy lines on the shoulder. (Fig. 21: 9-10.)

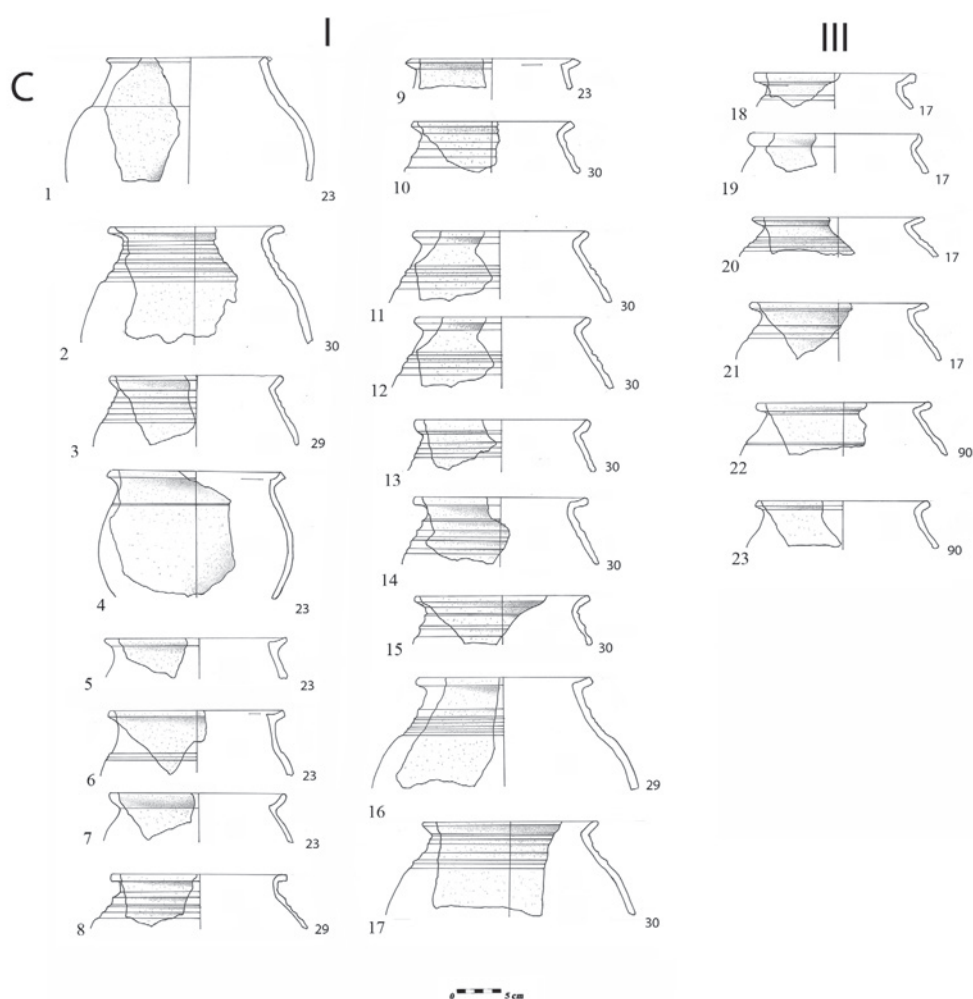


Fig. 20. The typology of the pots after the three group of the features. C: with a mouth diameter of about 14 cm (In the group II here not discovered the typologically reconstitutable forms). / Tipologia oalelor după cele trei grupuri de complexe . C: cu diametrul buzei în jur de 14 cm. (În grupul de complexe II nu au fost descoperite forme reconstituibile din punct de vedere tipologic). / Fazekak tipológiája a három objektum csoport szerint. C: 14 cm körüli peremátmérővel. (A II-es csoportban nincsenek tipológiailag azonosítható formák).

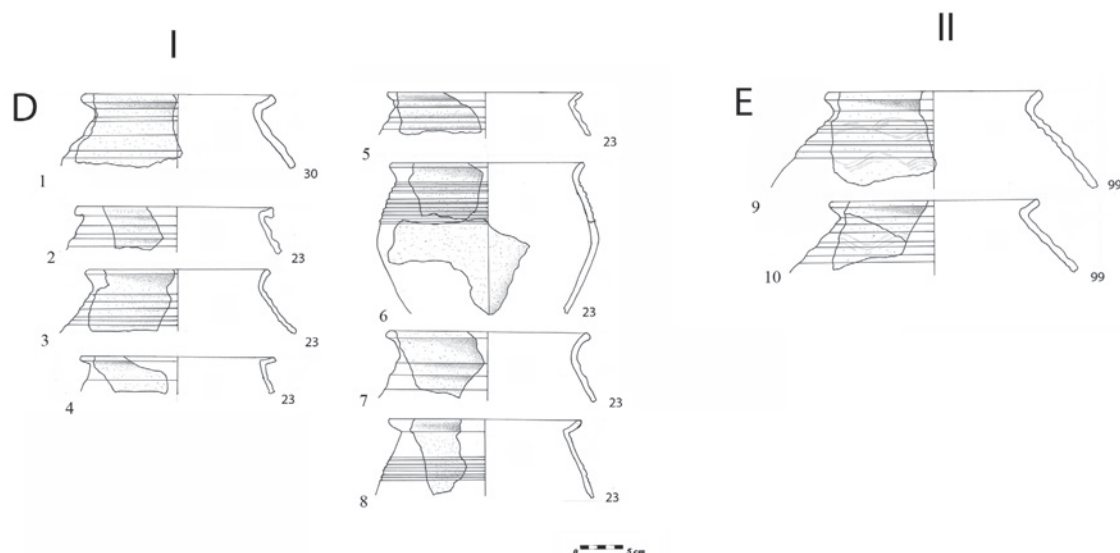


Fig. 21. The typology of the pots after the three group of the features. D: with a mouth diameter of about 16 cm (exclusive from the group I); E: with a mouth diameter of about 18 cm (exclusive from the group II). / Tipologia oalelor după cele trei grupuri de complexe. D: cu diametrul buzei în jur de 16 cm (exclusiv din grupul I); E: cu diametrul buzei în jur de 18 cm (exclusiv din grupul II). / Fazekak tipológiája a három objektum csoport szerint. D: 16 cm körüli peremátmérővel (kizárólag az I csoportból), E: 18 cm körüli peremátmérővel (kizárólag a II csoportból).

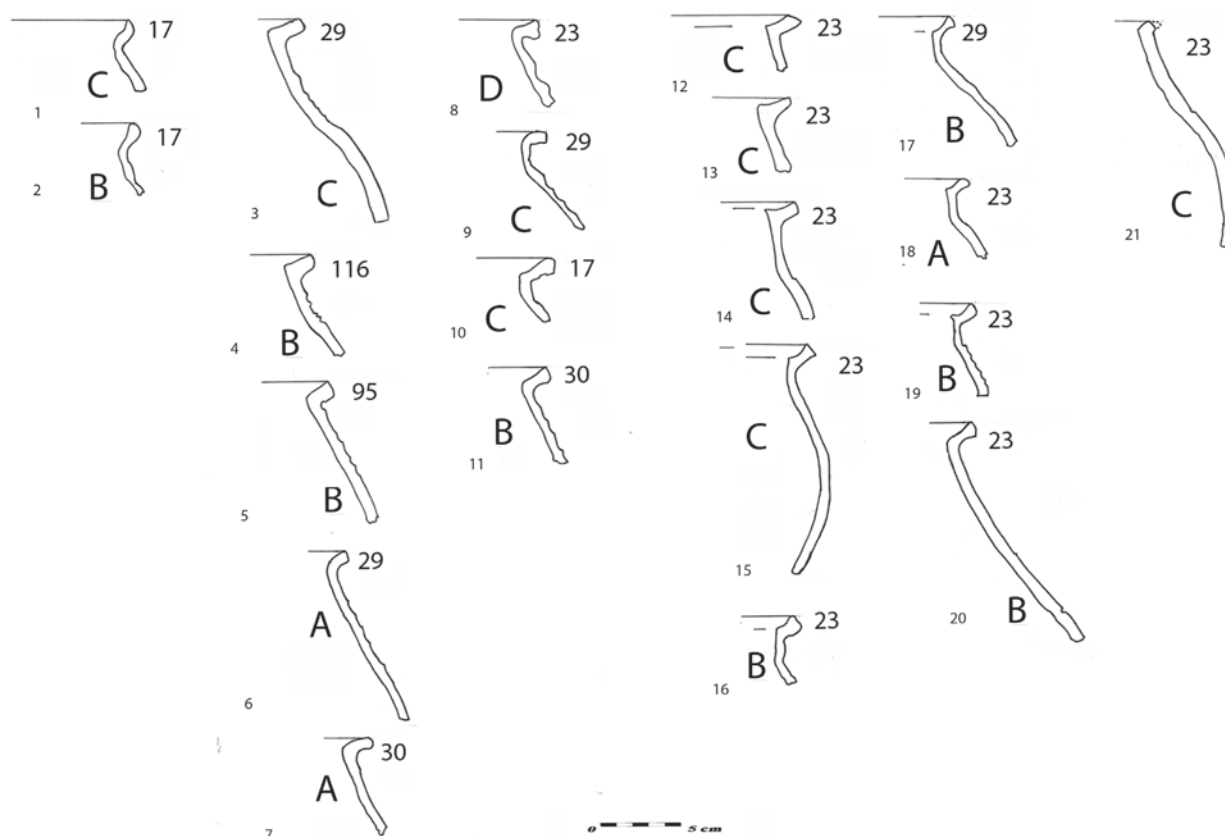


Fig. 22. The typology of the pot rims. Short rims. 1, 2: upwarmed rim, with lid groove; 3-7: thickened, angular; 8-11: thickened, profiled; 12-16: thickened, profiled, with lid groove; 17-20: thinner, profiled, with lid groove. / Tipologia buzilor de oale. Buze scurte. 1, 2: buze trase în sus cu canal de capac; 3-7: buze îngroșate, unghiulare; 8-11: buze îngroșate, profilate; 12-16: buze îngroșate, profilate cu canal de capac; 17-20: buze subțiri, profilate cu canal de capac. / A fazekak perem tipológiája. Rövid peremek. 1, 2: fölfelé húzott perem, fedőhornyolattal; 3-7: megvastagított, szögletes perem; 8-11: megvastagított, profilált perem; 12-16: megvastagított, profilált, fedőhornyolatos perem; 17-20: vékonyabb, profilált, fedőhornyolatos perem.

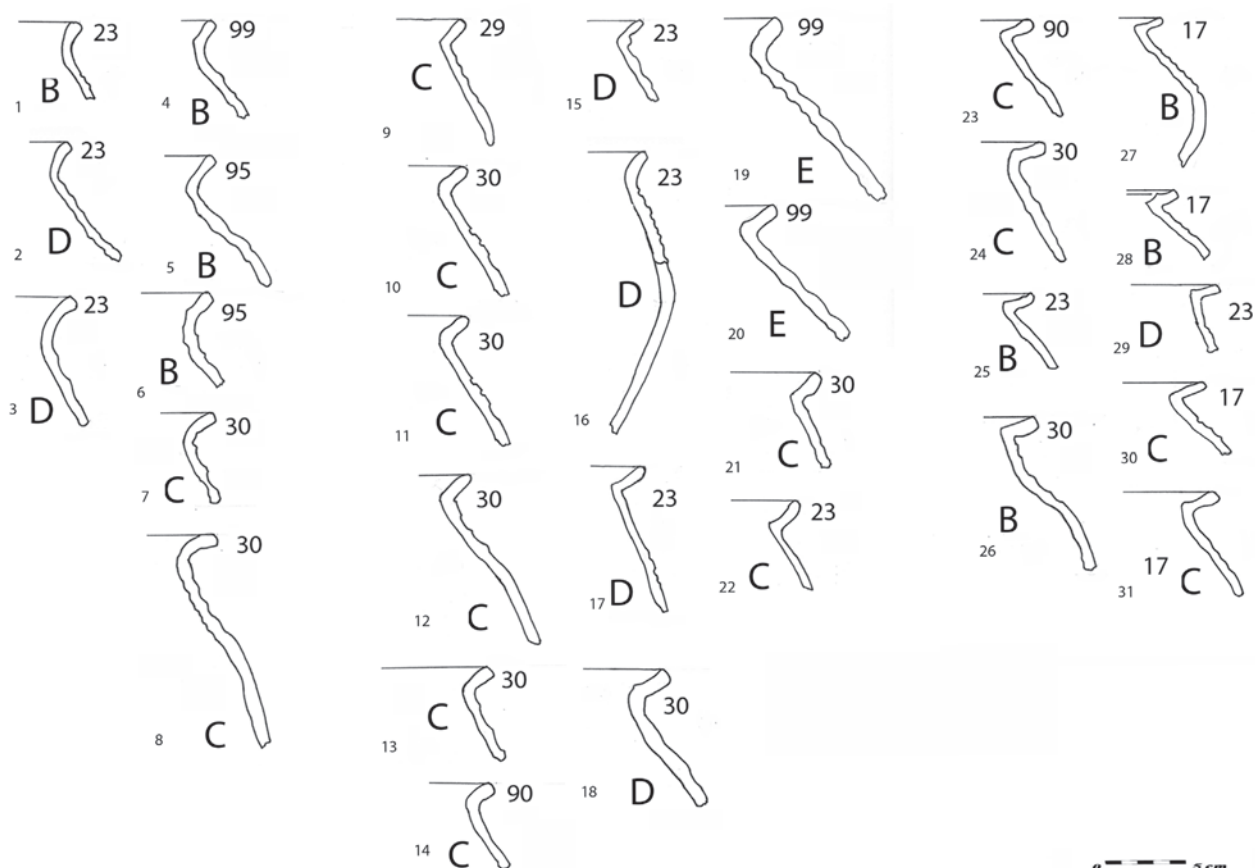


Fig. 23. The typology of the pot rims. Longer rims. 1-3: slightly everted; 4-8: stronger everted; 9-22: everted rim attached to the body at an angle; 23-27, 29-31: strong everted rim with lid groove; 28: profilated rim. / Tipologia buzelor de oale. Buze scurte. 1-3: trase mai puțin spre exterior; 4-8: trase mai mult spre exterior; 9-22: buză evazată, cu conexiune unghiulară la corp; 23-27, 29-31: buze puternic evazate, cu canal de capac; 28: buză profilată. / A fazekak perem tipológiája. Hosszú peremek. 1-3: enyhébben kihajló; 4-8: jobban kihajló; 9-22: kihajló perem, szögben kapcsolódik a testhez; 23-27, 29-31: fedőhornyolattal és erősen kihúzott peremmel; 28: profilált perem.

The mouths of coarse pots may be divided according to shape in several types. Likely, most visible differences are found between their length and mouth profile. Among the Gepidic pots from Carei count vessels with a shorter, more vertical mouth. In those with a shorter mouth, we succeeded to identify the following sub-types: sharp mouth, Fig. 22 with lid groove (Fig. 22: 1, 2); thickened mouth, square (Fig. 22: 3-7); thickened mouth, moulded (Fig. 22: 8-11), thickened mouth, moulded, with lid groove (Fig. 22: 12-16) and thinner, moulded mouth, with lid groove (Fig. 22: 17-20). We may note that shorter mouths emerge firstly with smaller pots and are more specific to pots in groups B and C of the typology. More vertical Fig. 23 mouths may be divided in three sub-types: less everted (Fig. 23: 1-3) or markedly everted (Fig. 23: 4-8) attached to the body in an arched manner; everted rim attached to the body at an angle (Fig. 23: 9-22), specimens with a lid groove and strongly heightened rim (Fig. 23: 23-31), one with moulded decoration (Fig. 23: 28) and the majority provided with lid grooves.

Of the total pottery material, 3% was handmade (Fig. 24). Among the fragments count degreased pieces with more or less chamotte or more sand, yet relative differences in this respect may not be found. This percentage is 17%<sup>381</sup> of the pottery material discovered in the nearby site of Berea, while in the sites from the Tisza Plain it varies between 3-6% and 20-25%<sup>382</sup>. In the current state of research, it is impossible to say whether such differences originate in regional or chronological differentiations.

<sup>381</sup> STANCIU 2011, 56.

<sup>382</sup> B. TÓTH 2006, 119.

We believe, taking into account for instance, the closeness of the site at Berea, that they are the result of a chronological differentiation. In terms of shape, pots dominate. They have vertical, everted rims, with a 12-16 cm diameter. More spherical (Fig. 24: 4.) or elongated (Fig. 24: 5) forms may be differentiated. The lid (Fig. 24: 6) and its handle (Fig. 24: 7) also emerge.

Out of the handmade pottery material, a small vessel, likely with spherical body may be distinguished both by shape and decoration. Finer to touch, fired to the black hue, it is decorated with incisions imitating runes. Resembling forms, of stamped “pseudo-runes” are known in the pottery material identified in Anglo-Saxon<sup>383</sup> burials.

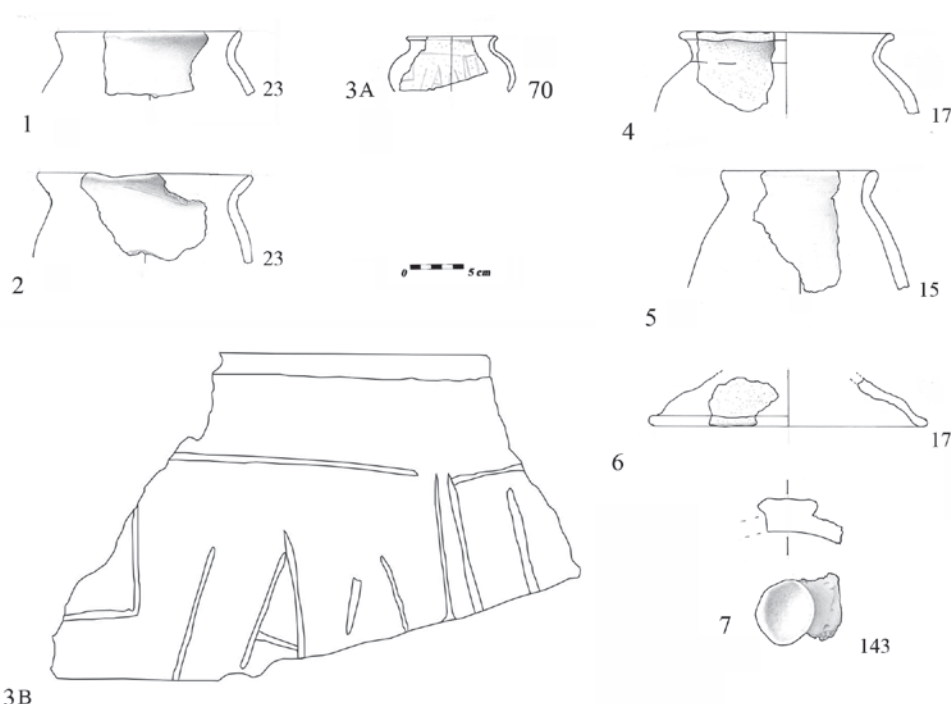


Fig. 24. The typology of the handmade pottery. 3A-B the vessel with pseudo-runa. / Tipologia ceramicii modelate cu mâna. 3A-B vasul cu pseudo-rune. / Kézzel készített kerámia tipológiája. 3A-B pszeudorúnás kerámia.

### II.5.1.2. Clay weights

The Gepid clay weights vary little typologically, forming a single large group. Alike those from Carei (Pl. 26: 2, 4; Pl. 28: 8; Pl. 39: 11, 12) they have a round or oval form in cross-section and a height which varies between 10-12.5 cm<sup>384</sup>, their diffusion being mapped by Cseh<sup>385</sup>. Round shaped weights, typical to the other Germanic settlements, do not emerge in Gepid settlements<sup>386</sup>. Their different forms are very likely related to the weaving techniques and thread thicknesses. The mass of the exclusively round weights from the Lombard site discovered at Balatonlelle is on average of 150-200 g, the heaviest being of 300 g<sup>387</sup>, while the intact weight surviving at Carei (Pl. 28: 8) is of 1200 g.

### II.5.1.3. Spindle whorls

In Gepid sites, especially among female funerary goods, spindle whorls are present in large numbers<sup>388</sup>. In the site of Carei, three shape types of these objects may be distinguished (Fig. 25). The most

<sup>383</sup> PIEPER 1986, 196.

<sup>384</sup> B. TÓTH 2006, 72.

<sup>385</sup> CSEH 1997a, 128, 10 kép. CSEH 2000, 99, 10 kép.

<sup>386</sup> SKRIBA/SÓFALVI 2004, 151.

<sup>387</sup> SKRIBA/SÓFALVI 2004, 151.

<sup>388</sup> B. TÓTH 2006, 71.

spread is that biconical with a 25-30 cm diameter and height of 16-20 mm (Fig. 25: 1-3, 8, 9). One of its variations is decorated by grooving (Fig. 25: 5). These forms are known in the Gepidic archaeological inventory, similarly grooved spindle whorls being discovered in the sites of Dipşa-Fundoaie<sup>389</sup>, Moreşti-Podei<sup>390</sup>, and in the Tisza Plain at Rákóczifalva-Nyolcas dűlő<sup>391</sup>.

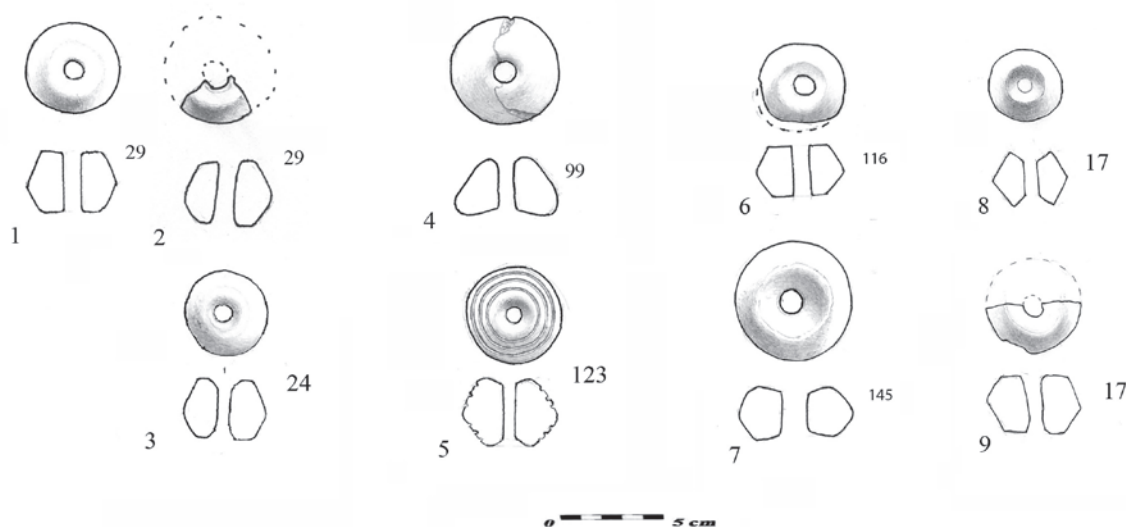


Fig. 25. The typology of the spindle-whorls. / Tipologia fusaiolelor. / Orsógombok tipológiája.

Another variation is the spindle whorl with a larger diameter, of 40 mm, more flattened and 18 mm high (Fig. 25: 7). Beside biconical shapes also emerge those conical (Fig. 25: 4). Many authors believe that spindle whorl's weight is more important than its shape, since it was directly connected with the thickness and thinness of the produced thread<sup>392</sup>. From this view, the analysed examples of Carei may be divided into three types: 1 piece of 10 g (Fig. 25: 8), most between 16-22 g (Fig. 25: 1-3, 5, 6, 9) and 2 pieces of 28-30 g (Fig. 25: 4, 7). Those in the last type differ also in shape from the others.

## II.5.2. Bronze objects

In the surface level of house 29 was identified a small bronze spoon (62 mm) (Pl. 28: 7). A similar spoon was found in male grave no. 3, richly furnished, yet lacking weaponry, from Hódmezővásárhely-Gorzsa. The small pierced spoon is believed a toiletry object of Romanic influence<sup>393</sup>. An almost perfect parallel is represented by the bronze spoon strung together with other toiletry objects on a wire ring identified in the male burial no. 64 from Szentes-Nagyhegy, similarly, without weapons. Only the handle decoration differentiates it from that at Carei<sup>394</sup>.

<sup>389</sup> GAIU 1993, 101, Fig. 6:13.

<sup>390</sup> HOREDT 1979, 102, Abb. 45: 26; 112, Abb. 55: 10.

<sup>391</sup> CSEH 1997b, 186, 18. Kép: 1.

<sup>392</sup> See the summary MAZÁRE 2012.

<sup>393</sup> BANNER 1933-34, 256, Taf. LXXI: 21.

<sup>394</sup> CSALLÁNY 1932, 161-162, Tf. XLIX, 11; CSALLÁNY 1941, Taf. XXXVII, 9.

### II.5.3. Iron objects.

The hammer from Carei (Pl. 39: 5) belongs to the group of punching small hammers owing to its sizes (7.5 cm) and small weight (28.7 g), being used in finer works. According to its elongated shape and rectangular socket hole, it may be associated to Celto-Germanic tradition<sup>395</sup> tools. In the Gepidic material culture, such hammers are unknown. In shape, it coincides with the iron hammer discovered in burial no. 10 at Band, however, it is much smaller<sup>396</sup>, while the specimen identified in the site of Moreşti is of another type<sup>397</sup>. Similar size and weight hammers are known from previous periods, Romanic, in Saalburg<sup>398</sup>, and from the later period, Avar, at Kisújszállás<sup>399</sup>.

Pincers (Pl. 29: 2) are common objects in Gepid settlements and burials<sup>400</sup>. Within graves, they emerge kept in small pouches hung by the hip, as personal toiletry pieces<sup>401</sup>. According to its sizes, of 4,5 cm, the specimen from Carei may be considered a small example.

Knife (Pl. 37: 4), one similar, with the cutting edge on the opposite side of the blade in contrast with that common, interpreted as dagger, was published by Margit Nagy from a Lombard grave in Budapest<sup>402</sup>. Curved knife (Pl. 39: 6), one resembling example is known from a grave at Szolnok-Szanda<sup>403</sup>. The awl discovered in house no. 141 (Pl. 37: 3) is typical for skins' working. Weapons are represented in this site by a spear shoe, very rare in Gepidic cultures (Pl. 37: 2).

### II.5.4. Bone objects

Bone combs, double toothed, are typical objects for Gepidic settlements and burial grounds. The comb discovered in house no. 116 (Pl. 34: 3) is decorated with a double punched line which frames two punched, wavy lines, respectively the lines on the opposite side. Similar decoration is known in both the Tisza Plain, like for instance burials 100 and 102 at Szolnok-Szanda<sup>404</sup>, and Transylvania, in grave 41B at Cluj-Polus<sup>405</sup>. In house no. 17 were discovered two bone comb fragments (Pl. 39: 8, 9) decorated with diagonally cut lines, deemed customary in the Gepid archaeological inventory.

### II.5.5. Stone tools

We may divide stone tools in two large classes: sharpening stones (Pl. 30: 12; Pl. 36: 6; Pl. 34: 6; Pl. 38: 6) and grinding stones, whose fragments appear in the filling of almost all features.

<sup>395</sup> HENNIG 1991, 71.

<sup>396</sup> KOVÁCS 1913, 289, 16. Kép, 1-1a.

<sup>397</sup> HOREDT 1979, Taf. 43: 5.

<sup>398</sup> PIETSCH 1983, cat. 99, 100, 102.

<sup>399</sup> RÁCZ 2013, 113.

<sup>400</sup> CSEH 1990 a, 57.

<sup>401</sup> NAGY 2005c, 159-164.

<sup>402</sup> NAGY 2012, 150, 7 kép: 2.

<sup>403</sup> BÓNA/NAGY 2002, 323, Taf. 49: 156/3.

<sup>404</sup> BÓNA/NAGY 2002, 316, Taf. 42, 100, 102.

<sup>405</sup> FERENZ/NAGY/LĂZĂRESCU 2009, 472, Pl.XVI:1.



## II.6. Chronology

Few authors have attempted to internally analyse the chronology of Gepid settlements. The reason is the small number of metal objects that may be accurately dated, respectively the few investigated large area sites. In his synthesis work on Gepidic settlements from Transylvania, G. Rustoiu defines two stages: the second part of the 5th century with Vyškov type brooches and other objects that evoke the Hunnic period (Soporu de Câmpie, Bratei, Sânmiclăuș, Țaga) and the first part of the 6th century, to which the majority of sites belong<sup>406</sup>. On the Tisza Plain, in the site of Battonya-Sziodnai gyepe I. a discovered bronze brooch<sup>407</sup> may be dated to the end of the 4th - early 5th century<sup>408</sup>. Ágnes B. Tóth attempted to date a few settlements from the Tisza Plain based on pottery. The specialist believes that the biconical and pear-shaped vessels, respectively the lack of stamps may represent a date to the 5th century.

A starting point in the analysis of the internal chronology of the Gepid settlements includes superposition, house orientation and spatial set up of the features. House orientation and superposition in two cases of two differently oriented houses in the site of Stupini-Vătășina are most certainly indicative of two distinct chronological stages, where in the second stage ovens emerge within houses as well<sup>409</sup>. In other Transylvanian sites, houses are approximately identically oriented<sup>410</sup>, except for the site of Bratei, where the superposition, circular structure of the settlement's layout and emergence of two house groups are very likely indicative of an internal chronology<sup>411</sup>. In the case of the site at Cluj-Polus Centre, the analysis of the archaeological inventory led to the conclusion that the orientation of the three house groups from the researched features is not identical not even within the groups<sup>412</sup>.

The houses of the three object groups appearing in the excavated part of the Carei settlement are not even orientated within the groups. From group I house no. 139 is distinguished, while in group III. emerge two subtypes according to orientation: features 17-17/1-145 and 90-116-141. The analysis of the Carei site should obviously take into consideration the fact that our data come from an excavated strip of the settlement of only 20-25 m width, while future research may nuance or even change much the interpreting here.

The distribution of house types within the feature groups has a different value in group II. There, house types without postholes and with one posthole on the shorter sides are missing, being the single case where the type with corner postholes is found. Group II. is formed of two houses, hence these specificities may also be accidental. Similarly, in this group II. of features those with the two outdoor ovens may be distinguished. Traces of bone processing are found in all three groups, however from group II. the slag specific to iron working is missing. Very likely, the different specificities of group II. of features evidence different economic use.

The distribution of pottery technique groups according to feature groups is surprisingly uniform, since pottery fragments are very different (Table 4). The proportion of the fine, wheel-thrown pottery is identical (10%) and the remaining working techniques are present in proportions that differ by only a few percentage points. We may thus argue with certainty that the Gepidic archaeological inventory of Carei is uniform in terms of different pottery making technique percentages, without differentiations between the three feature groups. Differences may be though noted in terms of the pottery typology distribution. Biconical vessels, jugs with network patterns and the jug with alveolar

<sup>406</sup> RUSTOIU 2005, 50-51.

<sup>407</sup> SZABÓ/VÖRÖS 1979 225, 9. Kép. 1

<sup>408</sup> SCHULTZE type IixAA7b, SCHULTZE 1977, Tab. 2.

<sup>409</sup> GAIU 2002, 124.

<sup>410</sup> RUSTOIU 2005, 77-79.

<sup>411</sup> BĂRZU 1994-95, The general plan.

<sup>412</sup> LĂZĂRESCU 2009, 373.

shoulder are missing from group III. of features. Certain mouth types predominate in group I. of features. Such distinction may be, in our view, chronological, as feature groups I. and II. might be earlier than group III.

TYPOLGY AFTER FEATURE GRUPS	I.	II.	III.
<i>Houses without postholes</i>	139		145
<i>Houses with 1-1 posthole on each short side</i>	23, 24, 29, 30		17, 17/3
<i>Postholes in each of the four corners of the house</i>		124	
<i>Houses with 3-3 postholes on each of the short sides</i>	27	123	116
<i>Outdoor ovens</i>		70, 99	
<i>Pits</i>		143	
<i>Finds of bone working</i>	29, 30	123	17, 17/1, 90, 116, 141
<i>Finds of iron working</i>	23, 30		17, 90
Percentage of fine pottery	10%	10%	10%
Percentage of half-coarser pottery	4%	4%	7%
Percentage of coarser pottery	80%	79%	77%
Percentage of handmade pottery	6%	7%	6%
Biconical vessel with small mouth diameter and maximum diameter in the lower third of the vessel	29, 30	99, 123	-
Biconical vessel with small mouth diameter and maximum diameter in the middle of the vessel	23	124	116
Biconical vessel with larger mouth diameter and maximum diameter in the middle of the vessel	23	124	-
Jugs with alveole	23	-	-
Jugs with smoothed network on the shoulder	23	123	-
Globular bowls	23, 29	-	7, 90
A.Pots with a mouth diameter of about 10 cm	23, 29, 30	-	-
B. Pots with a mouth diameter of about 12 cm	23, 29, 30	95,99	17, 116
C. Pots with a mouth diameter of about 14 cm	23, 30	-	17
D. Pots with a mouth diameter of about 16 cm	23, 29, 30	-	17, 90
E. Pots with a mouth diameter of about 18 cm	-	99	-
Shorter, upwarded rim, with lid groove	-	-	17
Shorter rim, thickened, angular	29, 30	95	116
Shorter rim, thickened, profiled	23, 29, 30	-	17
Shorter rim, thickened, profiled, with lid groove	23	-	-
Shorter rim, thinner, profiled, with lid groove	23, 29	-	-
Longer rim, slightly everted	23	-	-
Longer, stronger everted rim	30	95, 99	-
Longer, everted rim attached to the body at an angle	3, 29, 30	99	-
Longer, strong everted rim with lid groove	23, 30	-	17, 90
Pear-shaped vessels	-	-	-
Spouted jar	-	-	-
Stamped pottery	-	-	-

Table 4. Comparation table with the different typological aspects and the groups of the features. / Tabel comparativ cu diferite aspecte tipologice și grupurile de complexe. / Összehasonlító táblázat tipológiai aspektusok és az objektumcsoportok között.

The analysis of vessel types is surprising by the lack of pear-shaped vessels, typical for the Gepid environment, of spouted jar or stamped decoration. Given the number of pottery fragments (1266 pieces), we believe this is not accidental, but rather a chronologic or regional specificity. The regional analysis of the Gepidic pottery material from Carei is hindered by the lack of research of Gepidic sites in the area. Small excavations were conducted only at Berea X. (1 house), Berea XXI. (3 houses), Ciumești I. (1 house)<sup>413</sup> and Petrești (2 features)<sup>414</sup>. A few sites are also known by fieldwalks<sup>415</sup>. We may though note that the known archaeological inventory of the area lacks the mentioned pottery forms, beside also the typical Gepid decoration.

## II.7. Conclusions

The Gepid settlement of Carei geographically marks the north-eastern limit of the block of Gepidic settlements from the Tisza Plain, lying on the territory of the earlier border between the Germanic populaces and the Sarmatians, on Germanic territory. Certain objects may record connections with the previous material culture or preservation of certain traditions. Ágnes B. Tóth believes<sup>416</sup> that the bowl with heightened handle found in the filling of feature 23 marks a Sarmatae influence (Pl. 23: 7). Handled vessels were spread in the Sarmatian *Barbaricum* also in the Hunnic period<sup>417</sup>. The type of house with postholes in all four corners is known on the territory of the Late Sarmatian territory – of Hunnic date at Tápé-Széntégla-égető<sup>418</sup> and Solt-Palé<sup>419</sup>. The house with one posthole on the shorter sides is also known on the Sarmatian territory, for instance at Doboz-Homokgödri tábla<sup>420</sup>, Budapest-Péceli úti telep, where most houses belong to this type<sup>421</sup>. The house type with 3 postholes on the shorter sides is very rare, yet we believe that the one identified in the Sarmatian site near Nyáregyháza<sup>422</sup>, based on the many houses in this type identified in the region dated to previous periods<sup>423</sup>, may be of a rather Germanic tradition. The small rectangular hole with burnt walls from feature no. 123 is very likely of Vandal antecedence<sup>424</sup>, being unique at the level of the Gepid settlement. It is smaller than the previous, respectively no such sunken pit was found in the imperial date house floor. These two specificities differentiate it from similar, earlier formations. The feature type has recently surfaced (stage D1?) in the house with three postholes on the shorter sides dated with the aid of the double toothed bone comb in the site at Urziceni-Vamă, which lies at a few kilometres distance from the Gepid settlement of Carei.<sup>425</sup>

<sup>413</sup> STANCIU 2011, 51.

<sup>414</sup> The unpublished excavation of the author.

<sup>415</sup> STANCIU 2011, 50, Tab.1.

<sup>416</sup> B. TÓTH 2006, 118.

<sup>417</sup> VADAY 1989, 157-160.

<sup>418</sup> VÖRÖS 1991-92, 27.

<sup>419</sup> PÁRDUZ 1938, 97, Abb.4.

<sup>420</sup> MEDGYESI 1989, 94, 1. Tábla.

<sup>421</sup> KOROM 2006, 184.

<sup>422</sup> DINNYÉS 1997, 372, 1 kép. 16/7.

<sup>423</sup> GINDELE/ISTVÁNOVITS 2009, 13-14.

<sup>424</sup> GINDELE/ISTVÁNOVITS 2009, 15.

<sup>425</sup> GINDELE 2010, 93.

## II.8. Catalogue of features

### *Feature 17.*

Over the course of the intrusive diagnostic, two almost adjoining houses were investigated, with same orientation, north-west/south-east, at 1 m distance in-between. House sizes are as follow 300 x 360 (17), respectively 286 x 356 cm (17/3), with 47 and 36 cm depths from outline level. House 17 has a posthole midway each of the short sides, house 17/3 has a posthole midway the short, north-western side.

17. The finds:

- Fine, gray pottery 4 fragment of bowl bottoms (Pl. 40: 3, 4), jug handles (Pl. 40:1, 2).
- Half-coarser gray pottery (1 storage vessel fragment).
- Coarser gray/black pottery (105 fragments): Pl. 40: 5-13.
- Handmade pottery: pot rim (Pl. 40: 14) and cover (Pl. 40: 15).
- Fragmentary conical clay weight (Pl. 39: 11, 12).
- 2 biconical spindle whorls (Pl. 39: 3, 4).
- Punching small, iron hammer (7.5 cm, 28.7 g) (Pl. 39: 5).
- Curved iron knife (Pl. 39: 6).
- Two bone comb fragments (Pl. 39: 8, 9).

17/3. The finds:

- Half-coarser gray pottery (2 storage vessel fragments).
- Coarser gray/black pottery (10 fragments): Pl. 39: 10

### *Feature 23. House ?*

It was delimited in the form of a greyish-black rectangular patch, at 65 cm deep from the surface. It is a rectangular feature, with rounded corners, the eastern side lying outside the excavated area. It was approximately oriented on the north-east- south-west axis, sized 300 x 280 cm and had a 85 cm-depth from the outline level and flat bottom. Three postholes were identified, of which one on each of the long sides and one in the corner of the structure (23/1: 20 x 20 cm, 105 cm deep from outline; 23/2: 18 x 16 cm, 105 cm deep from outline; 23/3: 95 cm deep from outline). In the southern corner of the structure emerged a 86 x 98 cm - oval pit, which sinks by 30 cm from the structure's floor.

The finds:

- Fine, gray pottery (34 fragments): 5 biconical vessel frags with smoothened patterns (Pl. 22: 2-3) and without ornaments (Pl. 23: 1-3); 1 frags handle of jug (Pl. 22: 5); 1 jug frags (Pl. 22:6); 27 frags of jugs and other unidentifiable vessels.
- Half-coarser gray pottery (14 fragments): 1 pot frags, brown-brick-red core, blackish surface (Pl. 24:6); 1 pot frags gray (Pl. 24: 5); storage vessel (Pl. 22:7); vessel of a special form, with heightened handles (Pl. 23: 7); 10 frags of pots.
- Coarser gray/black pottery (281 fragments). Gray: 1 frags bowl (Pl. 22:10); another pot frags (Pl.22: 8-9; Pl. 23: 4-5, 10-12; Pl. 25: 1-7, 13-14). Black: pot frags (Pl. 23: 9; Pl. 24: 1-4, 7; Pl. 25: 8-12). Brown-brick-red core, black surface (Pl. 23: 8).
- Coarser brick-red pottery (11 pot fragments).
- Handmade pottery (20 fragments): 2 rim of pots (Pl. 24: 8-9).
- Iron tools fragments (Pl. 22: 11-12) and one iron plate, possible raw material (Pl. 24: 10).

#### ***Feature 24. House***

Outlined in the form of a greyish-black rectangular patch at 70 cm deep from surface level. Upon excavation, it proved to be a rectangular house, with rounded corners, approximately oriented on the north- west- south- east axis, sized 304 x 278 cm, flat bottom and 58 cm deep from outline. Approximately midway, a posthole was identified on each of the short sides (24/1: 24 x 26 cm, 83 cm deep from outline; 24/2: 20 x 20 cm, 79 cm deep from outline). The filling was greyish-black, loose, with adobe and charred wood fragments.

The finds:

- Fine, gray pottery (6 fragments).
- Half-coarser gray pottery (3 fragments).
- Coarser gray/black pottery (6 fragments).
- 2 fragmentary conical clay weights (Pl. 26: 2, 4).
- 1 biconical spindle whorl (Pl. 26: 3).

#### ***Feature 27. House.***

Delimited as a rectangular patch with rounded corners, dark grey in the yellowish-brown soil. The filling is brownish-grey with pottery fragments and adobe traces. The compact filling changes towards the feature's bottom, becoming mixed, brown with clayish yellow. The maximum depth is of -40 cm. Central to the house there is a circular deepening, 60 cm in diameter, which sinks by -5 cm from house level. Six postholes were identified: 3 on the E side, 1 in the NW corner, 1 midway the V side, 1 on the S side, nearby the SW corner. Sized 334x 296, 40 cm deep.

The finds:

- Fine, gray pottery (4 fragments).
- Half-coarser gray pottery (3 fragments of pots) (Pl. 26: 7).
- Coarser gray/black pottery (8 fragments of pots) (Pl. 26: 6).

#### ***Feature 29. House.***

Surfaced in the form of a greyish-black rectangular patch at 105 cm deep from topsoil. The feature is rectangular with rounded corners, oriented more or less on the north-east- south-west axis, sized 396 x 320 cm, 56 cm deep from outline. Two postholes approximately midway the long sides were delimited (29/1: 22 x 21 cm, 67 cm deep from outline; 29/2: 25 x 22 cm, 100 cm from outline). Very likely, the house was burnt, since the filling contained several areas with burnt adobe, fallen from the walls. On the house floor was discovered "in situ" a clay weight, a bone pin and a spindle weight. The filling was greyish-black, loose, with many adobe fragments.

The finds:

- Fine, gray/black pottery (7 fragments): gray biconical vessel frags with smoothened patterns (Pl. 27: 2); bowl frags with black surface and brown coarse (Pl. 27: 6); jug frags with black surface and brown coarse and smoothened patterns (Pl. 27: 10); gray jug handles (Pl. 27: 3, 7).
- Fine, brick-red pottery (7 fragments).
- Half-coarser gray pottery: 3 fragments of storage vessels (Pl. 27: 8; Pl. 28: 5,6).
- Coarser gray/black pottery: 72 fragments of pots (Pl. 27: 9, 11; Pl. 28: 1-4).
- Coarser brick-red pottery (3 fragments of pots).
- Conical clay weight (Pl. 28: 8).
- 2 biconical spindle whorls (Pl. 27: 4, 5).
- Small bronze spoon (62 mm) (Pl. 28: 7).

### ***Feature 30. House.***

Outlined in the form of a greyish-black rectangular patch, at 95 cm deep from topsoil. The house is rectangular, approximately oriented on the north- east- south- west axis, sized 300 x 310 cm and 55 cm deep from outline. The base is flat, several postholes being delimited, of which the largest and deepest two lay on house axis: 30/1: 34x 32 cm, 82 cm deep from outline; 30/2: 20x21 cm, 54 cm deep from outline; 30/3: 30x26 cm, 58 cm deep from outline; 30/4: 12 x16 cm, 62 cm deep from outline; 30/5: 30x28 cm, 60 cm deep from outline; 30/6: 32x30 cm, 73 cm deep from outline; 30/7: 20x18 cm, 68 cm deep from outline.

The finds:

- Fine, gray/black pottery (4 fragments): black biconical vessel frags with smoothened patterns (Pl. 29: 3).
- Half-coarser gray pottery: 2 fragments of storage vessels (Pl. 29: 4).
- Coarser gray/black pottery: 103 fragments of pots (Pl. 29: 5-9; Pl. 30: 1-11).
- Iron pincer, 4,5 cm (Pl. 29: 2).
- Sharpening stone (Pl. 30: 12).
- Iron slag (Pl. 30: 13).

### ***Feature 70. Outdoor oven with work pit.***

Identified at 40 cm deep from surface level. It is approximately oriented on the north-east-south-west axis. The work pit is rectangular with rounded corners, of 170 x 190 cm, the bottom is flat, the depth is of 46 cm from outline, on the opposite side of the kiln being noted two steps. The kiln is oval, domed, 118 x 80 cm, with a broad mouth of 68 cm. The kiln floor was bound with potshards and is burnt on 2 cm thickness. The dome survived on a height of 26 cm.

The finds:

- Half-coarser gray pottery (2 fragments).
- Coarser gray/black pottery (242 fragments).
- Coarser brick-red, overburnt pottery (6 fragments).
- Handmade pottery (2 fragments).

### ***Feature 90. Household appendix.***

Delimited as an oval, greyish-black patch, at 90 cm deep from topsoil. It is a rectangular feature with rounder corners, with a storage pit on the short side, flat bottom, without recorded postholes. It sinks by 45 cm from the outline level, sizes being of 350 x 446 cm.

The finds:

- Fine, gray/black pottery (3 frags of a jug with black, smoothened surface)
- Half-coarser gray pottery (3 fragments)
- Coarser gray/black pottery (8 fragments): black bowl and pot frags (Pl. 31: 3, 4) and gray bowl and pot frags (Pl. 31: 5, 6).
- Clay weight fragments.
- Many iron slag fragments.

### ***Feature 95. House.***

Surfaced as a greyish patch, rectangular in form with rounded corners. The filling is greyish-brown with adobe pigments, walls descending slightly obliquely, the bottom is flat. Final sizes: 350x320 cm, -40 cm deep from outline. It has a posthole on the north-west side, 40x40 cm in diameter, -10 cm deep. In the south-eastern side of the house was outlined an oval pit, 210x130 cm in diameter. Down to -40 cm, its walls descend straight, from -40 to -110 cm they descend obliquely. On the uneven pit



bottom was identified a deepening 75 cm in diameter and -15-20 cm deep. Likely, the pit that cuts the house is of medieval date.

The finds:

- Fine, gray/black pottery (12 fragments) 1 bowl bottom (Pl. 32: 2).
- Half-coarser gray pottery (2 fragments)
- Coarser gray/black pottery (36 fragments) (Pl. 32: 4-6).
- Handmade globular, black pot, with pseudo-runen (Pl. 32: 3).

#### ***Feature 99. Outdoor oven work pit.***

Work pit: outlined in the NE profile of the excavation, half remaining under the profile. From the outline level to a depth of -45 cm it has two filling layers, down to -20 cm being greyish compact, followed by a layer of adobe and pottery fragments mixture. Walls descend obliquely, the bottom being slightly uneven.

Oven: delimited as a burning patch with a diameter of 70x80 cm. The base consists of a pottery layer on top of which was noted a 2-3 cm thick burned clay. The oven dome did not survive.

The finds:

- Fine, gray/black pottery (13 fragments): 1 biconical vessel (Pl. 33: 3).
- Fine, brick-red, overburned pottery (12 fragments).
- Half-coarser gray pottery: 16 fragments from pots and storage vessels (Pl. 33: 4, 5).
- Half-coarser brick-red, overburned pottery (3 fragments).
- Coarser gray/black pottery (11 fragments) (Pl. 33: 6-8).
- Coarser brick-red, overburned pottery (12 fragments).

#### ***Feature 116. House.***

Outlined in the form of a greyish patch, at 45 cm deep from topsoil. It is a rectangular feature, with rounded corners, flat base and three postholes on each of the short sides (on one of the sides, in the house corner could not be noted a hole). Holes are sized between 24 x 20 and 30 x 28 cm and sink by 30-35 cm from house floor. The house is sized 328 x 270 cm.

The finds:

- Fine, light gray pottery: 1 frags biconical vessel with smoothed ornaments (Pl. 34:4)
- Half-coarser gray pottery (2 fragments).
- Coarser gray/black pottery (18 fragments) (Pl. 34: 5, 7).
- Sharpening stone (Pl. 34: 6).
- Biconical spindle whorl (Pl. 34: 2).
- Bone comb (Pl. 34: 3).

#### ***Feature 123. House.***

Delimited as a greyish-black rectangular patch, at 85 cm deep from topsoil. The house is rectangular, with rounded corners, approximately oriented on the east-west axis, sized 480 x 335cm, 60 cm deep from outline. The house bottom is flat, in the southern side being identified a rectangular, 83 x 77 cm sized pit, oriented north- south, 14 cm deep from house floor. Three postholes were discovered on each of the short sides (123/1: 40 x 38 cm, 87 cm deep from outline; 123/2: 23 x 16 cm, 92 cm deep from outline, 123/3: 36 x 31 cm, 95 cm deep from outline; 123/4: 16 x 17 cm, 96 cm deep from outline; 123/5: 24 x 25 cm, 95 cm deep from outline; 123/6: 34 x 32 cm, 94 cm deep from outline). On the eastern side of the house was built a kiln with work pit, with direct access to the combustion chamber from within the house and stepped descending made of a block of clay on the house exterior. The kiln floor was identified as an ash and fired clay print of 124 x 88 cm, the dome did not survive.

The finds:

- Fine, gray/black pottery (9 fragments): biconical vessel with black smoothed surface (Pl. 35: 2); jug frags black surface and smoothed ornaments (Pl. 35: 5).
- Coarser gray/black pottery (24 fragments) (Pl. 35: 4, 6-9).
- Handmade pottery (2 fragments).
- Biconical spindle whorl (Pl. 35: 3).

***Feature 124. House.***

Surfaced as a greyish-black rectangular patch, at 90 cm deep from topsoil. The house is rectangular, with rounded corners, approximately oriented on the east-west axis, sized 340 x 315 cm, 50 cm deep from outline. The house bottom is flat, in the middle with a rectangular fireplace with burnt walls of 40 x 56 cm, oriented on house axis, sunken by 10 cm from house floor. In the house corners were discovered four postholes (124/1: 26 x 30 cm, 110 cm deep from outline; 124/2: 28 x 27 cm, 100 cm deep from outline; 124/3: 24 x 27 cm, 100 cm deep from outline; 124/4 31 x 28 cm, 67 cm deep from outline). The post corresponding to posthole 124/4 was supported by another post, with a hole 124/5 sized 23 x 24 cm, 68 cm deep from outline. The house filling was loose, brownish-black, with adobe and charred wood fragments.

The finds:

- Fine, gray/black pottery (13 fragments): biconical vessels (Pl. 36: 3, 7) and jug frags (Pl. 36: 4).
- Coarser gray/black pottery (36 pot fragments) (Pl. 36: 5).
- Sharpening stone (Pl. 36: 6).

***Feature 139. House?.***

Outlined in the form of a greyish-black rectangular patch, at 80 cm from topsoil. It is a rectangular feature with rounded corners and flat bottom, sized 320 x 255 cm, 47 cm deep from outline. No postholes could be identified.

The finds:

- Fine, gray/black pottery (7 fragments).
- Half-coarser gray pottery (2 fragments).
- Coarser gray/black pottery 5 fragments of a pots (Pl. 36: 9, 10).
- Handmade pottery (6 fragments).

***Feature 141. Workshop?***

Delimited as a greyish patch, at 50 cm deep from surface level. It is a rectangular feature, with curved long sides. The bottom is flat, 38 cm deep from outline, sizes are of 320 x 282 cm. The filling contained beside potshards also deer antler bones with working traces.

The finds:

- Fine, gray/black pottery: 10 fragments of jugs and bowl (Pl. 37: 5, 6).
- Half-coarser gray pottery (4 fragments).
- Coarser gray/black pottery 2 fragments of a pots.
- Iron spear shoe (Pl. 37: 2).
- Iron knife (Pl. 37: 4).
- Iron awl (Pl. 37: 3).

***Feature 143. Pit.***

Outlined as oval pit, greyish in the yellow soil. Compact, greyish filling, walls descending obliquely, flat bottom. Final sizes: 170x190 cm, maximum depth of -40 cm from outline.

The finds:

- Fine, gray/black pottery (2 fragments).
- Half-coarser gray pottery (4 fragments).
- Coarser gray/black pottery (2 fragments).
- Handmade pottery (10 fragments) (Pl. 38: 2, 3).

***Feature 145. House.***

Outlined as a greyish patch in the greyish-brown soil, having a rectangular form with rounded corners. The filling is compact, greyish-black. Walls descend obliquely, the bottom being flat. Final sizes: 270x300 cm, depth of -60 cm from outline.

The finds:

- Fine, gray/black pottery (1 fragment).
- Fine, brick-red pottery (1 fragment).
- Coarser gray/black pottery (16 fragments) (Pl. 38: 5, 8, 9).
- Sharpening stone (Pl. 38: 6).
- Biconical spindle whorl (Pl. 38: 7).
- Mill stone fragments, animal antler, animal bones, slag.

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## Rezumat

Cimitirul a fost surprins doar parțial în săpăturile noastre, între zonele de locuire I și II ale așezării, pe panta vestică a unei ridicături. Am surprins de fapt marginea vestică a cimitirului, fiind cercetate 24 de morminte de înhumatie (Fig. 1). Mormintele sunt orientate cu mici deviații vest-est. Atât orientarea cât și poziționarea lor în șiruri paralele le includ în orizontul cimitirelor mormintelor în șiruri din sec. VI d. Hr., bine cunoscut în Europa Centrală și de Vest. În spațiul nord-vestic al României acest orizont este mai puțin cercetat, așezările și descoperirile funerare se limitează geografic pe Câmpiile Ierului, Nirului și a Careiului<sup>1</sup>. Aceste așezări și descoperiri funerare se leagă de un grup mai larg din zona de câmpie a județului Bihor și de câteva descoperiri din valea Barcăului de pe teritoriul Ungariei. Dacă studiem o hartă mai recentă lui I. Stanciu (cu toate rezervele privind reflectarea stadiului cercetării) putem observa că se conturează geografic o concentrație de descoperiri dintre cele două blocuri “clasice” din Câmpia Maghiară și Transilvania intracarpatică<sup>2</sup>. Cimitirul studiat de noi se află în extremitatea nordică a acestei concentrări de descoperiri și alături de câteva puncte din păcate nepublicate din Ungaria (Hajdúnánás Fürj halom,) este printre puținele unde s-au făcut săpături arheologice. Deși cercetarea cimitirului din sec. VI d. Hr. de la Carei-Bobald este doar la început, având în vedere dificultățile logistice legate de continuarea săpăturilor am decis introducerea în circuitul științific a mormintelor identificate până acum. Dacă analizăm planimetria cimitirului cercetat parțial de la Carei putem să observăm că cele 24 de morminte nu se despart în mai multe grupuri, dar nici rânduri separate nu sunt evidente. Mormintele cercetate ocupă un spațiu de cca. 10 x 30 m, avem surprinsă limita sudică și vestică a cimitirului. Limitele nordice și estice foarte probabil se află în afara zonei studiate. Evoluția cimitirului se pare că este unitară, nu avem întretăieri de morminte. Mormintele, cu excepția a două morminte de copii (101, 112), au fost jefuite (Fig. 2). Aceste morminte nejefuite sunt relativ apropiate, în zona centrală a grupului de morminte cercetat de noi. Nu putem să declarăm că nejefuirea mormintelor de copii ar fi o caracteristică pentru acest cimitir pentru că mormântul de copil 35/2 și 103 a fost perturbat ulterior. Orientarea mormintelor este vest-est, cu capul spre vest, cu ușoare deplasări ai axei mormintelor spre nord-vest. O diferență față de aceste reguli putem constata la câteva morminte din sudul cimitirului cercetat, unde axele mormintelor 33 și 34 sunt deplasate ușor spre sud-vest. O diferență semnificativă față de orientarea obișnuită în această perioadă am observat în cazul mormântului 153 de la marginea nord-vestică a grupului de morminte cercetat. Orientarea nord/nord-vest-sud/sud-est este atipică, însă din punct de vedere al inventarului (fragment dintr-un pieptene de os din zona craniului) nu putem să îl excludem din grupul de morminte cercetat de noi. În cadrul grupului de morminte cercetat la Carei în câteva cazuri putem atesta foarte clar prezența sicriului (41, 44, 111). Din păcate redeschiderea mormintelor în majoritatea cazurilor a făcut să fie imposibilă vreo observație privind prezența sau absența sicriului. S-a putut observa într-un caz practica de a săpa a groapă special sicriului pe fundul gropii de mormânt (M34). Legat de sicriu se ridică problema scoabelor de fier sau platbenzile cu care acestea erau legate. În cazul cimitirului nostru acestea lipsesc, fapt care, după părerea noastră, nu

<sup>1</sup> STANCIU 2011, 69.

<sup>2</sup> STANCIU 2011, 67, Fig. 15.

este incidental. Totuși, deși mormintele sunt jefuite ar fi trebuit măcar o scoabă să fie descoperită în umplutura unuia dintre ele.

Depunere de vas de ofrandă este atestată în cimitirul nostru doar într-un singur caz, este un vas bitronconic, modelat la roata rapidă, ornamentat cu motive lustruite. Vasul a fost descoperit în mormântul 43, în poziție inițială, lângă peretele vestic al mormântului, în stânga locului craniului (Pl. 12: 1). Având în vedere că mare parte din morminte au fost jefuite nu excludem că au fost vase depuse și în altele. Pieptenii din os au fost descoperiți în număr relativ mare în mormintele studiate de noi (Fig. 5). Foarte probabil, din pricina valorii relativ mică ei au rămas în morminte de multe ori și după jefuire. În cele șapte morminte de la Carei pieptenul a fost descoperit în poziții diferite, în zona craniului (42, 51, 112, 153), în zona bazinului (35/2, 39) sau la picioare (101). Dacă analizăm tipurile de înmormântări putem observa cu ușurință că din patru morminte de copii trei a avut piepteni. Acest fapt se datorează probabil și gradului mic de jefuire a acestor morminte. Din punct de vedere tipologic pieptenii din necropola de la Carei sunt de tipul cu dinți bilaterali, realizați din trei părți, prinși cu nituri din fier. Obiceiul depunerii armelor este în general răspândit în cimitirele gepidice. În cimitirul de la Carei piese de armament au fost descoperite în două morminte: un vârf de lance (39) (Pl. 8: 2) și patru vârfuri de săgeți (41) (Pl. 10:3-6). Poziția descoperirilor corespunde cu cea inițială, ele nu au fost mișcate cu ocazia intervenției de jefuire. În cazul ambelor morminte jefuitorii au distrus partea superioară a mormintelor, astfel este greu de estimat dacă doar aceste piese de armament au fost depuse cu ocazia înmormântărilor. Vârful de lance din mormântul 39 de la Carei a fost așezat cu vârful în jos, în zona piciorului, pe partea stângă a scheletului. În mormântul 41 trei vârfuri de săgeți sunt așezate grupat, cu vârful în jos, în zona unde ar fi trebuit să găsim genunchiul drept al defunctului. După părerea noastră această poziție reflectă poziția săgeților din tolă, legată probabil pe curea de la brâu al defunctului. Un vârf de săgeată a fost descoperit mai jos de celelalte, tot cu vârful spre partea inferioară a gropii de mormânt. Cuțitele (Fig. 8) au fost descoperite în partea stângă a craniului cu mânerul în sus la mormântul 34, o poziție asemănătoare având și cuțitul din mormântul 51, cu precizarea că se afla pe partea dreaptă a craniului. Celelalte cuțite apar fie în zona pieptului (mormântul 36), fie în zona bazinului (mormintele 44, 46). Având în vedere că din cele cinci cuțite doar două sunt întregi nu putem face legătură între tipul lor și poziția în mormânt.

Cele mai numeroase descoperiri din mormintele din Carei sunt cataramele de diferite dimensiuni, ele fiind confecționate din fier, bronz sau din argint (Fig. 6). În M34 și M35/1 apar mai multe exemplare, pe când în celelalte morminte apare câte una. Din păcate din cauza deranjării poziției scheletelor în majoritatea cazurilor de la Carei nu putem stabili locul exact al cataramii. Cataramele descoperite în cimitirul de la Carei (11 buc) pot fi clasificate după dimensiune, material și formă. Din punct de vedere al mărimii ele formează trei categorii. Cele mai mici sunt de dimensiunea 1,7 x 1,3/ 1,8 x 1,4 cm, toate sunt ovale, de secțiune circulară și toate trei au fost făcute din bronz. Un detaliu tipologic individualizează două dintre aceste piese, partea unde se prinde spinul de veriga cataramii este încadrat de câte două șanțuiri pe verigă. În categoria de dimensiuni medii se includ 7 catarami, cea mai mică fiind de 3 x 2 cm, cea mai mare de 3,8 x 2,7 cm. Două catarami (M34, 41) sunt din fier, două din bronz (M35/1, 39) și trei din argint (M34, 35/1, 51). Din punct de vedere tipologic putem să observăm o relativă uniformizare a cataramelor de la Carei, toate au formă ovală, o diferență se poate constata la construcția celor din fier, unde catarama nu se subțiază în zona prinderii spinului de verigă. Fragmentul de cataramă din argint din M35/1 se detașează de celelalte prin dimensiuni și prin calitatea argintului din care a fost turnată. Din păcate din cauza stării fragmentare nu putem să avem dimensiunile, însă nu excludem încadrarea ei în categoria cataramelor tip Adlerschallen. Mărgelile apar în cinci morminte (Fig. 7), dar din păcate în cele mai multe cazuri în poziție secundară, însă dacă acestea sunt pe fundul gropii de mormânt putem să presupunem poziția lor inițială. În cazul mormântului 43 patru mărgeli de mici dimensiuni au fost descoperite în zona bazinului, pe partea

stângă a acestuia. Mai multe mărgelile provin din morminte de copii, în 103 și 112 unde acestea au fost descoperite în partea stângă a craniului și la gât. Mărgelile au fost purtate și în zona gleznelor, acestea fiind atestate în mormântul 103 și 111. Cu totul special este purtarea mărgelilor înșirate pe o curea, atestată în mormântul 111 cu un pandantiv piramidal din chihlimbar la capătul acesteia.

## **Așezarea**

### **Mărimea așezării**

Studiind structura așezării gepidice din Carei trebuie să luăm în calcul în primul rând specificul săpăturii. Suprafața cercetată, lungă de 620 m și lată de 20-25 m, a intersectat, cel mai probabil marginea estică a așezării, astfel în decursul cercetării am putut documenta un fragment de aproximativ 10-15% din totalitatea ei. Perieghezele asociate săpăturilor au acoperit un teritoriu mult mai întins, o lungime de 5-6 km din terasa de la Bobald a pârâului Mergheș, și mulțumită acestora<sup>3</sup> știm că așezarea cercetată nu se compune din salba unor grupuri de locuiri mai mici, ci este o așezare unitară, de dimensiuni considerabile. Studiind secțiunea longitudinală a teritoriului cercetat, putem vedea că traseul drumului intersectează văile mai multor cursuri de ape mici, temporare, iar complexele se localizează pe terasele acestora (Pl. 42). Din păcate dispunem de date foarte puține în ce privește dezvoltarea așezărilor gepidice din Câmpia Tisei. Lângă localitatea Battonya, în apropierea graniței de stat dintre Ungaria și România, pe ambele maluri ale cursului Száraz ér (un fost braț al Mureșului), pe o lungime de aprox. 2 km s-a reușit identificarea mai multor urme de așezări. La situl Sziondai-gyep I, printr-o mică cercetare de sondaj a fost găsită o locuință adâncită în pământ și o groapă de provizii<sup>4</sup>. Cercetătorul a observat că așezările gepidice de-a lungul pârâului Szanda urmăresc cursul de apă și se situează pe amplasamente mai puțin ridicate<sup>5</sup>. János Cseh, prin periegheze și săpături mai mici, a studiat malurile unui fost curs al Tisei - pe o lungime de aprox. 12 km dintre așezările Kengyel și Rákócújfalu. Aici a găsit, la fel ca în zona Battonya, mai multe urme de așezări mai mici la o distanță de 200-2000 de m una de cealaltă. Pe baza răspândirii urmelor de ceramică, aceste așezări au variat ca și mărimi între 30-40 m ori 30-40 m și 100-130 m ori 50-60 m<sup>6</sup>. Materialul adunat de la suprafață nu a permis o cronologie interioară a așezărilor gepidice, astfel că avem doar presupuneri în privința mărimii așezărilor existente concomitent. Pe teritoriile vest-germanice așezările din epoca Merovingiană de obicei nu au depășit mai mult de 1-3 gospodării existente concomitent. Documentarea unui număr de 5 sau chiar 11 gospodării concomitente<sup>7</sup> se poate considera o situație excepțională.

### **Structura interioară a așezării**

Așezarea gepidică de lângă Carei s-a dezvoltat pe terasele cursurilor de apă temporare care s-au vărsat în pârâul Mergheș și s-a compus din mai multe subunități. Aici structura interioară a așezării a fost caracterizată de grupuri de gospodării situate la o anumită distanță una de cealaltă (Pl. 42). Studiind structura interioară a așezărilor gepidice putem identifica mai multe tipuri de așezări, în

<sup>3</sup> NÉMETI 1999, 64-67.

<sup>4</sup> SZABÓ/VÖRÖS 1979.

<sup>5</sup> SZABÓ/VÖRÖS 1979, 226.

<sup>6</sup> CSEH 1986b, 190.

<sup>7</sup> DONAT/ULLRICH 1971, 258.

primul rând pe baza tipologiei de aşezări germanice realizată de Jahnkuhn<sup>8</sup>. Având în vedere că de cele mai multe ori s-a putut cerceta doar o parte mai mică sau mai mare a aşezărilor, categoriile de mai jos reflectă strict stadiul actual al nivelului de cercetare.

1. Gospodărie izolată tip „Einzelhof”. Este tipul de aşezare cel mai dificil de identificat. La Egerlövö-Homokpart cercetarea unei suprafeţe mai întinse a putut identifica o singură locuinţă<sup>9</sup>, ceea ce indică asemenea tip de aşezare. La cca. 15 km la sud-vest de aşezarea din Carei, lângă Petreşti, pe o suprafaţă lipsită în totalitate de urme arheologice un şanţ a intersectat două complexe gepidice de locuire<sup>10</sup>. Luând în calcul caracterul zonei, aşezarea gepidică de la Petreşti a făcut parte, cel mai probabil, din această categorie.

2. O formă tipică a habitatului gepidic este cea a aşezărilor formate din grupări de locuinţe, care se compun din câteva locuinţe, gropi de provizii, cuptor în aer liber sau fântână. Aceste grupări de complexe se situează la câteva zeci de metri unul de celălalt. Astfel de aşezare este cea de la Carei, în Transilvania cele de la Cluj - Polus<sup>11</sup>, de la Sopor de Câmpie<sup>12</sup>, de la Ocniţa<sup>13</sup>, de la Sighişoara - Dealul Viilor<sup>14</sup>. Pe Câmpia Tisei, la Tiszafüred – Morotva, pe o suprafaţă de aprox. 6000 m<sup>2</sup> au fost identificate mai multe grupări formate din 2-4 locuinţe adâncite în pământ. Distanţa dintre aceste grupări a fost de cca. 80 m. Gospodăriile asemănătoare, situate la 30-50 sau 100-150 m distanţă între ele, ce se compun din câteva complexe, au fost documentate şi în bazinul mijlociu al Tisei, la siturile de la Tiszafüred-Tiszaszölös, Szelevény-Bohony part, Szolnok-Zagyva part<sup>15</sup>, respectiv în partea estică a Câmpiei Tisei, la Biharia<sup>16</sup>. Această structură interioară a aşezărilor este bine cunoscută şi în aşezările germanice din centrul Europei (de exemplu din Jenštejn<sup>17</sup>, Cehia, sau de pe teritoriu longobard din Balatonlelle<sup>18</sup>).

3. Aşezări compacte, unde locuinţele formează grupări mai mari, închise. Se poate observa, că acest tip de aşezare gepidică este tipic în primul rând pentru Transilvania. Astfel de situaţii se cunosc la siturile Moreşti<sup>19</sup>, Stupini - sectorul B<sup>20</sup>, la Dipşa-Fundoaie<sup>21</sup> şi probabil şi Cipău-Gârle<sup>22</sup>. La Bratei I a fost documentată o fâşie liberă de aprox. 50-60 m între cele două blocuri de complexe. În această aşezare – cu evoluţie foarte probabil în mai multe faze - a existat un spaţiu central cu diametru de aprox. 40-50 m înconjurat de locuinţe<sup>23</sup>. Această structură este foarte rară, dar se cunosc astfel de aşezări în Barbaricumul din perioada imperială, în nordul Poloniei, în aşezarea de la Debczyno.<sup>24</sup>

## Unităţi economice (gospodării)

Oportunitatea studierii unităţilor economice ce formează structura interioară a aşezărilor gepidice a fost definită de către Kurt Horedt cu ocazia publicării săpăturii de la Moreşti. După opinia

<sup>8</sup> JAHNKUHN 1969.

<sup>9</sup> LOVÁSZ 1986-87, 128, 1. Kép.

<sup>10</sup> Săpătura autorului din 2013. Npublicat.

<sup>11</sup> LĂZĂRESCU 2009, 340, Fig. 1.

<sup>12</sup> PROTASE/ȚIGARĂ 1960 Fig. 13.

<sup>13</sup> GAIU 1994, 54, Pl. 1.

<sup>14</sup> HARHOIU-BALTAG 2006, 510, Fig. 963.

<sup>15</sup> CSEH 1996a, 71.

<sup>16</sup> DUMITRAȘCU 1994, fig. 22.

<sup>17</sup> DROBERJAR/TUREK 1997, Abb. 3.

<sup>18</sup> Skriba/Sófalvi 2004, 156-157.

<sup>19</sup> HORED T 1979, 89, Abb. 38.

<sup>20</sup> GAIU 2002, 132, fig. 4.

<sup>21</sup> GAIU 1993, 97, Fig. 2.

<sup>22</sup> VLASA et al. 1966, 406, Fig. 7.

<sup>23</sup> BĂRZU 1994-95, fig. 1.

<sup>24</sup> MACHAJEWSKI 1986, 41, Abb. 2.



lui unitățile nu se pot identifica cu exactitate în cazul suprafeței de 60x60 m cercetate de el<sup>25</sup>. După părerea noastră numărul ridicat al locuințelor adâncite în sol și numărul foarte mic sau chiar absența construcțiilor anexă constituie un alt impediment<sup>26</sup>. Cheia acestei probleme o putem găsi, după părerea noastră, tot în așezările structurate pe grupări de locuințe, unde aceste grupări pot fi punctele de pornire pentru identificarea unităților economice căutate. În așezările gepidice centrele unităților economice sunt locuințele adâncite în sol. Probabil au existat și locuințe de suprafață, însă urmele acestora nu au putut fi încă identificate. La săpătura de la Morești au fost descoperite mai multe suprafețe, probabil amenajate din lut sau piatră, acoperite cu ceramică gepidică și identificate de autorul săpăturii drept niveluri de călcare<sup>27</sup>. Astfel de nivel „pavat” și amestecat cu ceramică gepidică a fost identificat și la situl Porumbenii Mici-Galath.<sup>28</sup>

Analizele referitoare la unitățile economice sunt cunoscute mai bine din zonele germanice apusene. Centrul unității economice din așezările alemanilor a fost locuința de mare dimensiuni (Wohnstallhaus) identificată prin aliniamentele de urme de stâlpi. Mărimea unei unități economice a fost definită ca 1000-2000 m<sup>2</sup>, cu excepția unităților economice ale conducătorilor, unde se atinge și 4000 m<sup>2</sup>.<sup>29</sup> Într-un alt caz, în Warendorf, o așezare din sec. al VII-lea din Westfalia, o unitate economică a atins și 10.000 m<sup>2</sup>.<sup>30</sup>

Locuința adâncită în pământ, ca centru al unității economice, este caracteristică mai ales așezărilor germanice din Europa Centrală (de exemplu cele din Cehia-Moravia), dar și aici putem întâlni - deși mult mai rar - locuințe de suprafață<sup>31</sup>. Dacă o unitate economică este formată exclusiv din locuințe adâncite în pământ, putem presupune ca unele dintre ele să fi funcționat ca atelier<sup>32</sup>. Teoretic, o unitate economică se compune din: casă de locuit, grajd, construcții sau gropi de depozitare, cuptoare sau vetre în aer liber, fântâni și eventual alte obiective legate de activități de producție. În cazul așezării de la Carei delimitarea acestor unități este dificilă, fiindcă lipsesc urmele gardurilor și din cauza lățimii de doar 20-25 m a suprafeței cercetate. O parte a unităților economice se situează cu siguranță în afara teritoriului cercetat, motiv pentru care la nivelul actual al cercetărilor nu putem defini clar unități economice.

## Locuințe

În așezarea gepidică studiată de la Carei-Bobald, pe aliniamentul cercetat nu am reușit să identificăm urme de stâlpi sau de pereți arși care să indice prezența unor construcții de suprafață. Dintre cele 18 complexe 14 au fost construcții adâncite în sol, identificabile ca locuințe dreptunghiulare, cu colțurile rotunjite, cu excepția a două cazuri. Încadrarea tipologică a locuințelor adâncite în pământ s-a realizat în funcție de numărul și poziția în locuințe a gropilor de stâlpi. Tipologia construcțiilor, numărul și poziția stâlpilor de susținere a acoperișului se leagă probabil de dimensiunile locuințelor. Și la Morești se poate observa cum locuințele mai mici nu au gropi de stâlpi. La cele mai mari găsim câte o groapă de stâlp pe latura mai scurtă, iar cele și mai mari au avut stâlpi în colțuri și câte 3-3 stâlpi pe laturile opuse, sau pe fiecare latură<sup>33</sup>. Având în vedere dimensiunea locuințelor identificate

<sup>25</sup> HORED T 1979, 121.

<sup>26</sup> Foarte probabil este un aspect special pentru așezările gepidice. După părerea noastră nu se explică prin lipsa de acuratețe în săpătură arheologică, pentru că în epoca anterioară avem informații multe despre anexe.

<sup>27</sup> HORED T 1979, 118.

<sup>28</sup> NYÁRÁDI 2011, 329.

<sup>29</sup> BÜCKER et al 1997, 314-317.

<sup>30</sup> WINKELMANN 1958, 516.

<sup>31</sup> PLEINEROVA 2007, 88.

<sup>32</sup> PLEINEROVA 2007, 84.

<sup>33</sup> HORED T 1979, 101.



la Carei (Tabelul nr. 2) putem să constatăm că cele mai mici sunt cele fără gropi de stâlp (139, 145), acestea abia depășesc 8 m<sup>2</sup>. Se distinge prin dimensiunile sale locuința nr. 123 (16 m<sup>2</sup>), cu câte 3 gropi de stâlp pe latura mai scurtă. Celălalte locuințe de acest tip nu diferă neapărat de cele cu câte 1 groapă de stâlp de pe latura mai scurtă.

***Locuințe fără gropi de stâlp. Donat 1988 F, Leube 2009 tipul F1. (Fig. 10)***

În zona săpată a așezării din Carei am documentat doar două astfel de locuințe (139, 145). Acest tip apare atât în Câmpia Tisei cât și în Transilvania, dar putem afirma că este tipică pentru câteva așezări transilvănene (Ocnița-La Ștefăluțu<sup>34</sup>, Stupini-Vătășină<sup>35</sup>, Dipșa-Fundoaie<sup>36</sup> Supuru de Câmpie-Cuntenit<sup>37</sup>).

***Locuințe cu câte 1 groapă de stâlp pe laturile mai scurte.  
Donat 1988 A, Leube 2009 tipul A2 (Fig. 11)***

În cazul așezării studiate de noi acest tip de locuințe apare în trei cazuri (17, 17/1, 23), însă aceeași structură putem intui parțial la locuințe cu mai multe gropi de stâlpi, unde gropile mai adânci se află la mijlocul laturilor scurte (24, 29, 30). Studiind harta răspândirii putem afla că acest tip de locuință este mai caracteristic așezărilor de șes.

***Locuințe cu gropi de stâlpi în cele patru colțuri ale casei. Leube 2009 tipul B1 (Fig. 12)***

La Carei, la fel ca în cazul tipurilor de locuințe mai rar întâlnite, fără gropi de stâlp, acest tip apare cu un singur exemplar (124). Asemenea locuințe pot fi întâlnite în așezările gepizilor atât în Transilvania cât și în Câmpia Tisei, dar în număr mai redus decât celelalte tipuri.

***Locuințe cu câte 3-3 gropi de stâlp pe laturile mai scurte Donat 1988 C1, Leube 2009 C, respectiv varianta acestora cu stâlp adițional pe latura mai lungă Donat 1988 C2, Leube 2009 D. (Fig. 13)***

În așezarea cercetată la Carei am putut documenta în trei cazuri (27, 123, 116) acest tip, fiind larg răspândit în așezările gepidice. Se poate constata că acest tip de locuință este caracteristic pentru siturile din satele transilvănene Morești<sup>38</sup> și Țaga-Hrube<sup>39</sup>. La fel, este cel mai răspândit tip în Europa Centrală. În Cehia tipul apare la Jenštejn<sup>40</sup>, Sobešuky<sup>41</sup>, la săpăturile de mai mari dimensiuni de la Brezno<sup>42</sup>, 70% dintre case a fost de acest tip. Locuințe asemănătoare sunt cunoscute și în așezarea longobardă de la Balatonlelle<sup>43</sup>.

## **Instalații de foc**

În locuințele așezării de la Carei, cu excepția uneia singure, nu am găsit urme de instalații de foc. În podeaua locuinței 123 am documentat existența unei gropi rectangulare, cu pereți arși, alungite pe axul casei. Această instalație de foc este unică pentru această epocă, este identică însă cu gropile

<sup>34</sup> GAIU 1994.

<sup>35</sup> GAIU 2002.

<sup>36</sup> GAIU 1993, 91-93.

<sup>37</sup> PROTASE 1962, 534.

<sup>38</sup> HOREDȚ 1979, 90-99.

<sup>39</sup> PROTASE 2003, 22, fig. 2; 26, fig. 7; 29, fig. 11; 63, fig. 19.

<sup>40</sup> DROBERJAR/TUREK 1997, Abb. 5.

<sup>41</sup> BLAŽEK 1997, Abb. 4-7.

<sup>42</sup> PLEINEROVA 2007, 82.

<sup>43</sup> SKRIBA/SÓFALVI 2004, 122, 1. kép.

rectangulare arse, orientate nord-sud, mai timpurii, de secolele II-V, bine cunoscute în așezările vandalilor<sup>44</sup>. Cuptor asemănător, pătrat, cu plită, a fost identificat în situl Sighișoara - Dealul Viilor<sup>45</sup>, dar nu se poate confunda cu groapa cu pereții arși din Carei. Gropi asemănătoare, pătrate, cu pereții arși sunt bine cunoscute din așezările culturii Przeworsk<sup>46</sup>, dar în contextul locuințelor au fost identificate doar în așezarea de la Stobnica-Trzymor 2. Au fost adâncite în podeaua locuinței în mijloc sau pe o latură a acesteia și au avut orientare nord-sud. Tot în acest sit a fost descoperită groapa pătrată, cu pereți arși, înconjurată cu un șanț circular, considerat de arheologi drept un loc de cult.<sup>47</sup>

Instalațiile de foc nu sunt tipice pentru așezările gepidice, apar doar în câteva situri din Transilvania (Fig. 14). Conform tipologiei realizate de Gabriel Rustoiu distingem vetre, uneori delimitate cu pietre, și cuptoare care pot fi ovale, rectangulare, delimitate cu pietre, respectiv cuptoare de piatră ovale sau circulare.<sup>48</sup> La situl din Morești se găsesc urme ale tehnicii de foc doar în situații excepționale, lespezii din colțul locuinței 22 pot fi urme ale unei vetre temporare. În imediata apropiere a locuinței 34 a existat o vatră.<sup>49</sup> Instalațiile de foc în locuințele gepidice din Transilvania apar strâns legate de tipul de locuință fără groapă de stâlp (Ocnița-La Ștefăluț<sup>50</sup>, Stupini-Vătășină<sup>51</sup>, Dîpșa-Fundoaie<sup>52</sup>). Această legătură reflectă probabil un grup regional sau o diferențiere cronologică. În Câmpia Tisei apariția unor pete arse și cu urme de cărbune de lemn a fost interpretată ca niște vetre din interiorul caselor<sup>53</sup>. Considerăm un grup separat cuptoarele de copt săpate în pereții caselor, care seamănă cu cuptoarele exterioare, dar în loc de gropi de lucru au fost alimentate din interiorul caselor. Le întâlnim foarte rar în așezări gepidice, un exemplu se cunoaște la situl Kengyel-Boghy major-Kengyelpart I<sup>54</sup>.

## Cuptoare exterioare

Săpăturile din Carei au identificat cuptoare exterioare adâncite în pământ (70, 99). Ambele au avut gropi de alimentare, iar la unul (70) plita a fost placată cu cioburi de ceramică, modelată la roată. Cuptoare exterioare au fost descoperite la așezările Porumbenii Mici - Galat<sup>55</sup>, Țaga-Hrube<sup>56</sup>, din păcate gropile de alimentare nu au putut fi documentate. La situl Bratei 1 au fost identificate două cuptoare exterioare<sup>57</sup>. Un cuptor asemănător celui din Carei, inclusiv cu groapă de alimentare, a fost găsit la situl Szelevény-rét, fără să aibă același strat de placare cu fragmente ceramice<sup>58</sup> a plitei. Cuptor exterior asemănător, cu dimensiuni de 100x80 cm, dotat cu groapă de alimentare în partea sudică, a fost documentat la situl Tiszafüred-Morotva-part<sup>59</sup>.

<sup>44</sup> GINDELE/IŠTVÁNOVITS 2009, 15; Soós 2011.

<sup>45</sup> HARHOIU-BALTAG 2007, 129, fig. 101.

<sup>46</sup> Vezi rezumatul la GINDELE 2015.

<sup>47</sup> WIKLAK 1984, 179.

<sup>48</sup> RUSTOIU 2005, 50.

<sup>49</sup> HOREDȚ 1979, 113.

<sup>50</sup> GAIU 1994.

<sup>51</sup> GAIU 2002.

<sup>52</sup> GAIU 1993, 91-93.

<sup>53</sup> CSEH 1991b, 165, 3 ábra, 167, 5. ábra.

<sup>54</sup> CSEH 1993d, 19, 2. Kép, 20, 3. Kép, 24, 7 kép cu placarea plitei cu fragmente ceramice.

<sup>55</sup> NYÁRÁDI 2011, 330.

<sup>56</sup> PROTASE 2003, 37.

<sup>57</sup> BĂRZU 1994-95, 246.

<sup>58</sup> CSEH 2004c, 82-83, 118, 21. Kép.

<sup>59</sup> CSEH 1991b, 175.

## Gropi

La situl cercetat la Carei s-a putut documenta o singură groapă (143), ovală, cu fundul denivelat, fără o funcțiune clar determinată. Gropile din așezările gepidice apar în număr mult mai redus decât în cazul așezărilor mai timpurii, din epoca romană. Diferă mult în dimensiuni și în forme. Gropile au formă circulară sau ovală, cu diametre de 1-2 m și pereți oblici de la siturile Battonya-Vörös Október TSZ<sup>60</sup>, Battonya-Szionda Gyep I<sup>61</sup>, Țaga-Hrube<sup>62</sup>. Alt tip este cel al gropilor de provizii tradiționale cu secțiune tronconică, documentate la siturile Tiszafüred-Morotvapart<sup>63</sup>, Szentes-Belsőecser<sup>64</sup>, Țaga-Hrube<sup>65</sup>. Groapă de provizii adâncită în podea a fost găsită la situl din Morești în colțul unei singure locuințe (7)<sup>66</sup>. Groapa de provizii găsită în colțul locuinței identificate la Tiszafüred-Tiszaszöllös nu coboară sub nivelul podelei, probabil a fost folosită ca o nișă<sup>67</sup>, dar în alte cazuri coboară cu aprox. 40 cm sub acesta<sup>68</sup>. Groapă de provizii adâncită în podeaua casei a fost semnalată și în așezarea gepidică din Biharia<sup>69</sup>.

## Activități industriale (țesut, prelucrarea oaselor, a fierului, orfevrărie)

În așezarea cercetată la Carei am identificat mai multe greutateți folosite la războaie de țesut, care indică practicarea acestui meșteșug, și care tipologic se înscriu perfect în formele utilizate de obicei de gepizi. Unele au fost găsite pe pardoseală, altele în umplutura locuințelor, dar nu au alcătuit un anumit sistem care să ne indice un război de țesut „in situ”. Problema locuințelor destinate țesutului a fost ridicată de către Kurt Horedt, legat de cele două complexe din Morești (13, 27) cu greutatețile din lut găsite lângă pereți<sup>70</sup>. Aceste locuințe au dimensiuni mai mari (6,2x5,6 m și 5,1x4,9 m) și fac parte din același tip (3-3 gropi de stâlp pe laturile mai scurte, la una se adaugă câte o groapă de stâlp adițional pe laturile mai lungi). În Câmpia Tisei, tot cu ajutorul configurației greutateților din lut, au reușit să identifice un astfel de complex la Tiszafüred-Morotva-part<sup>71</sup> (unde se practica și prelucrarea oaselor), unul cu dimensiuni mai mici, de 2,9x2,9 m, cu câte o groapă de stâlp la mijlocul laturilor scurte. O altă locuință folosită pentru țesut a fost presupusă la Szolnok-Zagyva-part (zona Alcsi), 3,30-3,50 x 3,00-3,40 m, cu 3-3 gropi de stâlp pe laturile scurte, respectiv la Kengyel-Baghy-homok<sup>72</sup>. G. Rustoiu a opinat că aceste ateliere de țesut puteau deservi cu materiale textile întreaga comunitate<sup>73</sup>.

Mai multe complexe descoperite în situl din Carei conțin coarne de cerb și alte oase cu urme de tăiere, rebuturi sau piese neterminate ale confecționării de piepteni de os, indicii ale activității de prelucrare de oase. Astfel de urme (Fig 15, D) am identificat în 7 complexe (29, 30, 123, 17, 90, 116, 141), fapt surprinzător dacă comparăm aceste vestigii cu atelierele gepidice cunoscute. Descoperiri

<sup>60</sup> SZABÓ 1978, 67, 6 ábra.

<sup>61</sup> SZABÓ/VÖRÖS 1979, 222, 5. Kép.

<sup>62</sup> PROTASE 2003, 36, fig.13.

<sup>63</sup> CSEH 1991b, 180, 11 ábra.

<sup>64</sup> B. TÓTH 2006, 34, Abb. 20.

<sup>65</sup> PROTASE 2003, 36, fig. 13.

<sup>66</sup> HOREDT 1979, 113.

<sup>67</sup> CSEH 1996a, 82, 6 ábra.

<sup>68</sup> CSEH 1996a, 82, 7 ábra.

<sup>69</sup> DUMITRAȘCU 1994, 167.

<sup>70</sup> HOREDT 1979, 93-97.

<sup>71</sup> CSEH 1986a.

<sup>72</sup> CSEH 2000, 91-94.

<sup>73</sup> RUSTOIU 2005, 51.

care indică prelucrarea oaselor au fost găsite până acum la Tiszafüred-Morotva-part<sup>74</sup>, Kengyel-Baghy-major Kengyelpart I<sup>75</sup>, Kengyelpart II<sup>76</sup>, Tiszagyenda<sup>77</sup> și Biharia<sup>78</sup>.

Prelucrarea fierului este indicată de urmele de zgură de fier, găsite și în situl din Carei la 4 complexe (23, 30, 17, 90) (Fig. 15, C). Cercetarea așezărilor gepidice a identificat până acum urme ale prelucrării fierului numai la Tiszafüred-Morotva-part<sup>79</sup>, la Soporu de Câmpie<sup>80</sup> și la Morești<sup>81</sup>.

Ciocănelul de poansonare (de aprox. 7,5 cm), identificat în complexul nr. 17 (Pl. 39: 5) poate fi un indiciu pentru practicarea orfevrăriei. Acest tip de unealtă este foarte rar în materialul arheologic lăsat de gepizi. Ciocanul din fier găsit în mormântul 10 al sitului din Band este identic ca formă, dar cu dimensiuni mult mai mari<sup>82</sup>. Ciocanul găsit la situl din Morești este de alt tip<sup>83</sup>.

## Cronologie

Puțini autori au încercat analiza cronologiei interne a așezărilor gepidice. Motivul este numărul redus al obiectelor de metal cu relevanță cronologică, respectiv numărul redus al siturilor cercetate pe mare suprafață. În lucrarea sa de sinteză a siturilor gepidice din Transilvania, G. Rustoiu definește două faze: a doua parte a secolului al V-lea cu fibule de tip Vyškov și alte obiecte ce evocă perioada hunilor (Soporu de Câmpie, Bratei, Sânmiclăus, Țaga) și prima parte a secolului al VI-lea, căreia aparțin majoritatea siturilor<sup>84</sup>. Pe Câmpia Tisei în situl Battonya-Sziodai gyep I. a fost găsită o fibulă din bronz<sup>85</sup> care se poate data la sfârșitul secolului al IV-lea, începutul secolului al V-lea<sup>86</sup>. Ágnes B. Tóth a încercat datarea câtorva situri din Câmpia Tisei pe baza ceramicii. În opinia ei vasele cu formă biconică și de forma parei, respectiv lipsa ștampilelor poate însemna un indiciu pentru o datare în secolul al V-lea.

Un punct de pornire pentru analiza cronologiei interne a așezărilor gepidice poate fi intersectările de complexe, orientarea locuințelor și dispunerea în spațiu a complexelor. Orientarea locuințelor și suprapunerea în două cazuri a unor locuințe orientate diferit la situl Stupini-Vătășina indică în mod cert două faze cronologice distincte, unde în faza a doua apar în locuințe și cuptoarele<sup>87</sup>. În cazul altor situri transilvănene locuințele sunt orientate aproximativ identic<sup>88</sup>, excepție fiind situl din Bratei, unde suprapoziționările, structura circulară a planului așezării, respectiv apariția celor două grupări de locuințe foarte probabil indică o cronologie internă<sup>89</sup>. În cazul sitului Cluj-Polus Center analiza inventarului arheologic duce la concluzia că nu sunt indicii pentru diferențe cronologice dintre cele trei grupuri de complexe<sup>90</sup>.

<sup>74</sup> CSEH 1986a.

<sup>75</sup> CSEH 1999b, 65.

<sup>76</sup> CSEH 2004b, 52.

<sup>77</sup> BÁRÁNY/HAJNAL 2010.

<sup>78</sup> DUMITRAȘCU 1982.

<sup>79</sup> CSEH 1991b, 194.

<sup>80</sup> PROTASE/ȚIGARĂ 1960, 392.

<sup>81</sup> HORED T 1979, 150.

<sup>82</sup> KOVÁCS 1913, 289, 16. Kép, 1-1a.

<sup>83</sup> HORED T 1979, Taf. 43: 5.

<sup>84</sup> RUSTOIU 2005, 50-51.

<sup>85</sup> SZABÓ 1978, 225, 9. Kép. 1

<sup>86</sup> SCHULTZE tip IixAA7b, SCHULTZE 1977, Tab. 2.

<sup>87</sup> GAIU 2002, 124.

<sup>88</sup> RUSTOIU 2005, 77-79.

<sup>89</sup> BĂRZU 1994-95, plan general.

<sup>90</sup> LĂZĂRESCU 2009, 373.

În așezarea de la Carei orientarea locuințelor din cele trei grupuri de complexe cercetate nu este identică nici în interiorul grupurilor. Din grupul I se distinge locuința 139, iar în grupul III apar două orientări diferite la complexe 17-17/1-145 și 90-116-141. La analiza noastră cronologică, desigur, trebuie să luăm în calcul faptul că datele noastre provin de pe o fâșie decopertată a așezării de doar 20-25 m lățime, cercetările viitoare pot nuanța sau chiar modifica mult rezultatele interpretărilor noastre.

Repartiția tipurilor de locuințe din grupurile de complexe prezintă o diferențiere în cazul grupului II. Aici lipsește tipul de locuință fără groapă de stâlp și cel cu o câte o groapă de stâlp pe laturile mai scurte, respectiv numai aici întâlnim tipul cu gropi de stâlp în colțuri. Grupul II este format din numai două locuințe, deci aceste caracteristici pot fi și incidentale. La fel se distinge acest grup II prin cele două cuptoare exterioare. Urme ale prelucrării oaselor găsim în toate cele trei grupe, însă din grupul II lipsește zgura specifică prelucrării fierului. Foarte probabil caracteristicile diferite ale grupului II de complexe indică o utilizare economică diferită.

Repartiția categoriilor tehnologice la nivelul ceramicii după grupurile complexelor este surprinzător de uniformă, luând în calcul numărul foarte diferit al fragmentelor ceramice (Tabel 3). Proporția ceramicii fine, lucrate la roată este identică (10%) și restul categoriilor tehnologice sunt prezente în proporții ce diferă cu doar câteva puncte procentuale. Putem afirma deci, cu certitudine, că inventarul arheologic gepidic din Carei este uniform în privința procentelor diferitelor categorii tehnologice la nivelul ceramicii, nu există diferențe între cele trei grupuri de complexe. Se pot observa însă diferențe în ceea ce privește repartiția tipologiei ceramicii. Vasele biconice, urcioarele cu motive lustruite în rețea și urciorul cu motive alveolate pe umăr lipsesc din grupul III de complexe. Se poate observa preponderența unor tipuri de buze în grupul I de complexe. Această diferențiere poate însemna, după părerea noastră, una cronologică, grupurile de complexe I și II ar putea fi mai timpurii față de grupul III.

Analiza tipurilor de vase surprinde prin lipsa vaselor de forma parei, tipice pentru gepizi, a urcioarelor cu cioc de scurgere, sau a ornamentelor executate prin ștampilare. Luând în calcul numărul fragmentelor de ceramică (1266 buc.), în opinia noastră această situație nu este una incidentală, poate fi o caracteristică cronologică sau regională. Analiza din punct de vedere regional a inventarului arheologic de ceramică gepidică din Carei este îngreunată de lipsa cercetărilor la situri gepidice din zonă. Săpături de mică anvergură au avut loc la Berea X. (1 casă), Berea XXI. (3 case), Ciumești I. (1 casă)<sup>91</sup> și Petrești (2 complexe)<sup>92</sup> și sunt cunoscute câteva situri din periegeze<sup>93</sup>. Putem constata însă, că din inventarul arheologic cunoscut din regiune lipsesc formele de vase amintite și ornamentele tipice pentru gepizi.

Așezarea gepidică de la Carei marchează din punct de vedere geografic limita nord-estică a blocului de așezări gepidice din Câmpia Tisei, se află în zona de întâlnire a culturilor materiale sarmatice și germanice din secolele II-V, într-un teritoriu locuit de populațiile purtătorilor culturii Przeworsk. Anumite obiecte pot semnala legăturile cu vechea cultură materială, sau persistarea unor tradiții. Ágnes B. Tóth consideră<sup>94</sup> că bolul cu mânerul înălțat, de tipul celui găsit în umplutura complexului 23 poate marca o influență sarmatică (Pl. 23: 7). Vasele cu mâner au fost răspândite în barbaricumul sarmatic și în perioada hunilor<sup>95</sup>. Tipul de locuință cu gropi de stâlpi în cele patru colțuri este cunoscut de pe teritoriul așezărilor sarmatice târzii sau din epoca hunică de la Tápé-Széntégla-égető<sup>96</sup> și Solt-

<sup>91</sup> STANCIU 2011, 51.

<sup>92</sup> Săpătură nepublicată a autorului din 2012.

<sup>93</sup> STANCIU 2011, 50, Tab.1.

<sup>94</sup> B. TÓTH 2006, 118.

<sup>95</sup> VADAY 1989, 157-160.

<sup>96</sup> VÖRÖS 1991-92, 27.

Palé<sup>97</sup>. Locuința cu câte o groapă de stâlp pe laturile mai scurte este, la fel cunoscută de pe teritoriul sarmaților, de exemplu la Doboz-Homokgödri tábla<sup>98</sup>, la Budapest-Péceli úti telep, unde majoritatea locuințelor aparțin acestui tip<sup>99</sup>. Tipul de locuință cu câte 3 gropi de stâlp pe laturile mai scurte apare foarte rar pe teritoriul sarmatic, dar cel identificat de lângă Nyáregyháza<sup>100</sup>, după părerea noastră, luând în considerare numărul mare al acestui tip în regiune din perioadele precedente<sup>101</sup>, se poate considera mai degrabă o tradiție germanică. Groapa rectangulară, micuță, cu pereții arși din complexul nr. 123 indică foarte probabil antecedente vandale<sup>102</sup>, fiind unicat pe nivelul așezărilor gepidice. Acest tip de complex apare cel mai recent (faza D1?) lângă locuința cu câte 3 gropi de stâlp pe laturile mai scurte, datată cu ajutorul piaptănului de os cu două șiruri de dinți de la situl Urziceni-Vamă, aflat la câțiva kilometri de așezarea gepidică din Carei<sup>103</sup>.

Săpăturile de mari dimensiuni de la Carei-Bobald ne oferă o imagine de organizarea internă a așezării și relația ei spațială cu cimitirul. Așa cum am arătat în capitolul legat de structura așezării, aceasta era structurată în gospodării răsfricate pe malul a două cursuri temporare de ape, care aduceau apele pluviale și de la topirea zăpezii de pe trasa înaltă, sudică a pârâului Mergheș spre lunca largă a acesteia. Din punct de vedere spațial nu putem să delimităm foarte clar amplasamentul cimitirului de zona folosită pentru locuire. Aceasta se întinde pe un loc mai înalt, bine evidențiat în teren, între gupul de complexe I și II-III, la o distanță de 80-90 m (grupul I) respectiv 120-130 m (grupul II) față de locuințele din marginea zonelor locuite.

Din punct de vedere al materialului arheologic caracteristic pentru cultura materială gepidică cea din zona studiată de noi se evidențiază prin lipsa vaselor în formă de pară, lipsa ornamenticii ștam-pilate, lipsa țevelor de scurgere, lipsa ceramicii cu noduli. După părerea noastră lipsa acestor elemente caracteristice ceramicii gepidice din Transilvania sau Câmpia Tisei nu are conotații cronologice ci mai degrabă reprezintă o diferențiere teritorială. Deocamdată cantitatea cercetărilor privind așezările și cimitirele gepidice în zona geografică din valea Ierului, valea Barcăului, Câmpia Nirului este foarte redusă, însă obiectivele publicate de noi în prezentul volum pot oferi o referință pentru viitoarele încadrări culturale și cronologice. Un obiectiv în viitor va fi continuarea săpăturilor la cimitirul de la Carei-Bobald, până la epuizarea acesteia. Nu excludem că odată cu creșterea cantitativă a informației arheologice pentru zona studiată de noi să se creioneze un grup teritorial în blocul cultural gepidic. Până atunci putem să concluzionăm că așezarea și cimitirul de la Carei-Bobald are paralele mai degrabă în fenomenele din Câmpia Tisei și se pare că nu se continuă mai departe după cucerirea avară (567/68) a estului Bazinului Carpatic.

<sup>97</sup> PÁRDUCZ 1938, 97, Abb.4.

<sup>98</sup> MEDGYESI 1989, 94, 1. Tábla.

<sup>99</sup> KOROM 2006, 184.

<sup>100</sup> DINNYÉS 1997, 372, 1 kép. 16/7.

<sup>101</sup> GINDELE/ISTVÁNOVITS 2009, 13-14.

<sup>102</sup> GINDELE/ISTVÁNOVITS 2009, 15.

<sup>103</sup> GINDELE 2010, 93.



## Kivonat

A temetőt csak részlegesen sikerült feltárni, az I-es és II-es házcsoportok között, egy magasabb terület nyugati lejtőjén. Tulajdonképp a temető nyugati és déli szélét érintették az ásatások, ahol 24 csontvázas temetkezést tártunk fel (Fig. 1). A tájolás és a sírok hozzávetőleges sorokba rendezése egy VI. századi, Közép- és Nyugat-Európában jól ismert ún. soros temetőt jeleztek. Északnyugat-Romániában ez a régészeti jelenség kevésbé kutatott, a települések és a sírleletek a Nyírség keleti peremére, az Ér völgyébe és a Nagykárolyi-síkságra korlátozódnak<sup>1</sup>. Ez a lelőhelycsoport minden bizonnyal kapcsolatban áll egy szélesebb lelőhelykörrel, Bihar megye síkvidékéről, a Berettyó völgyéből. Megvizsgálva I. Stanciu legutóbbi elterjedési térképét (figyelembe véve a terület kutatottságát is)<sup>2</sup> megállapíthatjuk, hogy a két „klasszikus” erdélyi és alföldi gepida települési tömb között egyre inkább körvonalazódik egy másik földrajzi csoport. Az általunk kutatott temető e földrajzi csoport északi peremén található és a magyarországi Hajdúnánás–Fűrj-halom mellett ez az egyik ritka példa az ásatásokkal kutatott temetőkre. A temető teljes kutatása még a jövő feladata, azonban az ásatások folytatásának a bizonytalansága miatt úgy gondoltuk, hogy közreadjuk az eddig dokumentált sírokat.

Ha megnézzük a részlegesen kutatott nagykárolyi temető térképét, megállapíthatjuk, hogy a 24 sír nem rendeződik csoportokba és a sírsorok sem válnak szét tisztán. A kutatott sírok egy kb. 10×30 méternyi területet foglalnak el, meghatározható a temető déli és nyugati szélé, míg a keleti és északi oldalon folytatódik a feltárt területen kívül. A temetőrészlet kutatásánál nem találtunk sírokat, amelyek vágják egymást. A sírok két gyereksír (101, 112) kivételével ki voltak rabolva (Fig. 2). E két rabolatlan sír relatív közel esik egymáshoz, az általunk kutatott felület közepén voltak. Nem állíthatjuk, hogy a gyereksírok bolygatatlansága jellemző a nagykárolyi temetőre, mert két másik hasonló sírt (35/2, 103) is kiraboltak a temetkezés után. A sírok tájolása nyugat–kelet, a koponyával a sírgödör nyugati részén, néhány esetben enyhén elmozdulva északnyugati irányba. A feltárt temetőrészlet déli szélén, a 33 és 34-es síroknál ez az enyhe eltérés délnyugati irányt mutat. Lényegesebb eltérést a 153-as sírnál tapasztalhatunk, mely a temető északnyugati szélén található. Ebben az esetben a tájolás észak/északnyugat–dél/délkelet és a sírban talált csontfészű alapján a temetkezés minden kétséget kizáróan a temetőhöz tartozik. A nagykárolyi sírcsoport esetében néhány sírban biztosan kimutathatóak koporsónyomok (41, 44, 111). Sajnos a sírrablás szokása miatt a legtöbb esetben már nem volt megfigyelhető bármiféle koporsó. Egy esetben, a 34-es sírnál a sírgödör aljába még egy kisebb, a koporsó méretének megfelelő gödröt ástak. A koporsókkal kapcsolatban felmerül a faelemek összefogására használt vas szerelékek jelenléte. Ezek hiányoznak a nagykárolyi temetőből, szerintünk e jelenség nem véletlenszerű.

Síredényt csupán a 43-as sírban találtunk, egy kis bikónikus korongolt, besimított díszítésű csupor, mely eredeti helyén, a koponya helyétől balra, a sírgödör szélében került elő (Pl. 12:1). Figyelembe véve a temető nagyfokú raboltságát, nem zárhatjuk ki, hogy esetleg más sírokban is lehettek edények. A nagykárolyi gepida temetőből relatív nagy számban kerültek elő csontfészűk (Fig. 5), talán kis értékük miatt, számos esetben ezek a rablás után is a sírokban maradtak. A nagykárolyi sírokban a

<sup>1</sup> STANCIU 2011, 69.

<sup>2</sup> STANCIU 2011, 67, Fig. 15.

fésűk legtöbb esetben a koponyák környékén (42, 51, 112, 153), a medencénél (35/2, 39) vagy a lábnál (101) kerültek elő. A gyereksírok esetében a négyből háromban találtunk csontfésűt, ez összefügg a gyereksírok kisebb mértékű bolygatottságával. Tipológiai szempontból a fésűk a két fogsoros kategóriába tartoznak, a három réteg csontlemezt vas nyitszegekkel fogták össze. A fegyverek megjelenése a gepida sírokban egy általános jelenség, a nagykárolyi temetőben a 39-es sírban egy lándzsahegy (Pl. 8:2), míg a 43-as sírban négy nyílhegy (Pl. 10:3-6) került elő. A fegyverek a temetkezés idején helyezett, eredeti helyükön kerültek elő, nem voltak utólag bolygatva. A lándzsahegy a hegyével a láb irányában volt, párhuzamosan a csontvázsal. A 41-es sír esetében a négy nyílhegy közül hármat egy csomóban, a hegyükkel a sírgödör alsó része felé találtunk, a jobb térd helye mellett, minden bizonynyal az övre akasztott tegez alsó részén. A negyedik nyílhegy ugyancsak hegygel lefelé, a sírgödör alsó részén került elő. A kések (Fig. 8) megjelennek a koponya bal oldalán, nyéllel felfelé a 34-es sírban, ugyanúgy de a koponya jobb oldalán az 51-es sírban. A többi kés a mellkas környékén (36) vagy a medencénél (44, 46) került elő. Sajnos töredékességük miatt nem vonható párhuzam a tipológia és a sírban lévő helyzet között. A csatok a leginkább reprezentált fémleletek a nagykárolyi temetőben, különféle méretűek, vasból, bronzból vagy ezüsből készültek (Fig. 6). A 34-es és 35/1-es sírokban több példány is előkerült, a többi sírban csupán egy-egy csat volt. Sajnos a vázak bolygatása miatt a legtöbb esetben nem tudjuk megállapítani a csatok eredeti helyét a sírokban. A nagykárolyi temetőben fellelt csatokat (11 db) tipológiai szempontból a méret, a forma és az anyag szerint osztályozhatjuk. A méret szerint három csoportot különíthetünk el, a legkisebbek az 1,7×3/ 1,8×1,4 centiméteresek, mind ovális, a keret kör keresztmetszettel és mindháron bronzból készült. Ugyanazt a tipológiai részletet figyelhetjük meg két esetben is: a tüske és a keret találkozását két rovátka határolja. A középső csoportba hét csat tartozik, a legkisebb 3×2 cm a legnagyobb 3,8×2, 7 cm. Kettő vasból (34, 41), kettő bronzból (35/1, 39) és három ezüsből (34, 35/1, 51) készült. A nagykárolyi csatok esetében megfigyelhető egy bizonyos formai azonosság, mind ovális, apró különbség a vas csatok esetében az, hogy a tüske felfogásánál nem vékonyodik el a keret. A 35/1-es sírban talált ezüst csattöredék kitűnik úgy a méret, mint az ezüst alapanyag minősége szempontjából. Sajnos töredékessége miatt a mérete nem megállapítható, azonban nem zárhatjuk ki, hogy talán az ún. Adlerschallen típusba sorolható. Gyöngyöket (Fig. 7) öt sírban találtunk, sajnos a legtöbb esetben másodlagos helyzetben, de amikor a sírgödör alján vannak, akkor következtethetünk az eredeti helyzetükre. A 43-as sír esetében négy gyöngy a medence bal oldalán került elő. Több gyöngy maradt a gyereksírokban (103, 112), ezek a koponya bal oldalán és a nyaknál kerültek elő. Más esetben a gyöngyöket a boka körül találtuk, a 103-as és a 111-es sírokban. Kivételes a 111-es sír, ahol a gyöngyöket az övről lecsüngő szíjra varrták, melynek végén egy borostyán piramis alakú függő volt.

## A település

### Településméret

A nagykárolyi gepida település szerkezetét vizsgálva elsősorban a kutatás jellegét kell figyelembe vennünk. A 620 m hosszú és 20–25 m széles feltárási felület minden valószínűség szerint a telep keleti szélét vágta át, így hozzávetőlegesen a település 10-15%-a került dokumentálásra az ásatások során. A környék kiterjedt terepbejárási munkálatainak<sup>3</sup> köszönhetően – amelyek 5-6 km hosszan kutat-

<sup>3</sup> NÉMETHI 1999, 64–67.

ták a Mérges-patak bobáldi teraszát – tudjuk, hogy telepünk nem több, láncszerűen elnyúló kisebb települési rendszer részlete, hanem egy nagyobb, összefüggő település. Ha megvizsgáljuk a feltárás hosszanti metszetét, láthatjuk, hogy az út nyomvonala több kisebb, időszakos vízfolyást keresztez, és ezek teraszain helyezkednek el az előkerült objekumok (Pl. 42). Az alföldi gepida telepek fejlődésére sajnos kevés adat áll rendelkezésünkre. Battonya határában, a román határ közelében, a Száraz-ér (egykori Maros-ág) mindkét partján kb. 2 km hosszan, több egymáshoz közel fekvő településnyomot sikerült azonosítani. A Sziondai-gyep I. lelőhelyen pedig, egy kis szondázó ásatás során feltártak egy földbe épített házat és egy tárolóvermet<sup>4</sup>. A feltáró megfigyelte, hogy a Szanda-ér melletti gepida telepek szorosan követik a vízfolyást, a laposabb hátaikon helyezkednek el, szemben a korábbi szarmata telepekkel, melyek sokszor 10 km-re vannak ezektől a háaktól<sup>5</sup>. Terepbejáráson és kisméretű ásatáson alapul Cseh János kutatása. Kengyel és Rákócújfalu települések között az egykori Tisza meder partjait vizsgálta mintegy 12 km hosszan, ahol a battonyaihoz hasonlóan több, egymástól 200–2000 m távolságban fekvő telepnyomot sikerült azonosítani. A kerámiaszóródás alapján a telepek 30–40 × 30–40 m és 100–130 × 50–60 m között ingadoznak<sup>6</sup>. A felszíni leletek alapján, a gepida telepek belső kronológiája hiányában csupán feltételezésbe bocsátkozhatunk az egy bizonyos időben fennálló telepek nagyságát tekintve. Nyugati germán területen a Merowing-kori települések általában nem haladták meg az egy időben fennálló 1–3 gazdasági egységet, csak kivételes esetekben dokumentáltak 5 vagy akár 11 gazdasági egységet<sup>7</sup>.

## Településszerkezet, belső struktúra

A nagykárolyi gepida telep a Mérges patak felé eső időszakos vízfolyások teraszain fejlődött ki, több alegységből áll, itt a telep belső struktúrájára az egymástól bizonyos távolságra fekvő ház/objektum csoportok jellemzőek (Pl. 42). A gepida telepek belső struktúrája alapján több településtípust azonosíthatunk, elsősorban Jahnkuhn germán telepekre vonatkozó osztályozása alapján<sup>8</sup>. Mivel a legtöbb esetben a telepeknek csupán kisebb-nagyobb felületét sikerült feltárni, ez az osztályozás szigorúan a jelenlegi kutatási helyzetet tükrözi.

1. Magányos gazdasági egység, „Einzelhof”. Ez a településtípus talán a legnehezebben azonosítható. Egerlővő–Homokparton egy nagyobb felület feltárása során csupán egyetlen ház került elő<sup>9</sup>, ami egyedül álló gazdasági egységet igazol. A nagykárolyi teleptől kb. 15 km-re délnyugatra, Mezőpetri határában, egy régészeti leletektől teljesen mentes területen, egy vizesárok vágott át 2 gepida településobjektumot<sup>10</sup>. Tekintetbe véve a terület jellegét, a mezőpetri gepida település minden bizonnyal a fenti kategóriába tartozhatott.

2. A házcsoportokból álló települések sora a gepida településrendszer jellegzetes formája, ahol néhány ház, tárolóverem, kültéri kemence vagy kút csoportosul. Az objektumcsoportok néhány tíz méter távolságra terülnek el egymástól. Ilyen a nagykárolyi telep, Erdélyben a Kolozsvár (Cluj)–Polus Center<sup>11</sup>, Mezőszopor (Sopor de Câmpie)<sup>12</sup>, Ocnita<sup>13</sup>, Segesvár (Sighișoara)–Szőlőhegy<sup>14</sup>. Az

<sup>4</sup> SZABÓ/VÖRÖS 1979.

<sup>5</sup> SZABÓ/VÖRÖS 1979, 226.

<sup>6</sup> CSEH 1986b, 190.

<sup>7</sup> DONAT/ÜLLRICH 1971, 258.

<sup>8</sup> JAHNKUHN 1969.

<sup>9</sup> LOVÁSZ 1986–87, 128, 1. kép.

<sup>10</sup> A szerző 2013-as ásatása. Közöletlen.

<sup>11</sup> LĂZĂRESCU 2009, 340, Fig. 1.

<sup>12</sup> PROTASE/ȚIGARĂ 1960, Fig. 13.

<sup>13</sup> GAIU 1994, 54, Pl. 1.

<sup>14</sup> HARHOIU/BALTAG 2006, 510, Fig. 963.

Alföldön Tiszafüred–Morotva-parton, kb. 6000 m<sup>2</sup> területen több 2–4 földbe épített házból álló csoportot kutattak, a köztük lévő távolság kb. 80 m. Hasonló, néhány objektumból álló, egymástól 30–50 vagy 100–150 m távolságra eső gazdasági egységet dokumentáltak a Közép-Tisza vidékén Tiszafüred–Tiszaszöllősen, Szelevény–Bohony-part, Szolnok–Zagyva-part településeken<sup>15</sup>, az Alföld keleti peremén Bihariban (Biharea)<sup>16</sup>. Ez a településszerkezet jól ismert a közép-európai germán telepeken (például Bohémiából Jenštejn<sup>17</sup>, langobárd területről Balatonlelléről<sup>18</sup>).

3. Összefüggő telepek, ahol a házak nagyobb, zárt csoportban jelennek meg. Megfigyelhetjük, hogy a gepida települések ezen típusa elsősorban az erdélyiekre jellemző. Hasonló típust ismerünk Malomfalva (Morești)<sup>19</sup>, Mezősolymos (Stupini) B szektorban<sup>20</sup>, Dipse (Dipșa)–Fundoaie<sup>21</sup> és talán Maroscsapó (Cipău)–Gârle lelőhelyről<sup>22</sup>.

Baráthely (Bratei) 1. telepén két településtömb között egy 50–60 m széles szabad területet dokumentáltak. A minden bizonnyal többfázisú telepen egy 40–50 m átmérőjű központi tér körül elhelyezkedő házak voltak<sup>23</sup>. Ez igen ritkán fellelhető településszerkezet, hasonlót ismerünk a császárkori Barbarikumból, Észak-Legyelországból, Debczyno településről<sup>24</sup>.

## Gazdasági egységek

A gepida telepek belső struktúráját alkotó gazdasági egység tanulmányozásának lehetőségét először Kurt Horedt vetette fel a malomfalvi (Morești) település publikálása során. Szerinte az ott feltárt kb. 60×60 méternyi felületen nehéz meghatározni ezeket az egységeket<sup>25</sup>. Véleményünk szerint továbbhiányzó nehézséget jelent a gödörházak nagy száma és az ezekhez kapcsolódó más típusú épületek kis száma, avagy hiánya<sup>26</sup>. E probléma megoldására – véleményünk szerint – a házcsoportokra felosztott telepeken találhatjuk meg a választ, ahol ezek a csoportok lehetnek a keresett gazdasági egységek meghatározásának kiindulópontjai. A gepida telepeken a gazdasági egység alapja a gödörház. Minden bizonnyal léteztek földfelszíni házak is, azonban ezeknek a nyomát meggyőzően még nem sikerült azonosítani. A malomfalvi telepen feltárássra került több letaposott föld- és kőfelület gepida kerámiával, melyeket *járószint*-ként magyarázott az ásató<sup>27</sup>. Hasonló, lekövezett, gepida kerámiával kevert szintet sikerült azonosítani Kisgalambfalva (Porumbeni Mici)–Galath lelőhelyen<sup>28</sup>.

A gazdasági egységekre vonatkozó elemzéseket inkább a nyugati germán területekről ismerjük. Az alemann telepek gazdasági egységeinek az alapja a földfelszíni, cölöplyukos alapján azonosított nagyméretű ház (Wohnstallhaus). Egy gazdasági egység méretét 1000–2000 m<sup>2</sup>-ben határozták meg, kivételt képezhetnek a főnöki gazdasági egységek, melyek elérhetik a 4000 m<sup>2</sup> kiterjedést<sup>29</sup>. Egy

<sup>15</sup> CSEH 1996a, 71.

<sup>16</sup> DUMITRAȘCU 1994, Fig. 22.

<sup>17</sup> DROBERJAR/TÜREK 1997, Abb. 3.

<sup>18</sup> SKRIBA/SÓFALVI 2004, 156–157.

<sup>19</sup> HOREDTE 1979, 89, Abb. 38.

<sup>20</sup> GAIU 2002, 132, Fig. 4.

<sup>21</sup> GAIU 1993, 97, Fig. 2.

<sup>22</sup> VLASA et al. 1966, 406, Fig. 7.

<sup>23</sup> BÂRZU 1994–95, Fig. 1.

<sup>24</sup> MACHAJEWSKI 1986, 41, Abb. 2.

<sup>25</sup> HOREDTE 1979, 121.

<sup>26</sup> Ez valószínűleg egy speciális jelenség a gepida telepeken. Szerintünk nem köthető ásástéchnikai figyelmetlenséghez, hiszen a korábbi császárkori szarmata vagy germán telepeken számos melléképület nyomait sikerült azonosítani.

<sup>27</sup> HOREDTE 1979, 118.

<sup>28</sup> NYÁRÁDI 2011, 329.

<sup>29</sup> BÜCKER et al. 1997, 314–317.

másik esetben, a VII. század második felére keltezett westfáliai településen, Warendorfban egy gazdasági egység elérte a 10 000 m<sup>2</sup>-t is<sup>30</sup>.

A földbe épített ház, mint a gazdasági egység alapja, inkább a közép-európai germán (például bohémiai–moráviai) telepekre jellemző, de itt is megjelenhetnek (sokkal ritkábban) a földfelszíni házak<sup>31</sup>. Ha egy gazdasági egység csupán földházakból áll, joggal feltételezhetjük, hogy némelyik akár műhelyként is működhetett<sup>32</sup>. Elméletben egy gazdasági egység a következő komponensekből állhat: lakóépület, istálló, tárolóépületek vagy gödrök, kültéri tűzhelyek vagy kemencék, kutak és esetleg ipari tevékenységhez kapcsolódó objektumok. A nagykárolyi gepida településen e gazdasági egységek körvonalazása a házcsoportokon belül nehézségbe ütközik a kerítés vagy az elkerítés nyomainak hiánya, illetve a feltárással került nyomvonal szélessége miatt (20–25 m). Minden bizonnyal e gazdasági egységek egy része a feltárt nyomvonalon kívül esik, ezért a kutatás jelenlegi állása szerint nem bocsátkozhatunk különálló gazdasági egységek meghatározásába.

## Házak

A Nagykároly–bobáldi gepida telepen a feltárt nyomvonalon nem sikerült azonosítani felszíni házra utaló cölöplyukakat vagy leégett falmaradványokat. A 18 objektum közül 14 földbe mélyített, háznak beazonosítható építmény, melyek 2 kivétellel lekerekített sarkú, négyszög alakúak. A földházak tipológiai besorolása a cölöplyukak számán és elhelyezkedésén alapszik. A házak építési stílusa, a tetőt tartó cölöpök száma és elhelyezése valószínűleg összefügg a házak méretével. Malomfalván megfigyelhető volt, hogy a kisebb házak nem rendelkeztek cölöplyukkal. A nagyobbaknál 1-1 cölöplyuk volt a rövidebb oldalukon, a még nagyobbaknak pedig cölöp volt a sarkaiban, vagy 3-3 cölöp a két ellentétes oldalán, vagy minden oldalán<sup>33</sup>. A nagykárolyi telepen a meghatározható típusú házak méreteit figyelembe véve (2. táblázat) megállapíthatjuk, hogy a legkisebbek a cölöplyuk nélküli házak (139., 145.), ezek alig haladják meg a 8 m<sup>2</sup>-t. Kitűnik méreteivel a rövidebb oldalain 3-3 cölöplyukas 123-as ház (16 m<sup>2</sup>), azonban a többi ilyen típusú ház nem feltétlenül különbözik a rövidebb oldalakon 1-1 cölöplyukkal rendelkezőkével.

### ***Cölöplyuk nélküli házak: Donat 1988 F, Leube 2009 F1 típus (Fig. 10)***

A nagykárolyi telep nyomvonalba eső részén csupán két ilyen házat (139., 145.) dokumentáltunk. E háztípus megjelenik az Alföldön és Erdélyben is, azonban megállapíthatjuk, hogy különösen jellemző néhány erdélyi településre (Ocnița–La Ștefăluțu<sup>34</sup>, Stupini–Vătășina<sup>35</sup>, Dipșa–Fundoaie<sup>36</sup>, Mezőszopor–Cuntenit<sup>37</sup>).

### ***A rövidebb oldalukon 1-1 cölöplyukkal rendelkező házak: Donat 1988 A, Leube 2009 A2 típus (Fig. 11).***

A tanulmányban vizsgált telepen 3 esetben jelenik meg ez a háztípus (17., 17/1., 23.), azonban néhány más háznál, ahol több cölöplyuk is volt, a mélyebb cölöplyukak ezt a struktúrát jelzik (24., 29., 30.). Térképre vetítve e háztípust megállapítható, hogy inkább az alföldi telepekre jellemző.

<sup>30</sup> WINKELMANN 1958, 516.

<sup>31</sup> PLEINEROVA 2007, 88.

<sup>32</sup> PLEINEROVA 2007, 84.

<sup>33</sup> HOREDT 1979, 101.

<sup>34</sup> GAIU 1994.

<sup>35</sup> GAIU 2002.

<sup>36</sup> GAIU 1993, 91–93.

<sup>37</sup> PROTASE 1962, 534.



### ***Cölöplyukak a ház négy sarkában: Leube 2009 B1 típus (Fig. 12)***

Nagykárolyban, hasonlóan a ritkább, cölöplyuk nélküli házakhoz, csupán egy esetben jelenik meg ez a háztípus (124.), amely általánosan jelen van éppúgy az alföldi, mint az erdélyi gepida telepeken, de a többiekhez képest kisebb számban.

### ***A rövidebb oldalukon 3-3 cölöplyukkal rendelkező házak: Donat 1988 C1, Leube 2009 C és ezek a hosszabb oldalon kiegészítő cölöpös változata: Donat 1988 C2, Leube 2009 (Fig. 13)***

A nagykarolyi telepen 3 esetben dokumentáltuk ezt a háztípust (27, 123, 116), mely nagy számban jelenik meg a gepida telepeken. Megállapíthatjuk, hogy az erdélyi Malomfalva (Morești)<sup>38</sup> és Cege (Țaga)–Hrube<sup>39</sup> telepekre inkább ez a típus a jellemző. Közép-Európában ez a legáltalánosabban elterjedt háztípus. Ismert Bohémiából Jenštejn<sup>40</sup>, Sobešuky<sup>41</sup>, a nagyobb ásatáson Breznón a házak 70%-a ilyen volt<sup>42</sup>. Hasonló házak ismertek a balatonlellei langobárd telepről is<sup>43</sup>.

## **Tüzelőberendezések a házakban**

A nagykarolyi telepen nem találtunk a házakban tüzelőberendezéseket, egy kivétellel. A 123-as ház padlójába ásva egy a ház tengelyével megegyező irányítású, négyszögletű, kiégett falú gödröt dokumentáltunk. E telepjelenség unikális a kor objektumtípusai között, megegyezik viszont a korábbi, II–V. századi vandál telepekről jól ismert észak-dél tájolású kiégett gödrökkel<sup>44</sup>. Hasonló, négyszög alakú platnis tűzhely ismert Segesvár–Szőlőhegyről<sup>45</sup>, de nem téveszthető össze a nagykarolyi kiégett falú gödrrel. Hasonló, négyszögű, kiégett falú gödrök jól ismertek a Przeworsk kultúra településeiről,<sup>46</sup> azonban házakban csak a Stobnica–Trzymor 2. lelőhelyen kerültek elő. Itt az észak-déli tájolású gödrök a házak közepén vagy szélén a padlóba voltak beásva<sup>47</sup>. Ugyancsak ezen a telepen került elő egy körárokkel keretezett kiégett négyszögű gödör, melyet kultikus helyként valószínűsített az ásató<sup>48</sup>.

A házakban megjelenő tüzelőberendezések nem jellemzőek a gepida településekre, előfordulásuk csupán néhány erdélyi településhez köthető (Fig. 14). Gabriel Rustoiu tipológiája nyomán megkülönböztetünk tűzhelyeket, melyek akár kővel körberakottak is lehetnek, valamint kemencéket, melyek lehetnek oválisak vagy négyszögűek, kővel körberakottak, esetleg kerek vagy ovális kőkemencék.<sup>49</sup> A malomfalvi telepen csak kivételes esetben találhatóak tüzelőberendezések, a 22-es ház sarkában talált lapos kővek jelezhetnek időszakos tűzhelyet, a 34-es ház közvetlen szomszédságában pedig volt egy tűzhely.<sup>50</sup> Az erdélyi gepida telepeken megjelenő tüzelőberendezések szorosan kapcsolódnak a cölöplyuk nélküli háztípusokhoz (Ocnița–La Ștefăluc<sup>51</sup>, Stupini/Mezősolymos–Vătășină<sup>52</sup>, Dipșa/Dipse–Fundoaie<sup>53</sup>), mely összefüggés minden bizonnyal vagy egy regionális csoportot, vagy krono-

<sup>38</sup> HOREDȚ 1979, 90–99.

<sup>39</sup> PROTASE 2003, 22, Fig. 2; 26, Fig. 7; 29, Fig. 11; 63, Fig. 19.

<sup>40</sup> DROBERJAR/TUREK 1997, Abb. 5.

<sup>41</sup> BLÁŽEK 1997, Abb. 4–7.

<sup>42</sup> PLEINEROVÁ 2007, 82.

<sup>43</sup> SKRIBA/SÓFALVI 2004, 122, 1. kép.

<sup>44</sup> GINDELE/ISTVÁNOVITS 2009, 15; Soós 2011.

<sup>45</sup> HARHOIU-BALTAG 2007, 129, Fig. 1101.

<sup>46</sup> Összefoglalóan GINDELE 2015.

<sup>47</sup> WIKLAK 1984, 178.

<sup>48</sup> WIKLAK 1984, 179.

<sup>49</sup> RUSTOIU 2005, 50.

<sup>50</sup> HOREDȚ 1979, 113.

<sup>51</sup> GAIU 1994.

<sup>52</sup> GAIU 2002.

<sup>53</sup> GAIU 1993, 91–93.



lógiai különbséget jelezhet. Az Alföldön tűzhelynek interpretáltak a házak padlóján hamus, faszenes, kissé átégett foltként megjelenő jelenséget<sup>54</sup>. Külön csoportként kell kezelnünk a házak falába vájt sütőkemencéket, amelyek hasonlítanak a kültérhez, de kiszolgálógödör helyett a házból táplálták őket. A gepida telepeken ezek rendkívül ritkák, egyet ismerünk Kengyel–Boghy major–Kengyelpart I. lelőhelyről<sup>55</sup>.

### Külső sütőkemencék

A nagykárolyi telepen két földbe ásott külső kemencét (70, 99) tártunk fel. Mindkettőnek volt kiszolgálógödre és az egyik (70) platniját szemcsés, korongolt cserepekkel tapasztották ki. Külső kemencét Galambfalva (Porumbenii Mici)–Galat<sup>56</sup>, Cege (Țaga)–Hrube<sup>57</sup> településen találtak, sajnos a kiszolgálógödört nem sikerült dokumentálni. Baráthely (Brateiu) 1. telepen 2 külső kemencét azonosítottak.<sup>58</sup> A nagykárolyihoz hasonló kemencét tártak fel munkagödörrel Szelevény-rét lelőhelyen, azonban ennek a platnija nem volt cserepekkel kitapasztva.<sup>59</sup> Hasonló kültéri, 100×80 cm méretű, déli részén munkagödörrel rendelkező kemencét dokumentáltak Tiszafüred–Morotva-part lelőhelyen<sup>60</sup>.

### Gödrök

A vizsgált nagykárolyi telepen csupán egyetlen gödört sikerült dokumentálni (143). Ovális, alja egyenetlen, funkcióját nem tudjuk meghatározni. A gepida telepeken a gödrök sokkal kisebb számban jelennek meg, mint a korábbi, császárkori telepeken. Ezek különböző méretűek és formájúak. Battonya–Vörös Október Tsz,<sup>61</sup> Battonya–Szionda Gyep I<sup>62</sup>, Cege (Țaga)–Hrube<sup>63</sup> lelőhelyekről 1-2 m közötti átmérőjű, kör vagy ovális, rézsútos falúakat ismerünk. Klasszikus, méhkas alakú tárolóvermeket tártak fel Tiszafüred–Morotvaparton<sup>64</sup>, Szentés–Belsőecseren<sup>65</sup>, Cege (Țaga)–Hrube<sup>66</sup> telepen. A házak padlójából lemélyülő tárolóvermet a malomfalvi (Morești) telepen csupán egy esetben jeleztek, a 7-es ház sarkában<sup>67</sup>. A Tiszafüred–Tiszaszöllősen feltárt ház sarkába vájt tárolóverem nem mélyül a padlószint alá, egyfajta fülkeként használhatták<sup>68</sup>, más esetben a gödör kb. 40 cm-re mélyül a padlószint alá.<sup>69</sup> Házba ásott tárolóvermet Bihari (Biharea) gepida településéről is jeleztek<sup>70</sup>.

<sup>54</sup> CSEH 1991b, 165, 3. ábra, 167, 5. ábra.

<sup>55</sup> CSEH 1993d, 19, 2. kép, 20, 3. kép, 24, 7. kép a sütőfelület cserepekkel kitapasztva.

<sup>56</sup> NYÁRÁDI 2011, 330.

<sup>57</sup> PROTASE 2003, 37.

<sup>58</sup> BÁRZU 1994–95, 246.

<sup>59</sup> CSEH 2004c, 82–83, 118, 21. kép.

<sup>60</sup> CSEH 1991b, 175.

<sup>61</sup> SZABÓ 1978, 67, 6. ábra.

<sup>62</sup> SZABÓ/VÖRÖS 1979, 222, 5. kép.

<sup>63</sup> PROTASE 2003, 36, Fig. 13.

<sup>64</sup> CSEH 1991b, 180, 11. ábra.

<sup>65</sup> B. TÓTH 2006, 34, Abb. 20.

<sup>66</sup> PROTASE 2003, 36, Fig. 13.

<sup>67</sup> HOREDT 1979, 113.

<sup>68</sup> CSEH 1996a, 82, 6. ábra.

<sup>69</sup> CSEH 1996a, 82, 7. ábra.

<sup>70</sup> DUMITRAȘCU 1994, 167.

## Ipari tevékenységek (szövés, csontmegmunkálás, vaskfeldolgozás, ötvösség)

A nagykarolyi telepen számos szövőszéknehezéket találtunk, melyek szövőtevékenységet jeleznek és tipológiai szempontból teljesen azonosak az általában ismert gepida formákkal. Egyesek a házak padlóján, mások a házak betöltésében voltak, azonban nem alkottak olyan rendszert, ami alapján „*in situ*” szövőszéket feltételezhettünk volna. A gepida szövőházak kérdését Kurt Horedt vetette fel a két malomfalvi (Morești) ház kapcsán (13, 27), a falak mellett talált agyagnehezékek alapján<sup>71</sup>. Ezek a házak a szokásosnál nagyobb méretűek (6,2×5,6 m és 5,1×4,9 m) és ugyanazon típusba tartoznak (3-3 cölöplyuk a rövidebb oldalakon, az egyiknél 1-1 cölöplyukkal kiegészítve a hosszabb oldalon). Az Alföldön Tiszafüred–Morotva-parton, ugyancsak az agyagnehezékek alapján azonosítottak hasonló funkciójú házat,<sup>72</sup> mely kisebb méretű, 2,9×2,9 m, két oldalának közepén 1-1 cölöplyukkal egyébként csontmegmunkálás is folyt benne. Egy másik szövőházat feltételeztek Szolnok–Zagyva-parton (Alcsi határrész), 3,30-3,50×3,00-3,40 m, a rövid oldalakon 3-3 cölöplyukkal és Kengyel–Baghy-homokon<sup>73</sup>. G. Rustoiu szerint a szövőházakban az egész közösség számára készíthettek textíliákat<sup>74</sup>.

A nagykarolyi telepen feltárt csontmegmunkálásra utaló leletek a vágásnyomokat hordozó szarvasagancsok és más csontok, valamint a csontfésűkből származó hulladékok vagy félkész fésűdarabok. Összesen 7 objektumban (29, 30, 123, 17, 90, 116, 141) találtunk csont megmunkálására utaló leleteket (Fig 15, D), mely összehasonlítva az eddig ismert gepida műhelyekkel igen meglepő adat. Csontmegmunkálásra utaló tárgyakat eddig Tiszafüred–Morotva-part<sup>75</sup>, Kengyel–Baghy-major Kengyelpart I.<sup>76</sup>, Kengyelpart II.<sup>77</sup>, Tiszagyenda<sup>78</sup> és Bihariból (Biharea)<sup>79</sup> ismerünk.

Vaskfeldolgozásra a nagykarolyi telepen az előkerült vassal utal. Ilyet 4 objektumból ismerünk (23., 30., 17., 90.) (Fig. 15, C). A gepida telepkutatás jelenlegi állása szerint vas feldolgozására utaló jeleket csak Tiszafüred–Morotva-partról<sup>80</sup>, Mezőszopor (Soporu de Câmpie)<sup>81</sup> és Malomfalváról (Morești)<sup>82</sup> ismerünk.

Ötvösmesterségre utalhat a 17. objektum kisméretű (7,5 cm) poncoló kalapácsa (Pl. 39: 5). Ez a szerszámtípus igen ritka a gepida leletanyagban. A mezőbándi 10. sír vaskalapácsa formailag meggyezik, de jóval nagyobb méretű.<sup>83</sup> A malomfalvi telepről származó kalapács más típusba sorolható<sup>84</sup>.

## Kronológia

A gepida telepek belső kronológiájának vizsgálatára mindeddig kevés kísérlet történt. Ennek oka a jól keltezhető fémleletek kis száma és a kevés nagy felületű feltárás lehet. Az erdélyi telepek összefoglalása során G. Rustoiu két fázist állapít meg: az V. század második fele Vyškov típusú fibulákkal és hunkort idéző leletekkel (Mezőszopor/Soporu de Câmpie, Baráthely/Bratei, Bethlenszentmiklós/

<sup>71</sup> HORED T 1979, 93–97.

<sup>72</sup> CSEH 1986a.

<sup>73</sup> CSEH 2000, 91–94.

<sup>74</sup> RUSTOIU 2005, 51.

<sup>75</sup> CSEH 1986a.

<sup>76</sup> CSEH 1999b, 65.

<sup>77</sup> CSEH 2004b, 52.

<sup>78</sup> BÁRÁNY/HAJNAL 2010.

<sup>79</sup> DUMITRAȘCU 1982.

<sup>80</sup> CSEH 1991b, 194.

<sup>81</sup> PROTASE/ȚIGĂRĂ 1960, 392.

<sup>82</sup> HORED T 1979, 150.

<sup>83</sup> KOVÁCS 1913, 289, 16. kép, 1–1a.

<sup>84</sup> HORED T 1979, Taf. 43: 5.

Sânmiclăuș, Cege/Țaga) és a VI. század első fele, ahová a telepek nagyobb része keltezhető<sup>85</sup>. Az Alföldön Battonya–Sziondai gyep I. lelőhelyen került elő bronzfibula<sup>86</sup>, mely a IV. század végére V. század első felére keltezhető<sup>87</sup>. A kerámiára hagyatkozva próbált keltezni B. Tóth Ágnes néhány alföldi telepet. Szerinte a bikónikus és körte formájú edények és a pecsételések hiánya V. századi besorolást jelezhet<sup>88</sup>.

A gepida telepek belső kronológiai vizsgálatához kiindulópontok lehetnek a szuperpozíciók, a házak orientálása és az objektumok térbeli elhelyezkedése. A házak tájolása és más eltérő tájolású házak a korábbiakhoz képest két esetbeli szuperpozíciója a Mezősolymos (Stupini)–Vătășina telepen egyértelműen két kronológiai fázist jelez, ahol a másodikban a kemencék is megjelennek a házakban<sup>89</sup>. Más erdélyi telepek esetében a házak jobbra ugyanolyan orientálásúak<sup>90</sup>, kivételt képez a Baráthely (Bratei) telep, ahol szuperpozíciók és a kör alakú településszerkezet, valamint a két csoportban megjelenő házak minden bizonnyal valamilyen belső kronológiát jelezhetnek<sup>91</sup>. A Kolozsvár (Cluj)–Polus center telep esetében a leletanyag elemzése arra enged következtetni, hogy a feltárt három objektumcsoport között nincs régészeti igazolható kronológiai különbség<sup>92</sup>.

A nagykárolyi telep feltárt részén megjelenő három objektumcsoport házainak tájolása a csoportokon belül sem megegyező. Az I. csoportban kitűnik a 139. ház, a III. csoportban a tájolás szerint két alcsoport jelenik meg: a 17, 17/1, 145 és a 90, 116, 141 objektumok. Az elemzésnél természetesen figyelembe kell vennünk, hogy a csupán 20–25 m széles nyomvonalban feltárt teleprészletről rendelkezünk információval, a későbbi kutatások nagyban árnyalhatják vagy módosíthatják az itt feltételezettet.

A háztípusok objektumcsoportok szerinti megoszlása a II. csoportban mutat eltérést, ahol hiányzik a cölöp nélküli és a rövidebb oldalon 1-1 cölöplyukas típus és csak itt található meg a sarkokban cölöplyukakkal rendelkező. A II. csoportban csupán két ház van, ezért ez a megosztás lehet esetleges is. Ugyancsak a II. objektumcsoport tűnik ki a két külső sütőkemencével. A csontmegmunkálásra utaló nyomok megtalálhatóak mindhárom csoportban, viszont a II. csoportból hiányzik a vas megmunkálásra utaló salak. Minden bizonnyal a II. objektumcsoport eltérő jellege más gazdasági használatra utalhat.

A kerámiatechnológiai csoportok objektumcsoportok szerinti megosztása, a kerámiatöredékek nagyban eltérő számát figyelembe véve, meglepően egységes (3. táblázat). A korongolt finomkerámia aránya megegyező (10%) és a többi technológiai csoport is csak néhány százalékkal tér el. Minden kétséget kizáróan megállapíthatjuk, hogy a technológiai csoportok arányaiban a nagykárolyi gepida leletanyag teljesen egységes, nincs különbség a három objektumcsoport között. Megfigyelhetők viszont különbségek a kerámiatipológia szerinti megosztásában. A bikónikus edények, a hálómintás korsók, az alveolás vállú korsó hiányoznak a III. objektumcsoportból. Megfigyelhető bizonyos peremtípusok gyakori előfordulása az I. objektumcsoportban. E különbség – véleményünk szerint – finom kronológiai eltérést jelenthet, az I. és II. objektumcsoport valamivel korábbi lehet a III.-nál.

Az edénytípusok vizsgálata alapján meglepő a jellegzetesen gepida, körte alakú edények, a kiöntőcsöves korsók vagy a pecsételt díszítés hiánya. Tekintetbe véve az elemzett kerámiatöredékek számát (1266 db) véleményünk szerint ez nem esetleges, kronológiai vagy regionális jellemző lehet. A nagykárolyi gepida telep leletanyagának regionális szempontból történő vizsgálatát nagyban megnehezíti

<sup>85</sup> RUSTOIU 2005, 50–51.

<sup>86</sup> SZABÓ 1978, 225, 9. kép, 1

<sup>87</sup> SCHULTZE tip IixAA7b, SCHULTZE 1977, Tab. 2.

<sup>88</sup> B. TÓTH 2006, 121.

<sup>89</sup> GAIU 2002, 124.

<sup>90</sup> RUSTOIU 2005, 77–79.

<sup>91</sup> BĂRZU 1994–95, összesítő térkép.

<sup>92</sup> LĂZĂRESCU 2009, 373.

a régióban hiányzó gepida telepkutatás. Kisebb ásatások csupán Bere (Berea) X. (1 ház), Bere (Berea) XXI. (3 ház), Csomaköz (Ciumești) I. (1 ház)<sup>93</sup> és Mezőpetriben (Petrești) (2 objektum)<sup>94</sup> folytak. Emellett terepbejárásból is ismert néhány település.<sup>95</sup> Megállapíthatjuk azonban, hogy az ismert regionális leletanyagból hiányoznak a fent említett jellegzetes gepida edényformák és a díszítés.

A nagykárolyi gepida telep földrajzi szempontból az alföldi gepida településtömb észak-keleti határát jelzi, a korábbi germán–szarmata határterületen van, a korábbi germán településterületen. Bizonyos lelettípusok jelezhetik a korábbi anyagi kultúrához való kapcsolatot vagy a hagyományok továbbélését. B. Tóth Ágnes szerint<sup>96</sup> szarmata befolyás lehet a magasított fogójú tál a 23-as objektum betöltéséből (Pl. 23: 7). Fogós edények elterjedtek a szarmata barbarikumban és megjelennek a hunkorban is.<sup>97</sup> A házak négy sarkában megjelenő cölöplyukas háztípus ismert a korábbi későszarmata–hunkori település területről, például Tápé–Szentégla-égető<sup>98</sup>, Solt–Palé<sup>99</sup>. A rövidebb oldalon 1-1 cölöplyukas ház ismert a szarmata területről, például Doboz–Homokgödri tábláról<sup>100</sup>, illetve a Budapest–Péceli úti telep legtöbb háza ilyen típusú<sup>101</sup>. A rövidebb oldalon 3-3 cölöplyukas házszerekezet igen ritka, ismerünk ugyan Nyáregyháza<sup>102</sup> melletti szarmata telepről, de szerintünk, figyelembe véve e típusnak a régióbeli korábbi nagy számát<sup>103</sup>, inkább germán hagyománynak tekinthetjük. Minden bizonnyal vandál előzményre<sup>104</sup> tekint vissza a 123-as objektum négyszögletes, kiégett falú kis gödre. Ez egyedi a gepida településterületen, mivel kisebb méretű, mint előzményei, és a császárkorból nem ismerünk ilyen típusú, házpadlóba mélyesztett gödröt. Ez az objektumtípus korban legkésőbb (D1 fázis?) a nagykárolyi gepida teleptől néhány kilométerre, a Csanáros–Vám lelőhelyen feltárt, kétsoros csontfésűvel keltezett, a rövidebb oldalakon 3-3 cölöplyukas ház mellett tűnik fel<sup>105</sup>.

A nagykároly–obáldi nagyfelületű ásatások képet nyújtanak a gepida település belső rendszeréről és a temetővel való térbeli kapcsolatáról. Mint a településelemzésből láthattuk, a település több objektumcsoportból áll, melyek két időszakos, az esővizet és a tavaszi hólét a Mérges-patakba vezető vízfolyás teraszain terültek el. Területi szempontból a temető nem válik el szigorúan a lakott tértől. Egy a terepből kiemelkedő magasabb részen volt, az I-es és a II–III-as objektumcsoportok között, az előbbieket szélétől 80-90 méternyire és az utóbbiak szélétől 120-130 méternyire. Az anyagi kultúra szempontjából az általunk vizsgált gepida településterületen megfigyelhető a körte alakú edények, a bepecsételt díszítés, a kiöntőcsöves edények vagy a hólyagos falú edények hiánya. Véleményünk szerint ezen elemek hiánya, melyek megtalálhatóak éppúgy Erdélyben, mint az Alföldön nem kronológiai különbség, hanem inkább földrajzi sajátosság. A kutatás jelenlegi állása a nyírségi, Ér-völgyi és a Berettyó-völgyi településeknél vagy temetőknél igen szegényes, ezért a jelen kötetben közzétett ásatási eredmények nagyban hozzájárulnak a térség gepida régészeti képének gazdagításához. Igen fontos jövőbeni feladat a nagykároly–bobáldi temető ásatásának a folytatása a teljeskörű feltárássig. Nem kizárt, hogy a régészeti információ mennyiségi és minőségi növekedése után körvonalazódik majd egy új gepida területi csoport. A jelen információk alapján megállapíthatjuk, hogy a nagykárolyi gepida település és temető inkább az alföldi gepida területtel mutat párhuzamot és úgy véljük, hogy nem folytatódik a Kárpát-medencei avar foglалás (567/68) után.

<sup>93</sup> STANCIU 2011, 51.

<sup>94</sup> A szerző 2012-es közöletlen ásatása.

<sup>95</sup> STANCIU 2011, 50, Tab. 1.

<sup>96</sup> B. TÓTH 2006, 118.

<sup>97</sup> VADAY 1989, 157–160.

<sup>98</sup> VÖRÖS 1991–92, 27.

<sup>99</sup> PÁRDUCZ 1938, 97, Abb. 4.

<sup>100</sup> MEDGYESI 1989, 94, 1. Tábla.

<sup>101</sup> KOROM 2006, 184.

<sup>102</sup> DINNYÉS 1997, 372, 1 kép, 16/7.

<sup>103</sup> GINDELE/ISTVÁNOVITS 2009, 13–14.

<sup>104</sup> GINDELE/ISTVÁNOVITS 2009, 15.

<sup>105</sup> GINDELE 2010, 93.

# Anthropological analysis of the skeletal sample from Carei

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## 1. Introduction

The skeletal sample consists of 19 individuals. In one case (Grave CX 41) we identified bones from another individual (Cx 41/2), which were commingled with the bones of the main deceased. In a second case (Grave CX 44), the bones from a another deceased were identified during archaeological excavations in the filling of the robbery pit (Cx 44U). The sample displays an average degree of preservation. At first, we will enumerate the methods used in the course of our analysis, followed by a detailed description of each individual. Secondly, the anthropological and paleopathological findings are discussed.

## 2. Materials and methods

The anthropological analysis was carried out at the Molecular Biology Center (Cluj-Napoca). The skeletal material was washed, dried and analysed macroscopically or with a lamp and magnifiers. Measurements were recorded using a digital spreading calliper.

Adult age at death was estimated by looking at the morphology of the sternal rib ends<sup>1</sup>, pubic symphysis<sup>2</sup> and auricular surface<sup>3</sup>. Dental wear and degree of cranial sutures closure were also taken into consideration<sup>4</sup>. For non-adult individuals, age at death was approximated based on dental eruption, measurements of the long bones and degree of epiphyseal fusion<sup>5</sup>. In cases in which none of the above-mentioned diagnostic elements was available, we made a rough approximation of the age at death (the “General” category in the chart below) based on the general morphology of the bones, which helped us differentiate between adult and sub-adult individuals. In order to be able to include these individuals in our demographic analysis, we used the age of 40 years as being representative for the Adult category.

<sup>1</sup> IŞCAN *et alii* 1984.

<sup>2</sup> BUIKSTRA & UBELAKER 1994; STECKEL *et alii* 2011; MEINDL *et alii* 1985.

<sup>3</sup> BUIKSTRA & UBELAKER 1994; STECKEL *et alii* 2011;

<sup>4</sup> WHITE *et alii* 2012.

<sup>5</sup> SCHAEFER *et alii* 2009.



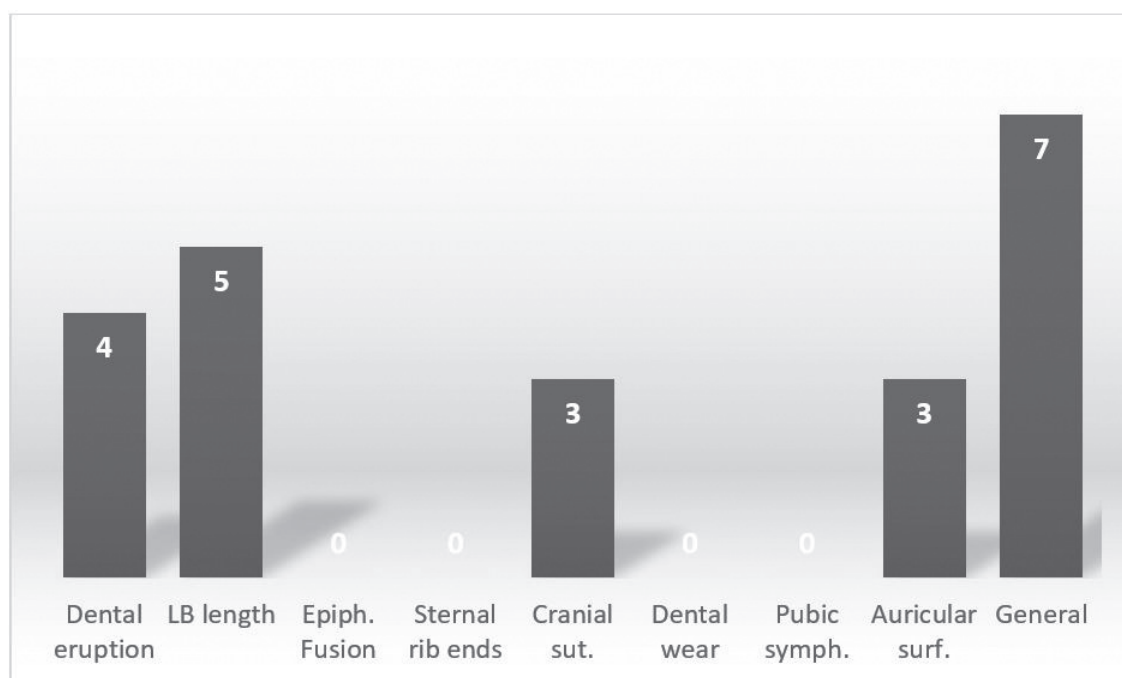


Fig. 1. Chart showing the skeletal elements used for approximating age at death and the number of individuals for which each skeletal element was used.

The sex of the individuals was determined using cranial (nuchal crest, petrous pyramid, supraorbital margin, glabella, mental eminence) and pelvic (subpubic concavity, subpubic angle, ischiopubic ramus, ventral arch, the great sciatic notch) morphology<sup>6</sup>. Stature was calculated using the formulae derived by Bach (1965) and Breitingner (1937)<sup>7</sup>.

Pathological changes were analysed following the guidelines from Ortner<sup>8</sup>, Steckel *et alii*<sup>9</sup>, Buikstra and Ubelaker<sup>10</sup>, Aufderheide and Rodriguez-Martin<sup>11</sup>, and Waldron<sup>12</sup>. In the course of the analysis, all the skeletons were screened for the presence of degenerative joint disease, periosteal reactions, porosity specific for *cribra orbitalia* and porotic hyperostosis, and Schmorl's nodes. With regard to osteoarthritis, we observed the following skeletal elements: temporomandibular joint, glenoid cavity, proximal and distal humerus, proximal and distal radius, proximal and distal ulna, the bones of the hands, acetabular cavity, proximal and distal femur, proximal and distal tibia, proximal and distal fibula, the bones of the feet, and the vertebrae (the cervical, thoracic, and lumbar segments). For the identification of periosteal reactions, we observed the following long bones: clavicle, humerus, radius, ulna, femur, tibia and fibula.

Dental inventory and pathology was done using the protocols proposed by Buikstra and Ubelaker<sup>13</sup> and Steckel *et alii*<sup>14</sup>. In this paper, we used the dental terminology described by White and colleagues<sup>15</sup> for tooth identification. Trauma and fractures were analysed using the methods described by Lovell<sup>16</sup> and Buikstra and Ubelaker<sup>17</sup>.

<sup>6</sup> BUIKSTRA & UBELAKER 1994.

<sup>7</sup> VERCELLOTTI *et alii* 2009, 138.

<sup>8</sup> ORTNER 2003.

<sup>9</sup> STECKEL *et alii* 2011.

<sup>10</sup> BUIKSTRA & UBELAKER 1994.

<sup>11</sup> AUFDERHEIDE & RODRIGUEZ-MARTIN 1998.

<sup>12</sup> WALDRON 2009.

<sup>13</sup> BUIKSTRA & UBELAKER 1994.

<sup>14</sup> STECKEL *et alii* 2011.

<sup>15</sup> WHITE *et alii* 2012, 103.

<sup>16</sup> LOVELL 1997.

<sup>17</sup> BUIKSTRA & UBELAKER 1994.



### 3. Results

#### *Grave Cx 33*

The average conservation degree is 22%. The skeleton is represented by fragments from the vertebrae, clavicle, humerus, radius, ulna, *os coxae*, femur, tibia, fibula, and the bones of the feet. Based on the length of the long bones, age at death was estimated between 11 and 12 years. Given the age at death, we did not attempt to determine the sex of the individual. No teeth or maxillary or mandibular fragments were preserved, therefore we could not examine the presence of dental disease. Neither of the available osseous fragments displayed degenerative changes. Eleven diaphyseal fragments were examined for the presence of periostitis, but no pathological changes were observed. Moreover, no changes indicative of *anaemia*, rickets or scurvy were identified.

#### *Grave Cx 34*

The skeleton is better represented, with an average conservation degree of 67%. Almost all the bones of the skeleton are represented, either by intact elements or by fragments. Based on the degree of cranial suture closure and the morphology of the auricular surface, age at death was estimated between 35 and 39.4 years. Sex determination was carried out on the diagnostic elements of the skull and the result is probably male.

A number of 19 permanent teeth were identified. Of these, three teeth were affected by caries: LM<sub>2</sub> occlusal caries, RM<sub>2</sub> interproximal caries, LP<sup>2</sup> interproximal caries. Moreover, the individual lost during lifetime four teeth (LM<sub>1</sub>, LM<sub>2</sub>, LI<sub>1</sub>, RM<sub>1</sub>) and we identified four abscesses (RM<sub>2</sub>, RI<sup>2</sup>, RC<sup>1</sup>, RP<sup>1</sup>). Slight to moderate dental calculus was seen on both maxillary and mandibular teeth. All the teeth were considerably affected by dental wear. Linear enamel hypoplasia was not identified.

On the frontal maxillary teeth we could see unspecific defects, possibly associated with an activity performed by the individual during lifetime. The RI<sup>1</sup>, LC<sup>1</sup>, LP<sup>1</sup> displayed enamel chipping on the labial and interproximal surfaces, while the RI<sup>2</sup> and RC<sup>1</sup> were completely worn, with no enamel left. LI<sup>1</sup> and LI<sup>2</sup> were lost post-mortem.



Fig. 2. Grave Cx 34: maxillary teeth displaying enamel chipping dental wear.

Out of 29 joint elements, which were available for observation, 16 displayed degenerative changes. Most of the affected joints were found in the upper body, with the left and right side similarly affected. Moderate osteoarthritis was also seen on the acetabulum and lumbar vertebrae. We were able to examine 14 diaphyseal fragments, of which none displayed periosteal inflammation.



Fig. 3. Grave Cx 34: spondylolysis on the left *pars interarticularis* of the 5th lumbar vertebra.

No signs of *cribra orbitalia* or porotic hyperostosis were seen on the elements of the skull. The fifth lumbar vertebra is affected by spondylolysis, which is a stress fracture seen on the *pars interarticularis* of the vertebral arch<sup>18</sup>. On the distal joint of the left tibia we could see a degenerative lesion. Moreover, on the diaphysis of the left ulna we identified gnawing marks, produced probably by a rodent.

#### **Grave Cx 35/1**

The skeleton has a low to moderate degree of conservation, 29%, preserving the skull and fragments from the radius, ulna, femur, tibia and humerus. Based on the degree of cranial suture closure, age at death was estimated between 35 and 49 years. Sex was determined based on the diagnostic elements of the skull and the result is Male.

A total number of 29 permanent teeth were preserved. Ante mortem tooth loss, dental abscesses, dental caries, dental calculus or periodontitis were not identified. Slight dental wear was seen on the molars. No hypoplastic defects were seen on the enamel.

Only two joint elements were available for observation and of these, one, the right temporo-mandibular joint, displayed slight degenerative changes. Moreover, out of 11 preserved diaphyseal elements, none showed signs of periosteal inflammation. No signs of *cribra orbitalia* or porotic hyperostosis were seen on the elements of the skull.

<sup>18</sup> ORTNER 2003, 147.

#### ***Grave Cx 35/2***

The skeleton has a low degree of conservation, 10%, preserving fragments from the skull, ribs, femur and tibia. Age at death was estimated based on the length of the long bones to be between 7 and 8 years. As this is a subadult individual, we did not attempt to determine the sex of the individual. We identified three deciduous, four permanent teeth which were erupted at the time of death and six permanent not erupted teeth. No dental pathologies were identified. The deciduous teeth showed slight dental wear. None of the available teeth displayed hypoplastic defects on the enamel. No joint elements were preserved and therefore we could not assess the presence of degenerative joint disease.

A series of osseous elements were affected by periosteal inflammation: the orbital roofs, the right greater wing of the sphenoid, and both femoral necks.

#### ***Grave Cx 36***

The skeleton is moderately preserved, with an average conservation degree of 57%. It is represented by fragments from the ribs, clavicle, scapula, humerus, radius, ulna, *os coxae*, femur, tibia, and fibula. Age at death was approximated based on the morphology of the auricular surface between 40 and 44 years. Moreover, based on the morphology of the sciatic notch and auricular sulcus, the individual is possibly a female. No teeth were preserved.

Out of 24 joint elements, nine were affected by degenerative changes. The most affected section was the right upper body, with moderate degenerative changes seen on the scapular joint, elbow and wrist. Periosteal inflammation was seen on the right femoral diaphysis and left tibial diaphysis.

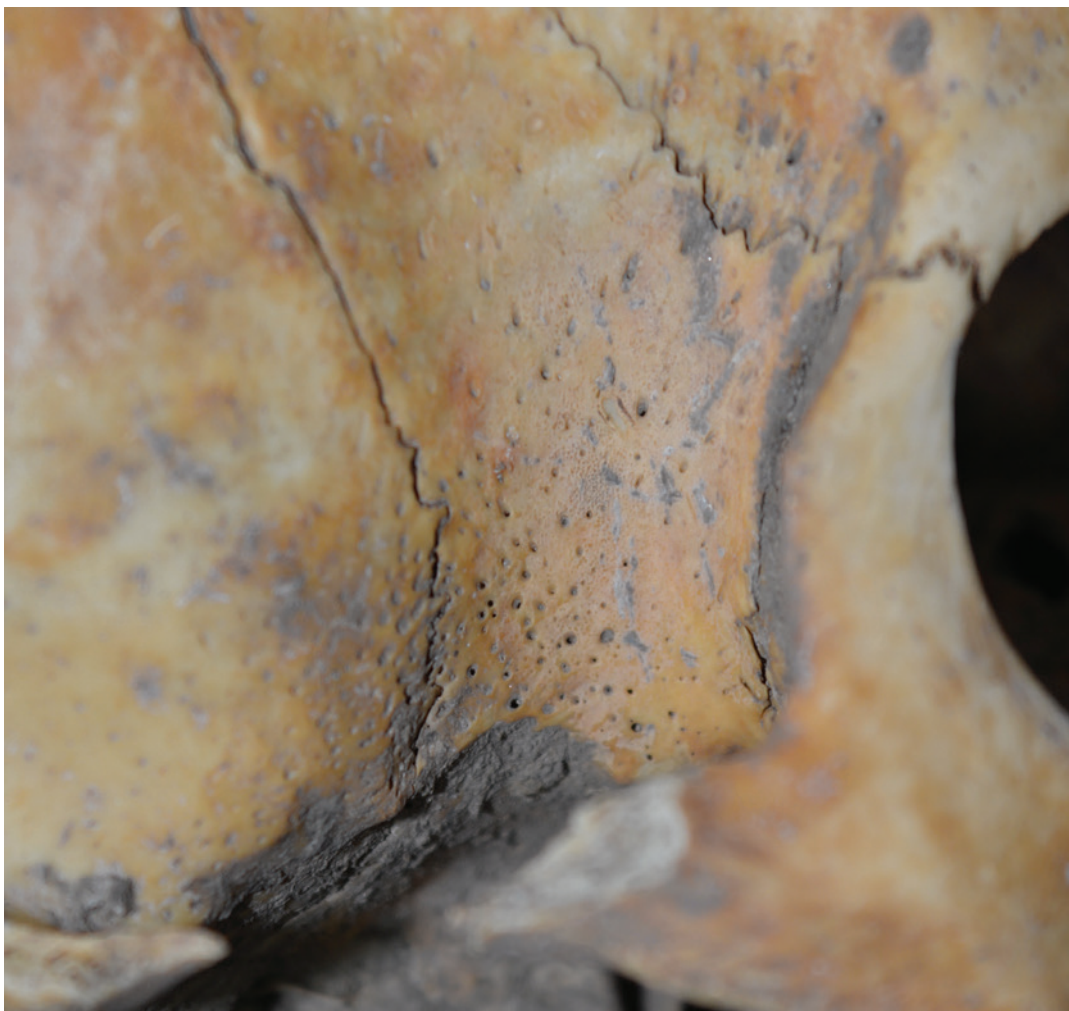


Fig. 4. Grave Cx 35\_2: Porosity on the sphenoid bone.



### **Grave Cx 39**

The skeleton is well preserved, with an average conservation degree of 77%. The skull is missing. Age at death was approximated based on the morphology of the auricular surface between 25 and 34 years. Also based on the morphology of the sciatic notch, the individual was possibly a male. No teeth were recovered.

Out of 30 joint elements available for analysis, we identified moderate degenerative changes only on the thoracic and lumbar vertebrae. Schmorl's nodes were also identified on the vertebrae. Fourteen diaphyses were preserved. Of these, four (both femora and tibiae) displayed moderate periosteal inflammation. *Cribra orbitalia* or porotic hyperostosis were not identified.



Fig. 5. Cx 39. Periosteal inflammation on the lateral diaphysis of the right tibia.

### **Grave Cx 40**

The skeleton is poorly preserved, with an average conservation degree of just 4%. It is represented by small fragments from the skull, scapula and right humerus. No diagnostic elements were available for the estimation of age of death, but based on the general morphology of the bones, we can say that it was an adult individual. However, the glabellar and supraorbital portions of the facial skeleton were preserved. Given the appearance of these elements, the individual is possibly a male.

The individual lost during lifetime one tooth (LM<sup>1</sup>). Thirteen permanent teeth were preserved, of which seven displayed dental caries and two displayed dental abscesses. None of the available teeth were affected by dental calculus, but moderate periodontitis was seen on both the maxillary and mandibular bodies. Slight dental wear could be seen on all molars. None of the available teeth displayed hypoplastic enamel defects.

No pathological changes associated with metabolic disease, degenerative joint disease or periosteal inflammation were observed.

### ***Grave Cx 41/1***

Skeletal inventory revealed the presence of two individuals. We were able to differentiate between the commingled bones based on bone duplicates and general appearance of the bones (colour, preservation).

The first individual shows a moderate degree of conservation (51%), preserving fragments from all the skeletal segments. However, no diagnostic element for age at death estimation and sex determination was available. Based on the general appearance of the bones, we can say that the individual was a middle adult.

A total number of nine permanent teeth were recovered. On the mandibular body we could see that the individual lost two teeth during lifetime. No dental caries or abscesses were identified. Moderate dental calculus was seen on both the maxillary and mandibular teeth. The left mandibular molars displayed advanced periodontitis and dental wear.

Twenty joint elements were assessed for the presence of degenerative changes. Of these, four were slightly affected (the right wrist, the lumbar vertebrae, and the left shoulder joint). No periosteal inflammation was identified on the 11 available diaphyses.

### ***Grave Cx 41/2***

The second individual is represented only by fragments from the left radius, bones of the hand, right *os coxae*, femoral head and patella. The morphology of the greater sciatic notch indicates that the individual is possibly a male. The auricular surface is poorly preserved and we were not able to estimate age at death based on its appearance. However, based on the general appearance of the bones, the individual is an adult. On the medial surface of the ilium (on the iliac fossa and iliac blade) we could see traces of iron, probably resulting from an iron object.

### ***Grave Cx 42***

As in the case of the deceased from Cx 40, the skeleton is poorly preserved, with an average conservation degree of just 4%. The only available fragments come from the mandibular body, humerus, femur and tibia. Based on dental development, the individual is a subadult with an age at death between 9 and 10 years. We did not attempt to determine the sex of the individual. We identified three deciduous and four permanent erupted teeth and two permanent teeth, which were not erupted at the time of death. The right lower permanent (unerupted) canine displayed a dental enamel defect on its labial surface. None of the available joint elements and diaphyseal surfaces displayed pathological changes. On the right humerus we identified a possible post-mortem cut, measuring approximately 25 mm.

### ***Grave Cx 44***

The skeleton displays a moderate degree of conservation (33%), preserving fragments from the clavicle, humerus, radius, ulna, femur, tibia, fibula. No diagnostic element was available for age at death or sex estimation. However, based on the general morphology of the bones, the individual was an adult. Only two permanent teeth were recovered (LI<sup>1</sup> and LI<sup>2</sup>). No dental pathologies were identified on the teeth or facial skeleton.



Fig. 6. Grave Cx 42: post-mortem cut on the right humerus.



Fig. 7. Grave Cx 44. Periosteal inflammation on the left femur.

We were able to analyse five joint elements for the presence of degenerative changes. Of these, three were slightly affected (right and left proximal femur and the the thoracic vertebrae). Periosteal



inflammation was identified on two diaphyseal elements out of 11, which could be observed. The affected elements were the left femur and tibia. The tibia has a swollen aspect and displays a widespread inflammation, which affected particularly the medial surface and to a lesser extent the lateral surface of the bone. The fibula also displays new bone formation, but with a reduced amplitude. On a rib fragment we identified a healed oblique fracture, measuring approximately 17.73 mm. Moreover, the sternum displays a sternal foramen.

***Grave Cx 44U – second individual, identified in the filling of the grave pit***

Bones from a second individual were identified in the filling of the grave pit. The general aspect of the bones confirms the fact that they belong to a different person other than the one described above. The bones belonging to individual Cx 44U display a better conservation degree in what matters the general quality of the osseous tissue. However, the average representation degree is low (11%), as only fragments from the femur, patella, tibia, and calcaneus were recovered. Sex and age at death could not be estimated, but based on the aspect of the bones, the individual was an adult. No teeth were recovered.



Fig. 8. Grave Cx 44U: advanced degenerative changes on the femoral condyles (lateral and posterior view).

The most striking feature is the advanced degenerative changes seen on the joints of the knees. The distal femur (left and right) and proximal tibia show new bone formation and marginal lipping, bone destruction, and eburnation. Minor periosteal inflammation was seen on both tibiae, while the femur was slightly more affected.

***Grave Cx 46***

The skeleton is poorly preserved (15%). Only fragments from the vertebrae, clavicle, os coxae, patella, ribs, humerus, radius and ulna were recovered. Age at death could not be estimated due to lack of diagnostic elements. However, based on the general aspect of the bones, the individual was an adult. Moreover, based on the morphology of the sciatic notch and auricular sulcus, the individual is possibly a male. Only one permanent tooth was recovered. The only dental pathology we identified was moderate dental calculus. Degenerative changes were seen particularly on the vertebrae, but also slightly on the right acetabulum. Of the three vertebral segments, the cervical vertebrae were the most affected. Only two diaphyseal elements were available for analysis; no periosteal inflammation was seen on these.

### **Grave Cx 51**

The skeleton displays a moderate degree of preservation (49%), preserving fragments from the skull, vertebrae, ribs, clavicle, and bones of the arm and legs. Age at death was estimated to 48.8 years (with a standard deviation of 10.5 years<sup>19</sup>) based on the degree of cranial suture closure. Sex determination was carried out on the elements of the skull and the result is male. A total number of 29 permanent teeth were recovered. None of these show dental caries, but moderate dental calculus was identifiable on both the maxillary and mandibular teeth (slightly more pronounced on the maxillary teeth). Moderate periodontitis affected both the maxillary and mandibular teeth. Advanced dental wear was seen on all the molars. One tooth (RM<sub>1</sub>) was lost antemortem. Out of the 29 teeth, 11 displayed moderate or advanced enamel defects on the tooth surface.



Fig. 9. Grave Cx 51: Linear enamel hypoplasia seen on the maxillary (A) and mandibular(B) teeth.

Degenerative joint disease was seen on six out of 18 available joint elements. The radius, ulna and femur were the affected elements; the upper body was similarly affected on both sides, while the lower body is represented only by joint elements from the left side. No periosteal inflammation was seen. The individual displayed abnormal porosity on the temporal bone (porotic hyperostosis). A particular feature were the strongly developed muscle insertions on the clavicle and the humerus.

### **Grave Cx 85**

The individual is represented only by a fragment of calotte and left femoral diaphysis. Based on the length of the femoral fragment, age at death was estimated between 1 and 1.5 years. No teeth were recovered. No pathological changes were seen on the available bones.

<sup>19</sup> WHITE *et alii* 2012, p. 392.



### **Grave Cx 103**

Just like in the case described above, the skeleton belongs to a subadult and has a poor degree of preservation. The only recovered osseous elements were fragments from the skull and facial skeleton, femur, tibia and fibula from the right side, and femur and tibia from the left side. Based on dental development stages and the length of long bones, age at death was estimated between 0.5 and 1.5 years. A total number of 12 teeth were recovered, including 3 deciduous erupted teeth, 8 deciduous unerupted teeth, and 1 permanent unerupted tooth. No pathological changes were seen on the teeth. The left femoral and tibial diaphyses displayed moderate periosteal inflammation. Pathological new bone formation was seen on the orbital roofs, endocranial surface of the temporal and frontal bones, mandibular body, palatine process of the maxilla and sphenoid bone.



Fig. 10. Grave Cx 103: porosity and new bone formation on the temporal (ectocranial) (left) and frontal (endocranial) (right) bones.

### **Grave Cx 111**

The skeleton is poorly preserved (27%), displaying fragments from the skull, vertebrae, ribs, bones of the arms, *os coxae* and bones of the legs. Based on dental development stages, age at death was estimated at around 15 years. Sex was not determined. A total number of 23 permanent teeth and 2 permanent unerupted teeth were recovered. Slight dental calculus was seen on the mandibular teeth. Pronounced dental enamel defects were seen on the tooth surface of 20 teeth. No periosteal inflammation or degenerative changes were identified. However, the skull and facial skeleton display advanced pathological periosteal inflammation, with different stages of healing based on the presence of woven bone. The affected osseous elements are the orbital roofs (*cribra orbitalia*), temporal bone, sphenoid bone and mandibular body.



Fig. 11. Grave Cx. 111. Linear enamel hypoplasia on the left mandibular teeth.

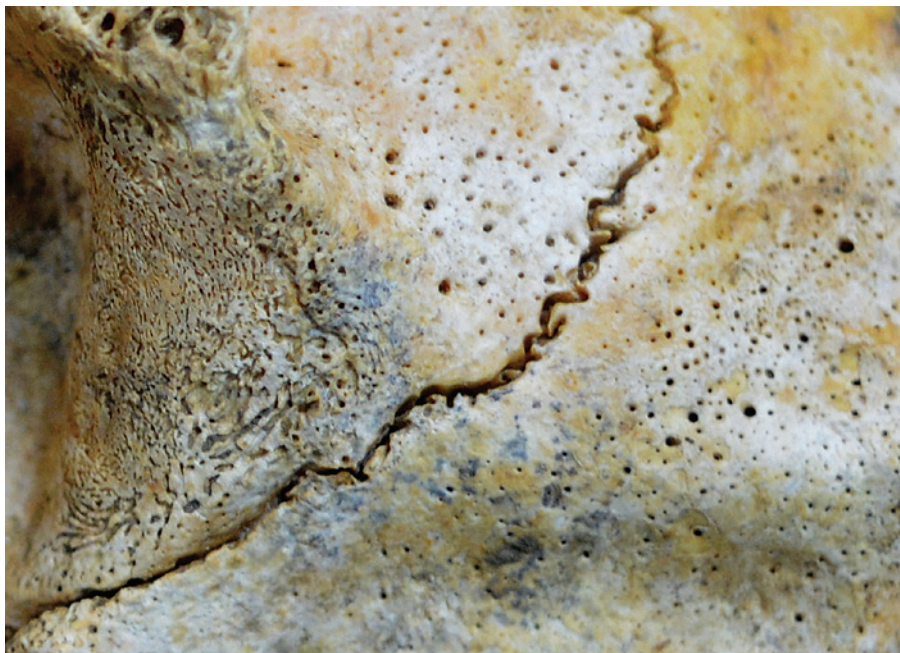


Fig. 12. Grave Cx. 111: new bone formation and porosity on the temporal and sphenoid bones.

#### ***Grave Cx 112***

The skeleton belongs to a subadult individual and is poorly preserved, displaying only a few fragments from the humerus, a metacarpal and some vertebrae. Based on the size of the humeral fragment, the individual was a child with an age at death of approximately 5 years. Among the subadult osseous fragments, we identified a permanent maxillary premolar from an adult.

#### ***Grave Cx 153***

The only skeletal elements which were recovered are fragments from the right tibia, left femur and left tibia. Based on the general aspect of the bones, the individual is a young adult. Sex could not be determined. No teeth were recovered. None of the available bones displayed periosteal changes.

## 4. Discussion

The sample is composed of 19 individuals, of which 6 individuals were under the age of 14 years at the time of death. The average age at death of the sample is 27 years. Out of the 19 individuals, only one was identified as possibly female. For 4 individuals with an age at death over 20 years, sex could not be determined. Sub-adults, with an age at death below 20 years, represent 37% (N = 7) of the sample, while male individuals account for 37% (N = 7), female individuals of 5% (N = 1), and individuals with indeterminate sex account for 21% (N = 4) of the total sample.

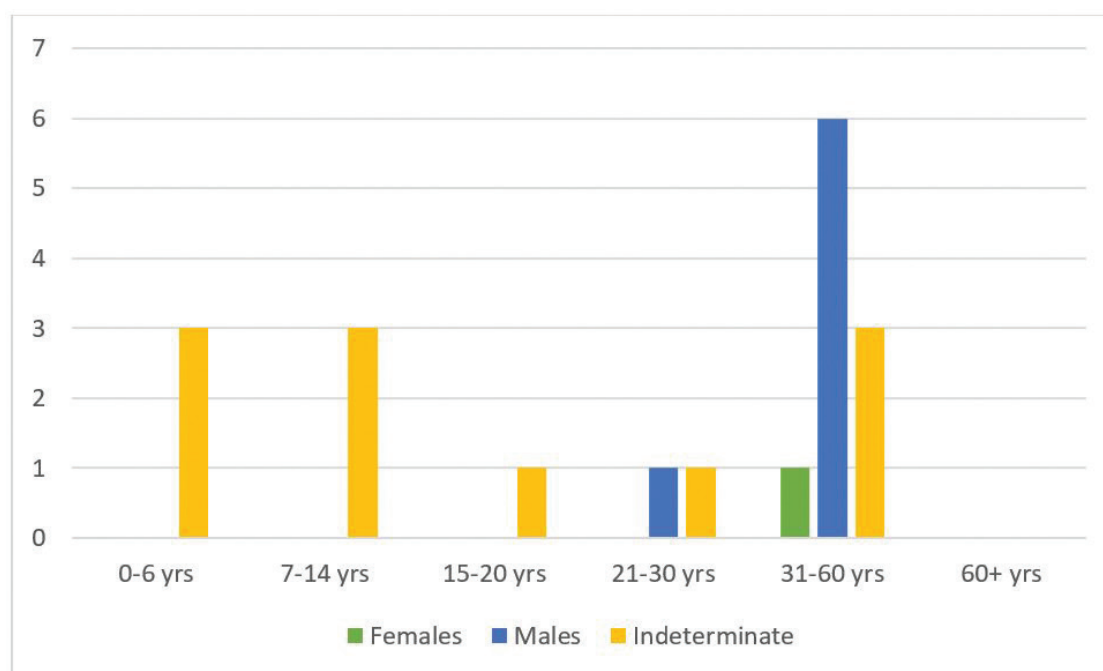


Fig. 13. Age at death distribution of the sample.

Stature and the presence of *cribra orbitalia*, porotic hyperostosis and enamel hypoplasia can be used as indicators for the health status of the individuals in the course of their childhood<sup>20</sup>. Four of the 19 individuals displayed pathological changes associated with these health status indicators: individual Cx103, individual Cx 111, individual Cx 51 and individual Cx35/2. The majority of the affected individuals were children, only one was a male adult (Cx 51). This individual was able to overcome any physical insults experienced during childhood and survived through adulthood. In the case of the sub-adult individuals, several other pathological changes are illustrative of nutritional deprivation.

Individual Cx35/2 displayed porotic lesions on the orbital roofs, the greater wing of the sphenoid and both femoral necks. The presence of this type of lesions on these particular skeletal sites is indicative of scurvy<sup>21</sup>, which can have a fatal outcome in the case of children.

Individual Cx103, a child with an age at death between 0.5 and 2 years, displays periosteal inflammation on the tibial and femoral diaphyses and pathological new bone formation on the orbital roofs, endocranial surface of the temporal and frontal bones, mandibular body, palatine process of the maxilla and sphenoid bone. These pathological changes are indicative for an inflammatory process, which, based on the morphology of the lesions, was active at the time of death. As in the case of individual Cx35/2, the location of the pathological features is suggestive of scurvy, but other disease processes like *anaemia* or an infection are also possible.

<sup>20</sup> LEWIS, ROBERTS 1997.

<sup>21</sup> BRICKLEY, IVES 2006, 169-170.



ID	SEX	AGE	STATURE (CM)	CO	PH	LEH
Carei_85	Sub	1.3		Nobs	No	Nobs
Carei_103	Sub	1		Yes	No	No
Carei_111	Sub	15		Yes	Yes	Yes
Carei_51	M	48.8		No	Yes	Yes
Carei_42	Sub	9.5		Nobs	Nobs	Yes
Carei_33	Sub	11.5		Nobs	Nobs	Nobs
Carei_44	IND	40		Nobs	Nobs	No
Carei_44U	IND	40		Nobs	Nobs	Nobs
Carei_35/2	Sub	7.5		Yes	No	No
Carei_41/1	IND	40	176.56	Nobs	Nobs	No
Carei_41/2	ProM	40		Nobs	Nobs	Nobs
Carei_34	ProM	37	168.33	No	No	No
Carei_35/1	M	39.4	170.8	No	No	No
Carei_46	M	40		Nobs	Nobs	Nobs
Carei_112	Sub	4.5		Nobs	Nobs	Nobs
Carei_40	PosM	40		No	No	No
Carei_39	PosM	30	169.15	Nobs	Nobs	Nobs
Carei_36	PosF	42	162.75	Nobs	Nobs	Nobs
Carei_153	IND	25		Nobs	Nobs	Nobs

Fig. 14. Health status indicators for the analysed skeletal sample (CO = *cribra orbitalia*; PH = porotic hyperostosis; LEH = linear enamel hypoplasia; No = not present; Nobs = could not be observed due to lack of skeletal material; Yes = present).

Individual Cx111, a child with an age at death around 15 years, displays advanced linear enamel defects on the labial surface of 20 teeth. By using the method developed by Hassett<sup>22</sup> for the timing of dental enamel defects, which takes into consideration the location of the defect on the labial surface, we can approximate that the growth disruption took place when the individual was approximately 4 to 5 years of age. Furthermore, the individual displays new bone formation and inflammatory pitting on the orbital roofs, temporal bone, sphenoid bone and mandibular body, which are indicative of scurvy.

Out of the 128 long bones which were available for analysis for the entire sample, 19 osseous elements, belonging to 5 individuals, displayed periosteal inflammation on the diaphysis. All the affected bones belong to the lower part of the body, with the left side being more affected than the right.

Degenerative joint disease was seen in 58% of the adult population. We were able to analyse a total number of 139 joint elements, out of which 46 were affected by degenerative changes. The joints of the upper body were the most affected, particularly the right side.

## 5. Conclusion

The human skeletal material from Carei provides data with regard to the life style and health status of 19 individuals. One of the main characteristics of the sample is the presence of pathological stress indicators in sub-adults. These indicators are particularly suggestive of scurvy, which is a deficiency of ascorbic acid (Vitamin C) and in chronic cases, can lead to micro-hemorrhages due to fragile blood

<sup>22</sup> HASSETT 2014, 468.

vessels and impaired osteoblastic activity or bone formation. This deficiency in Vitamin C occurs due to lack of fruit and vegetables in an individual's diet<sup>23</sup>. Therefore, the presence of scurvy in the sub-adult population from Carei could suggest the lack of fresh fruit and vegetables in the sub-adult diet. On the other side, the adult population is characterized from a pathological point of view by degenerative joint disease. Of the adult population, 58% displayed degenerative changes. Moreover, 33% of the adult individuals displayed periosteal inflammation, which is indicative of an infection occurring in the body. Another feature of the adult population is the small (N =1) number of female individuals.

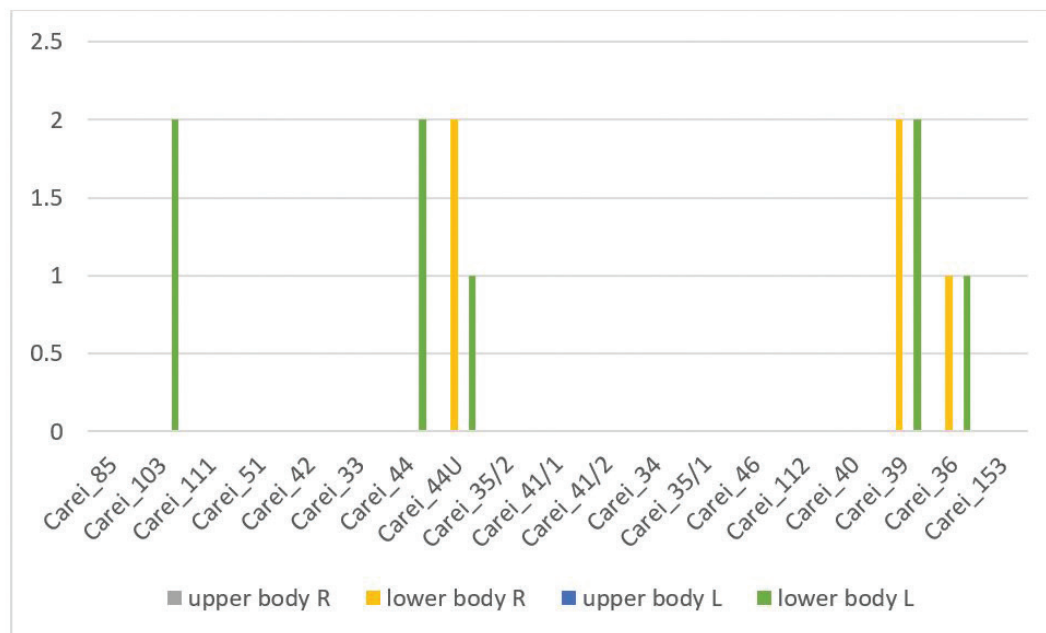


Fig. 15. Distribution of periosteal inflammation.

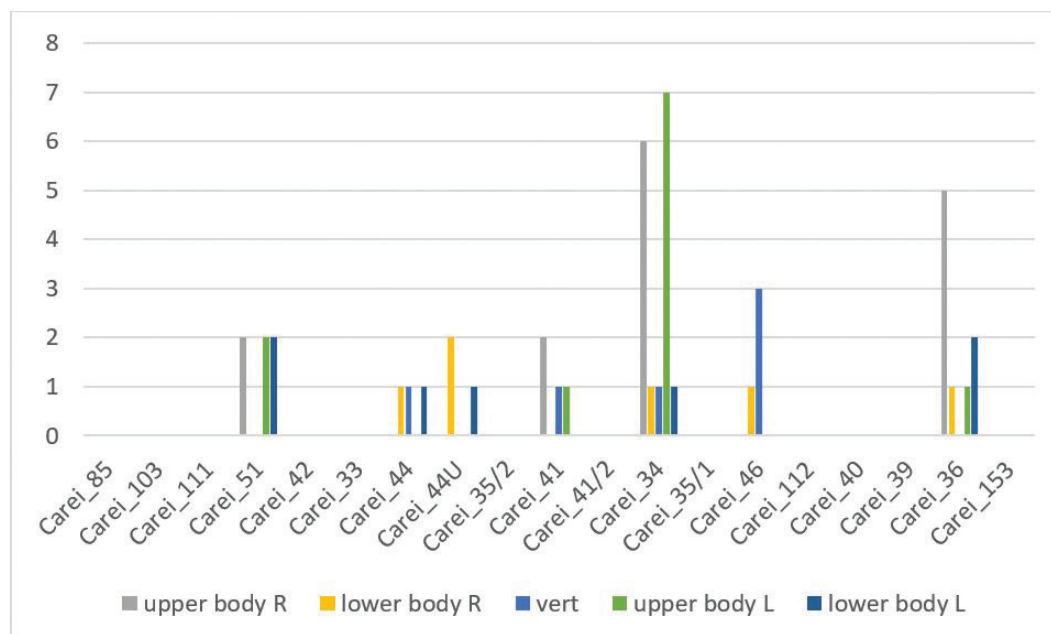


Fig. 16. Distribution of degenerative joint disease.

<sup>23</sup> BRICKLEY, IVES 2006, 163.

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## Data on animal management in the Gepid settlement of Carei-Bobald, site. 1 (Satu Mare county)

Georgeta El Susi

The city of Carei is located in the western part of Satu-Mare County, in the Carei Plain, a region of 120-163 m elevation, in a featureless flatland modelled by river erosion. In the past, the 400 km<sup>2</sup> surface Ecedea marshland extended to the north-east of the city's boundary. The area, especially the higher stream terraces, is very rich in archaeological remains dated from the Neolithic to the late Middle Ages. The faunal sample collected from the Gepid settlement (5th – 6th c. AD)<sup>1</sup> of Carei-Bobald sums up 550 fragments. The bones were sampled from many houses (features 17-30; 95-143; 145), two household appendages (features 90; 93) and a storage pit (feature 144). Although the material is limited, we believed its publishing opportune, since there are no faunal analyses for this chronological period, especially in Transylvania's case. The 550 animal bones come exclusively from mammals, amongst, 365 being completely determined. 107 fragments are rib flakes and long bone diaphyses, undeterminable. Approximately 78 pieces (14.2%) resulted from deer antler working. These are beams and tines exhibiting cutting traces, of which samples were taken (Fig. 7). Such working waste or pieces in intermediary processing stages were identified in almost all houses (Tab. 1). Most come from feature 116 (46 pieces) and feature 143 (11 pieces). Very likely, the first also functioned as a workshop where deer antler was processed. From house 123 comes a horse metacarpal, with polished anterior side for obtaining patina (Fig. 5b). From features 24 and 29 were also sampled two distal portions of a horse metacarpal, with worked trochlea. Likely, the fragments come from other damaged patinas or wasters. From house 141 was sampled a horse metatarsal (Fig. 5/a) displaying carving traces on the trochlea and cutting prints below the proximal epiphysis. Likely, these actions are connected to bone working. Thus, horse bones and deer antlers represented the raw material for processing. We mention that bones of other species do not exhibit working traces. 26 bones show firing traces, in the form of black-reddish stains; most come from houses 17 and 123. Dog bites were noted only on a proximal phalanx, a non-fused distal humerus and a barely fused proximal tibia, all of cattle. Cutting traces were also identified on distal extremities of a boar humerus and deer made in order to slit the forelimb at the level of the radio-humeral articulation. In terms of the bone quantities recovered from houses, feature 17 supplied the largest lot, 183 bones (33.27%). Other houses record below 100 fragments. Amongst, we mentioned feature 123 with 85 bones (15.45%) and feature 116 with 56 fragments (10.18%). On the other hand, there are houses containing between 1-6 bones (features 23, 24, 139, 141).

Based on the nutritional value of body parts from where the faunal remains come, these were grouped in four classes: A - skull; B - spine; C - belts and upper limb parts; D – feet. In cattle, skull remains are few (16.27%), prevailing those from parts rich in meat (39.2%) and limb extremities (34.4%). The low ratio of spinal elements (10%) is also due to the large number of ribs included

<sup>1</sup> GINDELE *et al.* 2013, 215.

among indeterminables (Tab. 2; Fig. 1). In horses, class D prevails, with a percentage of 47.3%, which suggests that horse carcasses, namely distal parts and especially metapodials were processed in the house perimeter. Skull elements, particularly isolate teeth, represent approximately 23%; instead, the highly meaty limb parts total only 16.2%, while the spine is 13.5%. According to such distribution, horse carcasses were processed in another sector, with mainly metapodials reaching the investigated area, for working. It seems that bones originating in parts with high nutritional value (B, C) reached somewhere else. In sheep, bones in class C (42.5%) prevail, skull remains summing up 28.5%, while spinal and distal leg extremities count each 14.3%. It seems that metapodials, talus bones of small ruminants were not worked. Swine bones come in a proportion of 51.5% from the head skeleton and 30.3% from the ham. The spine represents only 18.2%. We did not identify foot remains. It is possible that swine were also slaughtered elsewhere, house areas being reached only by parts with nutritional value and likely the heads. The distribution of deer bones is similar to that of cattle. Meat-rich limb parts represent 50%, leg extremities approximately 31.2% and heads 18.75%. It seems that after hunting, the animals were brought whole in the settlement where they were slaughtered. Many antler remains used as raw material come, not only from collected antlers, but also from the hunted examples (especially males). This explains the large number of cephalic remains (teeth) sampled from houses.

Of the 365 determined bones, 347 (95.06%) were ascribed to domestic species and only 18 (4.94%) to hunted species. Of the hunted mammals, deer counts with 16 remains (4.38%) and boar with two remains (0.56%). As number of remains (NISP), bovids count 57.26%, followed by equids (20.27%), swine (9.04%), sheep/goats (7.67%) and dog (0.82%). In terms of minimal number of individuals (MNI), percentages preserve (Tab. 1, Fig. 2). Thus cattle dominate by 41.18%, followed by equids (21.57%), small ruminants (13.72%), swine (11.76%) and dog (3.92%).

To **bovids** belong 209 bones, mainly from the appendicular skeleton. To the cephalic skeleton belong two sizeable cornual processes and several horn walls. One of the horns comes from a female. Its base sizes are small (BA/BB/C- 47/37/140 mm), being strongly curved arched anteriorly. From a subadult bull comes a horn fragment with a large, 62 mm base diameter. When mature, it might have reached very large sizes. The small number of horns suggests that cattle carcasses were processed elsewhere within the site, house areas being reached only by parts of high nutritional value. We do not exclude the processing of bovid horns either.

In females, a size variation of 104.9-114.3 cm and an average of 110.7 cm were estimated, while in males, values were of 120.9 cm and 126.6 cm (Matolcsi 1970). Overall, the cattle harnessed in the Gepid settlement had a withers height of 104.9-126.6 cm, with an average of 115.9 cm (n=3) (Tab. 4). Sizing on bone widths evidence predominant average values, with an existing marked sexual dimorphism; for instance, at size level, the difference between male/females is of ca. 10 cm. In fig. 4 are shown the first two bull metacarpals, of large sizes, widened in the distal part. Likely, they come from animals used for pulling. Instead, the female metacarpal is much more gracile. As regards the slaughtering age, of the 21 identified individuals, eight were slaughtered under 2 years of age (38.1%), three between 2-3 years of age (14.28%), nine between 4-9 years of age (42.86%) and one between 9-11 years of age (4.76%). The relation juveniles/ subadults/adults-mature with a value of 38.1/ 14.28/47.62 evidences a few interesting aspects related to cattle harnessing. Practically, none of the slaughtered animals were below 6 months of age, approximately 40% of the flock being slaughtered as juveniles, for meat. It seems that males were mainly slaughtered, given the relatively high metric data, sampled from bones. Noteworthy are the small ratio of subadults and the high percentage (47.6%) of animals harnessed for several years for milk and labour (Tab. 3, Fig. 3).

To **equids** belong 74 fragments coming from 11 examples. In general, the proportion of deceased animals (slaughtered?) up to five years is of 45%, while the rest of 55%, were harnessed for sever-



al years. We mention an exemplar of 7-9 years, one of 10-13 years and two of 11-16 years<sup>2</sup>. Horse meat was likely eaten occasionally, horses being bred for riding and carriage. Possibly, the subadult specimens had suffered of certain diseases (undetectable on bones), since they were slaughtered immature. Worked metapodials come from adults mature. Based on a metacarpal and two metatarsals withers heights of 128.1 cm, 137.4 and 138 cm (May 1985) were estimated. Gracility indices have values of 16.03 (medium), 11.7 (gracile) and 12.1 (half-gracile). The three equid specimens, according to the metapodials, were different in body-build. The first was of small size, "squat", with averagely thick extremities; the other two were of sub-average/ average size, with half-thin extremities. The last two specimens seem more adequate for riding, the first might have been used for multiple purposes. There is no information on size and body build for the Gepid period. A proximal phalanx, recovered from feature 123, presents certain pathological features, consisting in bone tissue proliferation on the posterior side, ossification of collateral ligament insertions due to extensive harnessing and harsh terrain (Fig. 6/b)<sup>3</sup>.

In general, the horses of the migration period in Central Europe and Eastern Europe belonged to a homogenous group, although there was a large size variation. Such broad variation is also due to common interbreeding with local horses from the conquered territories. In size terms, Germanic horses, for instance, rank between those Avar and those from the Hungarian conquest period in terms of metapodial gracility. For instance, the Avar horse had an average 15.15 metacarpal diaphysis index, while that Germanic of 14.9. The average metatarsal index is of 11.7 in that Avar and 11.6 in that Germanic. The build and intersegmental proportions of Avar horses resemble those of the Germanic horse, their size being on average of 136-137 cm; nevertheless, the variation interval is broad, of 130-145 cm<sup>4</sup>. We mention that for horses in the Avar graves from Austria, Slovakia and Hungary, an average size of 135 cm<sup>5</sup> was estimated. The average height of the horses from the Avar cemetery at Budakalasz-Dunapart is of 136.4 cm, and of those at Otok-Gradina (Croatia) of 139 cm (136-144 cm variation)<sup>6</sup>.

Of the 33 **swine** bones, 17 are jaw remains. Only juveniles and subadults were identified on their basis, in 50/ 50% proportion. They were slaughtered as follows: two between 6-8 months, two between 14-20 months, one between 21-23 months and another between 2-3 years (female).

Of the 28 bones of **small ruminants**, nine are of goat, 10 of sheep and nine are not specifically ascribed. Goat bones come from a specimen slaughtered between 6-10 months, one between 14-18 months and two, over three years. Ovid bones belong to a specimen slaughtered between 12-18 months, to one between 24-30 months and another between 5-6 years. The juveniles/ subadults/ adults report is of 42.85/ 14.3/42.85%. Thus, between 3-18 months was slaughtered 43% of the herd, obviously for meat. Slaughters between 18 months and 3.5 years are few (14.3%), similarly to those between 3-6 years (28.55%). Obviously, animals were harnessed for wool and milk. Let us note the large number of goats in the small ruminant herds, also used for milk. Ovids were of small size, relatively gracile. Based on a metacarpal sampled from feature 17, a height of 57.7 cm was estimated (Teichert 1975). The few data obtained for goat bone widths count more than in sheep.

From a **dog** comes a pair of mandibles, collected from feature 123 and a right mandible (un-measurable), from feature 90. The mandible pair exhibits certain pathological aspects. On the left ramus, M<sub>2</sub> is lost, the alveoli being closed. Respective animal was relatively mature, average in size, with M<sub>1</sub>-21 mm long and mandible height of -52 mm. On the right ramus there is an inflammation at carnassials level (M<sub>1</sub>), due to an inflammatory process (Fig. 6/a). In this case, we are dealing with de-

<sup>2</sup> Estimates were made based on teeth height, cf. Levine 1982, 246-250.

<sup>3</sup> MARKOVIĆ *et al.* 2015, 622.

<sup>4</sup> BÖKÖNYI 1974, 267-271.

<sup>5</sup> BARTOSIEWICZ 2010, 4.

<sup>6</sup> VUKIČEVIĆ *et al.* 2017, 76.

generative periodontitis, with changes of alveoli tissue, root exposure and teeth loss<sup>7</sup>. To **deer** belong 16 remains, beside the 78 antler fragments, inserted separately in statistics. From feature 17 come six remains ascribed to a specimen of 24-30 months; from feature 30 come four bones of a 12-18 month old animal and from feature 95, three bones of a 24-30 months specimen. Deer remains were also identified in features 123-124, yet bones do not offer accurate criteria for age group ascribing. Possibly, bones above come from the three animals or from a fourth specimen. To **boar** were ascribed a distal humerus fragment and a mature specimen mandible.

Based on afore presented data, we suggest that the animal economy of the Gepid settlement of Carei was focused on cattle exploitation. Their bones represent 50% of the total analysed material. The goat-sheep, and swine ratio is much reduced, of 7-9%. Equids contribute to a large extent, ranking second in terms of bones, with 20.27%. In MNI terms, inter-specific relations did not suffer significant changes; frequency of swine (11.76%) and sheep-goat (13.72%) slightly increased, owing to the significant number of jaw remains ascribed to them. Cattle rank first, with 41.18%, followed by equids with 21.57%. Game contribution is reduced, of only 5-8%.

In parallel, we also estimated the meat quantity supplied by respective specimens<sup>8</sup> as well as the percentage contribution of each species. In table 5 are inserted the number of individuals per taxon, living weight, according to age classes, slaughtering output and resulted meat and organ quantity, then the percentage of each species. Obviously, the meat quantity directly depends on the number of identified individuals and indirectly on the frequency of body parts, namely teeth remains. In bovids, equids, sheep-goat and deer, the slaughtering output is of only 50%, increasing to 80% with swine and boar. Practically, even the percentage distribution of species compared to the supplied meat quantity confirms the NISP and NMI statistics. Of the estimated 5703 kg, beef totals 57.42% (3275 kg), that of horse 26.3% (1500 kg), swine only 6.31% (360 kg), sheep-goat 2.6% (148 kg), boar 4.21% (240 kg) and deer 3.16% (180 kg). The small ratio of the swine is surprising, although the lowlands of Carei were favourable to their free breeding. We must likely take into consideration the Gepid food specificity and traditions. Neither sheep breeding occurred at large scale. Apparently, goats were chosen for meat. Practically, cattle and equids were the species of major importance in the community. Bovid's supplied meat, dairy and labour. Horses were bred especially for riding, labour and occasionally eating, while their metapodials were worked. Among wild species, deer was mainly hunted, although its ratio is small. Males were preferred, being hunted in the cold season. It seems its density was much diminished in the area. We mention that in the Otomani settlement of Carei-Bobald, deer was only 6%<sup>9</sup> frequent, their area obviously restricting over the course of time. Evidently, shed antlers were also collected for working. Among the materials we identified a fallen antler base. The 46.44% prevalence of bovids is also mentioned for a Gepid sample retrieved from the settlement at Tiszagyenda-Lakhatom, site 14. Sheep-goat have a significant weight, of 21.23%, swine are only 14.07% and equids only 4.18%. Game contribution is also small, amounting to only 7.16%. In the same settlement are mentioned 91 red deer antler waste identified in a Gepid workshop<sup>10</sup>.

The specialization of the Gepid communities in cattle breeding suggests a stable inhabitancy in the respective area. Unfortunately, for Romania there are no information on the fauna from the Gepid sites, the analysis of this sample (small) representing a challenge for the archaeozoologist. Cattle and horse breeding, red deer antler use and horse metapodials for processing may be considered features specific to respective communities, in terms of animals. Hopefully, future archaeozoological research shall significantly enrich existing data.

<sup>7</sup> Coroliuc, Haimovici 2006, 263.

<sup>8</sup> Estimated meat quantity, cf. Vigne 1988, apud Blaise 2009, 736; for deer, Moore et al. 1988, tab. 1, 287.

<sup>9</sup> Personal data.

<sup>10</sup> Bárány, Hajnal 2010, tab. 1, 86.

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**Table 1. Species distribution in pit-houses at Carei**

Features	Cx. 17	Cx. 23	Cx. 24	Cx. 29	Cx. 30	Cx. 90	Cx. 95	Cx. 116	Cx. 123	Cx. 124
Bos taurus	70	2		16	15	20	21	2	39	17
Equus caballus	31	2	1	3	7		8	2	12	5
Ovis/Capra	12			2		5	2	1	3	1
Sus domesticus	12	1		5	1	4		3	3	2
Canis familiaris						1			2	
Domestics	125	5	1	26	23	30	31	8	59	25
Cervus elaphus	6				4		3		2	1
Sus scrofa	1					1				
Wilds	7				4	1	3		2	1
Determined	132	5	1	26	27	31	34	8	61	26
Antlers	7	1				1	1	46	4	
Flakes	44			10		6	4	2	20	13
Total sample	183	6	1	36	27	38	39	56	85	39

continued

FEATURES	Cx. 139	Cx. 141	Cx. 143	Cx. 144	Cx. 145	NISP	%	MNI	%
Bos taurus				2	5	209	57,26	21	41,18
Equus caballus		2			1	74	20,27	11	21,57
Ovis/Capra			1	1		28	7,67	7	13,72
Sus domesticus			1		1	33	9,04	6	11,76
Canis familiaris						3	0,82	2	3,92
Domestics		2	2	3	7	347	95,06	47	92,15
Cervus elaphus						16	4,38	3	5,88
Sus scrofa						2	0,56	1	1,96
Wilds						18	4,94	4	7,84
Determined		2	2	3	7	365	100	51	100
Antlers	1		11	1	5	78			
Flakes					8	107			
Total sample	1	2	12	4	20	550			

**Table 2. Body parts distribution of species**

FEATURES	Cx. 17						Cx. 23			Cx. 24
SPECIES	CATTLE	HORSE	SHEEP	PIG	RED DEER	BOAR	HORSE	CATTLE	PIG	HORSE
Neurocranium	1			1						
Viscerocr.	4			1						
Dentes sup.	2	1					1			
Mandibula	5	3		4	1					
Dentes inf.	1	2					1			
Atlas				1						
Axis		1								
Vertebrae	7	5								
Costae	1		1	1						
Scapula	5	3	1	1	1					
Humerus	9		1			1			1	
Radius	5		2	1						
Ulna		2		1						
Carpalia	2	2								
Metacarpus	2		3							1
Pelvis	4									
Femur	1		1							
Tibia	1	1	2	1				1		
Tarsalia	3	5			2			1		
Metatarsus	11	1	1		2					
Metapodalia		1								
Phalanx 1	5	2								
Phalanx 2	1	2								
Total	70	31	12	12	6	1	2	2	1	1



continued

FEATURES	Cx. 29				Cx. 30				Cx. 90	
	CATTLE	HORSE	SHEEP	PIG	CATTLE	HORSE	PIG	DEER	CATTLE	SHEEP
Neurocranium					1				2	
Viscerocr.				1	1				1	
Dentes sup.		1								
Mandibula	2			2					3	2
Atlas					1					
Vertebrae		1							3	1
Costae	1		1							1
Scapula				1					2	
Humerus	3						1	2	2	
Radius	2			1				1	1	
Metacarpus	1	1			1				1	
Pelvis					1				2	
Femur	2				1	2				
Tibia	1		1		2					1
Tarsalia					3	2		1		
Metatarsus	2				2				1	
Phalanx 1	2				1	2			1	
Phalanx 2					1				1	
Phalanx 3						1				
Total	16	3	2	5	15	7	1	4	20	5

continued

FEATURES	Cx. 90			Cx. 95				Cx. 116		
	PIG	DOG	BOAR	CATTLE	HORSE	SHEEP	DEER	CATTLE	HORSE	SHEEP
Neurocranium				2						1
Viscerocr.	1									
Dentes sup.					1				2	
Mandibula	2	1	1	1	1	2	2			
Vertebrae					2					
Costae	1			1				1		
Scapula										
Humerus				4			1			
Metacarpus				3						
Pelvis				2						
Tibia				1	1			1		
Tarsalia				2	1					
Metatarsus				1						
Phalanx 1				3	1					
Phalanx 2				1						
Phalanx 3					1					
Total	4	1	1	21	8	2	3	2	2	1

continued

FEATURES	Cx. 116	Cx. 123						Cx. 124		
SPECIES	PIG	CATTLE	HORSE	SHEEP	PIG	DOG	DEER	CATTLE	HORSE	SHEEP
Neurocranium	1	2								
Dentes sup.			1							1
Mandibula			1	2	1	2		4		
Dentes inf.		1	1					1		
Axis		1	1							
Vertebrae								2		
Costae	2	3			1					
Scapula		1	1							
Humerus		5	1		1			1		
Radius		6					1	1		
Ulna		2								
Metacarpus		3	2					1		
Pelvis		1	1				1	1		
Femur		3								
Tibia		4		1						
Patella		2								
Tarsalia								2	3	
Metatarsus		2						3	1	
Phalanx 1		3	1					1	1	
Phalanx 3			2							
Total	3	39	12	3	3	2	2	17	5	1

continued

FEATURES	Cx. 124		Cx. 141	Cx. 143		Cx. 144		Cx. 145	
SPECIES	PIG	DEER	HORSE	SHEEP	PIG	CATTLE	SHEEP	CATTLE	HORSE
Neurocranium			1						
Mandibula	1				1				
Scapula				1					
Humerus	1								
Pelvis							1		
Femur						1			
Tibia		1						1	
Metatarsus			1			1		2	
Phalanx 1								1	
Phalanx 3								1	1
Total	2	1	2	1	1	2	1	5	1

**Table 3. Age profiles**

AGE (YEARS)	CATTLE		PIG		SHEEP/GOAT	
	MNI	SA	MNI	SA	MNI	SA
0.5-1 y		juvenile	2	juvenile	1	juvenile
1-1.5 y	3	juvenile	1	juvenile	2	juvenile
< 1.5 y	4	juvenile				
1.5-2 y	1	juvenile	2	subadult		
2-2.5 y	2	subadult	1	subadult	1	subadult
2.5-3 y	1	subadult				
3-4 y					2	adult
4-6,5 y	2	adult			1	adult
6-9 y	3	adult				
1>8/9 y	1	mature				
1>4 y	4	adult				
Total	21		6		7	

MNI- minimum number individuals; SA-skeletal age cf. Forest 1997

**Table 4. Complete bones measurements**

FEATURES	BONE	GL/LL (MM)	HEIGHT	INDEX SLENDERNESS	GENDER	TAXON
Cx. 123	Metacarpal	174	104,9	16,1	F	Cattle
Cx. 30	Metacarpal	189,5	114,3	15,62	F	Cattle
Cx. 17	Metacarpal	200	126,6	17,5	M	Cattle
Cx. 17	Metacarpal	191	120,9	20,4	M	Cattle
Cx. 17	Metatarsal	212	113	11,1	F	Cattle
Cx. 123	Metacarpal	201/209	128,1	16,03		Horse
Cx. 124	Metatarsal	264/256	137,4	11,74		Horse
Cx. 144	Metatarsal	264,5/258	138	12,1		Horse
Cx. 17	Metatarsal	118	57,7 cm	9,3	F	Sheep

Gl/Ll – Greatest length/Lateral length;

**Table 5. Meat weight provided by the identified species**

TAXON	AGE CLASS	LIVE WEIGHT	YELD*	WEIGHT	MNI	TOTAL KG**	KG PER TAXON	%
Cattle	6-24 m	250	0,5	125	8	1000		
	>24 m	350	0,5	175	13	2275	3275	57,42
Pig	6-24 m	50	0,8	40	3	120		
	>24 m	100	0,8	80	3	240	360	6,31
Ovic	6-12 m	22	0,5	11	1	11		
	12-24 m	25	0,5	12,5	2	25		
	>24 m	32	0,5	16	4	112	148	2,6
Horse	12-24/36 m	200	0,5	100	3	300		
	>24 m	300	0,5	150	8	1200	1500	26,3
Boar	>24 m	300	0,8	240	1	240	240	4,21
Deer	15 m	100	0,5	50	1	50		
	24-30 m	130	0,5	65	2	130	180	3,16
Total					49	5703	5703	100

\* Butchery gross yield; \*\*Meat weight and offals

**Measurements, cf. Von den Driesch, 1976**

MAXILLA			SCAPULA				
FEATURE	M <sub>3</sub>	TAXON	FEATURE	SLC	GLP	LG	TAXON
Cx. 29	32	Pig	Cx. 17	38	50	42	Cattle
Cx. 29	33,5	Horse	Cx. 17	62		54	Horse
Cx. 123	34	Horse					

RADIUS					MANDIBULA		
FEATURE	BFP	BP	DP	TAXON	FEATURE	M <sub>3</sub>	TAXON
Cx. 90	60	64,5	32	Cattle	Cx. 123	21,5	Sheep
Cx. 29	64	68,5		Cattle	Cx. 95	32	Horse
Cx. 17	68	73	37	Cattle			
Cx. 123	75	83	42	Cattle			
Cx. 17	77	83	42	Cattle			
Cx. 29		29,5	19	Pig			

HUMERUS					PH I		
FEATURE	BT	BD	DD	TAXON	FEATURE	GL	TAXON
Cx. 17	71,5	77	77	Cattle	Cx. 29	48	Cattle
Cx. 17	71	77,5	74	Cattle	Cx. 123	53,5	Cattle
Cx. 29	74,5			Cattle	Cx. 95	54,5	Cattle
Cx. 95	74			Cattle	Cx. 123	54	Cattle
Cx. 95	75	80	78,5	Cattle	Cx. 95	60	Cattle
Cx. 123	76			Cattle	Cx. 95	62	Cattle
Cx. 123	77	87		Cattle	Cx. 90	57	Cattle

METACARPUS							
FEATURE	GL/LL	Bp	Dp	Sd	Bd	Dd	TAXON
Cx. 123	174	48	38,5	28	48,5	26	Cattle
Cx. 30	189,5			31		24	Cattle
Cx. 17	200	65,5	37	35	68	34	Cattle
Cx. 17	191	62,5	36	39	69	33	Cattle
Cx. 95					50	31	Cattle
Cx. 17					61	38,5	Cattle
Cx. 17		28	19				Goat
Cx. 17					27,5	15	Goat
Cx. 123	201/209	43,5	28,5	33,5	44		Horse
METATARSUS							
FEATURE	GL	Bp	Dp	Sd	Bd	Dd	TAXON
Cx. 17	212	43,5		23,5	48,5	26,5	Cattle
Cx. 17					53,5	28	Cattle
Cx. 17					55	30	Cattle
Cx. 124					58	31	Cattle
Cx. 17	118	19	18,5	11	22	13,5	Sheep
Cx. 124	264/256	47	40	31	44	47	Horse
Cx. 144	264,5/258	50	43	32		49	Horse

TIBIA				CALCANEUS		
FEATURE	Bd	Dd	TAXON	FEATURE	GL	TAXON
Cx. 30	55	41	Cattle	Cx. 124	131,5	Cattle
Cx. 95	56	43	Cattle			
Cx. 17	59	41,5	Cattle			
Cx. 30	63	44	Cattle	Pelvis		
Cx. 95	72	44	Horse	Feature	LA	Taxon
Cx. 17		42	Horse	Cx. 17	56	Cattle

PH I							
FEATURE	GL	BFP	Bp	SD	BFD	Bd	TAXON
Cx. 17	78	46,5	49,5	29,5	36,5	39,5	Horse
Cx. 123	84	47,5	53,5	34	42	46,5	Horse
Cx. 30	87	57		33	41	45,5	Horse
Cx. 17	81	48	53	35,5			Horse

PH II						
FEATURE	GL	BFP	Bp	SD	BFD	TAXON
Cx. 17	42	43,5	48,5	39		Horse
Cx. 17	43	42,5	49,5	38	45	Horse
Cx. 95		43	51			Horse

PH III					
FEATURE	Ld	GB	HP	BF	TAXON
Cx. 123	44				Horse
Cx. 123	46		38	46	Horse
Cx. 30	52	74		44	Horse



## Figures

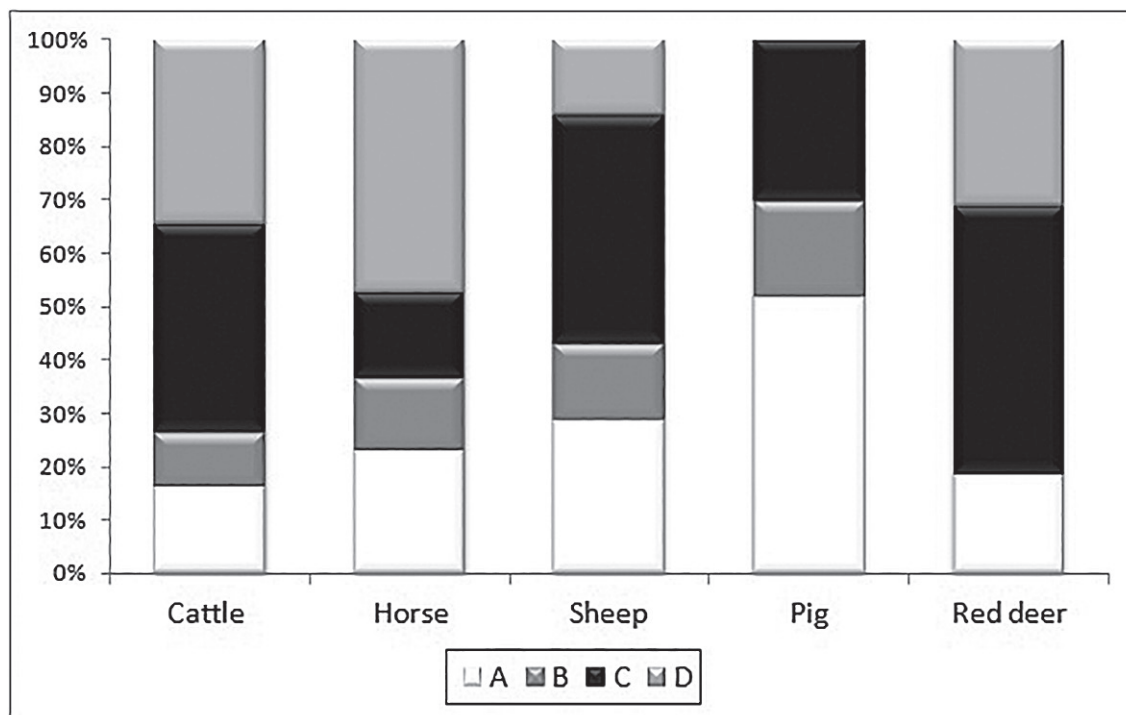


Fig. 1. Body parts distribution of main taxa at Carei: A-skull; B-spine; C, D- belts and upper parts of the limbs; E- feet.

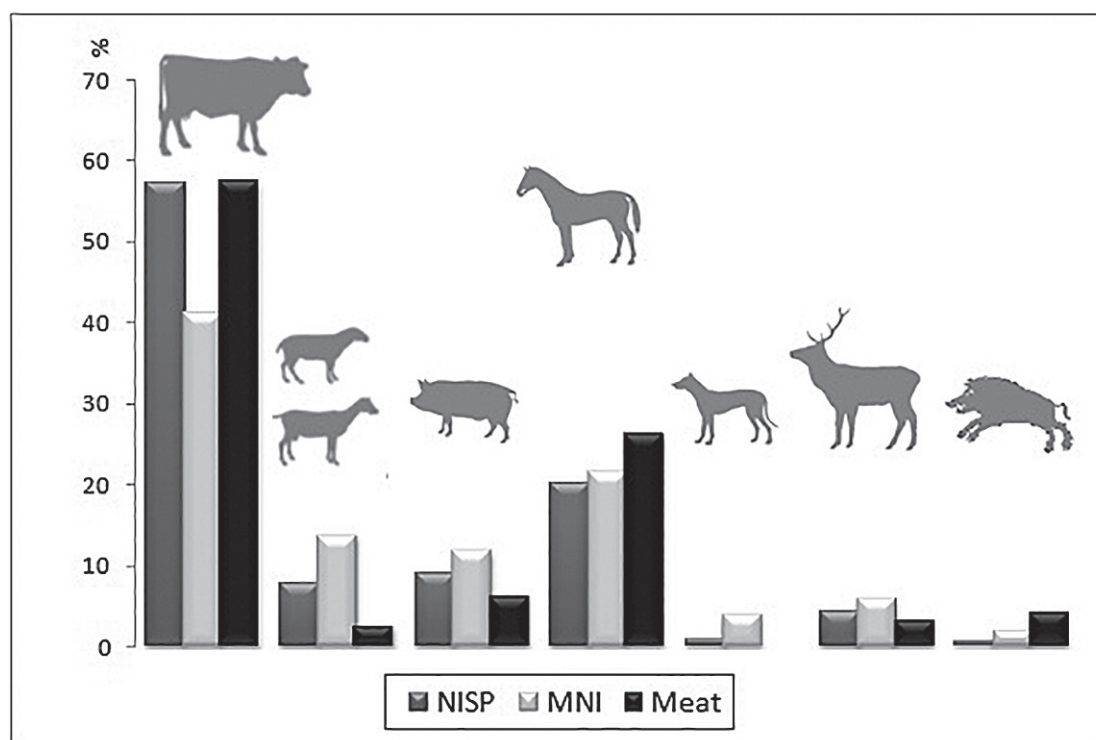


Fig. 2. Species distribution as NISP, MNI and meat weight at Carei

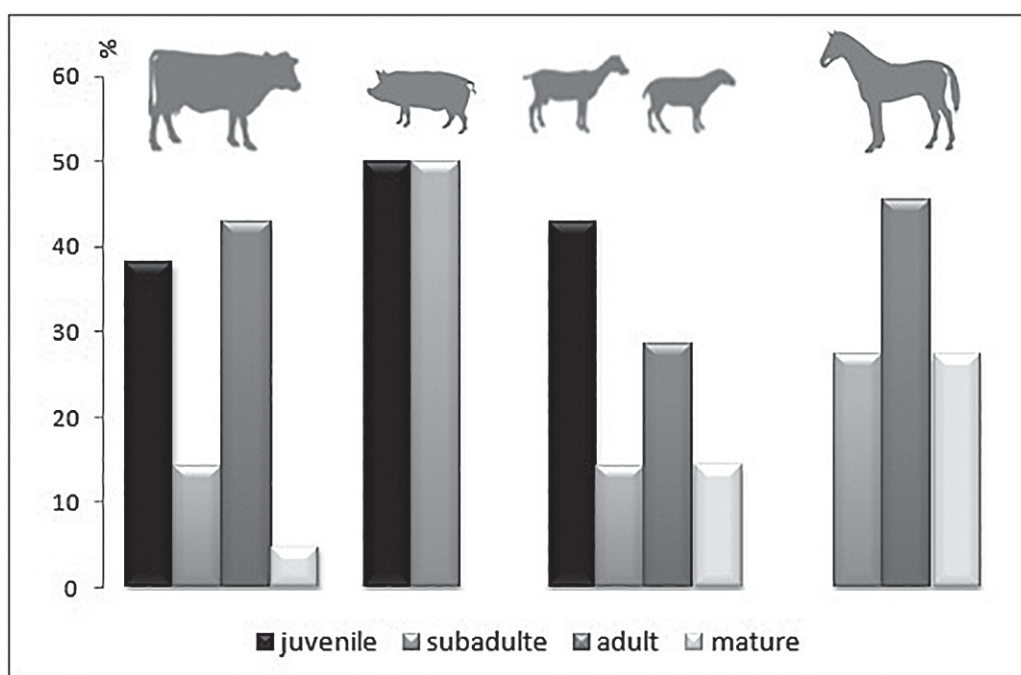


Fig. 3. Age estimates of main species



Fig. 4. Cattle metapodials



Fig. 5. Horse metapodials: a, c- metatarsals; b- metacarpal





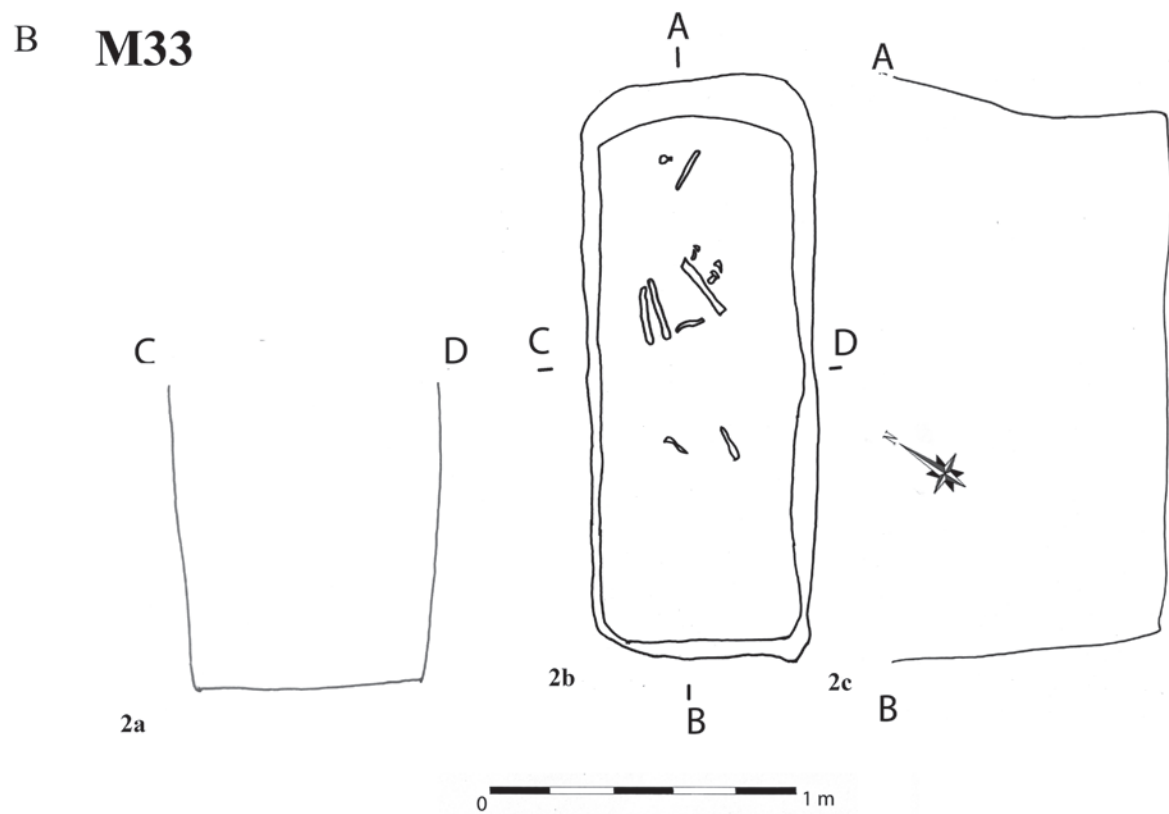
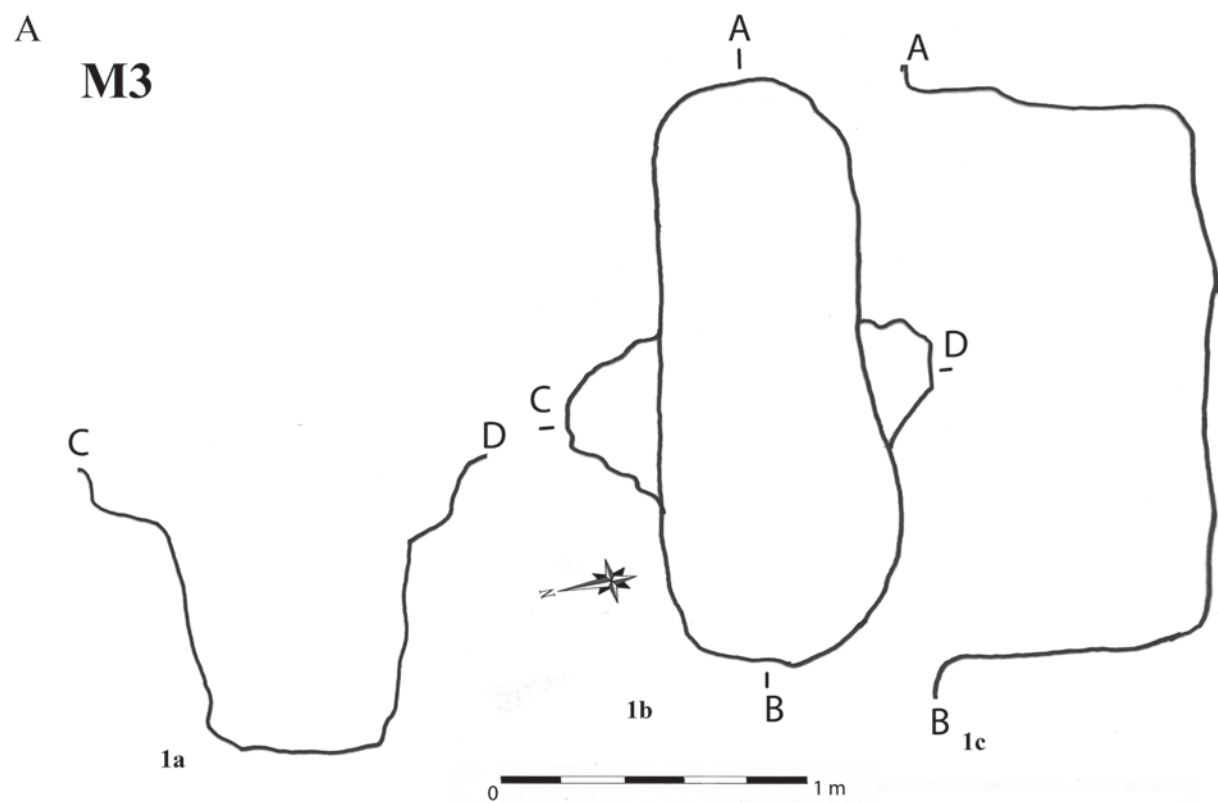
Fig. 6. Bones with pathology: a-dog; b- horse



Fig. 7. Beam fragments from red deer

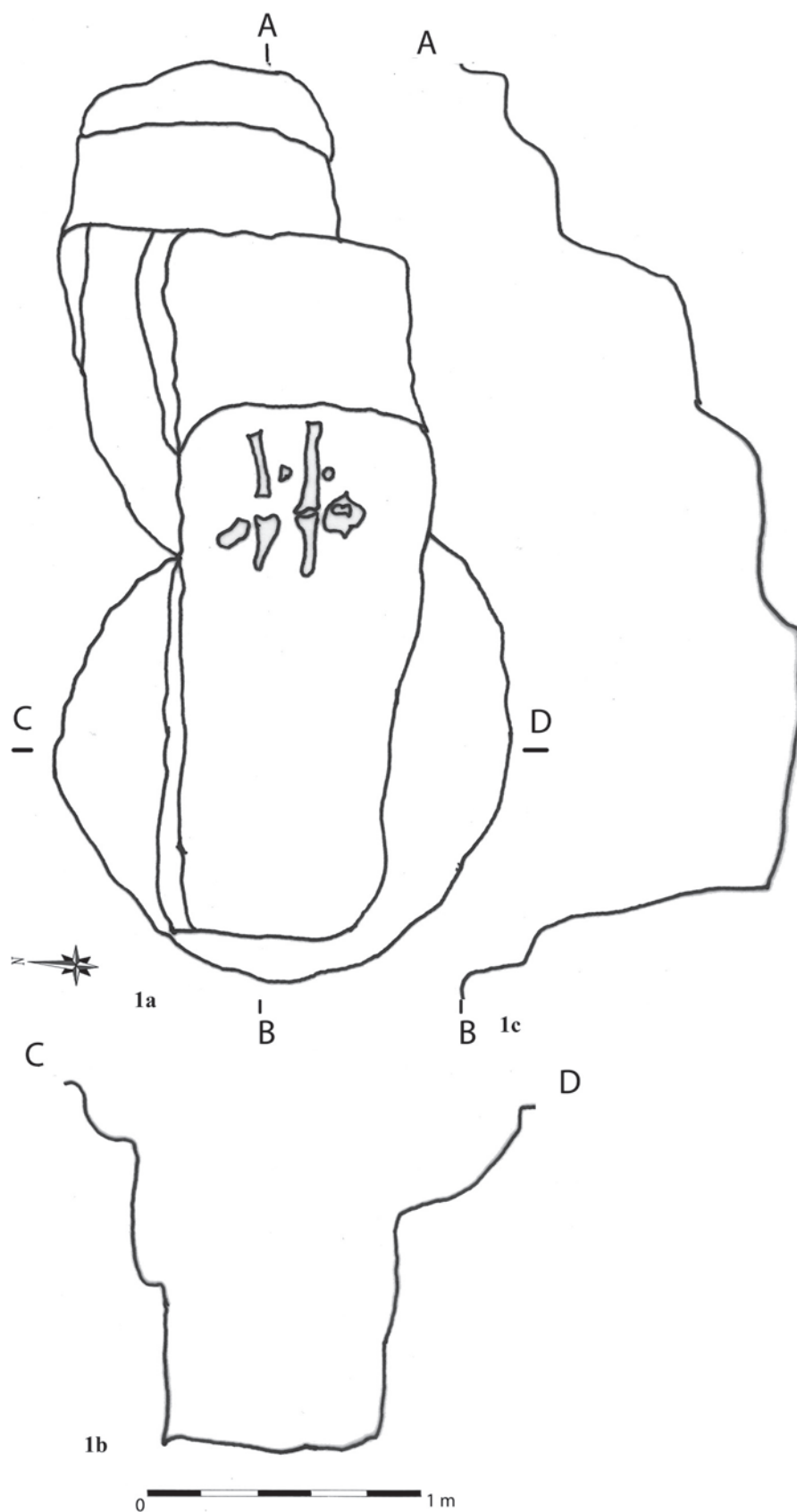






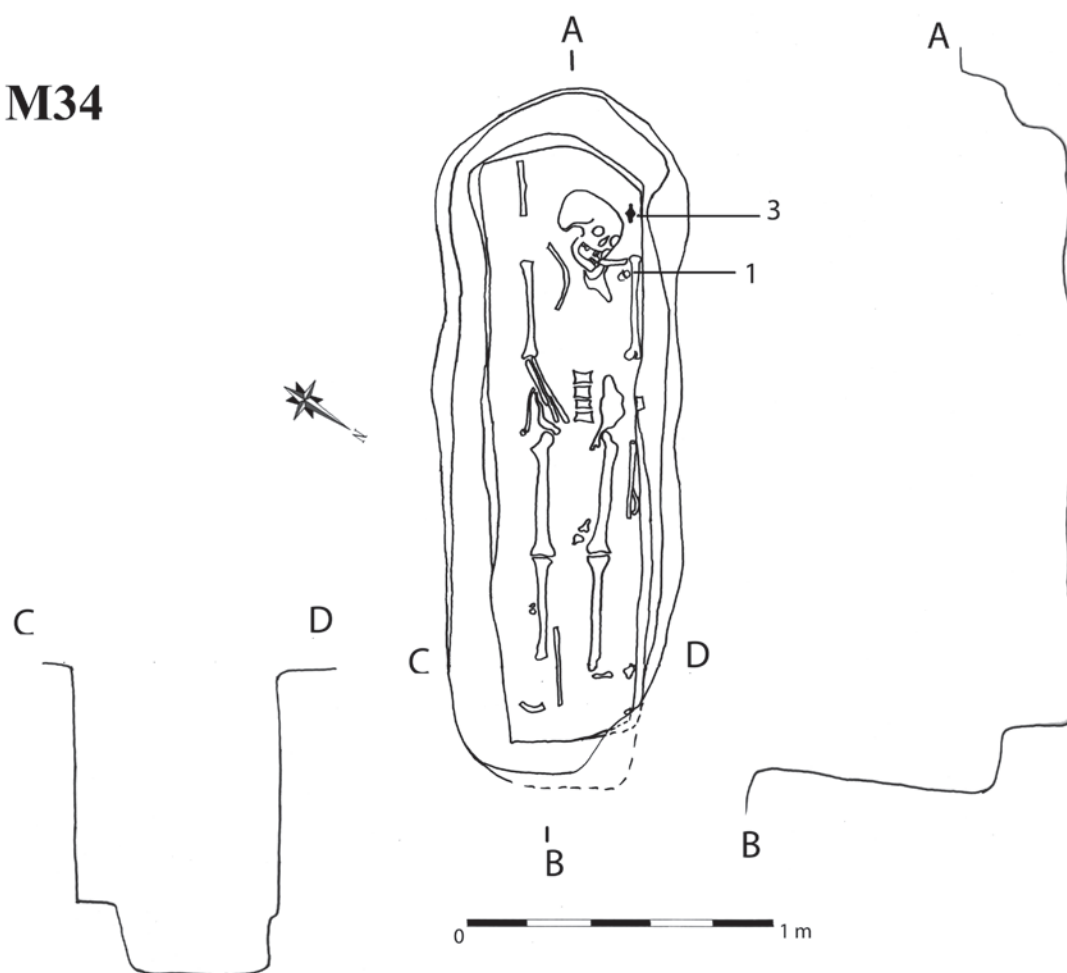
Pl. 1. Graves 3, 33 / Mormintele 3, 33 / 3, 33-as sírok.

M8



Pl. 2. Grave 8 / Mormântul 8/ 8-as sîr.

**M34**



1a



1b



3



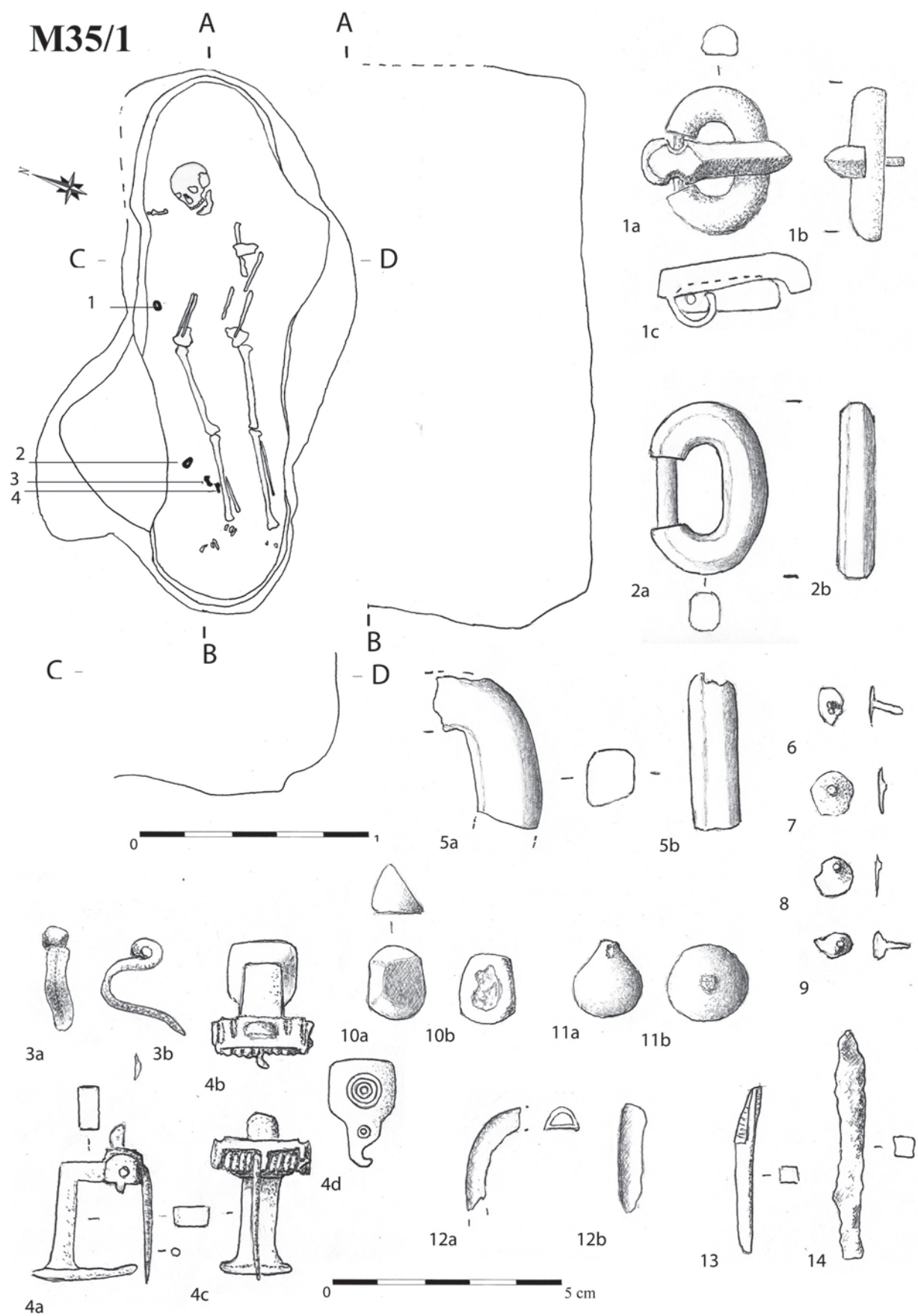
1c



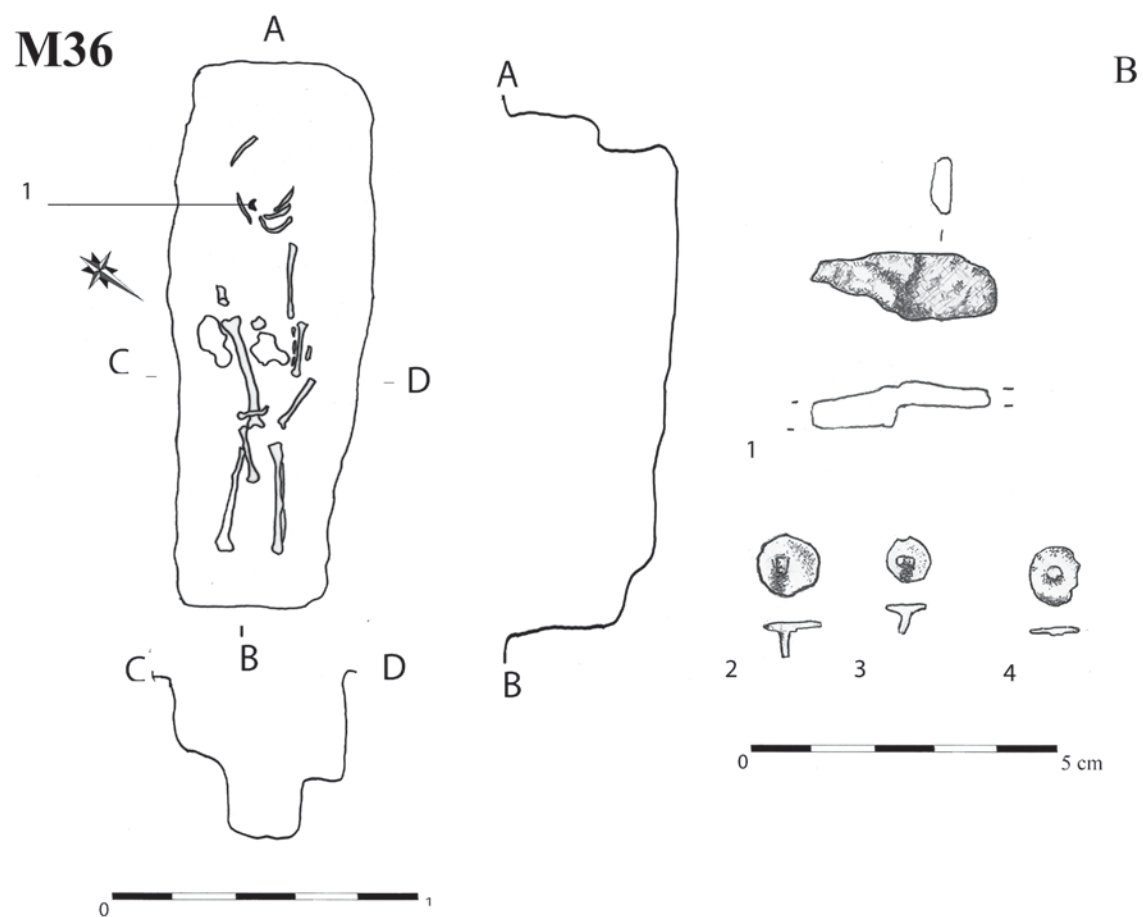
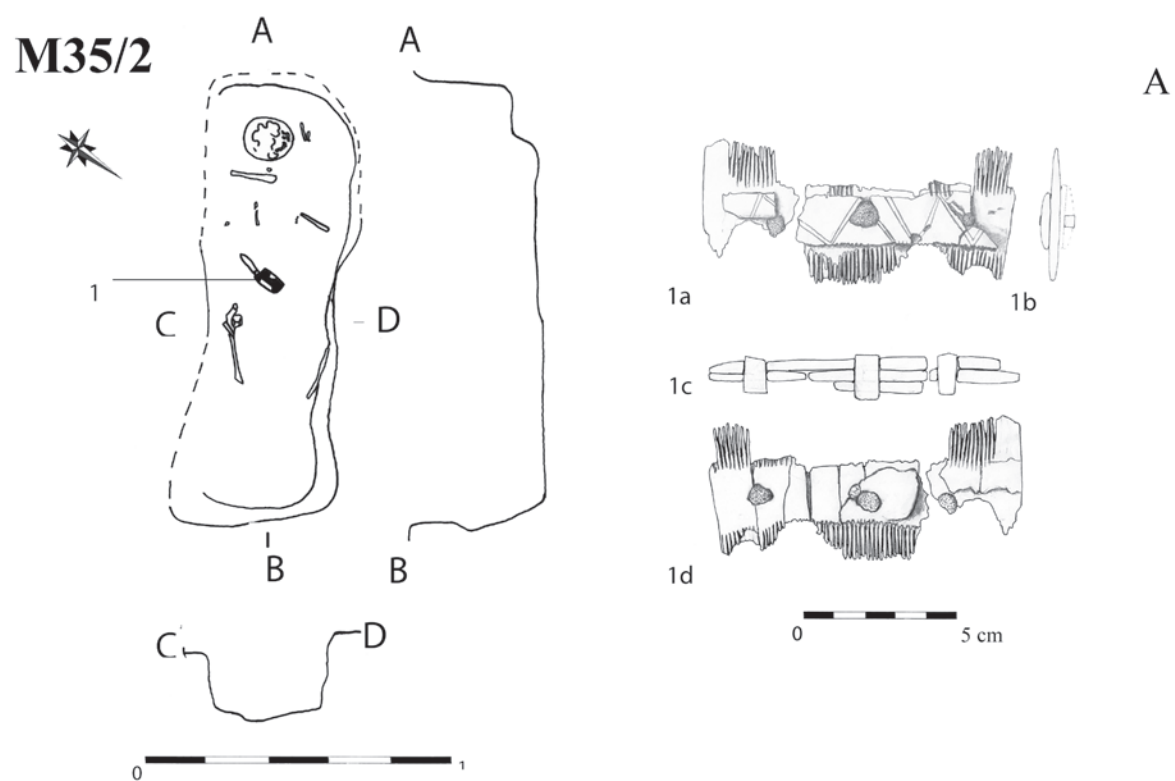
2



Pl. 3. Grave 34 / Mormântul 34 / 34-es sír.



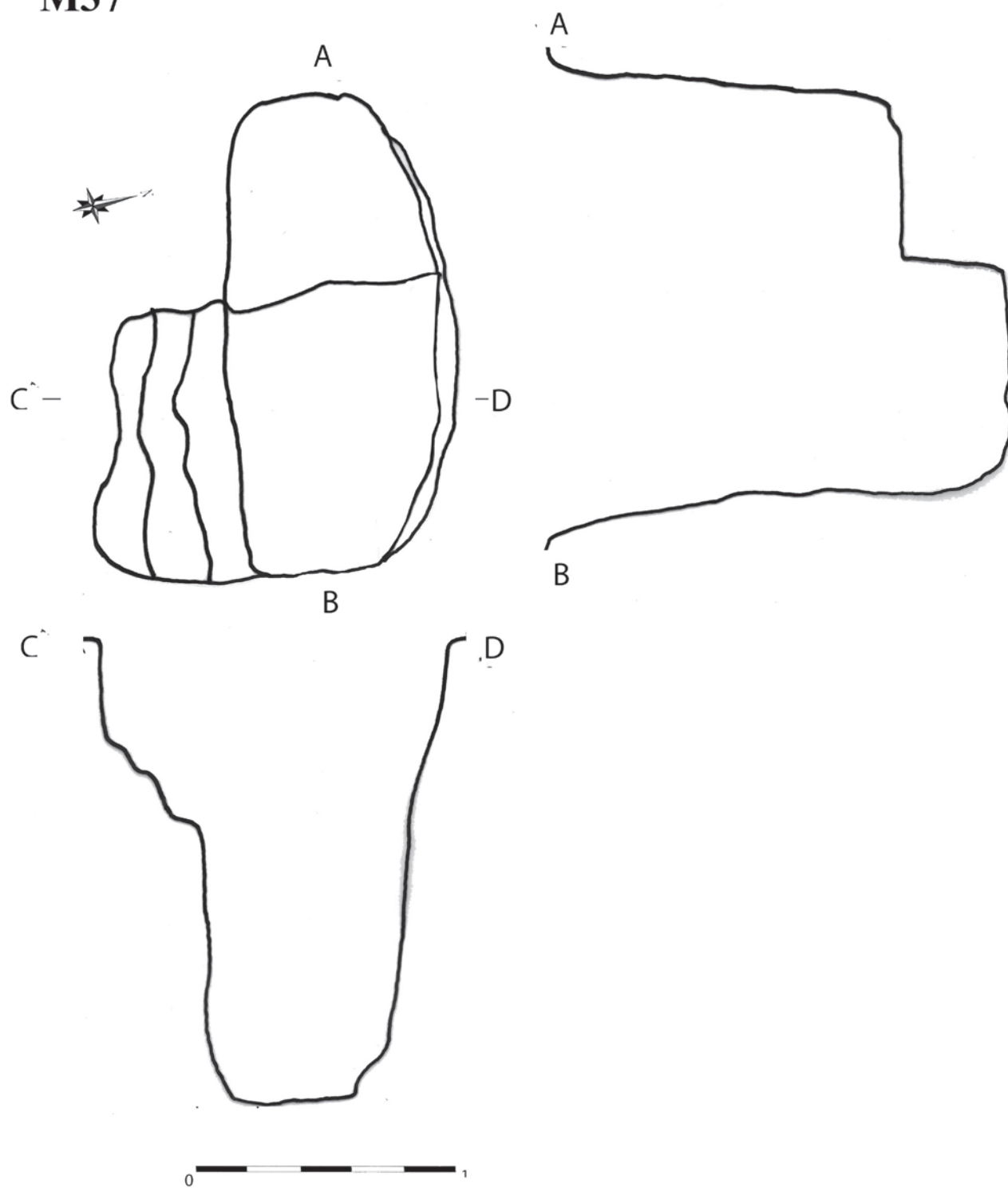
Pl. 4. Grave 35/1 / Mormântul 35/1 / 35/1-es sír.



Pl. 5. Graves 35/2, 36 / Mormintele 35/2, 36 / 35/2, 36-os sírok.

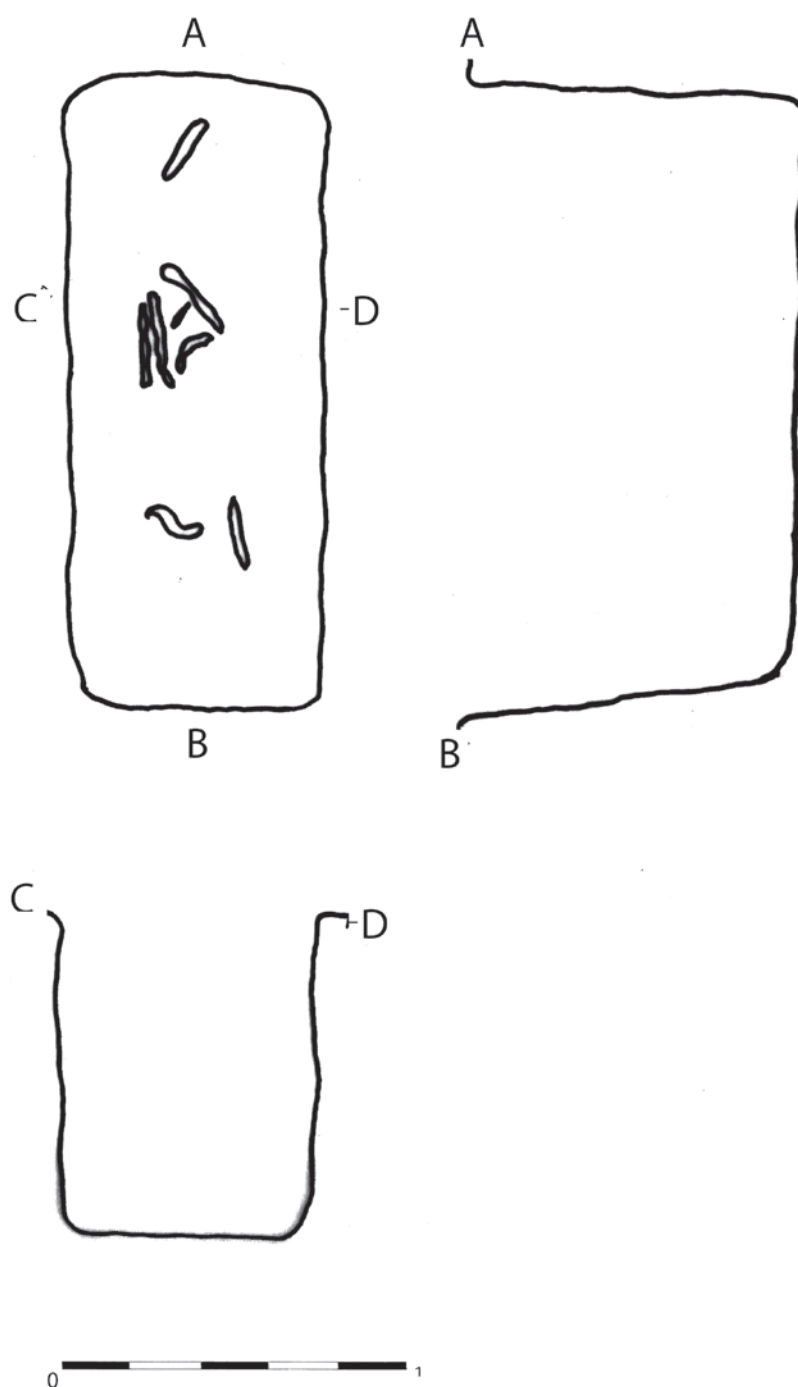


# M37

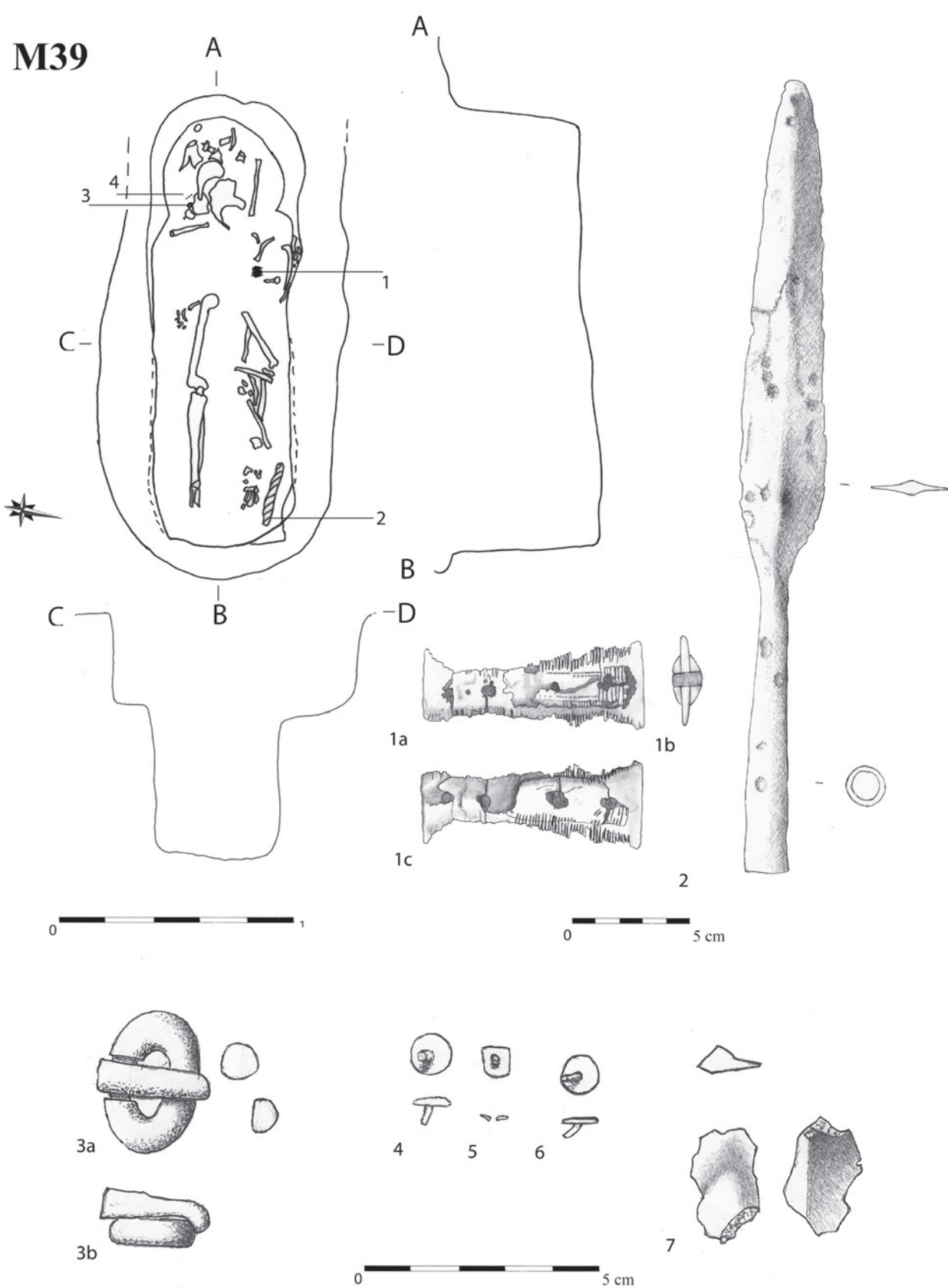


Pl. 6. Grave 37 / Mormântul 37 / 37-es sír.

# M38

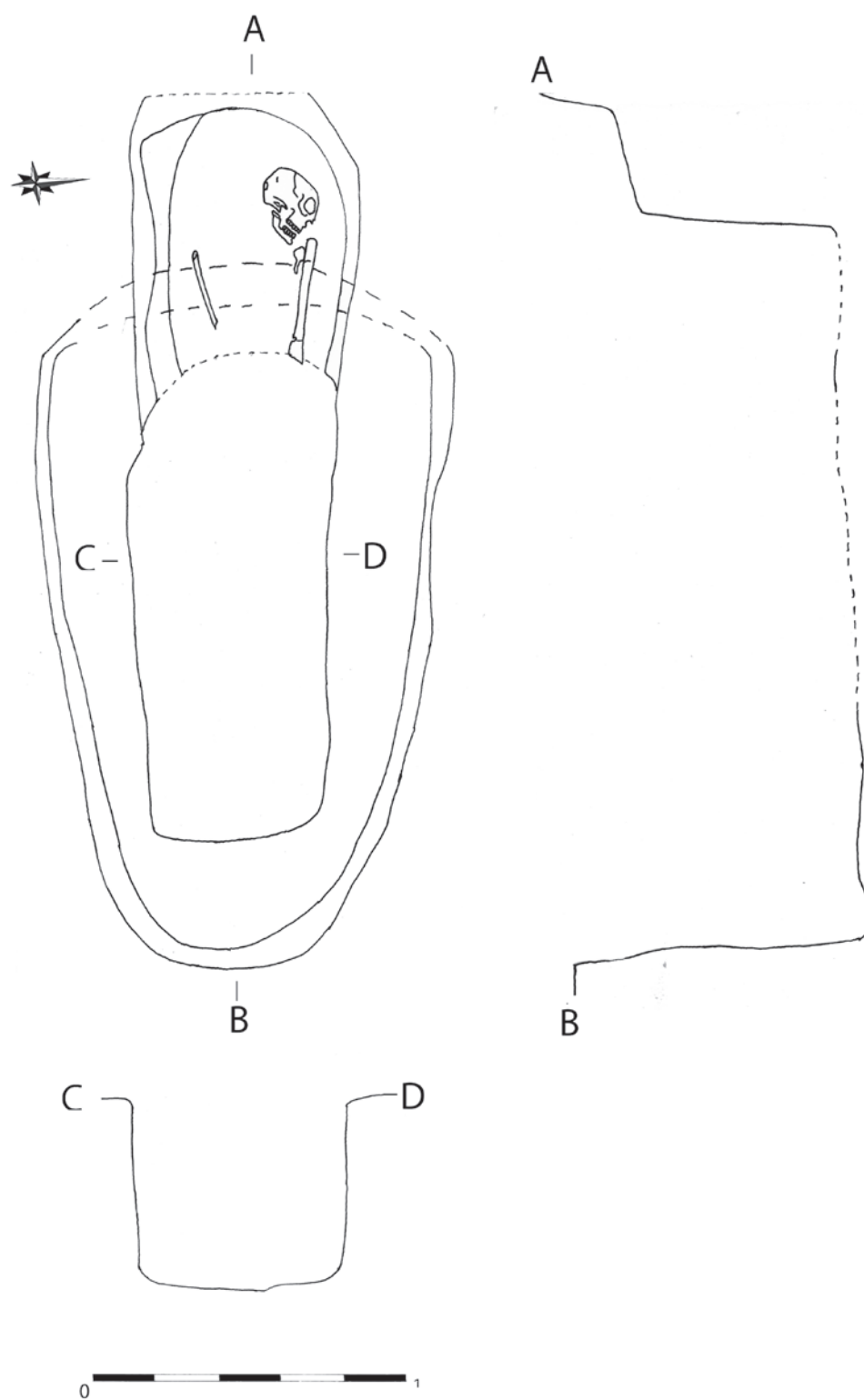


Pl. 7. Grave 38 / Mormântul 38 / 38-as sîr.

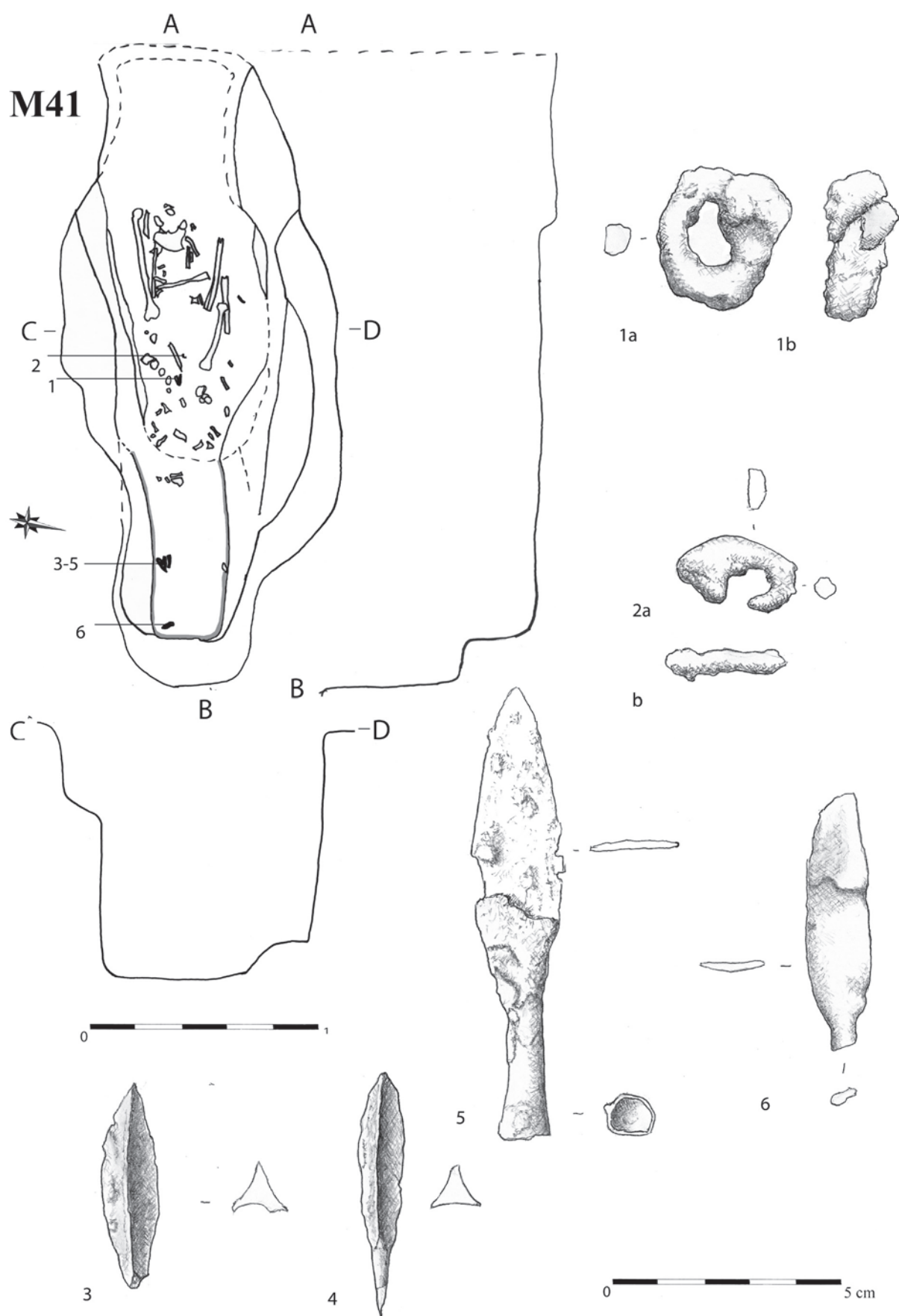


Pl. 8. Grave 39 / Mormântul 39 / 39-es sír.

# M40



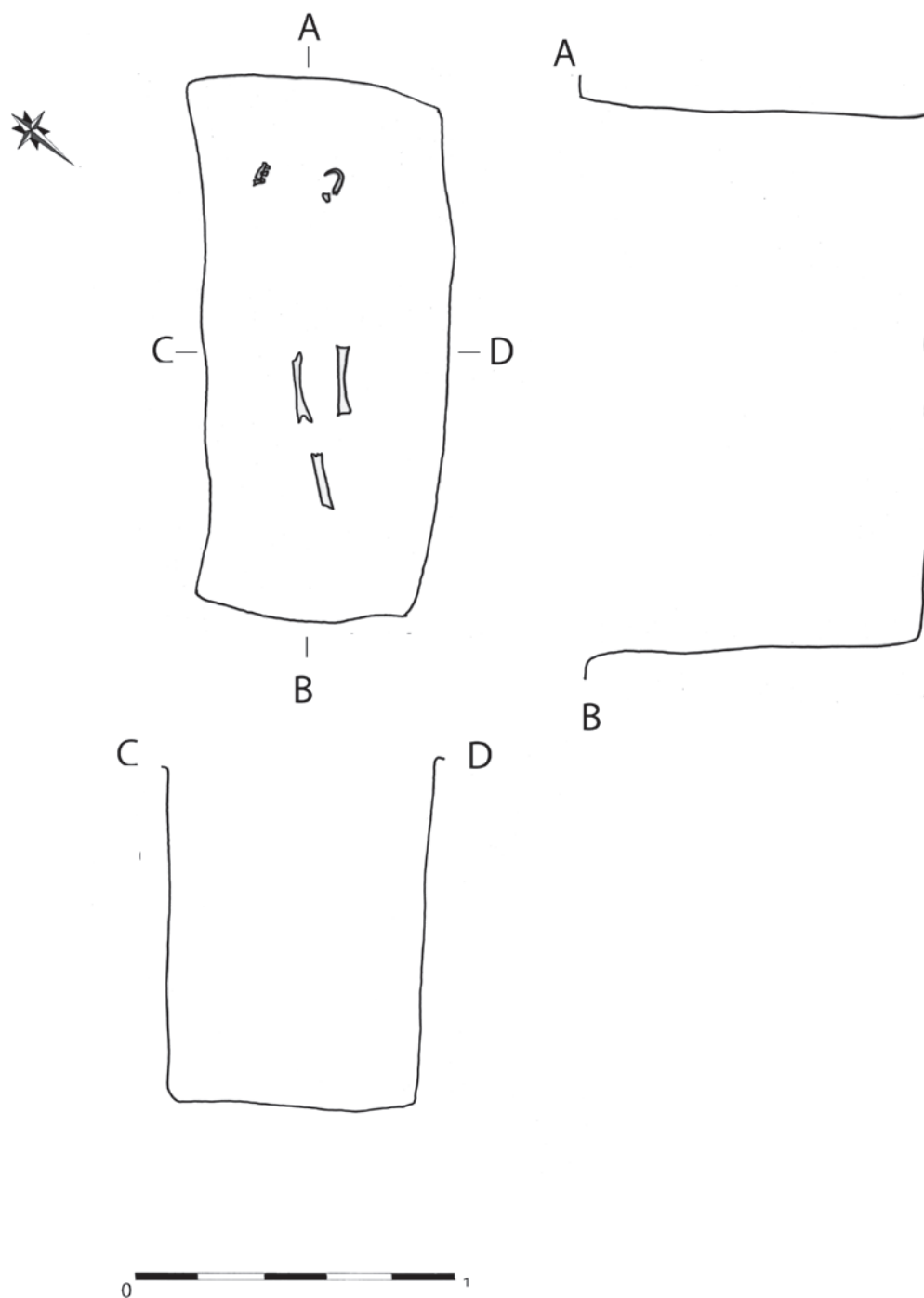
Pl. 9. Grave 40 / Mormântul 40 / 40-es sír.



Pl. 10. Grave 41 / Mormântul 41 / 41-es sír.

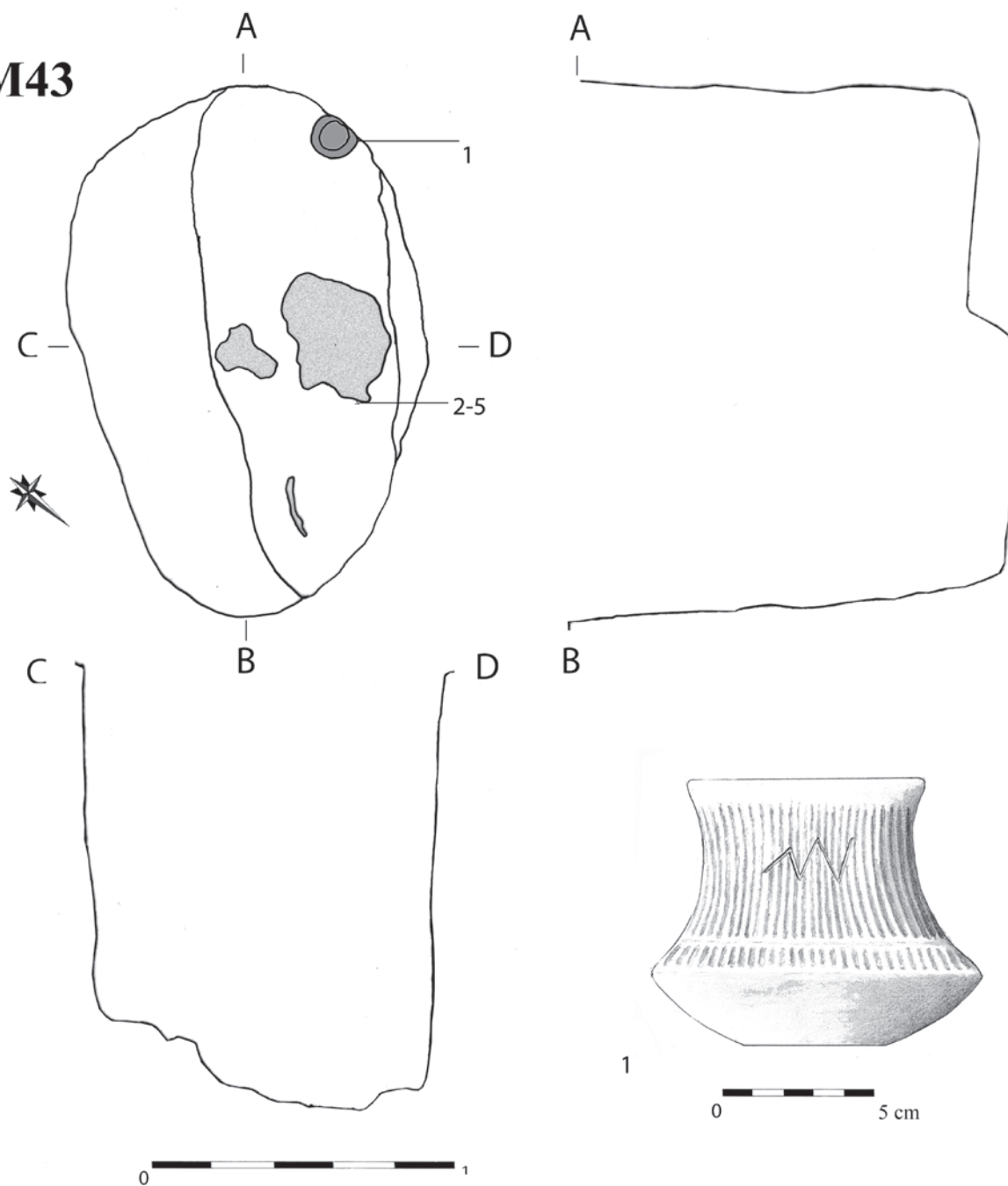


# M42

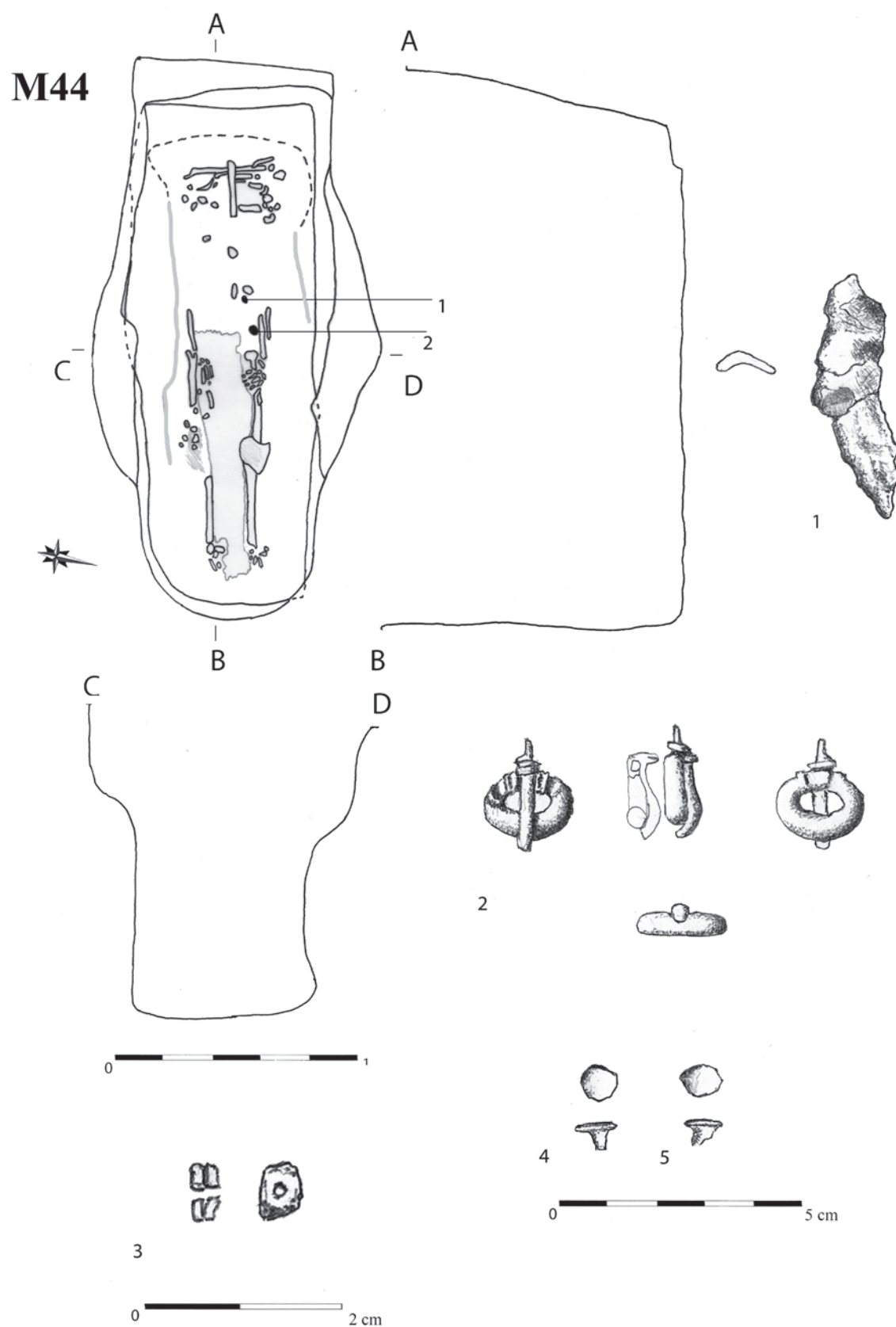


Pl. 11. Grave 42 / Mormântul 42 / 42-es sír.

**M43**

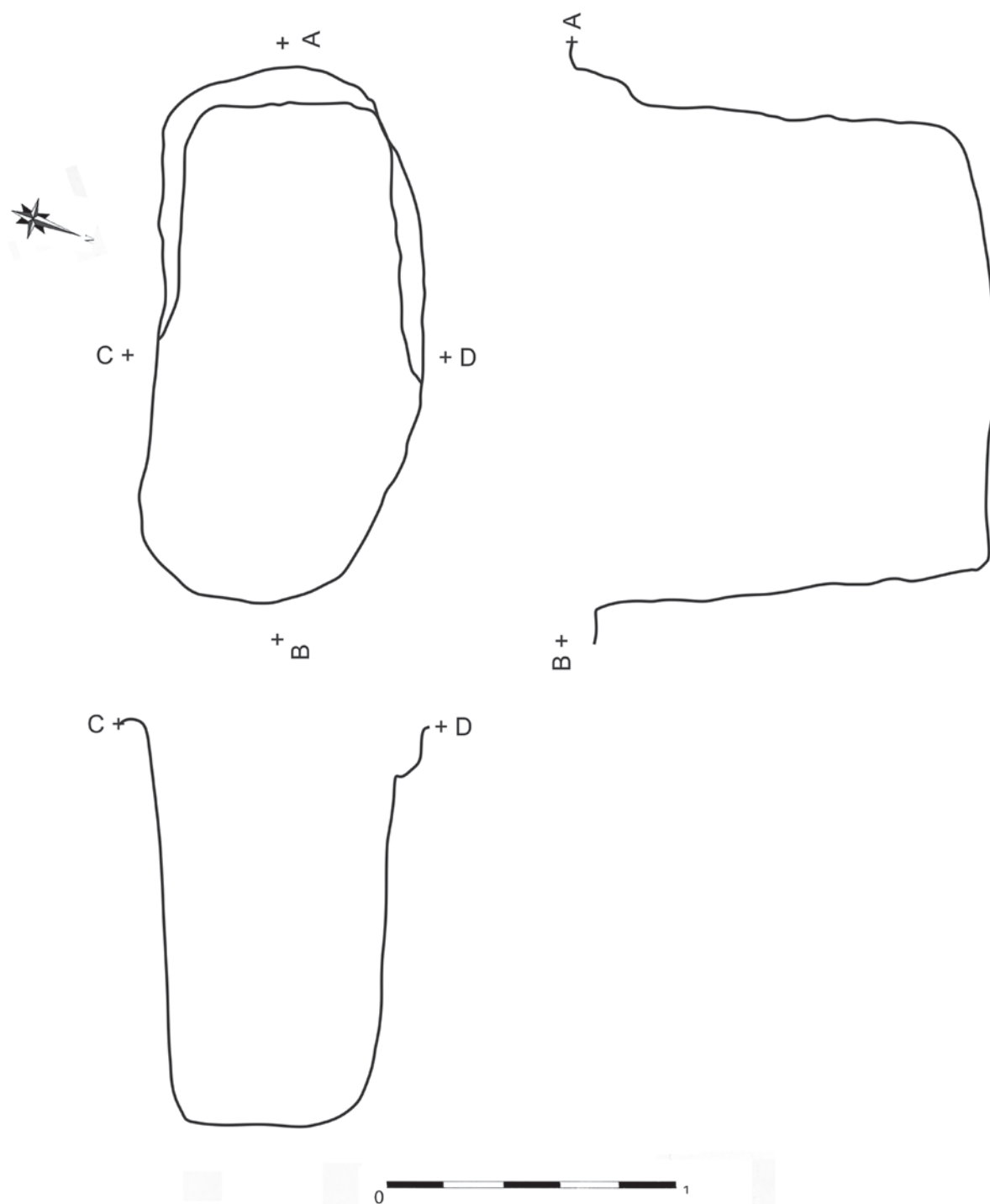


Pl. 12. Grave 43 / Mormântul 43 / 43-as sír.



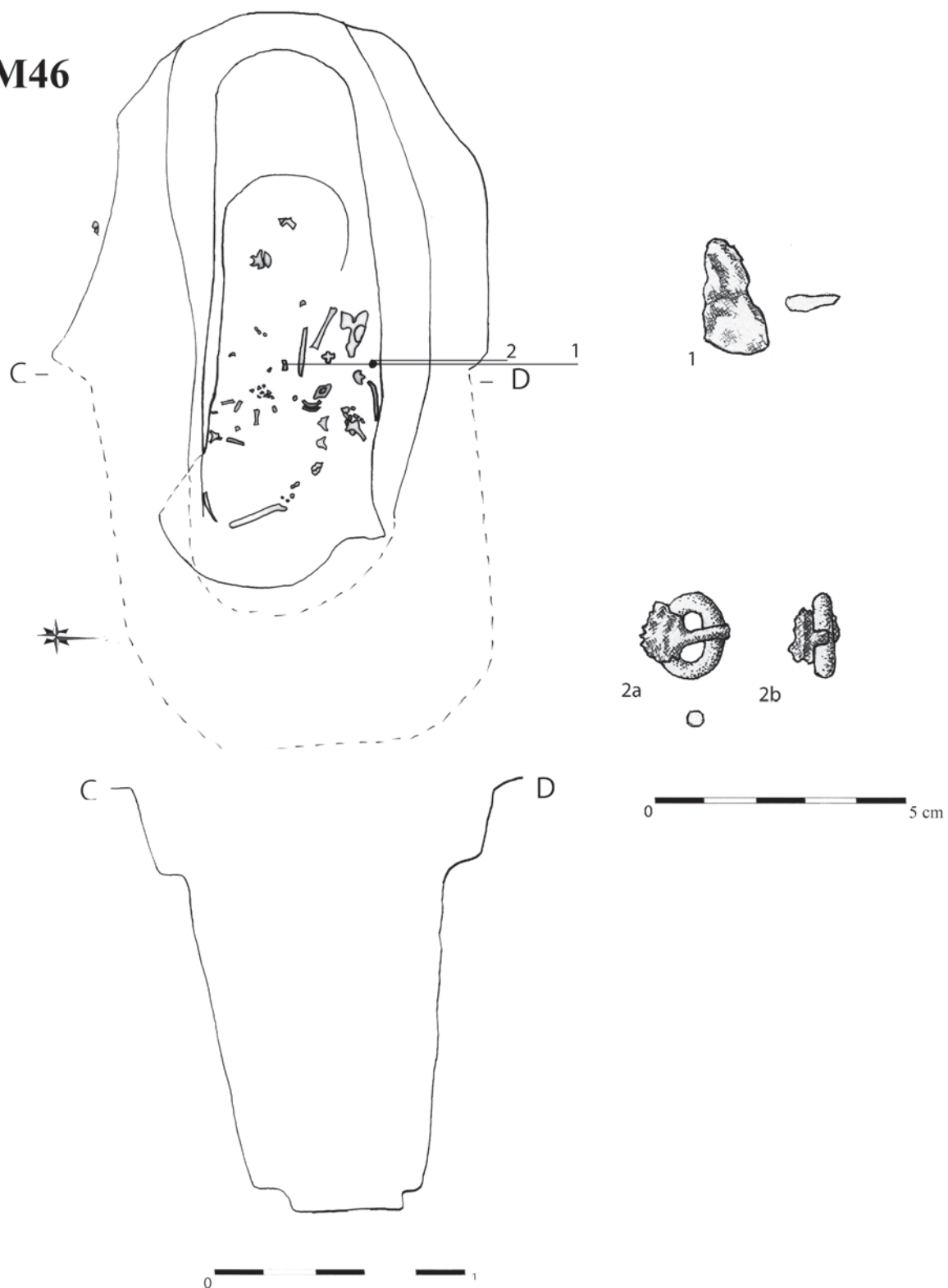
Pl. 13. Grave 43 / Mormântul 43 / 43-as sír.

# M45



Pl. 14. Grave 45 / Mormântul 45 / 45-ös sír.

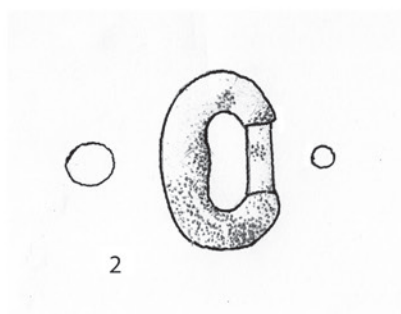
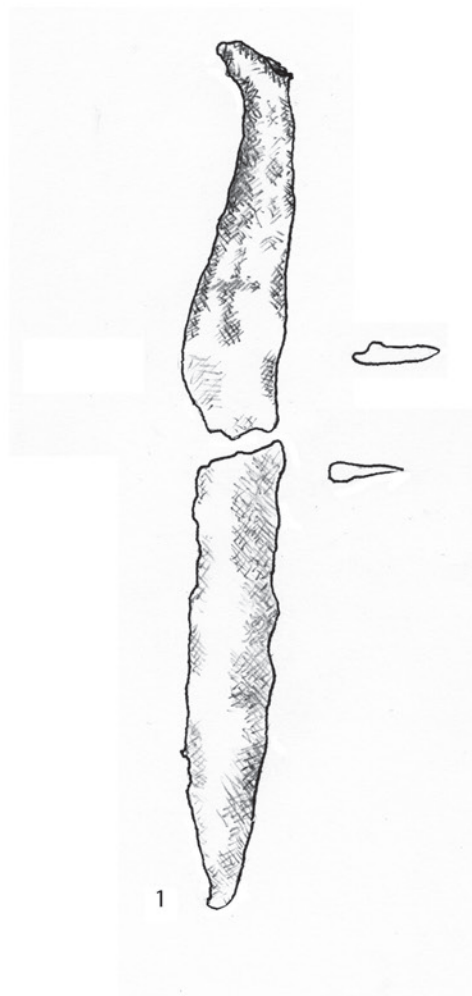
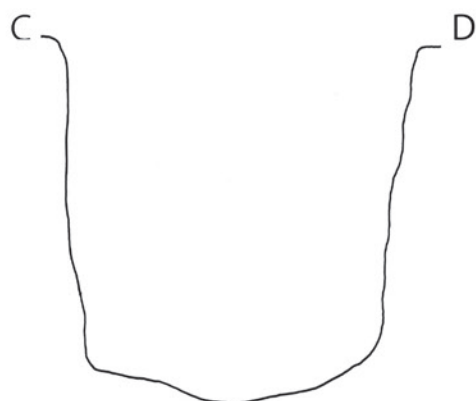
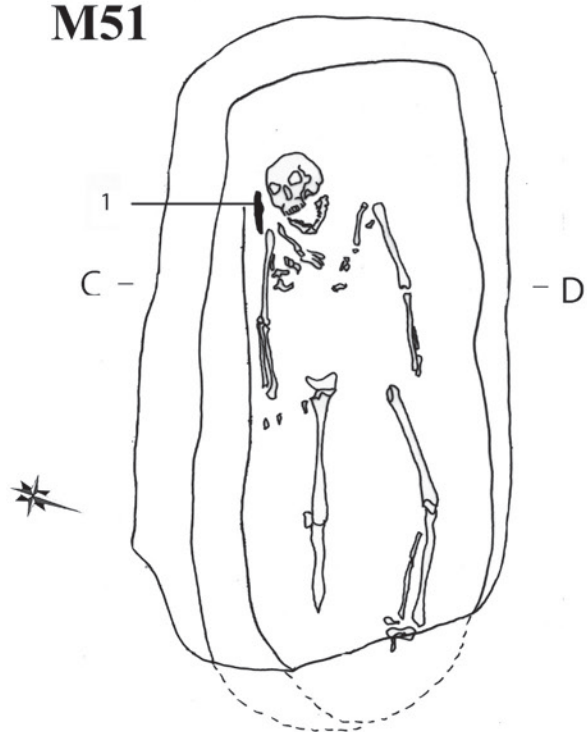
**M46**



Pl. 15. Grave 46 / Mormântul 46 / 46-os sír.

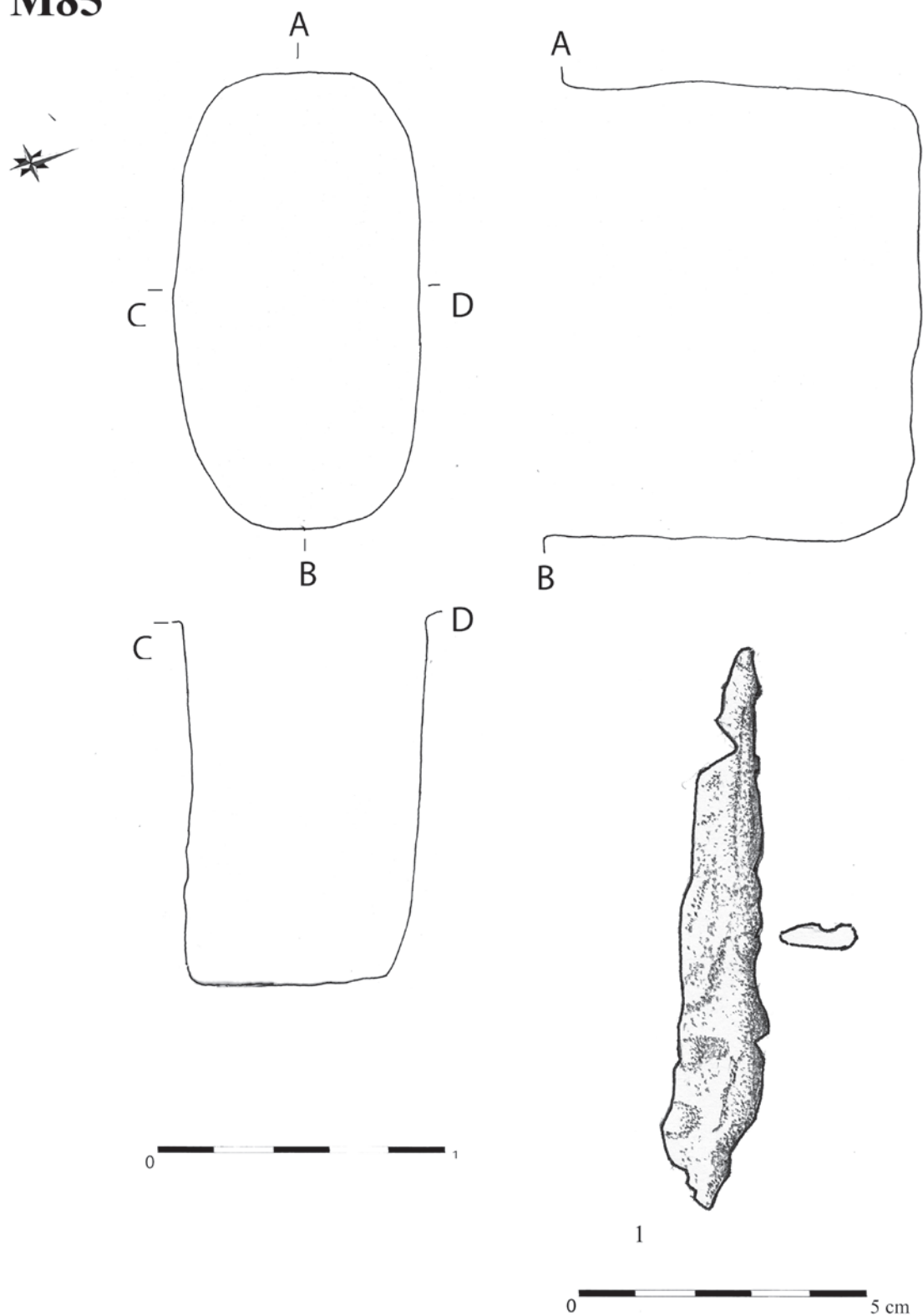


**M51**



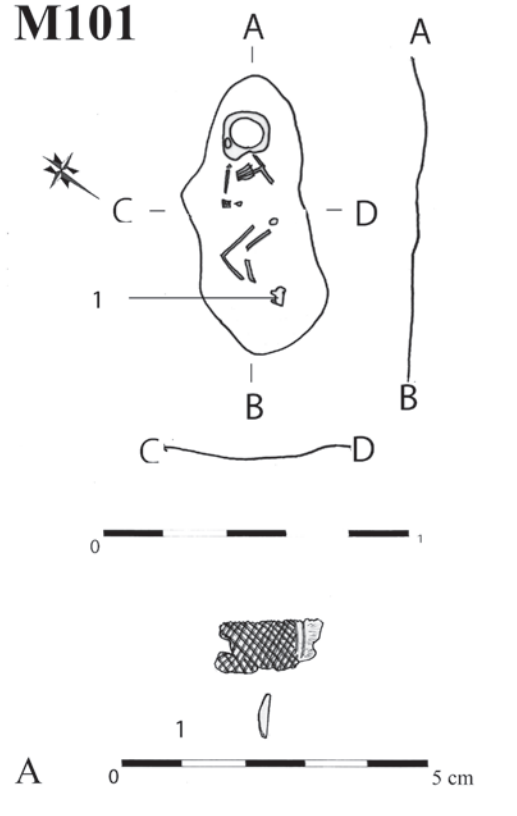
Pl. 16. Grave 51 / Mormântul 51 / 51-es sír.

**M85**

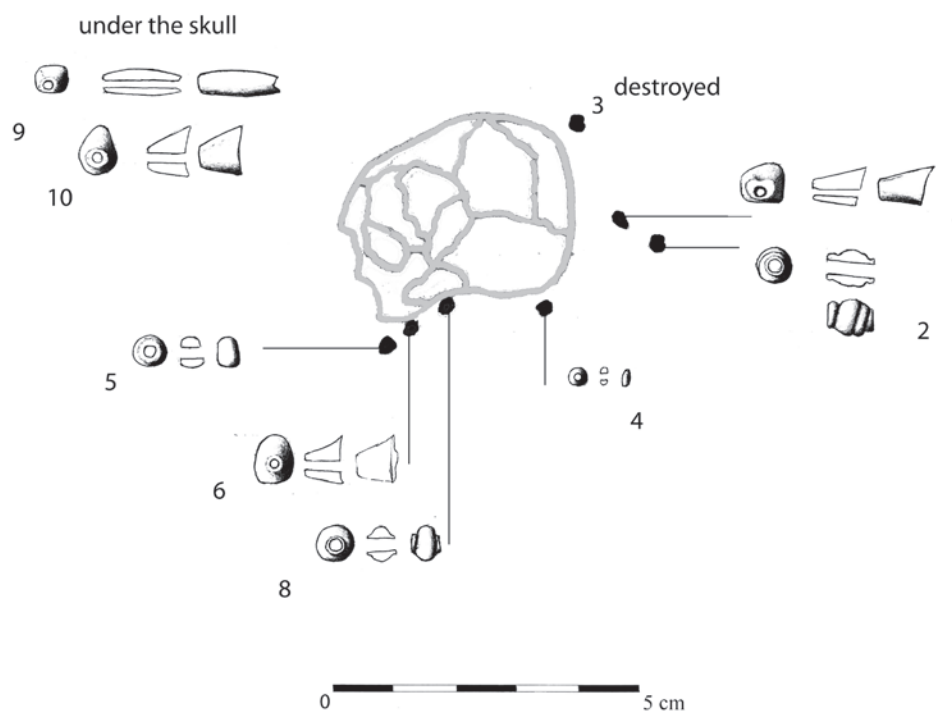
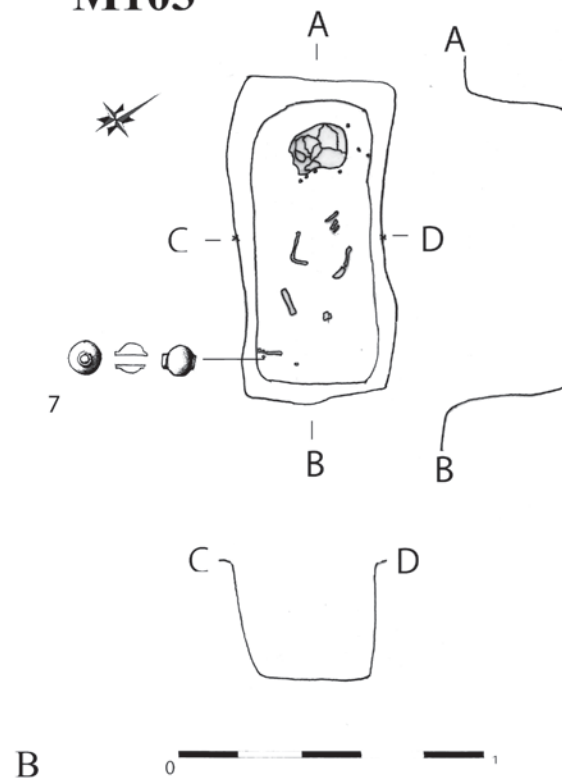


Pl. 17. Grave 85 / Mormântul 85 / 85-ös sír.

**M101**

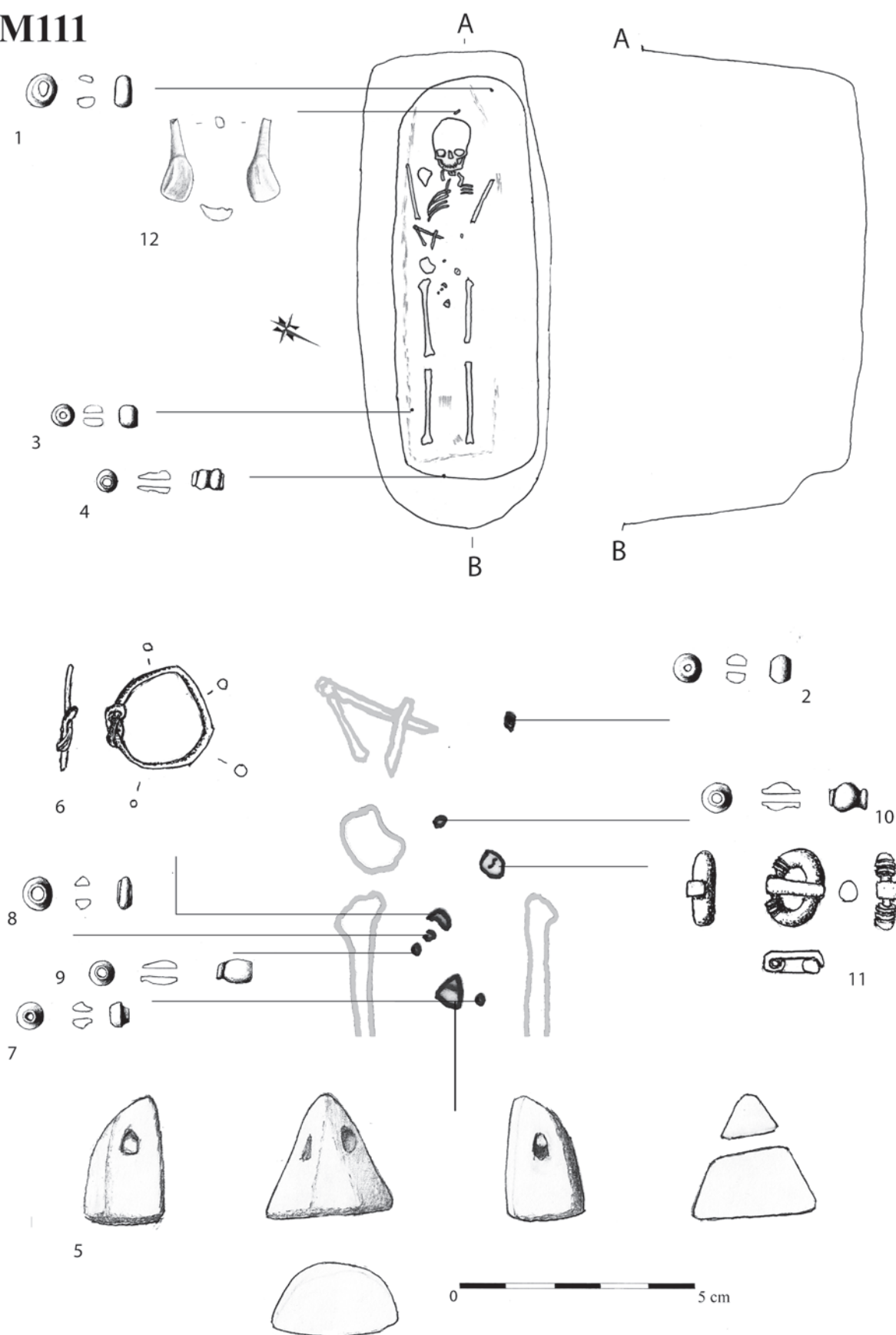


**M103**



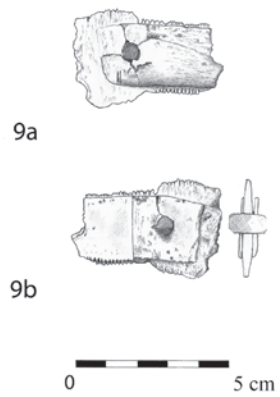
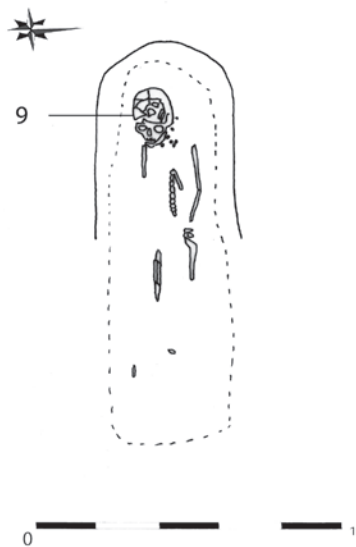
Pl. 18. Graves 101, 103 / Mormintele 101, 103 / 101, 103-as sírok.

# M111



Pl. 19. Grave 111 / Mormântul 111 / 111-es sír.

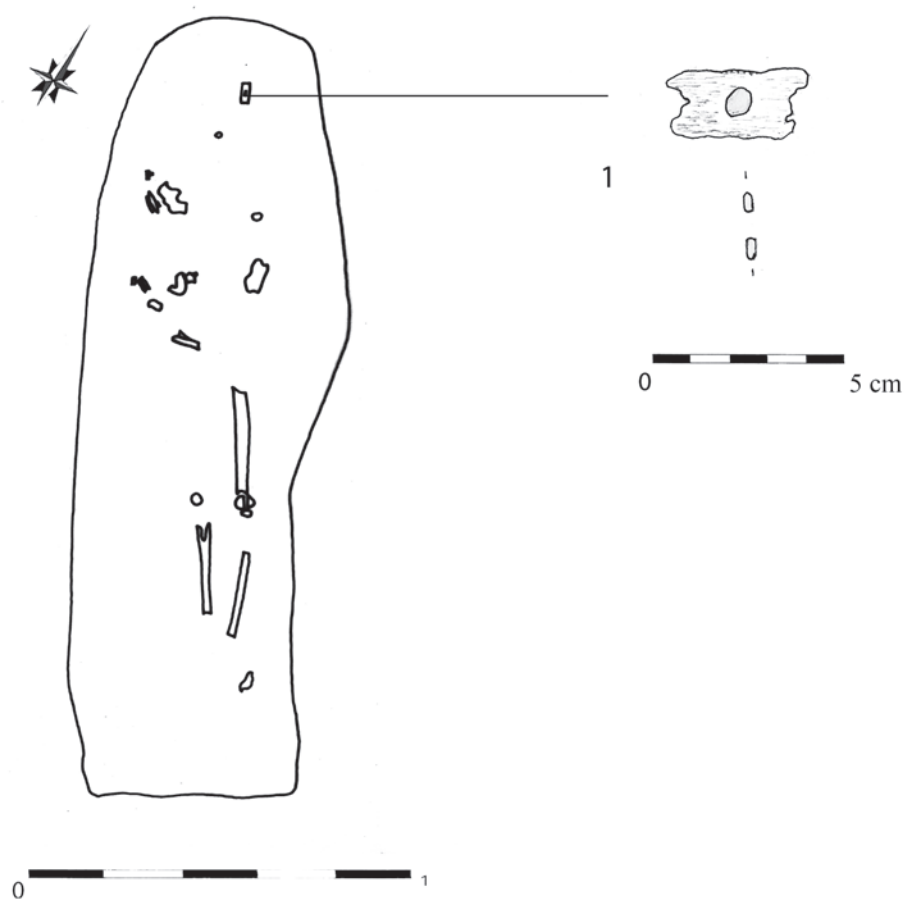
# M112



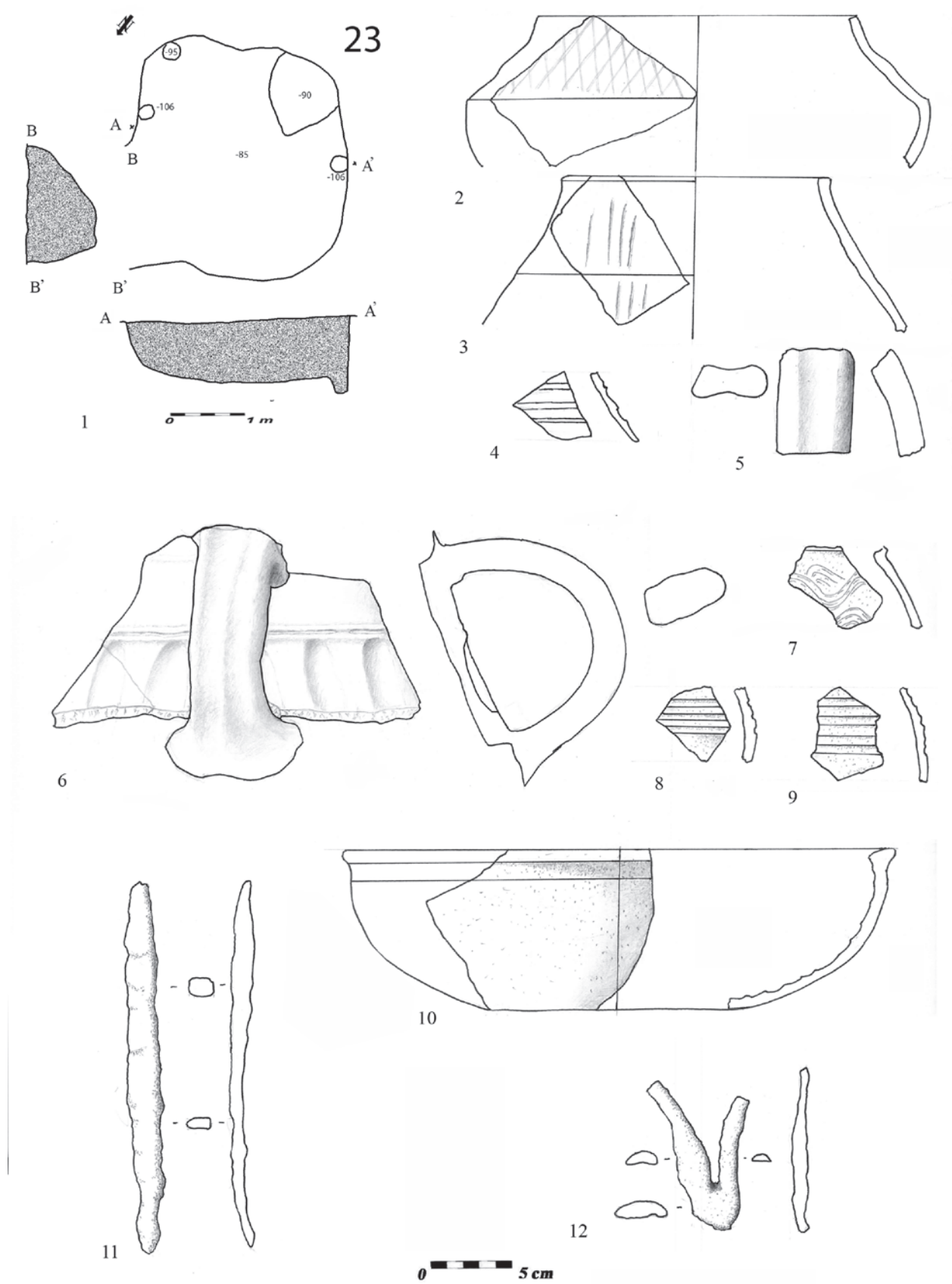
Pl. 20. Grave 112/ Mormântul 112/ 112-es sír.



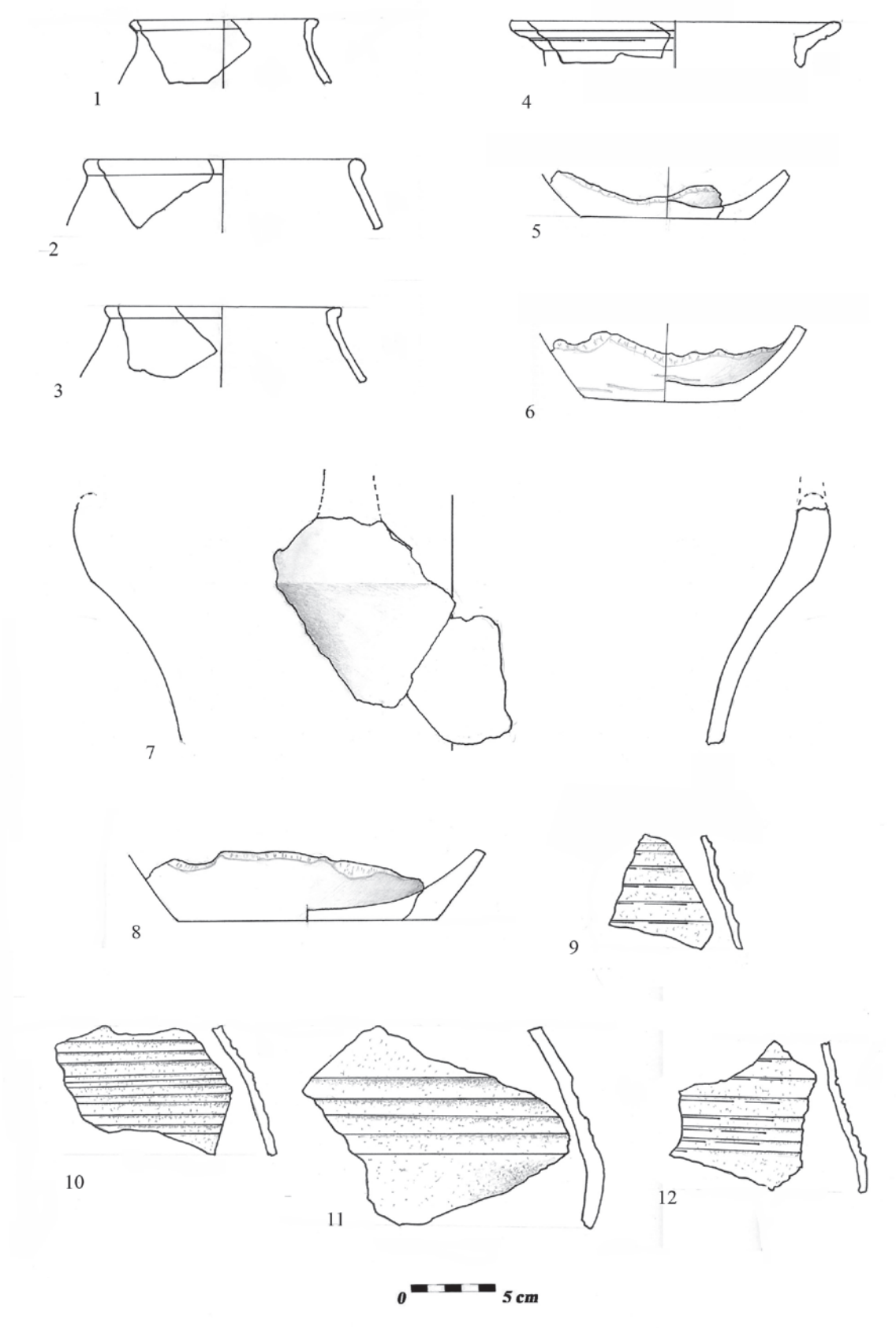
# M153



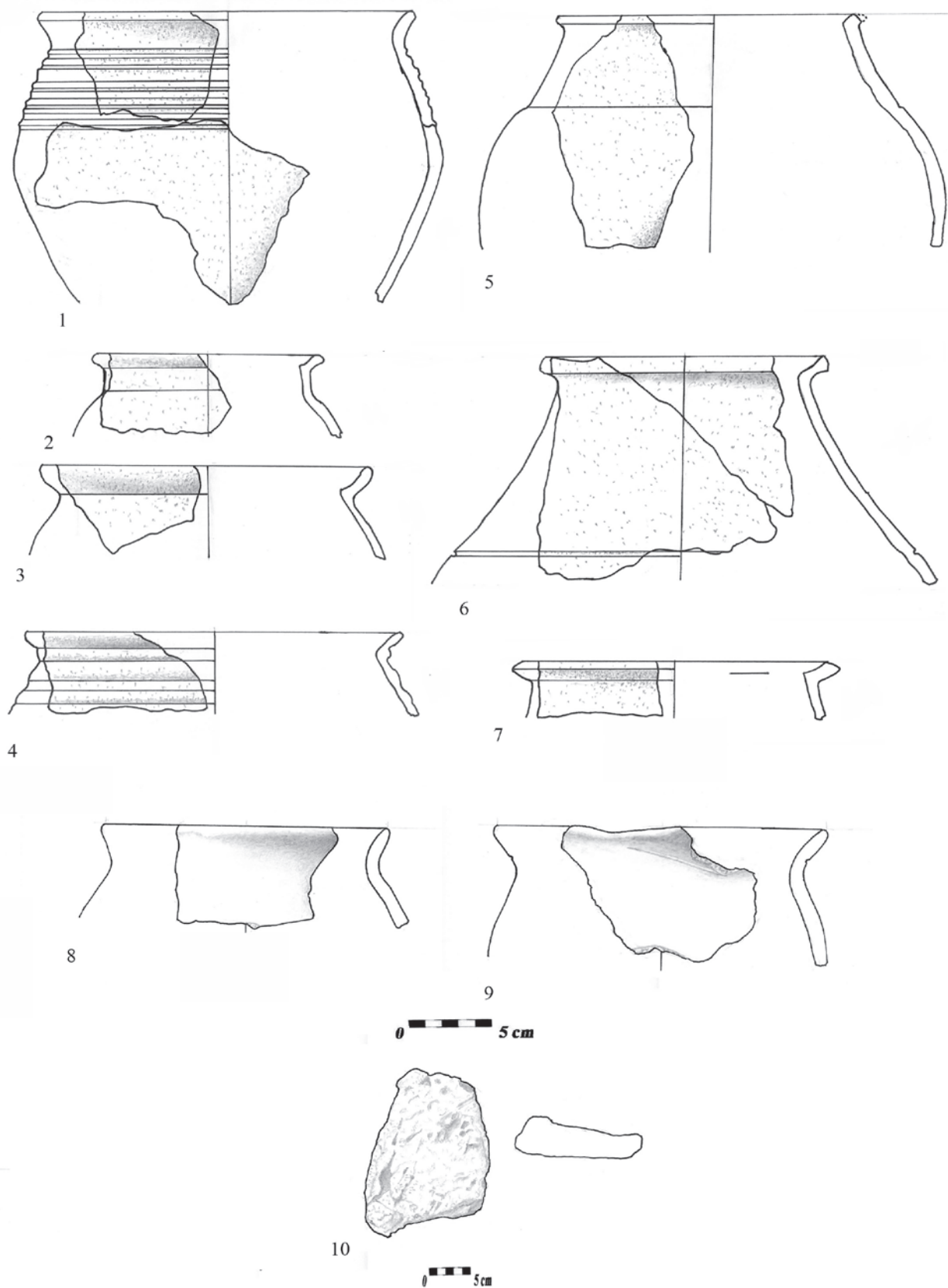
Pl. 21. Grave 153 / Mormântul 153 / 153-as sír.



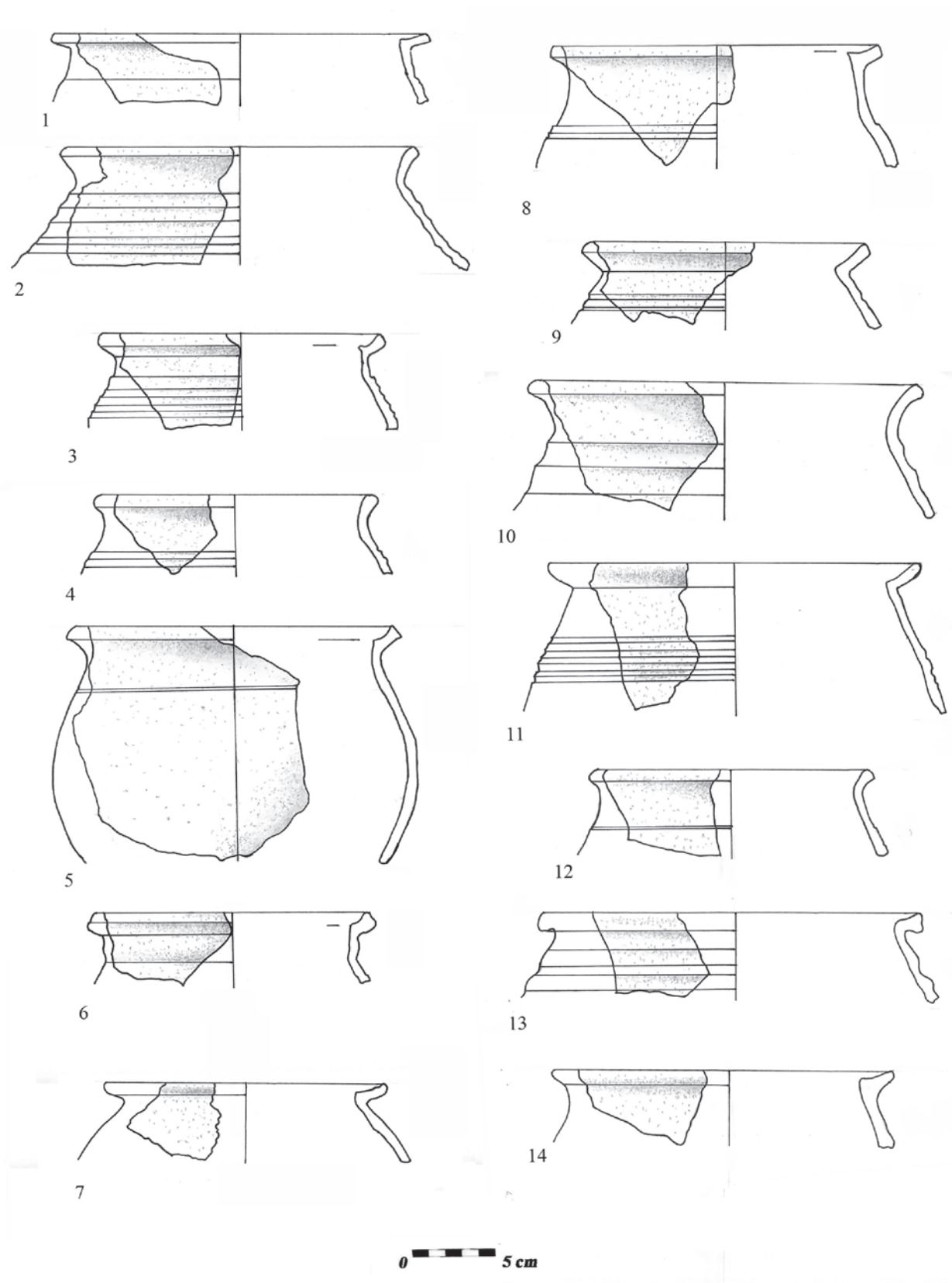
Pl. 22. Feature 23: 2-10 ceramic, 11-12 iron / Complexul 23: 2-10 ceramică, 11-12 fier / 23-as obiectum: 2-10 kerámia, 11-12 vas.



Pl. 23. Feature 23: 1-12 ceramic, / Complexul 23: 1-12 ceramică / 23-as objektum: 1-12 kerámia.

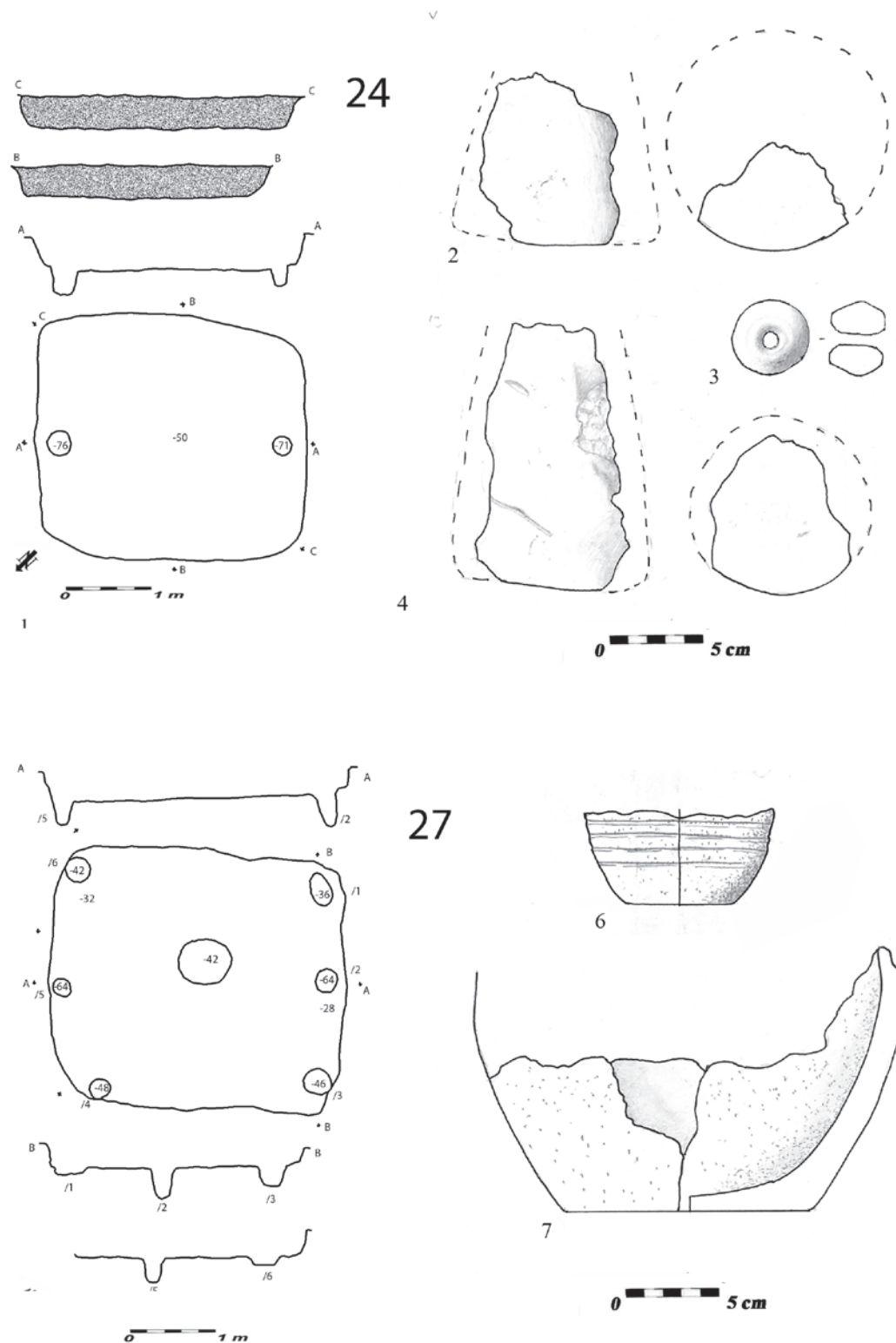


Pl. 24. Feature 23: 1-9 ceramic, 10 stone / Complexul 23: 1-9 ceramică, 10 piatră / 23-as objektum: 1-9 kerámia, 10 kő.



Pl. 25. Feature 23: 1-14 ceramic / Complexul 23: 1-14 ceramică / 23-as objektum: 1-14 kerámia.

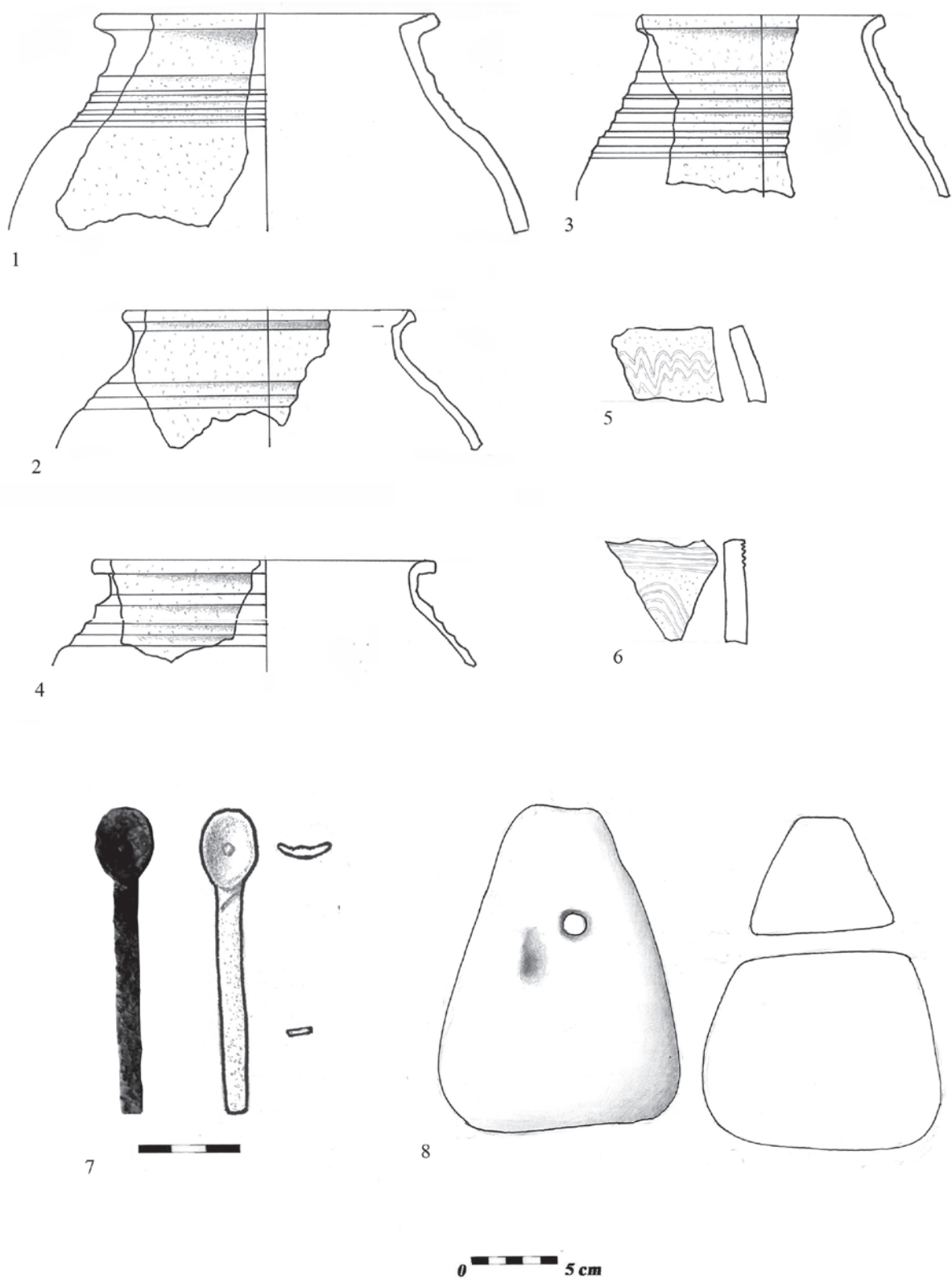




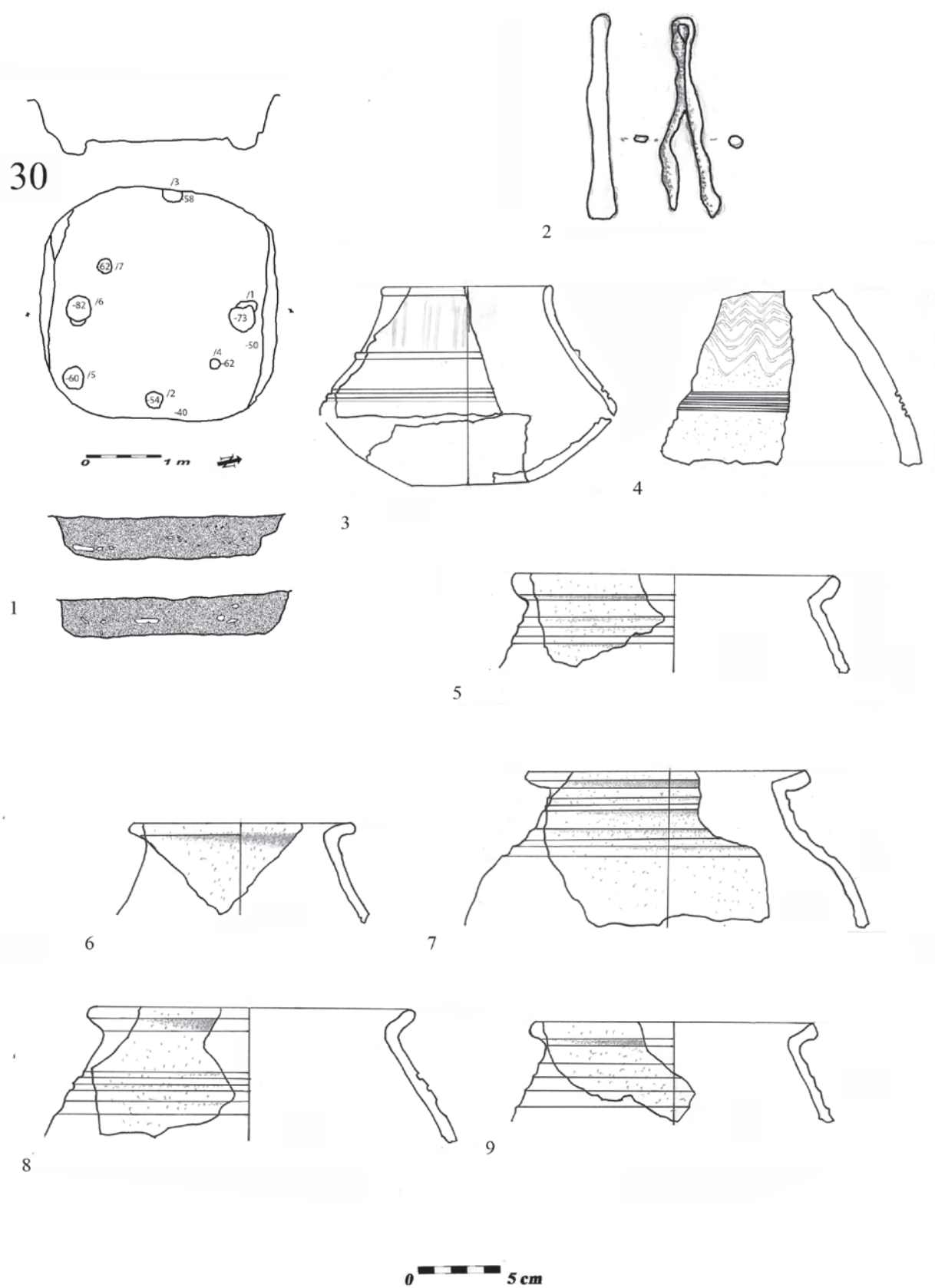
Pl. 26. Feature 24: 2, 4 clay weight, 3 spindle-whorl; feature 27: 6, 7 ceramic / Complexul 24: 2, 4 greutate din lut, 3 fusaiolă; complexul 27: 6, 7 ceramică / 24-es objektum: 2, 4 agyagnehezékek, 3 orsógomb; 27-es objektum: 6, 7 kerámia.



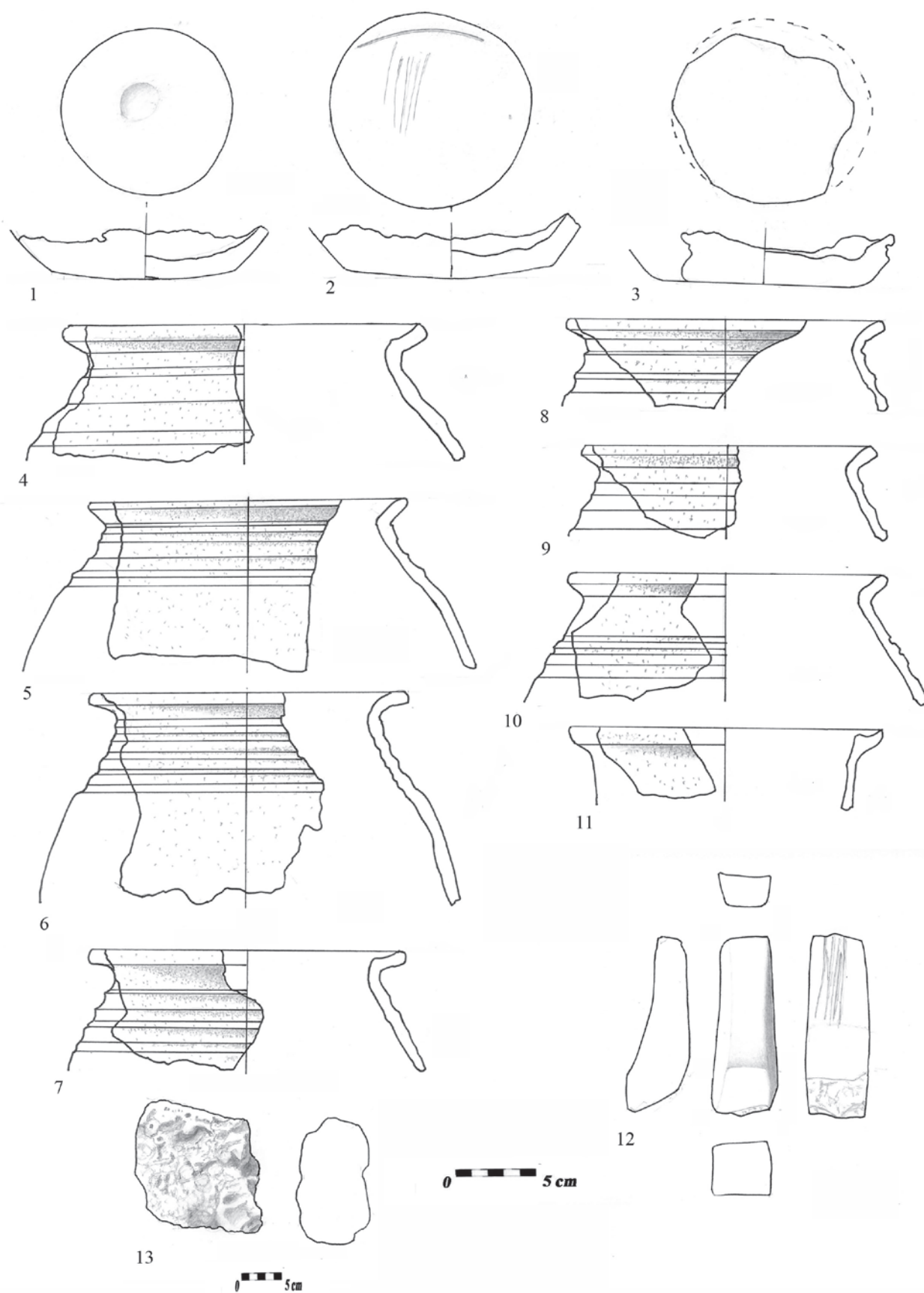
Pl. 27. Feature 29: 4, 5 spindle-whorl, 2, 3, 6-11 ceramic / Complexul 29: 4, 5 fusaiolă, 2, 3, 6-11 ceramică / 29-es objektum: 4, 5 orsógomb, 2, 3, 6-11 kerámia.



Pl. 28. Feature 29: 1-6 ceramic, 7 bronze spoon, 8 clay weight / Complexul 29: 1-6 ceramică, 7 linguriță din bronz, 8 greutate din lut / 29-es objektum: 1-6 kerámia, 7 bronz kanál, 8 agyagnehezék.

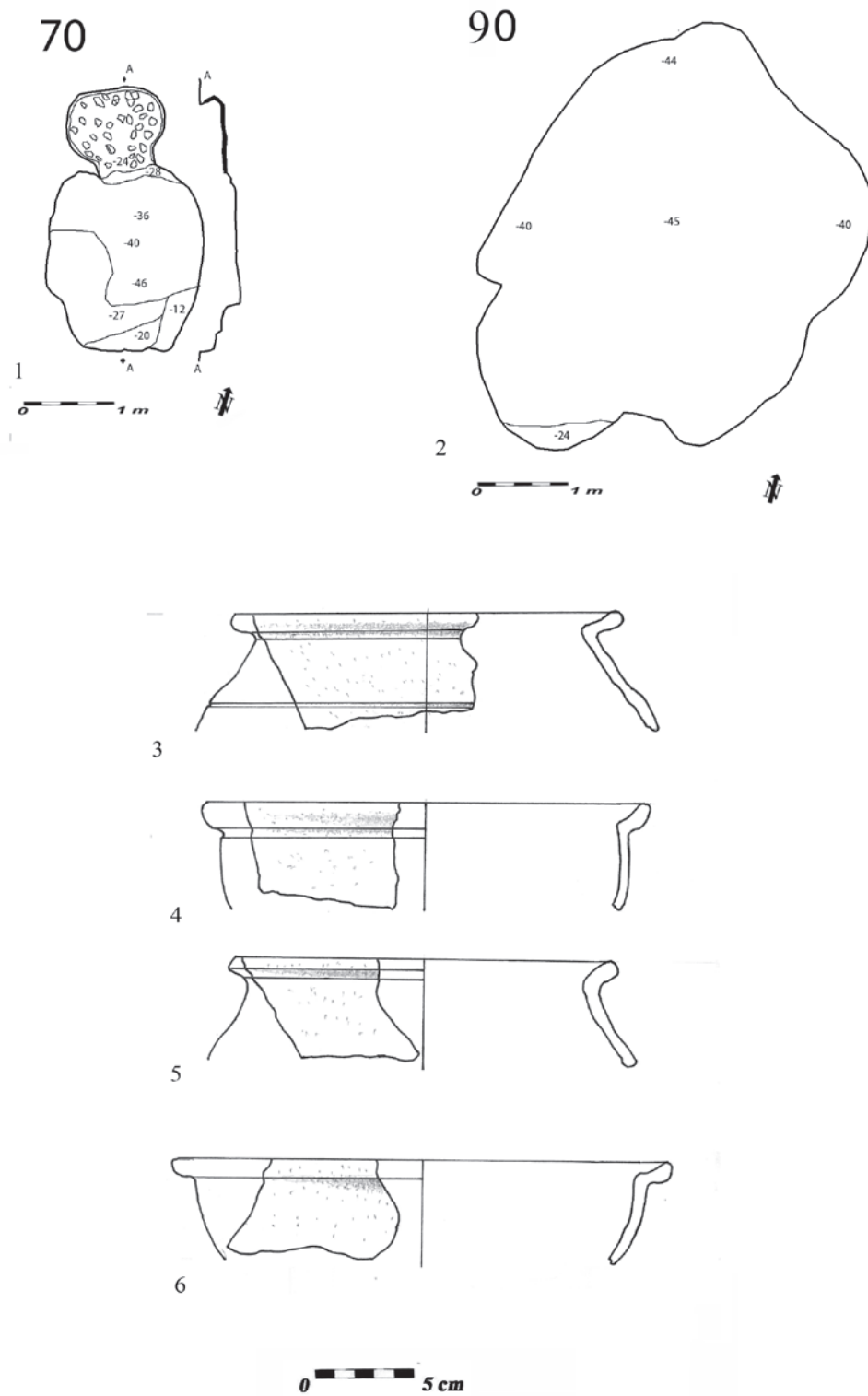


Pl. 29. Feature 30: 2 bronze tweezers 3-9 ceramic / Complexul 30: pensetă din bronz, 3-9 ceramică / 30-as objektum: 2 bronz csipesz, 3-9 kerámia.



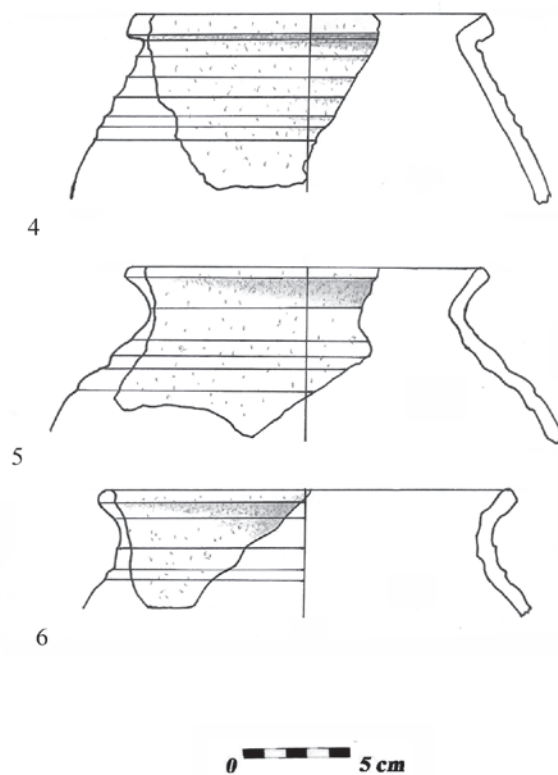
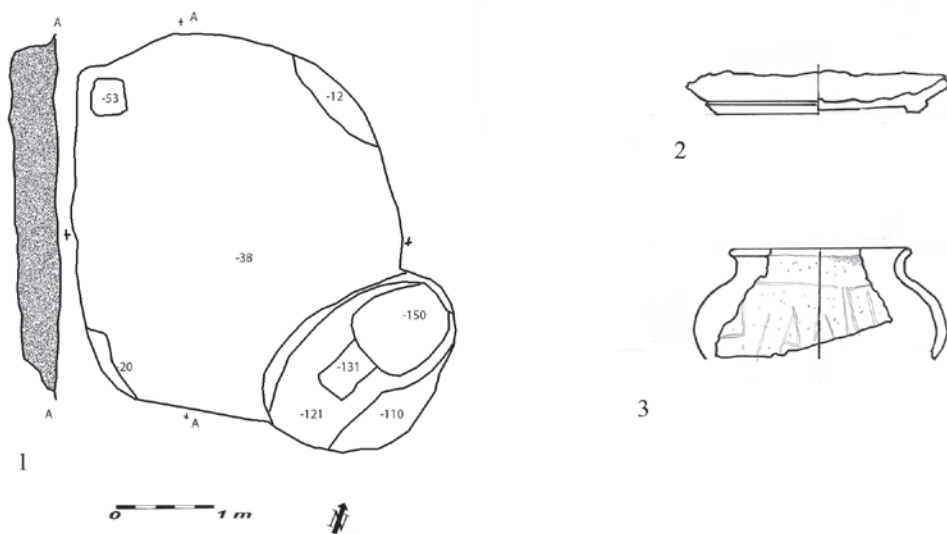
Pl. 30. Feature 30: 2-11 ceramic, 12, 13 stone / Complexul 30: 2-11 ceramică,  
12, 13 piatră / 30-as objektum: 2-11 kerámia, 12, 13 kő.





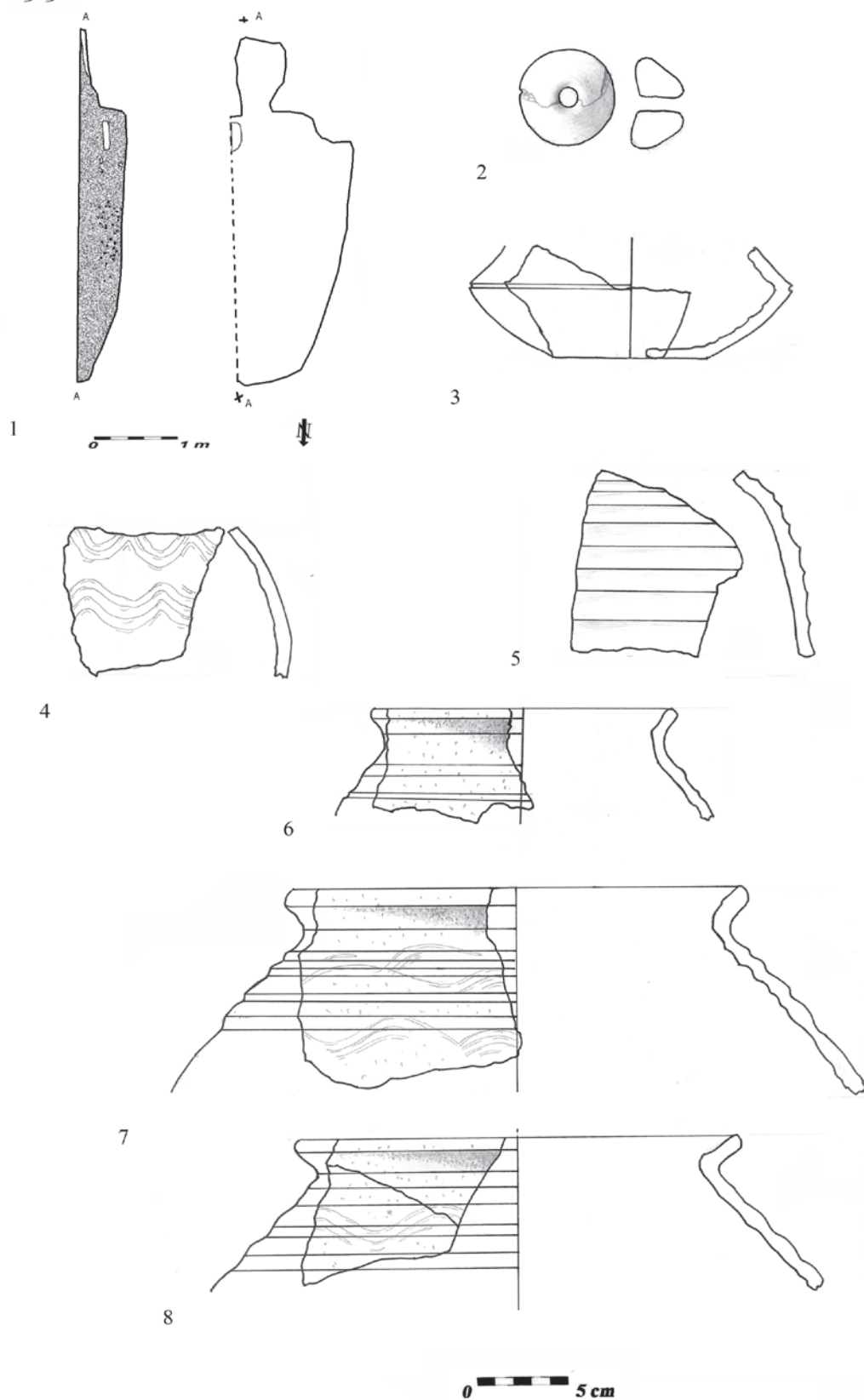
Pl. 31. Feature 70. Feature 90: 3-6 ceramic / Complexul 70. Complexul 90:  
3-6 ceramică / 70-es objektum. 90-es objektum: 3-6 kerámia.

95



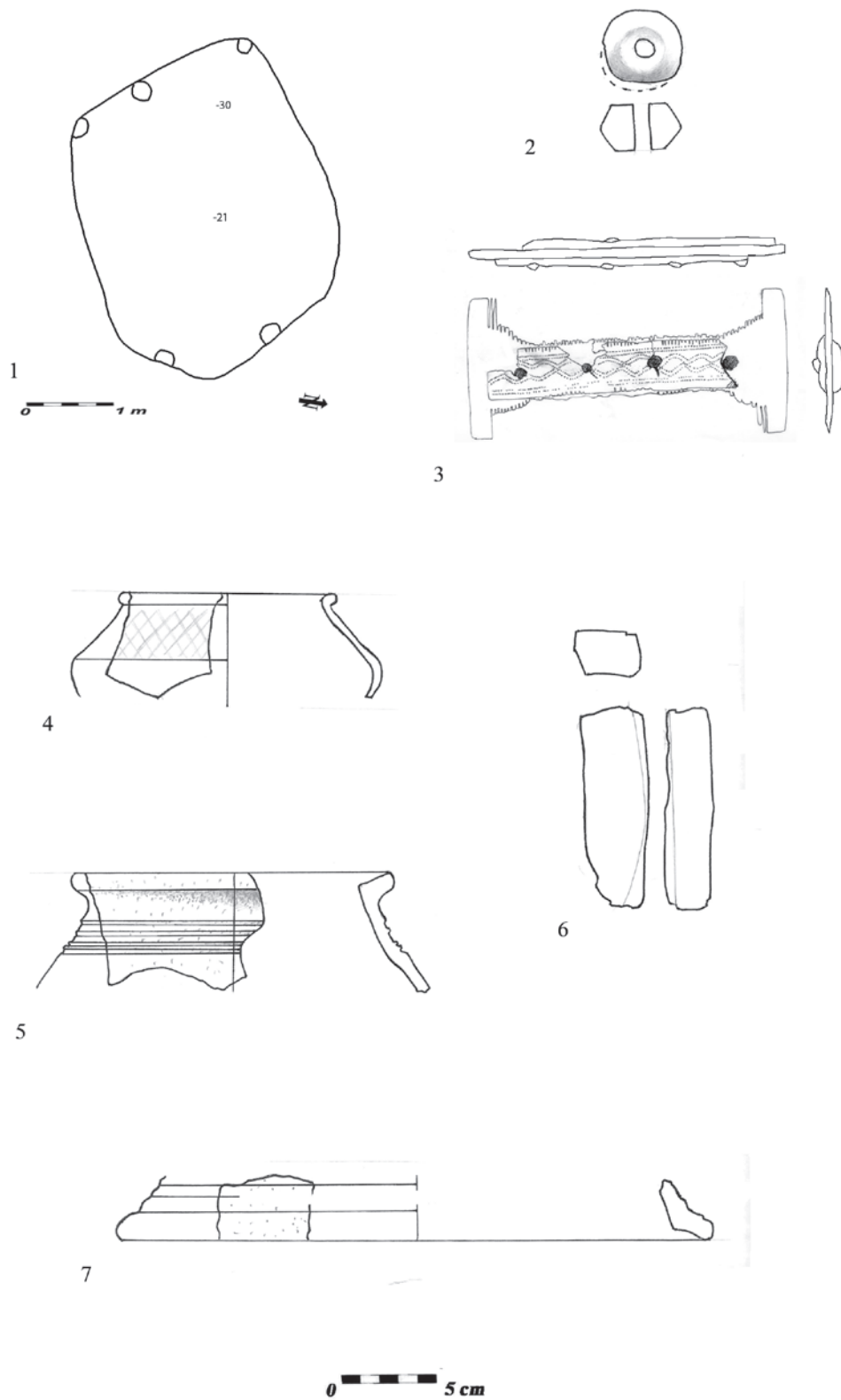
Pl. 32. Feature 95: 2-6 ceramic / Complexul 95: 2-6 ceramică / 95-ös objektum: 2-6 kerámia.

99

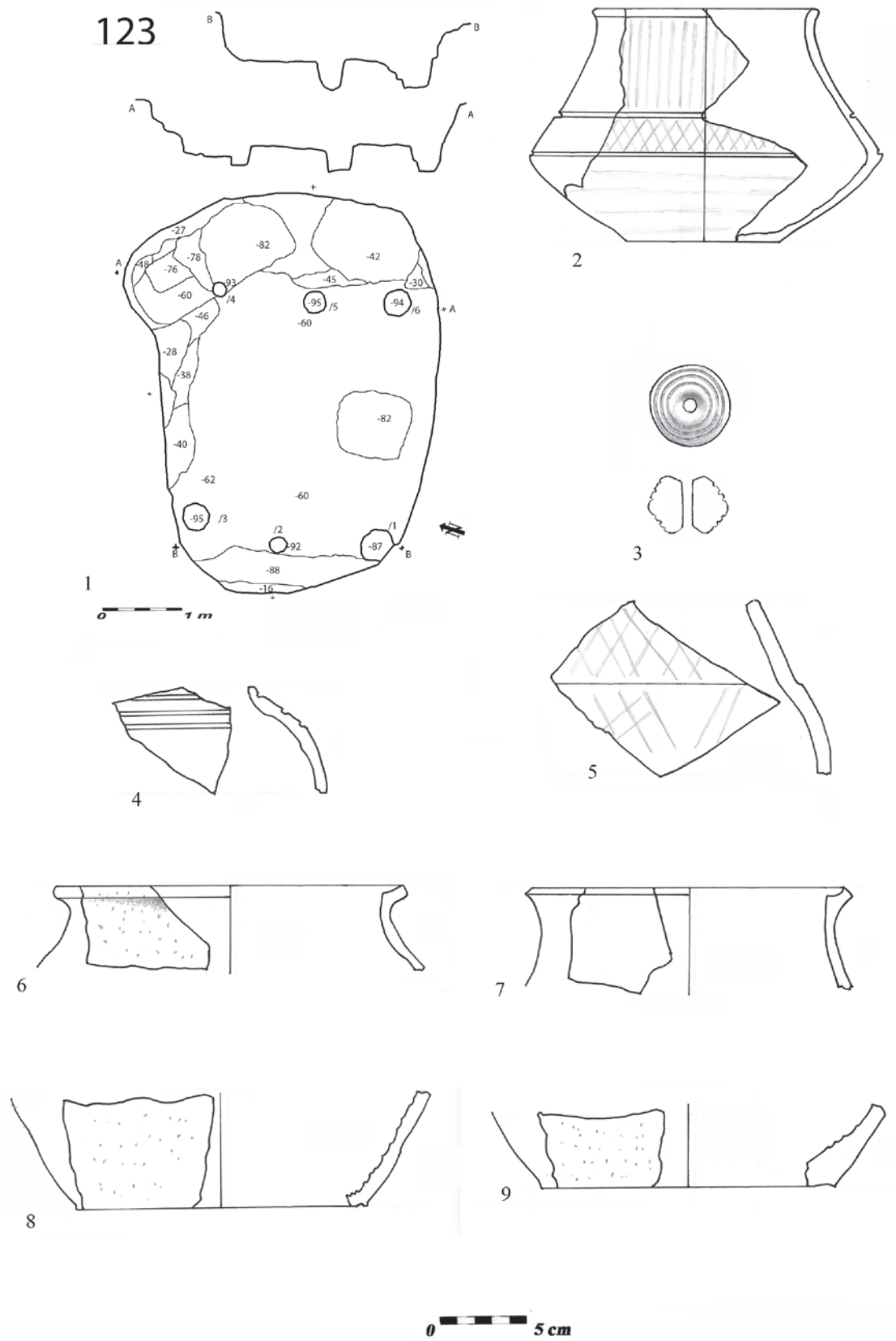


Pl. 33. Feature 99: 2 spindle-whorl, 3-6 ceramic / Complexul 99: 2 fusaiolă,  
3-6 ceramică / 99-es objektum: 2 orsógomb, 3-6 kerámia.

116



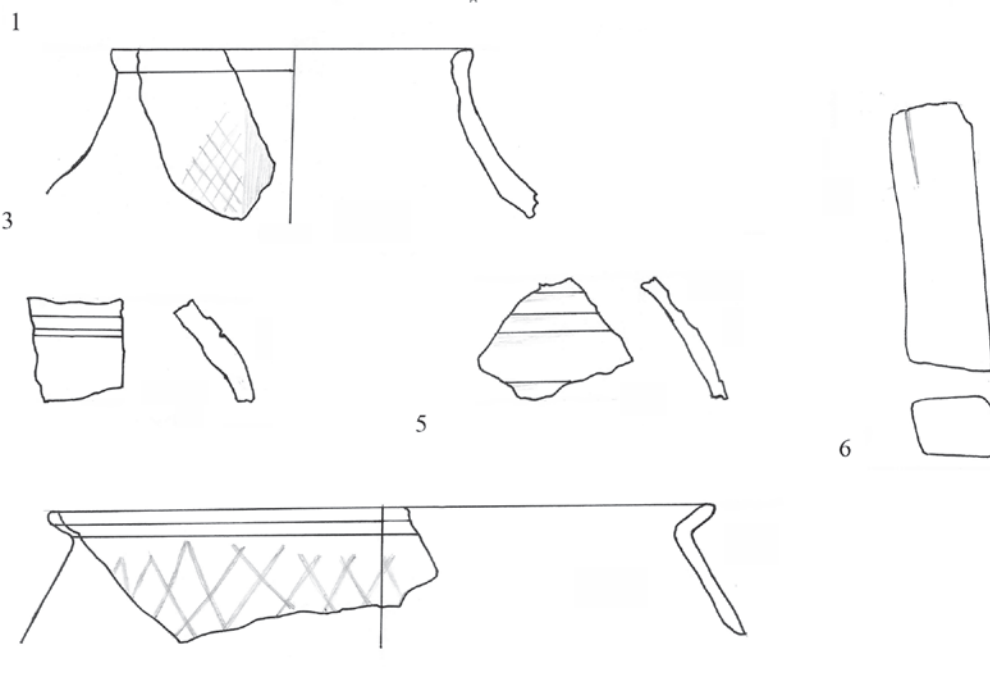
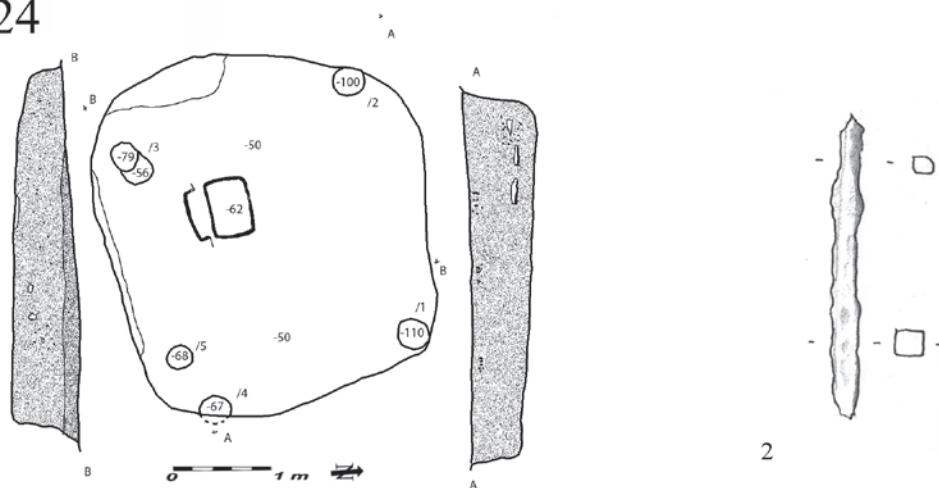
Pl. 34. Feature 116: 2 spindle-whorl, 3 bone comb, 4, 5, 7 ceramic, 6 stone / Complexul 116: 2 fusaiolă, 3 pieptene din os, 4, 5, 7 ceramică, 6 piatră / 116-os objektum: 2 orsógomb, 3 csontfésű, 4, 5, 7 kerámia, 6 kő.



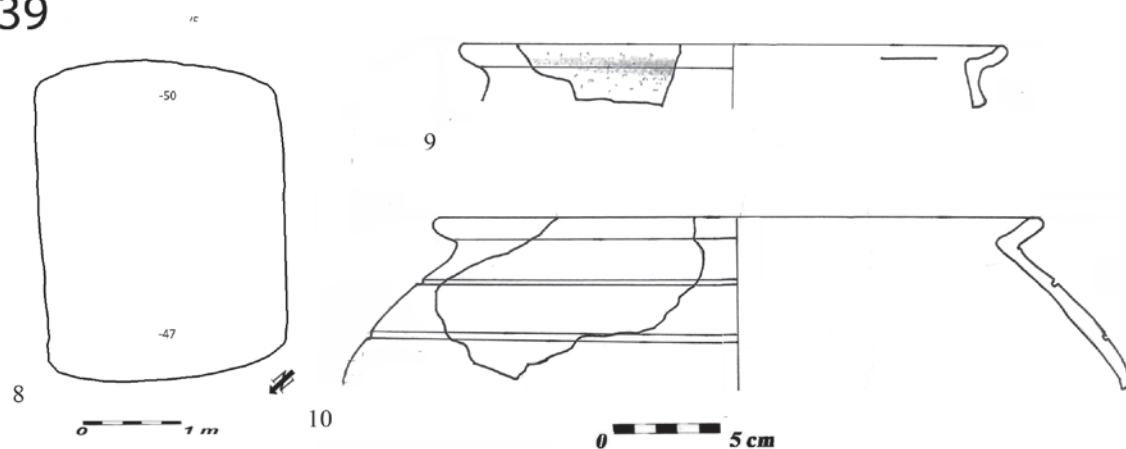
Pl. 35. Feature 123: 2, 4-9 ceramic, 3 spindle-whorl / Complexul 123: 2, 4-9 ceramică, 3 fusaiole / 123-as obiectum: 2, 4-9 kerámia, 3 orsógomb.



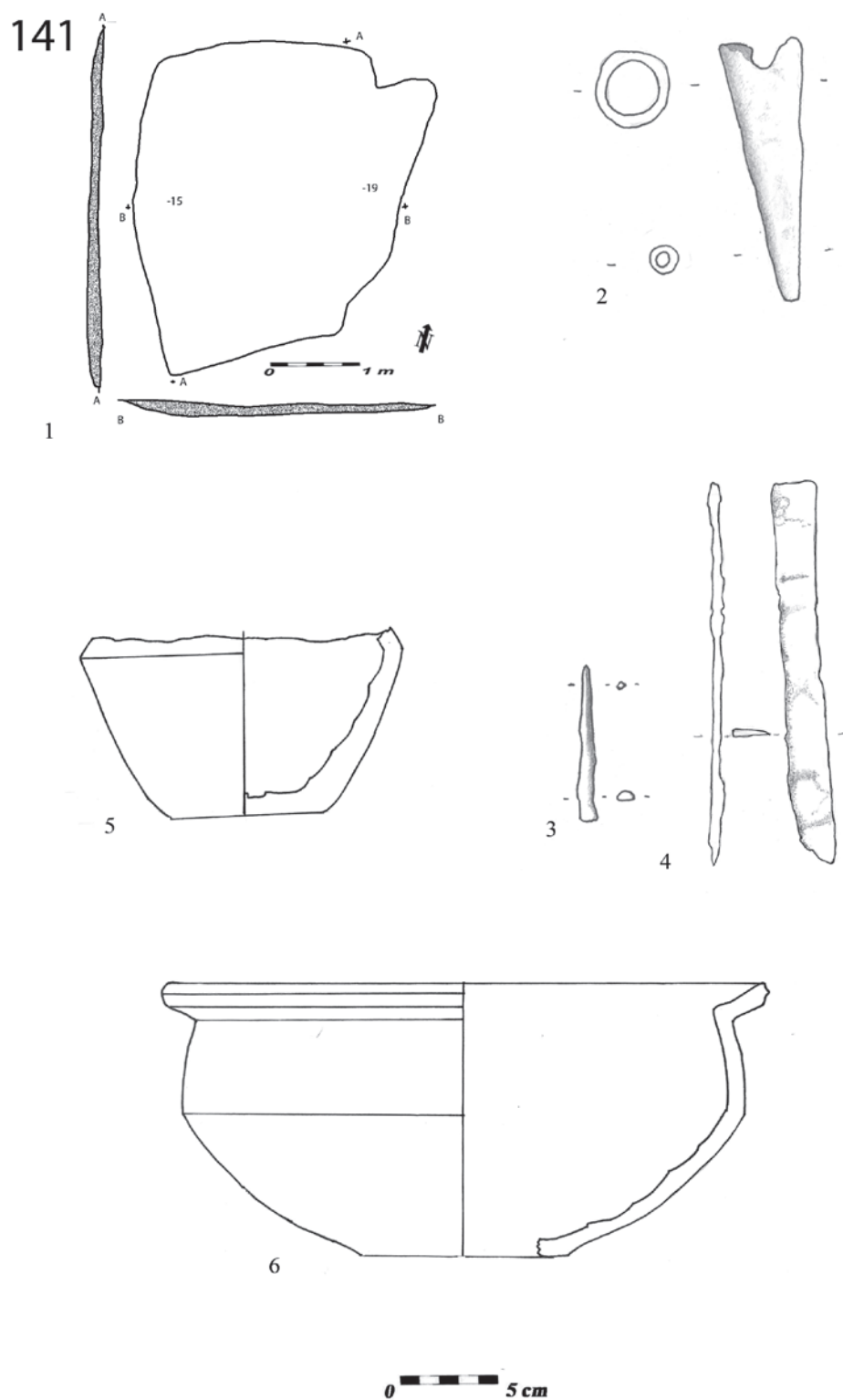
124



139

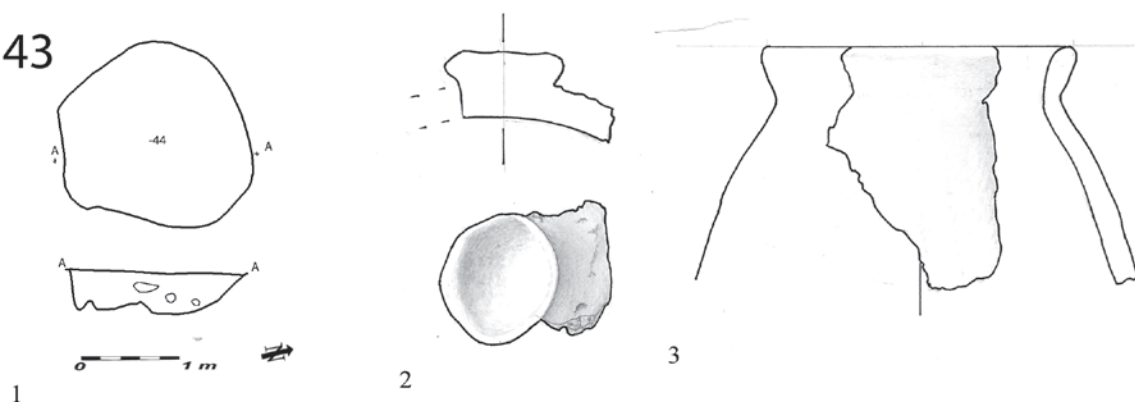


Pl. 36. Feature 124: 2 iron, 3-5, 7 ceramic, 6 stone. Feature 139: 9, 10 ceramic / Complexul 124: 2 fier, 3-5, 7 ceramică, 6 piatră. Complexul 139: 9, 10 ceramică / 124-es objektum: 2 vas, 3-5, 7 kerámia, 6 kő.

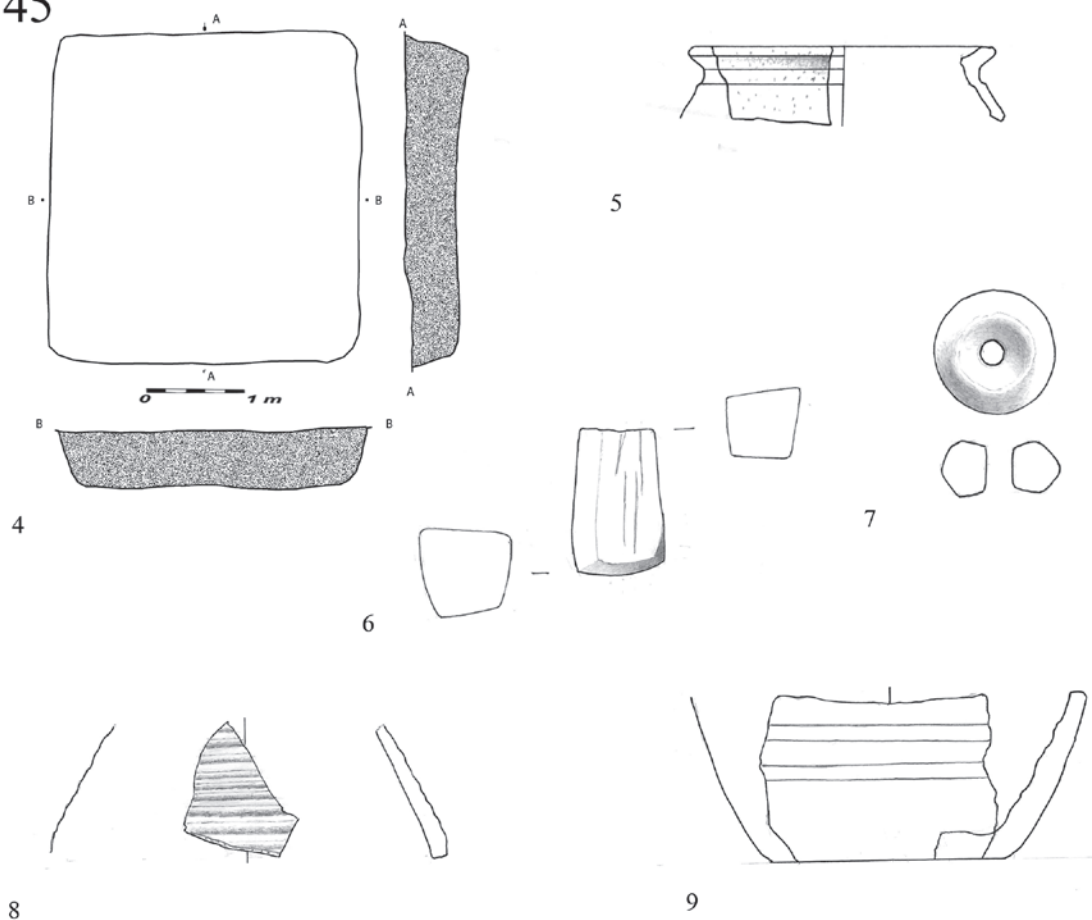


Pl. 37. Feature 141: 2-4 iron, 5, 6 ceramic / Complexul 141: 2-4 fier, 5, 6 ceramică / 141-es objektum: 2-4 vas, 5, 6 kerámia.

143

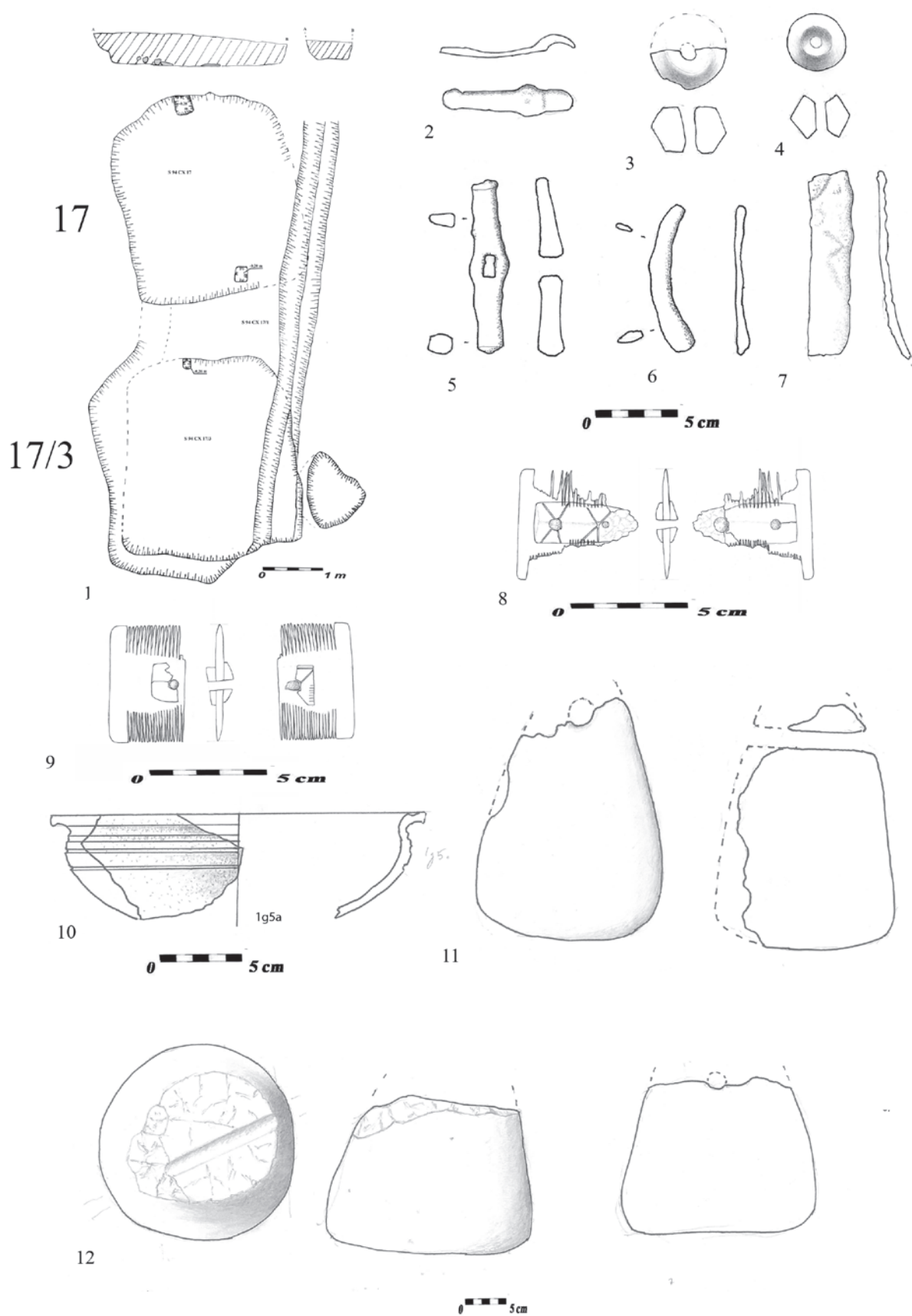


145

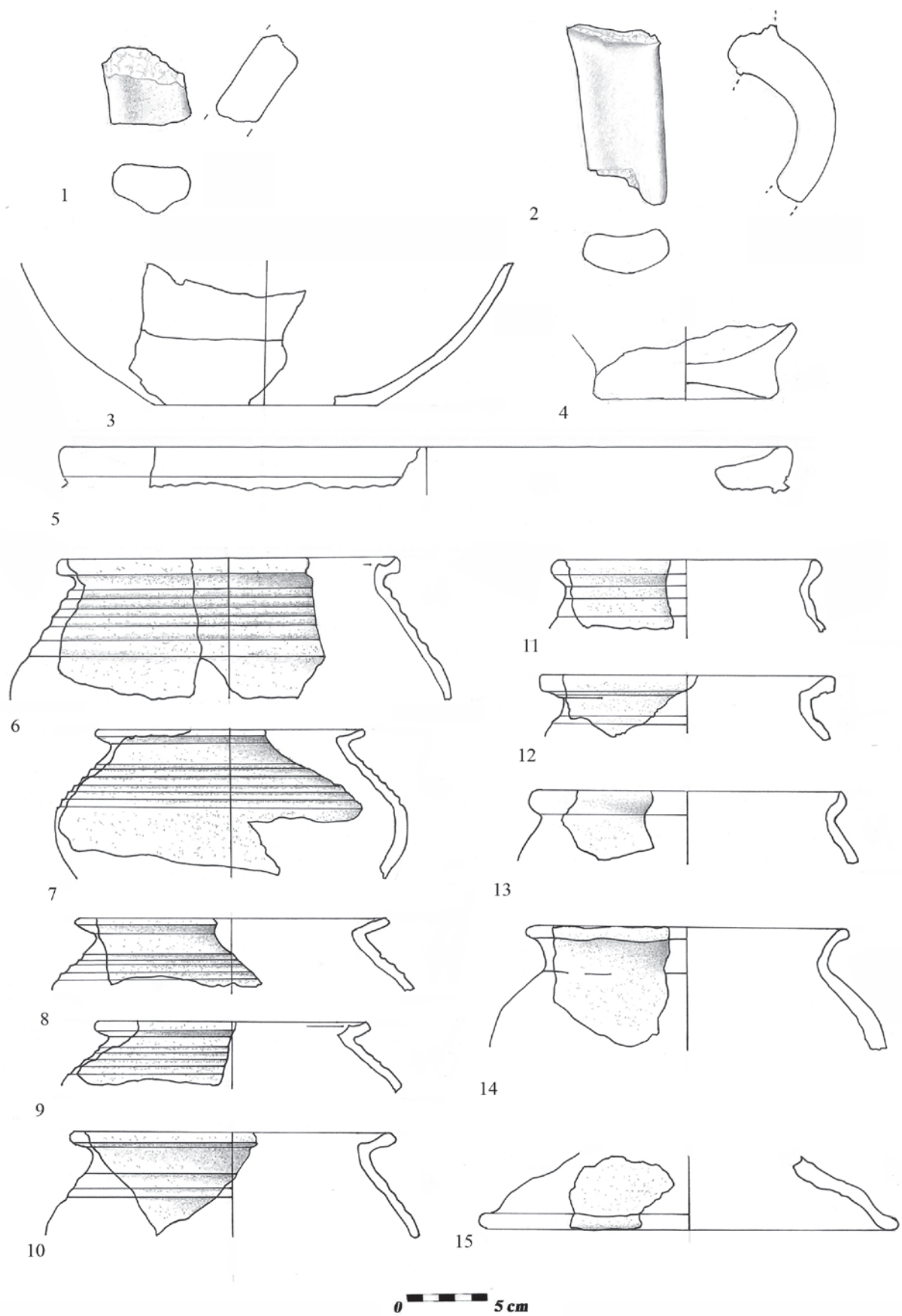


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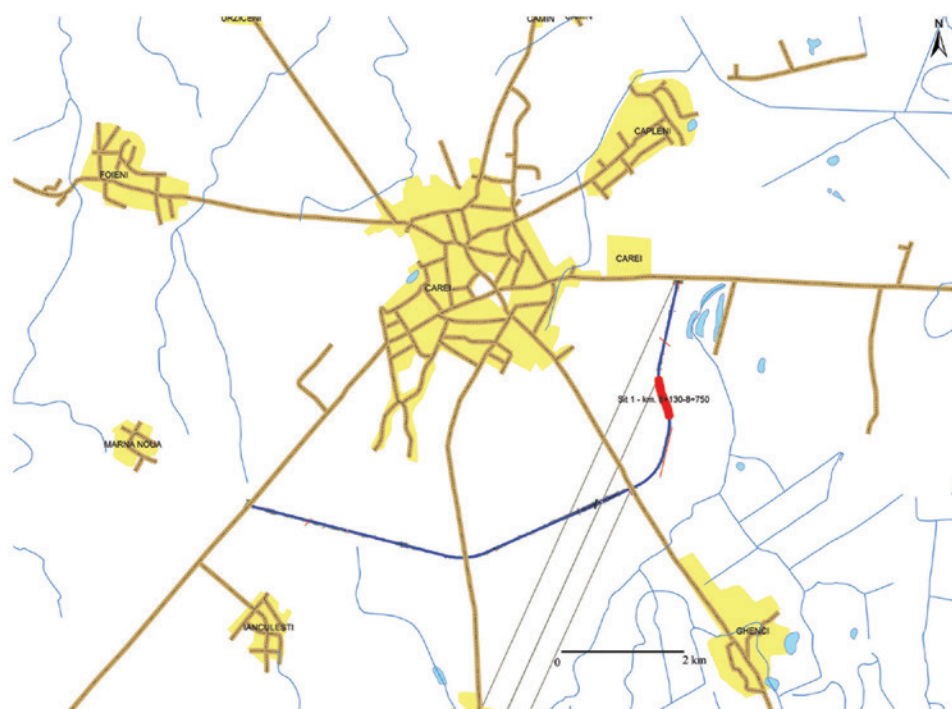
Pl. 38. Feature 143: 2, 3 ceramic. Feature 145: 5, 8, 9 ceramic, 6 stone, 7 spindle-whorl /  
Complexul 143: 2, 3 ceramică. Complexul 145: 5, 8, 9 ceramică, 6 piatră, 7 fusaiolă /  
143-as obiectum: 2, 3 kerámia. 145-ös obiectum: 5, 8, 9 kerámia, 6 kő, 7 orsógomb.



Pl. 39. Feature 17, 17/3: 2 bronze find, 3, 4 spindle-whorl, 5-7 iron tools, 8,9 bone combs, 10 ceramic / Complexul 17, 17/3: 2 obiect din bronz, 3, 4 fusaiolă, 5-7 unelte din fier, 8, 9 piepteni din os, 10 ceramică, 3 / 17, 17/3-as obiectum: 2 bronz tárgy, 3, 4 orsógombok, 5-7 vas szerszámok, 8, 9 csont fésűk, 10 kerámia.



Pl. 40. Feature 17, 17/3: 1-15 ceramic / Complexul 17, 17/3: 1-15 ceramică / 17, 17/3-as objektum: 1-15 kerámia.



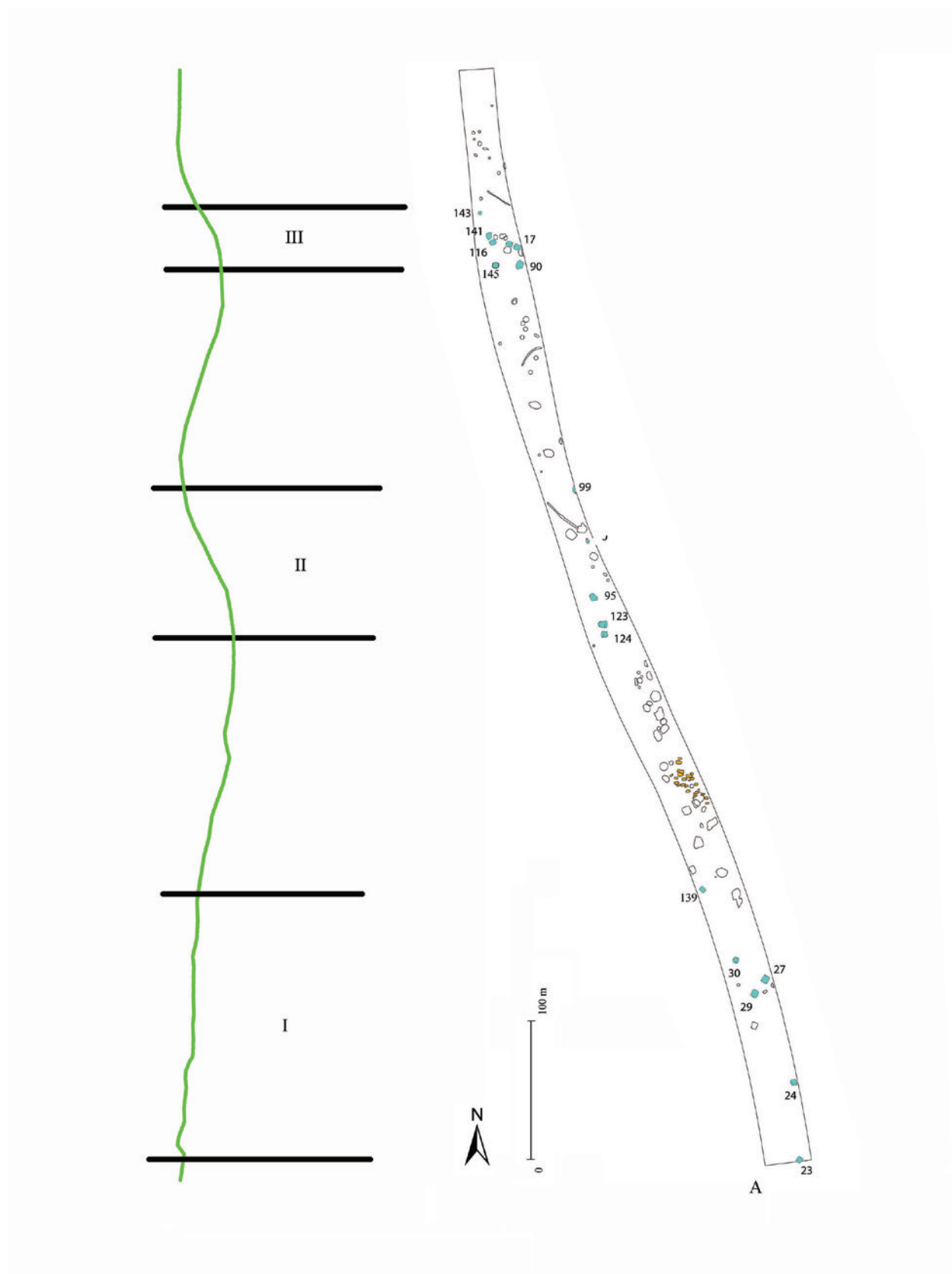
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2

Pl. 41. 1: the city of Carei and the ring road with the marking of site 1.; 2: geographical position of the site 1 in the vicinity of the Archaeological Basis Carei-Bobald / 1: Oraşul Carei şi traseul drumului de centură cu marcarea sitului 1; 2: poziţia geografică a sitului 1 în vecinătatea Bazei Arheologice Carei-Bobald / 1: Nagykároly és az elkerülő út az 1. lelőhellyel; 2: az 1. Lelőhely és a Nagykároly-Bobáld Régészeti Bázis.





Pl. 42. The general plan of the site 1. Carei-Bobald. The features from the settlement are marked with blue and the graves with orange. On the left is an altimetric reconstruction with the household groups / Planul general al cercetărilor din situl 1 de la Carei-Bobald. Cu albastru sunt marcate complexele din aşezare şi cu portocaliu mormintele. Pe partea stângă este o reconstituire altimetrică cu delimitarea unităţilor de locuire / A Nagykároly-bobáldi 1. lelőhely összesítő rajza. Kékkel jeleztük a település-objektumokat és narancssárgával a sírokat. A rajz bal oldalán egy terep-magassági rajz az objektumcsoportokkal.



1



2

Pl. 43. 1: the researched area on the ring road of Carei, in front the Archaeological Basis Carei-Bobald, in the backgroud the city of Carei; 2: The houshold groups (red) and the cemetery (blue) / 1: zona cercetată de pe centura Carei, în faţă Baza Arheologică Carei-Bobald , în fundal oraşul Carei; 2: Grupurile de gospodării (roşu) şi cimitirul (albastru) / 1: a nagykárolyi elkerülő út és a kutatott rész, előtérben a Nagykároly-Bobáld Régészeti Bázis, háttérben Nagykároly városa; 2: a település objektum-csoportok (vörös) és a temető (kék).





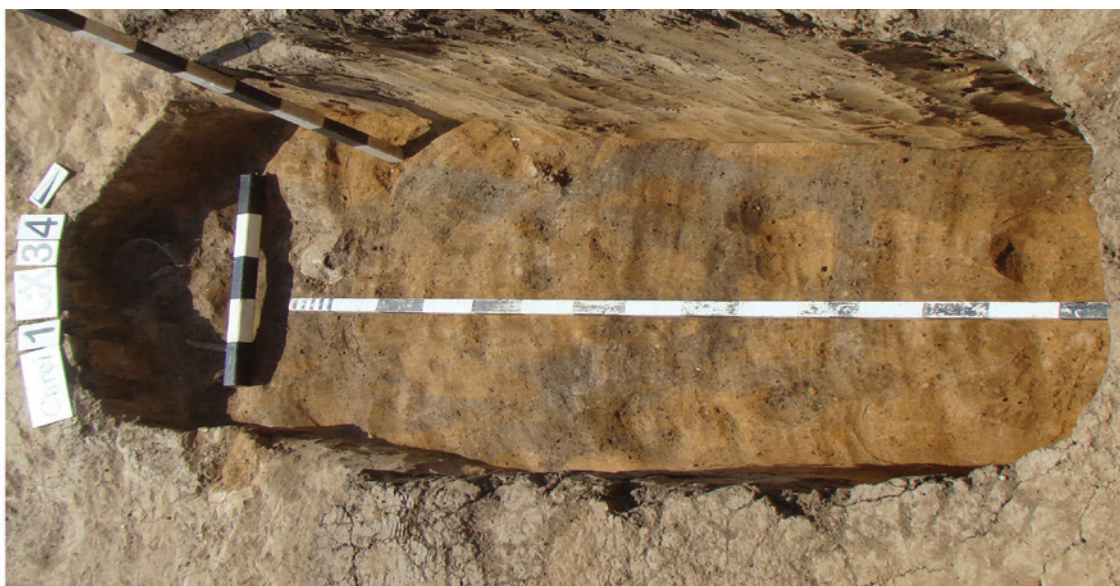
1



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Pl. 44. The houshold groups (red) and the cemetery (blue) / Grupurile de gospodării (roșu) și cimitirul (albastru) / A település objektum-csoportok (vörös) és a temető (kék).





Pl. 45. Grave 34 / Mormântul 34 / 34-es sír.





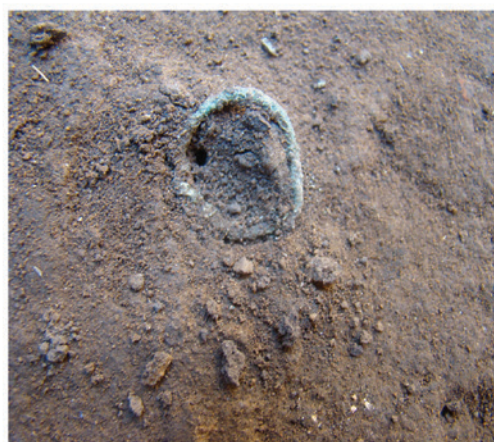
Pl. 46. Grave 36/1 / Mormântul 35/1 / 35/1-es sír.





Pl. 47. Grave 44 / Mormântul 44 / 44-es sír.



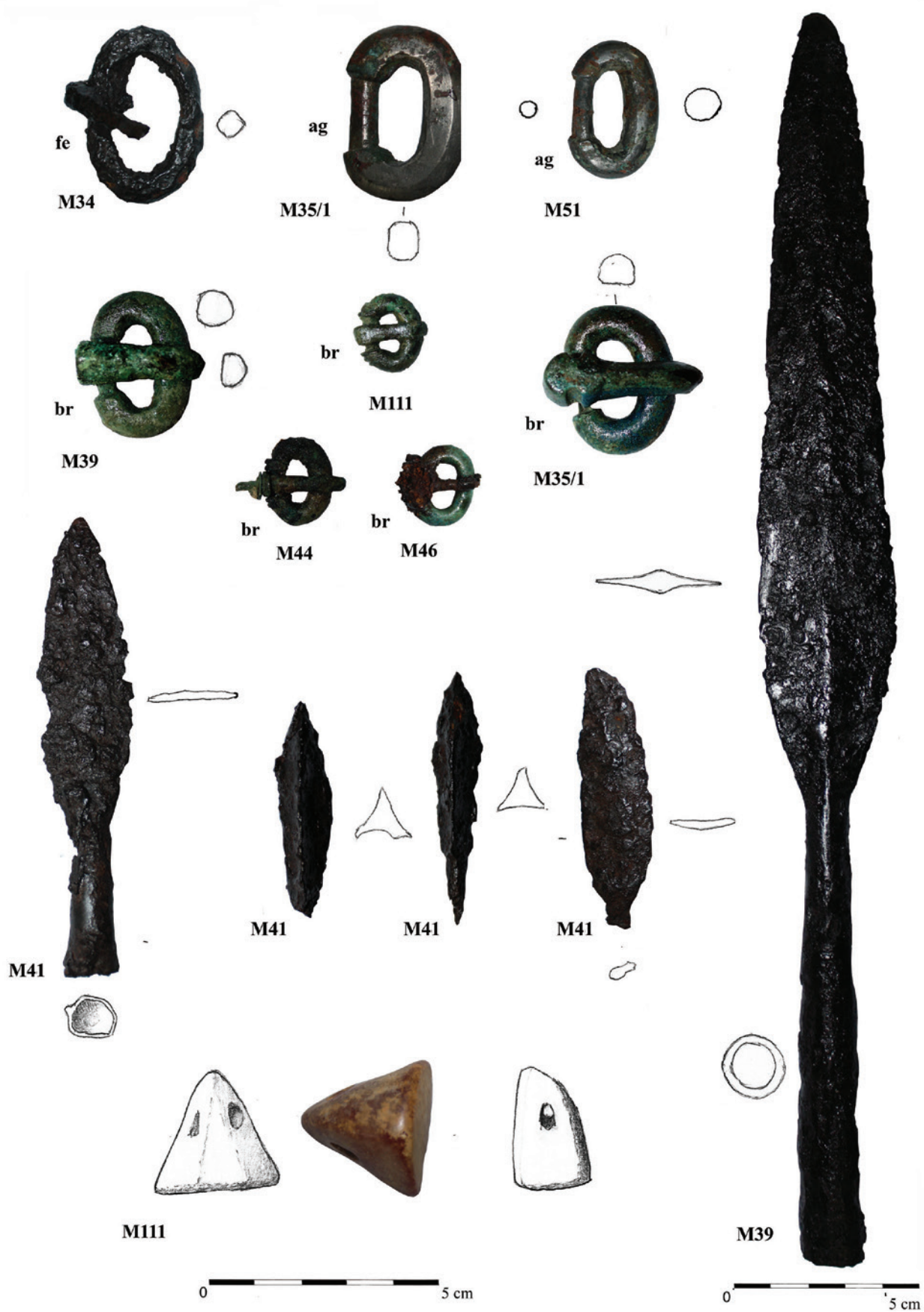


Pl. 48. Grave 111 / Mormântul 111 / 111-es sír.





Pl. 49. Features from the settlement / Complexe din aşezare / Település objektumok.



Pl. 50. Finds from the cemetery / Descoperiri din cimitir / Leletek a temetőből.



The project (A Cross-Border Open Model of a Digital Museum Database) is implemented under the Interreg V-A Romania-Hungary Programme ([www.interreg-rohu.eu](http://www.interreg-rohu.eu)), and is financed by the European Union through the European Regional Development Fund, Romania and Hungary.



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**Project name**

A Cross-Border Open Model of a Digital Museum Database (COMODI)

**Edited by**

Robert Gindele

Hungary, Nyíregyháza, 2020

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