CHRONOLOGY OF SÂNTANA DE MUREȘ – ČERNJACHOV TYPE OF SETTLEMENT AND NECROPOLIS FROM BUDEȘTI (REPUBLIC OF MOLDOVA)

BY

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Discovered in 1954, the settlement and the necropolis of Sântana de Mureş – Černjachov type of Budeşti (Chişinau municipality) were investigated through systematic digging in two stages: in the period of 1954–1957 – by E. Rikman (Rikman 1958, p. 187–200; idem 1960a, p. 303–327; idem 1960b, p. 197–219; idem 1964, p. 106–131; idem 1967) and in 1973 – by G. Čebotarenko and T. Ščerbakova (Čebotarenko, Ščerbakova 1974, p. 93–104). As a result of five digging campains there were discovered eleven dwellings, two kilns of iron ore, one tile kiln and several household annexes (surface constructions, outdoor fireplaces and provision holes) (Fig. 1). In the necropolis there were discovered over 370 inhumation and incineration graves and several ritual holes (Fig. 2). At the same time, both the settlement and the necropolis offered a variety of archaeological material, consisting of ceramics, glass beads, various tools, household utensils, clothing accessories, toilet pieces and jewels that mirror the human community, with its various domains of life and activity. Without being exhaustively investigated, the archaeological ensemble of Budeşti, with its valuable information, turned out to be extremely important in perceiving and clarifying some issues of the starting period of migration.

One of the most difficult issues raised by the Budeşti settlement and necropolis is their dating and periodization. Without a rigorous analysis of the dated elements, E. Rikman bated the antiquities from Budeşti back to the $2^{nd}-4^{th}$ centuries, accounting for the end of this settlement by the destructive invasion of the Hunic tribes during the early last quarter of the 4^{th} century (Rikman 1960b, p. 207; idem 1967, p. 40, 42). The thorough study of the inventory, supplemented by clear stratigraphic observations, shows however that the entire archaeological complex dates back to the 4^{th} century, and the start of the habitation can be dated, in all probability, back to the end of the 3^{rd} century, while the end – to the late 4^{th} or early 5^{th} century. The D-shaped bronze fibula (type 4a) (Fig. 3, 4), found on the surface of the ground, based on which E. Rikman placed the beginning of the settlement or in later period. As about the imported Roman amphorae, invoked as well for the early dating of Budeşti complex, their great majority can be dated back to the 4^{th} century. Only the narrow-neck amphorae made from the whitish pasta of *Tanais type*, represented by several fragments found in the settlement, can be dated back to the earlier period – the 3^{rd} and the first decades of the 4^{th} centuries (Vornic, Ciobanu 2005).

As concerns the establishment of the internal chronology of the complex, it is worth mentioning that E. Rikman failed to draw a detailed typology of the inventory and a diagram showing the presence in graves of typological series of objects; instead, he made only some observations on the evolution of the burial rites, underlying the gradual transition from incineration to interment and burial, towards the later period of the cemetery's activity, in W–E graves (Rikman 1975, p. 293–299). According to E. Rikman, the necropolis evolved, spacewise, from the center (which is dominated by incineration graves) towards the periphery (dominated or displaying exclusively interment graves) (Rikman 1975, p. 295, 296).

Although the Budești cemetery has not yet been uncovered entirely, the great number of graves, with their rich and diverse inventory, provides a quite good opportunity for a relative chronology. In order to obtain a chronological ordering of the discoveries we applied to the method called "automatic change of the matrix".

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The combinatory chart (Table 1) includes 79 graves (35 incineration, 45 interment and 2 "cenotaphs") and the following typological series of objects: bitronconic spindles with concave base (type 1a) (Fig. 3, 9), fibulae with wrapped leg, band-form of body and short spring (type 4c) (Fig. 3, 5), bronze buckles with an oval link and no fittings (type 2) (Fig. 3, 8), keys (Fig. 3, 11), casket fittings (Fig. 3, 10), sea-shell pendants (type 2) (Fig. 7, 9) and iron pail-shaped pendants (type 4) (Fig. 7, 11), spherical coloured-glass beads of small shape (type 1a) (Fig. 6, 5), medium or large in size (type 1b) (Fig. 6, 3), engraved (type 1c) (Fig. 6, 4), lobate (type 1d) (Fig. 6, 6), polyhedral (type 2) (Fig. 6, 9), ring-shaped (type 3) (Fig. 6, 7), small discoid (type 4) (Fig. 6, 8), cylindrical (type 5) (Fig. 6, 11) and prismatic with a hexagonal base (type 9) (Fig. 6, 10), polyfacetted beads made of carneol (type 12) (Fig. 16, 14) and prism-shaped beads (type 13) (Fig. 16, 15), beads made of amber (type 16) (Fig. 6, 16), tubular bone beads (type 18) (Fig. 6, 13), decorated glasses with hexagonal facets (type 4) (Fig. 6, 2), hand-made spherical pots (type 1) (Fig. 4, 1), ovoid pots (type 2) (Fig. 4, 2), pyriform pots (type 3) (Fig. 4, 3), with opening arched inwards (type 4) (Fig. 4, 4) and cylindrical pots (type 5) (Fig. 4, 5), hand-made cups (Fig. 4, 6), spheroidal pots (type 1) (Fig. 4, 7), ovoid pots (type 2) (Fig. 4, 9), short pyriform pots (type 3a) (Fig. 5, 1) and tall ones (type 3b) ((Fig. 4, 8), spheroidal flattening with large opening (type 4) (Fig. 4, 10), wheel-made from rough-paste pots, rough-paste tronconical (type 1) (Fig. 4, 11) and bitronconical bowls (type 2) (Fig. 4, 12), fine-paste spheroidal pots with tall edge (type 1b) (Fig. 5,4), bitronconical bows with raised shoulders (type 1a) (Fig. 5, 13), with a maximum diameter at the middle of the height (type 1b) (Fig. 5, 9) and with lowered shoulders (type 1c) (Fig. 5, 10), S-type bowls with acute (type 2a) (Fig. 5,11) and rounded shoulders (type 2b) (Fig. 5, 8), bowls with cylindrical upper part (type 3) (Fig. 5, 12), half-spheroid bowls with thickened edge (type 4a) (Fig. 5, 7), short bowls with arched walls and simple edge (type 5a) (Fig. 6, 17), bitronconical minuscule bowls (type 7) (Fig. 5, 14) and three-handle bowls (type 9) (Fig. 5, 19), wheel-made of fine paste, bitronconical low mugs with a relatively wide opening (type 1a) (Fig. 5, 3), big bitronconical cups with cylindrical neck (type 1b) (Fig. 6, 19), middle-size bitronconical mugs with tronconical neck (tip 1e) (Fig. 5, 6), small spherolidal mugs with tronconical neck (type 2a) (Fig. 5, 5) and big mugs of a cup shape (type 5) (Fig. 6, 20), wheel-made of fine paste, and wheel-made amphorettes of fine or rough paste (Fig. 5, 2). The succession of the incidences of the object series mentioned, included in the chart of table 1, allows for a development in time of the combinations that could be made in the entire course of the necropolis's functioning.

If we are to take into account the combinations of the inventory pieces, three principal groups of graves which correspond to three burial phases can be distinguished. The first group contains 29 graves (including 1 "cenotaph"), the second one -22 graves, and the third -28 graves (including 1 "cenotaph"). Each group is characterized by certain typological series of objects or their combinations.

For the first group, which comprises graves from an older phase (I), the following categories and types of objects are characteristic: iron keys; fittings for metal caskets; iron pail-shaped pendants (type 4); tubular bone beads (type 18); hand-made ovoid (type 2) and cylindrical (type 5) pots; low pots with flattened sphere-shaped body and wide opening, wheel-made of rough paste (type 4); roughly tronconical bowls, made on the wheel of rough paste (type 2) and bitronconical wheel-made mugs of fine paste (type 1e). The graves of this group also contained the great majority of bronze buckles with an oval link and no fittings (type 2), hand-made pots with the edge arching inwards (type 4a) and wheel-made ovoid pots of rough paste with the edge straight or turned down (type 2).

The second (II) group of graves is characterized by colored-glass, spheroid, engraved beads (type 1c); prism-shaped carneol beads (type 13); pear-shaped, low pots wheel-made of rough paste (type 3b), as well as spherical pots with a tall edge (type 1b); semispherical bowls with a straight lip (type 4a) and tronconic bowls with slanting shoulders and flaring edge (type 2a), wheel-made of fine paste. Also, the wheel-made tronconic tureens with rounded shoulders and turned-down edges of fine paste (type 2b) is almost exclusively found in these graves. Other series of typological elements, such as low bowls with bowed walls and rounded bottom (type 5a), small bitronconical tureens (type 7), mugs with bitronconical body and funnel-shaped opening (type 1b), wheel-made of fine paste, as well as hand-made tronconical mugs of rough paste are evenly found across graves of groups I and II.

The third group (III), which includes the remaining 28 graves, is characterized by such pieces as coloured-glass beads of spherical shape and medium or large in size (type 1b), lobate (type 1d), small discoid (type 4) and prismatic with a hexagonal base (type 9), beads made of amber (type 16), decorated glasses with hexagonal facets (type 4), hand-made spheroidal pots of rough paste (type 1), bitronconical bowls of rough

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paste (type 1), bitronconical bowls with the maximal diameter in the middle of their height, made of fine paste (type 1b), bitronconical mugs with lowered shoulders made of fine paste (type 1c), low mugs with a bitronconical body and wide opening made of fine paste (type 1a) and small cups with a spherical body and tronconical opening made of fine paste (type 2a). The graves of this group also contain most of the small glass spheroidal beads (type 1a), high pear-shaped pots made of fine paste (type 3a), as well as amphorettes and bitronconical bowls with raised shoulders (type 1a) made of fine paste. The ring-shaped glass beads (type 3) and big mugs made of fine paste (type 5) are evenly found across graves of group II and III. Concerning the other typological series of objects contained in the chart, they are found in graves of all three groups.

Besides the graves included in the combinatory chart, 17 of other tombs can be dated with accuracy, since they contain objects specific only to a certain chronological phase. Thus, graves 92 (type 2 hand-made pot), 134 (lock part) and 220 (type 5 hand-made pot) date back to phase I, while graves 115 (type 3b pot made of rough paste), 143 (similar pot), 154 (similar vessel), 205 (type 2a tureen made of fine paste), 233 (type 1c beads) and 312 (3b type pot made of rough paste) – phase II. Graves 80 (type 1 hand-made pot), 82 (type 1b tureen made of fine paste), 116 (similar tureen), 118 (type 1 hand-made pot), 136 (similar pot), 140 (type 1b tureen made of fine paste), 234 (type 1c tureen made of fine paste) and 282 (type 4 glass) date back to phase III.

Concerning the chronological relationship between the three groups of graves, we should note that the situation described in the diagram is supported by data provided by "vertical stratigraphy". For example, the interment tomb 93, dating in phase II, was partially overlapped by the incineration tomb 82, which is to be attributed to phase III, since it contained a 1b type tureen made of fine paste. Besides, the other accurately dated tombs, were subject to overlaps too. Thus, the incineration tomb 174, which falls into the group of graves of phase I (table 1), was disturbed by the interment tomb 173, not included in the chart, but which is to be attributed to phases I-II, since it contained, among other things, a bronze buckle with a simple link (type 1). The incineration tomb 23 dated from the phase III, was also overlapped by the incineration tomb 19, not included in the chronological chart; naturally, the latter tomb is also to be attributed to phase III. The other graves involved in overlaps do not provide elements of accurate dating, and so we cannot establish with precision their phases. We will only mention that they are located outside of the initial burial sector, which may mean that they date from the phase II or III.

As far as the layout of the three groups of graves across the necropolis is concerned, it is worth mentioning that they occupy distinct areas. The group I graves, which represent the burial phase I, occupy an area covering a ground approximately from the center of the necropolis towards the middle of the North-Western side (Fig. 8, 1). Here, in the initial basic area, 25 of the 29 group I graves are located; the other four graves are scattered in the South-Western area.

The group II graves appear sporadically in the initial burial sector. Nevertheless, they can be frequently found in the areas along the edges of the cemetery (Fig. 8, 2).

The group III graves occupy both the central and peripheral sectors (Fig. 8, 3).

In respect of the typological series chart, and hence of the chronological phases, it should be noticed that the two categories of graves (incineration and interment) are not evenly spread across all stages. Thus, the incineration graves can be found mostly in phase I (19 incinerated and 9 interred), while interment ones are mostly found in phases II (15 interred and 7 incinerated) and III (18 interred and 9 incinerated). These data suggest that during phase II a change in the burial customs took place, which triggered a shift from incineration to interment. The change of the rite, which is characteristic of the overwhelming majority of Sântana de Mureş cemeteries, took place probably due to some influences arriving from the Roman Empire (Ioniță 1995, p. 259, 260).

After we have established the burial stages of Budeşti necropolis, we believe it necessary to make several additional observations on the chronology of some important objects of inventory that were not included in the combinatory chart. As we have mentioned above, the two fibulae with a high clip holder of the *monströs entwickelte Formen* type (Fig. 3, 1) were not found in graves but in the culture layer of the cemetery. The significant fact is that both pieces were found in the initial burial sector, which is an indicator that implies their dating in the early phase of the existence of the complex. It is also the phase I, in all probability, in which we should place the fibula with the diamond-shaped stem, fixed clip holder and long spring (Fig. 3, 6), since it was discovered also in the initial burial sector. As far as the other fixed-clip holder fibulae are concerned (Fig. 3, 2), they were found in different areas (some in the initial sector, others in sectors containing phase II and III graves), and therefore we cannot establish, not even approximately, the phases to which they belong.

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Among the early pieces found in the Budești cemetery there also was a Roman fibula with a diamondshaped bronze body. It was discovered in the incineration grave 41, which was dated - based on other objects of inventory (type 2 buckle and type 4c fibula) - to phase I (Table 1).

The typological series chart could also not accommodate the fibulas with a wrapped stem and long spring (type 4b). In the necropolis these pieces appeared in the Eastern part of the initial burial sector, which suggests that they date to phase I.

The series of early objects discovered in the Budeşti cemetery also contains, in all probability, the two bronze dressing knives. The clue that suggests that these pieces are to be dated to an earlier phase is that both of them were discovered in the initial burial sector, although only one of them was in a closed complex (grave 24). This supposition is supported by the clarification made in Mihălăşeni, to the effect that all the small bronze knives date from the first phase of the cemetery's operation (Şovan 1999, p. 20).

Another category of inventory objects, which are important for chronology but could not be included in the chart, is represented by the bone combs. Depending on the shape of the handle, the combs are broken up into several types:

Type 1. Combs with trapezoidal handle and concavities on lateral edges (Fig. 7, 4).

Type 2. Combs with approximately semicircular handle, with the following variations:

2a. Combs with semicircular tall handle (Fig. 7, 1).

2b. Combs with flattening arched handle (Fig. 7, 2).

2c. Combs with approximately semicircular handle, with concavities toward the base, forming small wings (Fig. 7, 5).

Type 3. Combs with semicircular handle, lateral alveoli and wings (Fig. 7, 6).

Type 4. Combs with semicircular handle and lateral straight wings, outer parts made from two pieces, one rectangular on base, on the whole length of the comb and other semicircular that forms the proper handle (Fig. 7, 3).

As far as their chronological distribution is concerned, we should note that some types of combs date to the phase I, while others – to the phase II. Thus, the first two types and the type 2b combs were discovered in sectors containing phase I graves. Moreover, grave 122, which contained among other things a type 1 comb could be included in the chart and dated with precision (phase I) based on a type 5 hand-made pot and a type 1 spindle (Table 1). The other type 1 comb was found in the immediate vicinity of grave 122 and probably belongs to phase I too.

It seems that the interment grave 152 also dates from the old phase; it is there that the semicircularhandle comb with slight concavities towards the base (type 2c) was found. This assessment is based on the fact that in the Sântana de Mureş necropolis in Mihălăşeni the combs of this type were all included in phase I (Şovan 1999, p. 14, 20).

As far as the type 2a, 3 and 4 combs are concerned, they were found in graves (no. 57, 288 and 243) dating from phase II (Table 1).

Concerning the chronology of various types of amulet pendants not included in the combinatory chart, we should mention that some types date from the earlier phase, while others from the middle phase of the cemetery's development. Thus, grave 127, which contained among its inventory a pendant made of bronze sheet with coloured-glass setting (type 6) (Fig. 7, 12) was included in the diagram and dated with accuracy to phase I based on a tubular bone bead (type 18) and a clay spindle with a roughed base (type 1a). It worth mentioning that this grave also contained a wheel-made mug of fine paste, having a bitronconical body and a funnel-shaped opening (type 1c), which features are characteristic to phases I–II. The second grave, containing a type 6 pendant in its inventory (no. 187) is located in the vicinity of grave 127 and probably belongs to the early phase too. It is also to phase I – or, more precisely, later sub-phase of phase I – that the only iron "axe-shaped" pendant (type 3) (Fig. 7, 7), identified in the Budeşti necropolis belongs to. The grave in which the axe pendant was found (no. 54), was included in the chart and placed in phase I, based on some iron pail-shaped pendants (type 4) and a clay spindle (type 1a). We should also note, however, that this grave also contained a multifaceted cornelian bead (type 12), a hand-made pear-shaped pot (type 3) and a three-handle tureen (type 9) – pieces found in all three phases. It is interesting to note that grave 54 is located in the North-Western side of the cemetery, where the most spread type of graves are those dating in the phase II.

Grave 57, which contains, among other things, an amulet pendant made from an animal fang (type 1) (Fig. 7, 10), is dated to phase II based on several pieces of inventory. It is interesting to note that the boar-fang pendant, found in the Târgşor necropolis, dated also to the middle phase (Ioniță 1986, p. 306).

Concerning the rectangular bronze-sheet pendant (type 5) (Fig. 7, 8), it is dating either to phase I or phase II. This assessment is based on the fact that grave 106, where this piece was found, is located in an area containing tombs from phases I and II. An interesting note is that the metal rectangular pendant found in Târgşor was dated in phases II-III (Ioniță 1986, p. 306).

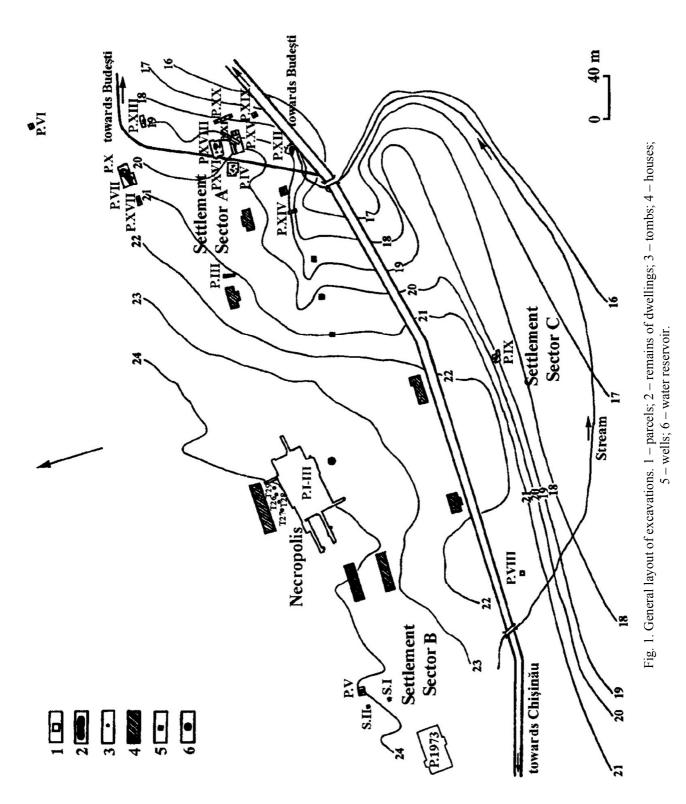
The group of objects dated in the middle phase of the development of the Budeşti complex also contains the four ceramic, Roman-made mugs found in graves 57 (Fig. 6, 18), 228, 286, and 324. As these vessels were of different types, they were not included in the combinatory chart. Nevertheless, three graves containing Roman mugs (57, 228 and 324) could be included in the chart and dated with accuracy (in phase II) based on a range of object types. Grave 286, which contained a Roman cup with a trilobate opening, was found in the sector containing graves from phase II and must be included into the same chronologic interval.

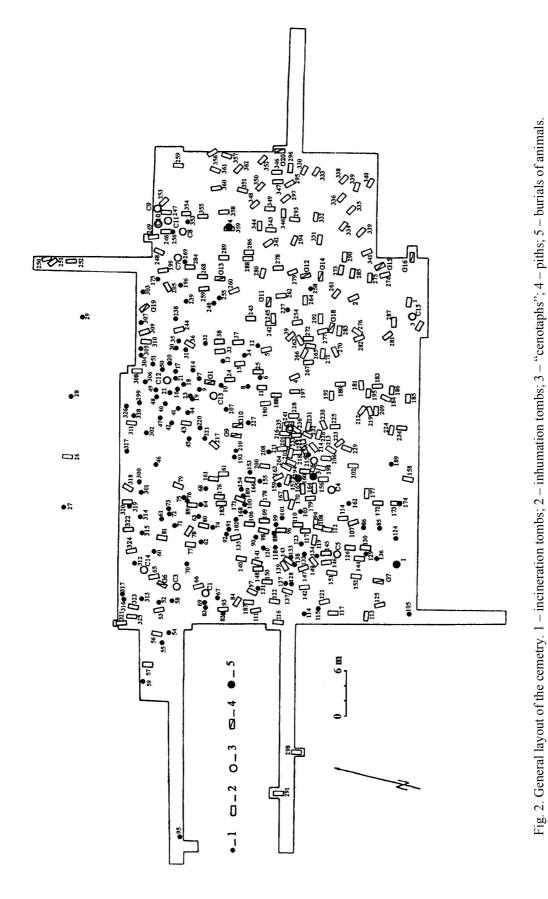
From the later discoveries one ought to mention the conic glass with relatively thin walls, found in the interment grave 266 whose skeleton was oriented W–E. It is important to remember that this grave is in an area (South-East) which contains mostly W–E graves.

The projection of the three phases of the evolution of Budeşti complex into an absolute chronology proved to be quite difficult. The first phase can be dated back before mid-4th century. The second stage can be dated back to the third quarter of the 4th century, probably before the Huns invasion. Finally, the third stage can be dated back to the last quarter of the 4th century and, perhaps, also to the first two decades of the following century. It is in this last stage that, in all probability, the greatest part of the W–E graves (Christian?) date. Because of poor or absent inventory, the combinatory chart could not accommodate but a few of them. It is relevant to note that the four graves oriented W–E, which have been included in the chart (no. 181, 203, 212 and 271), date back to the final stage (III) of the cemetery's existence. A clue that helps dating the W–E graves in the latter stage of the cemetery existence is the fact that in most cases of the overlaps involving graves with their skeletons oriented W–E it is the N–S interment tombs that were disturbed.

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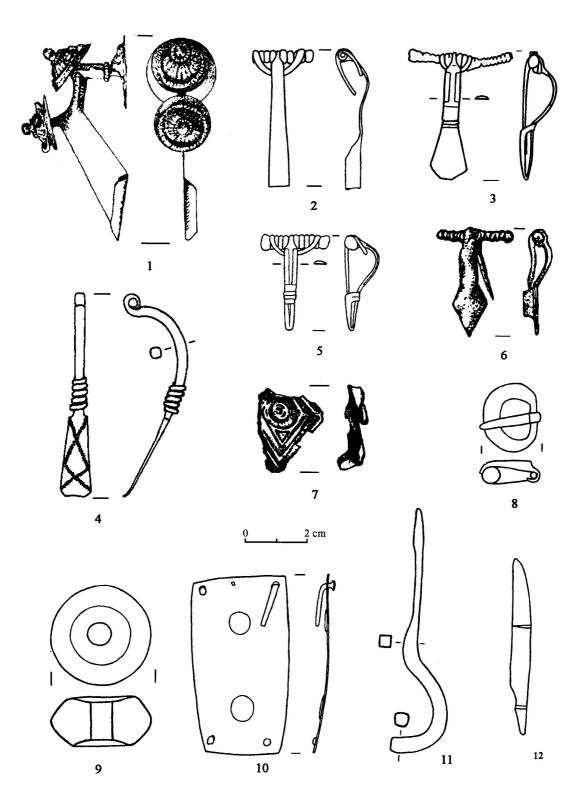


Fig. 3. Fibulae of type 1 (7), 2 (1), 3a (2), 3b (6), 4a (3) and 4c (5), buckle of type 2 (8), spindle of type la (9), kasket fitting (10), key (11) and dressing knife (12). 1, silver; 2–8, 10, 12 bronze; 11, iron; 9, clay.

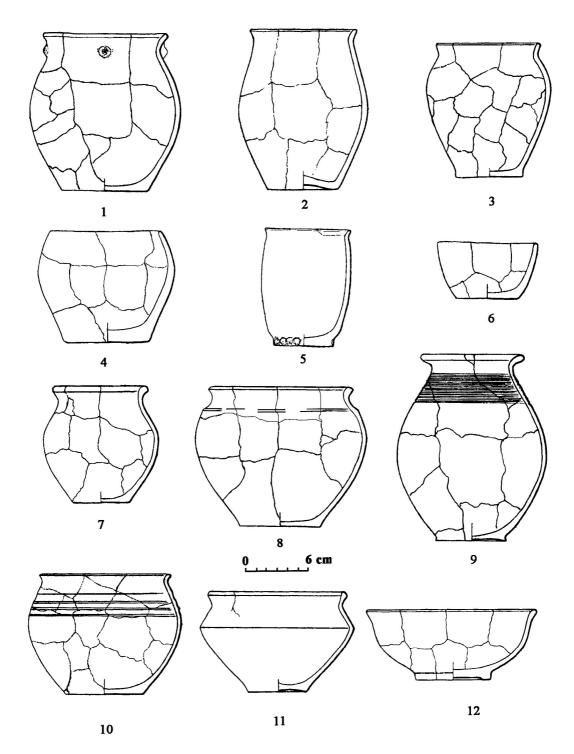


Fig. 4. Hand-made pots of type 1 (1), 2 (2), 3 (3), 4 (4) and 5 (5), hand-made cup (6), wheel-made from rough paste pots of type 1 (7), 2 (9), 3b (8), 4 (10) and wheel-made from rough paste bowls of type 1 (11) and 2 (12).

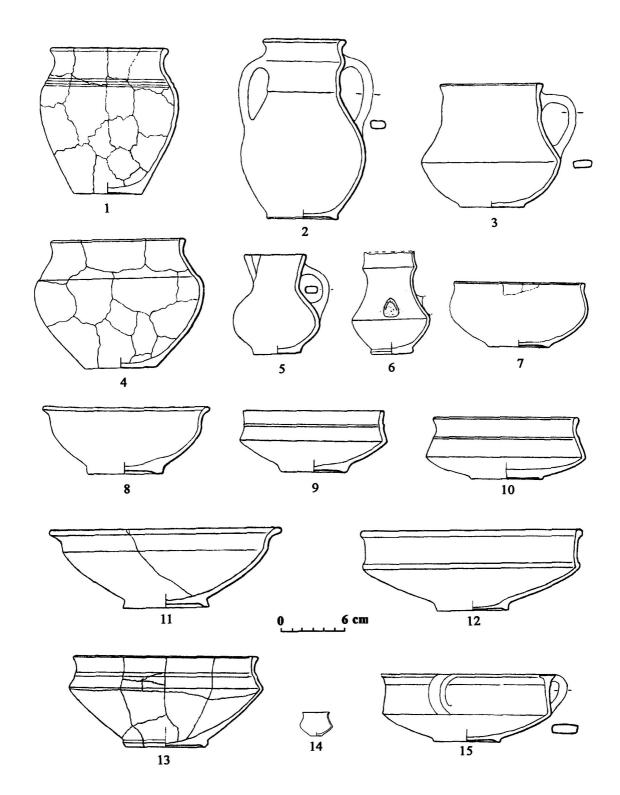


Fig. 5. Wheel-made from rough paste pot of type 3a (1), wheel-made amphorette of fine paste (2), wheel-made from fine paste pot of type 1b (4), wheel-made from fine paste mugs of type 1a (3), 1d (6), 2a (5), wheel-made from fine paste bowls of type 1a (13), 1b (9), 1c (10), 2a (11), 2b (8), 3 (12), 4 (7), 7 (14) and 9 (15).

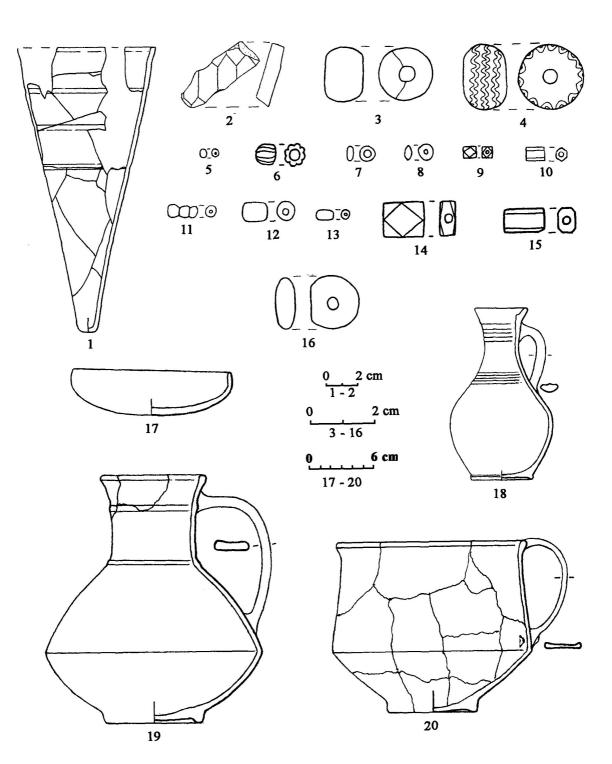


Fig. 6. Glass of type 1 (1) and 4 (2), beads of type la (5), 1b (3), 1c (4), 1d (6), 1e (11), 2 (9), 3 (7), 4 (8), 5 (12), 9 (10), 12 (14), 13 (15), 16 (16), 18 (13), wheel-made from fine paste bowl of type 5a (17), wheel-made from fine paste mugs of type 1b (19), 5 (20) and imported Roman mug (18). 1–12, glass; 13, bone; 14, 15, carneol; 16, amber; 17–20, clay.

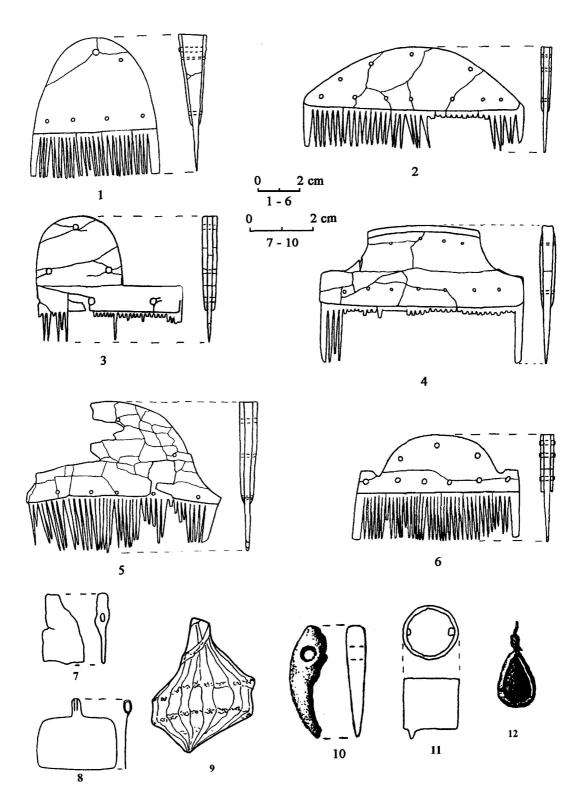


Fig. 7. Combs of type 1 (4), 2a (1), 2b (2), 2c (5), 3 (6), 4 (3) and pendants of type 1 (10), 2 (9), 3 (7), 4 (11) and 5 (8). 1–6, 9, 10, bone; 7, iron; 8, 11, 12, bronze.

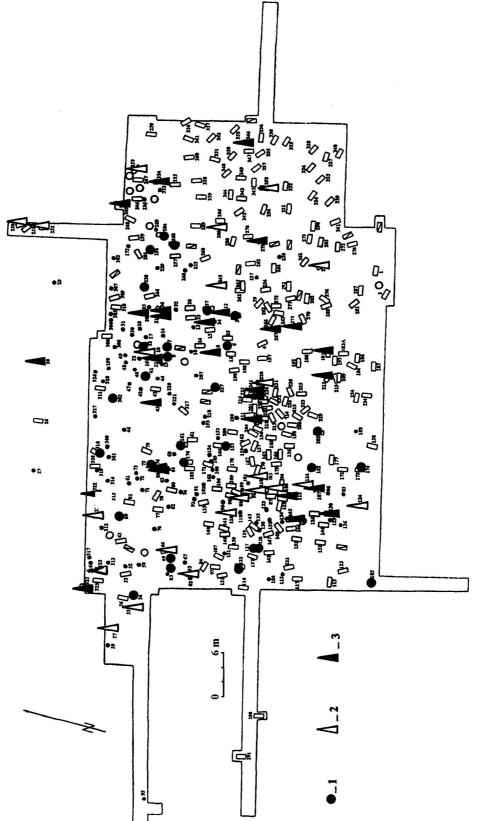


Fig. 8. Tombs from phases I (1), II (2) and III (3).

Tombs	Keys	Fittings	BOWIS K 2	Pots H 2	Pots R 2	Beads 18	Pendants 4	Pots H 5	Buckles 2	Muos F le	Shindles 1a	Bowle F 50	DUWIS F 28	Route F 7	Muae F 1h	Pots H 4	Cuns H	Pofs R 1	Date E 1h	Rowle F 2h	Beads 12	Pots H 3	Pots F 2a	Bowls F 4a	Fibulae 4c	Beads le	Bowls F 3	Beads 5	Beads 1c	Beads 13	Pots R 3b	Beads 2	Deads 3	Pendants 2	Muce F 5	Rode 0	Rowle F 1a	Amforettes F	Bowls F Ic	Pots R 3a	Beads 1d	Beads 1a	Beads 16	Beads 1b	Beads 4	Bowls F 1b	Glass 4	Pots H 1	Mugs F 1a	Bowls R 1	Mugs F 2a
69	•	•	+	•			-	╞	t	t	╞	╞	╪	╞	+		╞	╞	╞	╞	╞	╞		╞								╡	+	+	╈	+	╞	╞	╞		╞	F	F	┢		┢	╞				F
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