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## DISPOSAL OF THE DEAD IN RECENTLY ABANDONED SETTLEMENT AREAS — AN EVIDENCE OF THE SIEGE OF OLBIA PONTICA BY ZOPYRION?

*The present contribution focuses on extraordinary features with human remains of the 4<sup>th</sup> century BC which have been discovered to the west of the core city area of Olbia Pontica. There are numerous multiple burials within former settlement structures. The deceased were put in them without any grave goods, mainly in irregular positions and in some cases with obvious traces of external violence. Based on the archaeological finding, which is presented here for the first time exhaustively, we review the suggestion of previous research: a possible connection of these features with human remains with the siege of the city by the Macedonian general Zopyrion, which has been recorded in literature.*

*Key words:* Lower Buh Region, Olbia Pontica, Classical period, Zopyrion, city siege, urban development.

### *The altered cityscape of Olbia in Archaic-Classical times*

In 2014, when a Ukrainian-German cooperative project started its interdisciplinary research in the west of Olbia, the goals were evident (fig. 1). The academic focus was to be on the suburb, which had previously been investigated only sparsely. While its general existence in this area was regarded as unequivocally verified after the excavations conducted by Yu. I. Kozub (Kozub 1979a, c. 316-325;

1979b, c. 3-34), only little was known about its extension, structure and appearance. With the help of geophysical prospections, research-relevant structures were supposed to be localised on a large scale. Their academic meaningfulness in regard to the question at hand was then to be examined by purposeful excavations. In this manner, the international cooperation team tried to set a higher level of knowledge about the suburb against the intensive research in the core city in order to better understand the Milesian *apoikia* at the banks of the Buh in its entirety.<sup>1</sup>

Today — approximately ten years later — our perception of the urban development of Olbia in the 6<sup>th</sup>—4<sup>th</sup> centuries BC has changed completely thanks to the newly achieved Ukrainian-German excavation results. Therefore, the previously relevant reconstructions need to be updated comprehensively. Especially in the case of the early period of the Olbian city history in the 6<sup>th</sup>/5<sup>th</sup> century BC, this topic has been put up for discussion in the academic public by numerous research contributions in recent years (Fornasier, Buiskykh 2021, S. 203-227; Buiskikh, Fornasier 2022, p. 195-228; Fornasier, Buiskykh, Kuzmishchev 2022, p. 67-95; Fornasier, Buiskykh 2023, S. 101-114). Thus, between 2014 and 2017, a previously unknown fortification system from Late Archaic times could be located in the west of Olbia. It secured a city area of up to 70 ha to the north and west and thereby immediately clarified that the traditional separation in a core city and a suburb (*proasteion*) is no longer consistent with the archaeological findings at the

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<sup>1</sup> The partner organisations involved were the Institute of Archaeology of the National Academy of Sciences of Ukraine in Kyiv and the Institute of Art History and European Archaeologies of the Martin Luther University Halle-Wittenberg: the team leaders are Alla V. Buyskikh and Jochen Fornasier. We thank the German Research Foundation (DFG) for their extensive support, which has initially enabled the execution of our researches. Many thanks to Cornelia Voelsch for the translation of the manuscript and to Karl Krentz for the supporting researches prior to the study.



Fig. 1. Olbia Pontica. The city area of the Milesian colony. At the background the current research area of the Ukrainian-German research project. View from the south-east

site. The area formerly defined as suburb was, quite contrary, an integral part of the actual settlement territory (located *intra muros*), which, especially during the initial period, presented comparable characteristics area-wide (cf. Kuzmishchev 2021, p. 185-202). A qualitative gradation, which has been postulated for a long time, is simply impossible on the basis of the currently known material findings.

In addition, investigations of the Olbian sacral topography of Late Archaic times permitted an update of the previously suggested theses on the urban developmental phases of the city. These were also affirmed by analytical studies on the necropolis areas (most recently Buiskykh, Ivchenko 2021, p. 155-184). Already before the construction of the western fortification, numerous sanctuaries emerged at the edges of the future city area. On the one hand, they secured the settlement territory from the outside on a sacral level and, on the other hand, marked it visibly from afar, while the earliest graves were also created beyond the “imagined” space. Thus, despite decade-long excavations in the area to the west of the core city, no graves of the 6<sup>th</sup>/5<sup>th</sup> century BC were found within the area limited by the rampart and moat system. Therefore, a systematic and future-oriented approach to the urban usage of space can be perceived from the beginning.

In the context of the Ukrainian-German cooperative project, new results could not only be achieved for the early period of the urban planning development. New insights were also gained into the urban transformation process from the middle of the 4<sup>th</sup> century onward, when the western part of the Olbian settlement territory was first abandoned and then successively introduced to a sepulchral usage. Already Yu. I. Kozub had noted that in the “suburb” investigated by her, no settlement structures dating after the first quarter of the 4<sup>th</sup> century BC could be verified (Kozy6 1979, c. 29; cf. Fornasier et al. 2018, p. 244-245). In later times alike, no findings were discovered which were younger than from the middle of the 4<sup>th</sup> century BC (most recently Buiskykh, Fornasier 2022, p. 220) — with the exception of a smaller early Hellenistic cult complex along the so-called western road, which has been discovered only a few years ago; it had been erected inside earlier settlement structures in secondary usage (object 22 in the area HEKP-4, cf. Kuzmishchev 2021, p. 198-201). A specific review of overall 285 graves which were found within the area *intra muros* and whose chronological determination was supposed to serve as an immediate counter-check of our thesis of an extensively planned settlement area from the beginning, directed our attention furthermore to ten features with human remains of the 4<sup>th</sup> century BC. In the following, these features will be the focus

of the study at hand. An extensive description of all subsequent burials located *intra muros* is only planned for the final publication of our Ukrainian-German research project.

These Late Classical burials do not only distinguish themselves due to their chronological determination to exactly this transformation phase whereby they unmistakably denote a new urban development level within Olbia. A part of them is also characterised by remarkably irregular burial forms, being multiple burials with up to 52 individuals in secondarily used former storage pits. The fact that some of the deceased were obviously killed by external violence has attracted attention from the beginning, and early on led to the assumption of a crisis situation in Olbia (Козыб 1975a, c. 28). A causal connection with the literarily recorded siege of the city by the troops of the Macedonian general Zopyrion has been already addressed occasionally (Козыб 1984, c. 162-163; Vinogradov 1997a, S. 331-332).

An essential publication of these burials is missing up to now. In the following, the findings will be therefore presented in detail and, if possible, visualised on the basis of the respectively prevailing status of the documentation. Only after that, a tangible connection with the events in the last third of the 4<sup>th</sup> century BC which are recorded in literature will be examined regarding to its validity<sup>2</sup>.

### ***Burials of the 4<sup>th</sup> Century BC in the Western City Area of Olbia***

Due to the study of the relevant excavation reports on the early fieldwork, which had once been conducted on the newly discovered area surrounded by a fortification, it was possible to perform a (counter-)check of all in all 285 grave findings (fig. 2), of which 165 graves (table 1) could be dated during the excavations. Especially interesting for our issue were ten burial places which were dated to the 4<sup>th</sup> century BC and therefore to a period of time when, based on the findings of the settlement, an

abandonment of the western city area of Olbia has been postulated up to now.

At least eight of these burials from the Late Classical era show comparable characteristics: they are all dated from the middle of the 4<sup>th</sup> century BC onward, most of them feature clear signs of irregular burials. They are mostly built secondarily into the structures which were formerly used for settlement purposes and in five cases, there were also multiple burials with up to 52 deceased humans.

All these observations clearly point to the lack of a systematic and extensive necropolis already in the 4<sup>th</sup> century BC. Such a necropolis can only be convincingly verified from the 2<sup>nd</sup> century BC onward, based on the distribution analysis (table 1). This situation leads to the assumption that irregular burials in the 4<sup>th</sup> century BC were necessary, which might have been the result of an extraordinary crisis situation in Olbia. Only one child grave (3/1978), and — with reservations — also the heavily disturbed grave 1/2009 can most probably be interpreted as regular burials. Being one of the earliest evidences of this type, they also document a smooth transition towards a different usage of this territory.

Before discussing the issue of a possible causal connection between the military threat on Olbia and the emergence of the irregular burials on the territory west of the Olbian core city, it is first necessary to describe the relevant burial findings.

The information density on the individual burials — especially the graphic and photographic records and level of detail in the measurements — reflects the respective level of the excavation documentation in Olbian research history, which, in the study presented here, covers a period of close to 60 years. All available sources were incorporated into the observations. In cases where there were no detailed photographic or graphic records available in the excavation reports, our focus lay predominantly on the statements on the statistically recorded find material. Of course, a certain error rate in the classification of the small finds spectrum in the past, which has naturally become more precise over time, has to be taken into consideration. Nevertheless, all people responsible for the excavations discussed here, which in some cases took place long ago, were renowned specialists, who at the time of the respective field researches had already been working in Olbia for many years and exactly knew the general find spectrum of this Milesian colony. The expectable margin of error is therefore within acceptable parameters. Thus, the datings and conclusions, which cannot be directly

<sup>2</sup> Thanks to the unrestricted cooperativeness of the Institute of Archaeology of the National Academy of Sciences of Ukraine in Kyiv, we have for the first time been allowed accessing to all relevant excavation documentation in order to close in on our frequently discussed question of Zopyrion's presence "at the gates" of Olbia on the basis of the material evidence. For this extensive support, which, especially against the current background of the Russian offensive war against Ukraine contrary to international law, required a maximum of flexibility, the authors like to express their special gratitude to all those involved.





Fig. 2. Olbia Pontica. Location of the excavation areas in the west of Olbia mentioned in the text (former Olbian suburb): 1 — Plateau II; 2 — Plateau III; 3 — Pivnichnyi Mys 1; 4 — HEKP-7; 5 — Plateau I; 6 — Southern Plateau (picture on the basis of: Google, DigitalGlobe 2015)

verified today, because the original objects are lost or inaccessible, can still serve as a secure basis for the following studies.

**Pit 1/1966 (cistern) in the area Plateau II (Quadrant 7/1966)**<sup>3</sup>. Already during the excavation campaigns

<sup>3</sup> The labels of the features correspond to those originally attributed in the respective excavation reports. To ensure unambiguous identification, no sequential numbering is used.

1966–1967, it was possible to examine a structure (at first: Pit 1) inside of Quadrant 7 on Plateau II, which revealed first clues to a secondary usage as a burial pit (Козыб 1966, с. 7-9; 1967a, с. 7-9; 1967b, с. 209). At a distance of about 4 m from a settlement dugout (no. 4/1966) deepened into the ground, a cistern was found. It was up to 4.76 m deep; its roughly round shaft was 1.52 m in diameter in the upper

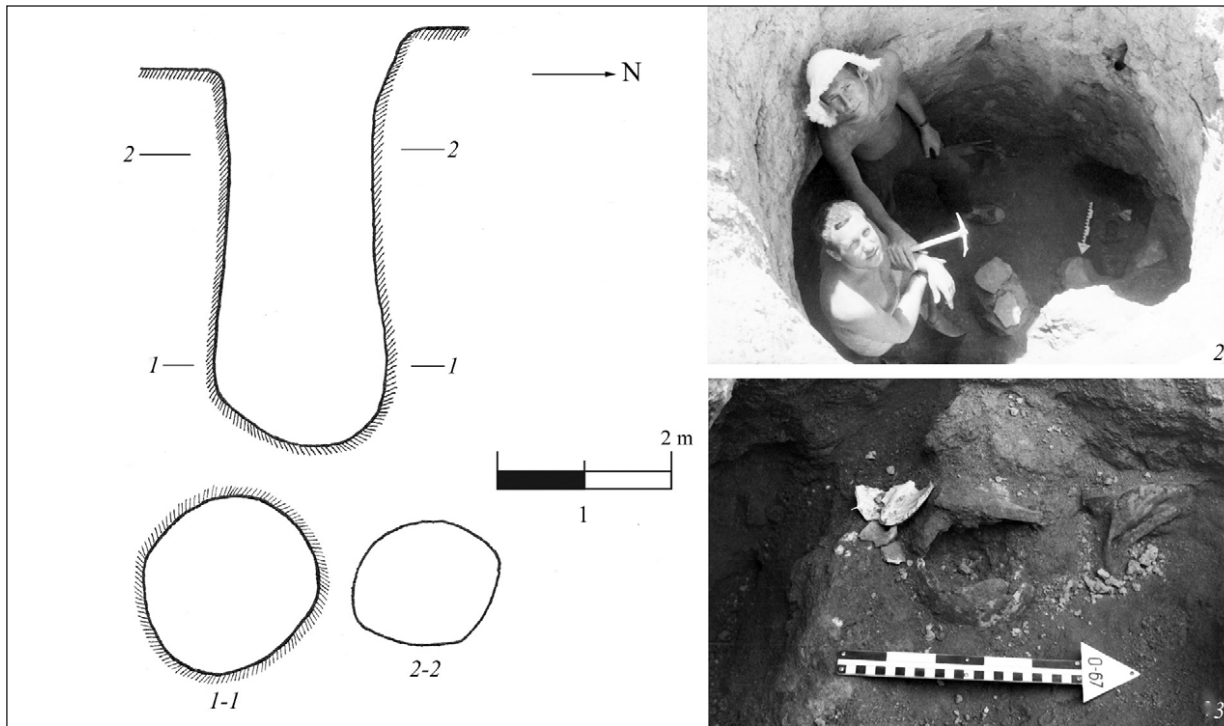


Fig. 3. Olbia Pontica. Pit 1/1966 (cistern): 1 — a profile and a ground plan of the cistern; 2 — a view into the cistern (during the work process); 3 — remains of a dog skeleton in the filling of the cistern (excavation in 1967)

part and widened to the bottom to 2.03 m (fig. 3: 1). The cistern walls were completely dug into the natural soil and seem to have been originally faced with bigger stones, which have been found in large numbers inside the filling layers between 2 m and 2.7 m in the collapsed debris (fig. 3: 2). From a depth of 2.48 m onward, the cistern walls were also evidently covered with a bluish waterproof clay layer, which is up to 14 cm thick (Kozyb 1967a, c. 7). This convincingly emphasises the interpretation of Pit 1 as a cistern.

In the upper parts (up to 2.40 m), the filling layers within the cistern consisted of solid yellowish clay with shards of ceramics (inv. no. 1910–1921). Their examination in 1966 led to the discovery of a heavily distorted human skeleton (inv. no. 1997) at a depth of 2 m. Both the extraordinary posture of the deceased and the fact that grave goods were missing completely prompted the excavators to conclude that in all probability, this was no regular burial. Instead, the body was apparently disposed of in the cistern, which was no longer used according to its original function (Kozyb 1967a, c. 8).

This thesis received immediate confirmation by the findings of the lower filling layers which could be uncovered during the excavation campaign in

1967. Separated from the upper filling by a burnt layer, which was up to 20 cm high and consisted of burnt clay with numerous inclusions of charcoal, there was now loose soil up to the floor of the cistern. This soil contained a high number of mostly ceramic find objects, which dated to the second half of the 5<sup>th</sup> — the first half of the 4<sup>th</sup> century BC. They include fragments of amphorae from Chios, Thasos and the grey clay amphora type from Lesbos. In addition, there were fragments of black-glazed pottery, partly decorated with stamps, of numerous kitchenware and handmade ceramic, remains of a red clay fish plate, an iron knife and, directly on the cistern ground, more amphorae which were crushed by the soil and probably were originally used for carrying water. Finally, remains of several dog skeletons (fig. 3: 3) were found at different depths and further human remains in an extremely crouched position at the western edge of the cistern at –2.8 m (Kozyb 1967a, c. 8–9). More specific statements on the find situation or on the specific stratigraphy can unfortunately not be made based on the state of documentation from the 1960s. However, the finding does generally not show discernible signs of a regular burial or, in the case of the dog skeletons, of sacral actions (cf. Fornasier, Buisykh, Kuzmishchev 2022, p. 83–84).



The secondary usage of the cistern as a pit, which, beside burnt and waste layers, also contained animal cadavers and two human bodies disposed of irregularly, enabled a basic conclusion already in the early stages of the academic research in the so-called suburb: after the abandonment of the settlement area in the middle of the 4<sup>th</sup> century BC, still visible structures were, obviously very soon, used unconventionally and probably also under time pressure for the disposal of deceased individuals. This is an up to now singular finding, which should be enhanced by numerous other, sometimes even more expressive, excavation results from the following decades.

**Pit 18/1974 on Plateau III (Qu. 584).** Pit 18/1974 is the largest finding spot of the here discussed multiple burials in the north-west of the Olbian city area. Already in 1973, the complex within Qu. 584 was first localised in its upper area and was originally named Grave 26/1973. Its findings seem to have been disturbed by the dromos of the subsequent chamber burial no. 24/1973 (Kozyb 1974, c. 33; 1975a, c. 26). Due to the extremely complex stratigraphic situation and difficult quality of the filling layers, the complete examination was delayed to the following excavation campaign for time reasons (Kozyb 1975a, c. 26-28; 1975b, c. 295-296; 1984, c. 162-163).

Pit 18/1974 was deepened into the natural soil to a depth of 2.2 m from the ancient surface level. Its cross-section was bell-shaped and it had an overall round shape with a diameter of up to 3.25 m (fig. 4). There was only little fragmented ceramic material in the upper, densely compacted filling layers (Kozyb 1975b, c. 295-296). In contrast, at a depth of 1.1 m from the edge of the pit, there were loose dark soil layers, which reached down to the floor of the pit and contained human remains of all in all 52 individuals (fig. 4: 2–3; 5) — both in the form of whole skeletons and of singular skulls (Kozyb 1975a, c. 26; 1984, c. 162-163). Anthropological investigations prove that the majority of the human remains were youths/young adults with ages between 9 and 25 (Kozyb 1975a, c. 28). Only three cases seem to feature older persons (according to T. S. Konduktorova; cf. Корпусова 1983, c. 171-172).

The skeletons were arranged in several rows. Most of them were placed horizontally; some, however, featured a half-vertical position, which is why they could overlap each other. The posture of the deceased was mostly crouched and twisted with thrown-back heads; Skeleton 1 was found with

bent arms and hands which originally covered the face (Kozyb 1975a, c. 27). Another case featured the skeleton of a grown-up above that of a child, who was obviously supposed to be protected from external damage by this posture. Additionally, many of the skulls were heavily punctured and one deceased also had half of his face completely shattered.

All in all, the findings point unambiguously to a violent death of all individuals found in this pit. According to Yu. I. Kozub, the deceased were even killed directly at this place with the help of sharp stones — among them fragments of marble louteria (inv. no. 724) — or huge fragments of amphorae and finally with arrows (inv. no. 726), which also belong to the spectrum of finds (Kozyb 1975a, c. 27; 1975b, c. 295-296; 1984, c. 162-163; 2003, c. 124). This could be postulated convincingly by the posture of the buried humans, the traces of injuries on the skulls and their position in relation to these objects. In one case, for example, one of the large stones was found *in situ* right on top of one of the skulls. In addition, two of the skeletons featured round iron rings (inv. no. 738) with a diameter of 12 cm on the legs (fig. 6), which, in all probability, were shackles (Kozyb 1984, c. 162-163; cf. Vinogradov 1997a, S. 331; 1997b, S. 288 with note 44).

Some skeletons were accompanied by personal adornments, which the people had worn at the time of their death. Among them are a shell necklace (inv. no. 737, fig. 7: 1), two large pearls (inv. no. 735–736, fig. 7: 2–3), round bronze earrings (inv. no. 728, fig. 7: 4), a bronze bracelet (inv. no. 652, fig. 7: 6) with triangular studs at the ends, a bronze button (inv. no. 653, fig. 7: 5) and a bronze clasp (inv. no. 730, fig. 7: 7) (Kozyb 1975a, c. 27). In addition, there were remains of iron objects (inv. no. 654; 731–733, fig. 8), including two knives and a dagger. Moreover, there were numerous remnants of ceramic vessels between the human remains. Selected pieces were inventoried by the excavation leaders at the time (fig. 9–11): among them are different types of black-glazed pottery (inv. nos. 643–647; 722–723), red and grey clay vessels (inv. nos. 639–640; 648; 716–718; 720), kitchenware (inv. nos. 641; 719–721) or handmade vessels (inv. no. 642). Among the transport vessels (fig. 12) are the lower part of an amphora from Chios (inv. no. 638) belonging to type V-B according to S. Yu. Monakhov (cf. Моныхов 2003, c. 21-22, табл. 12; Моныхов et al. 2019, c. 95) and the upper part of a Heracleian amphora (inv. no. 713) belonging to type I-A according to Monakhov with a rectangular stamp at the neck (cf. Моныхов 2003, c. 143, 320-322,

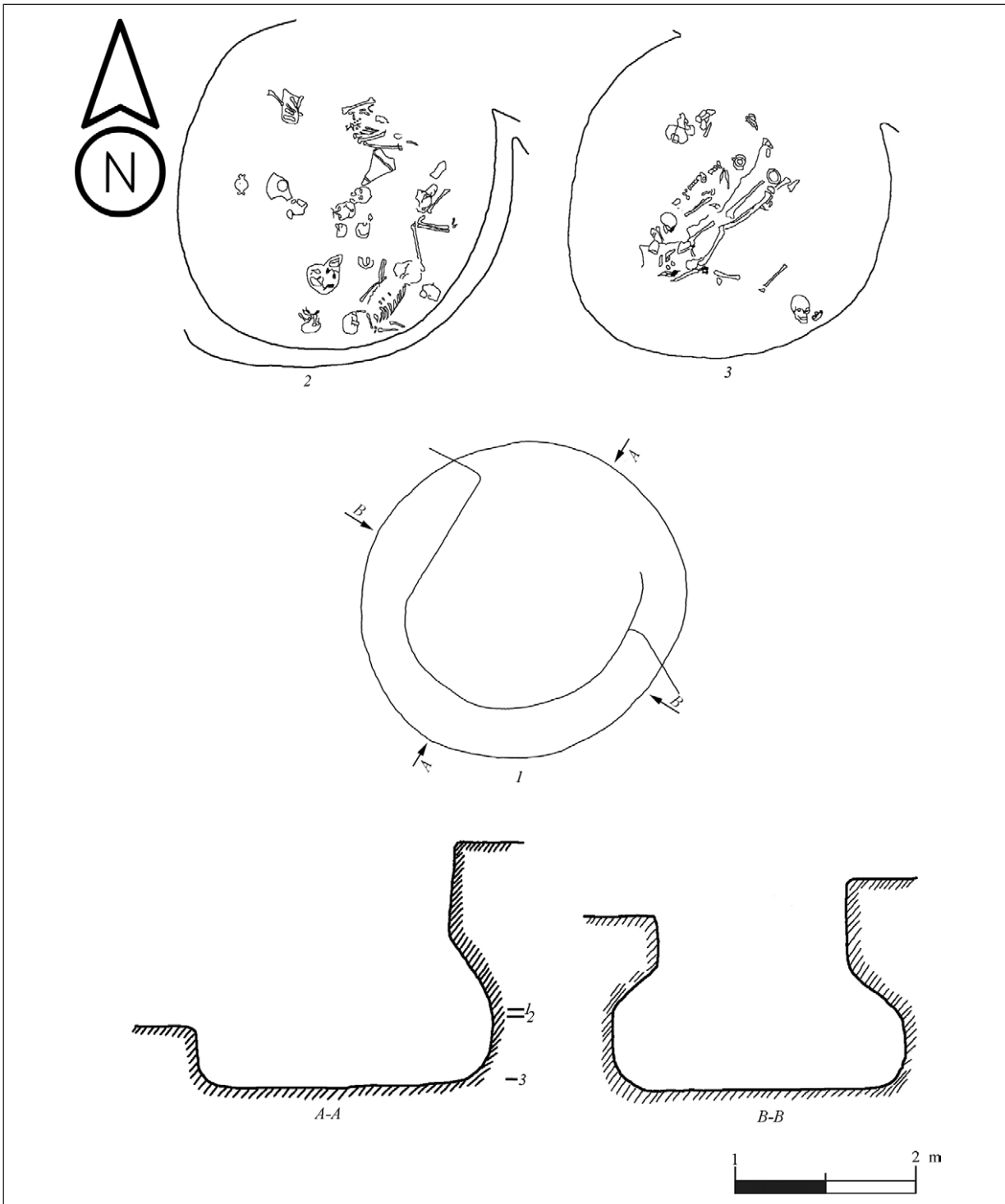
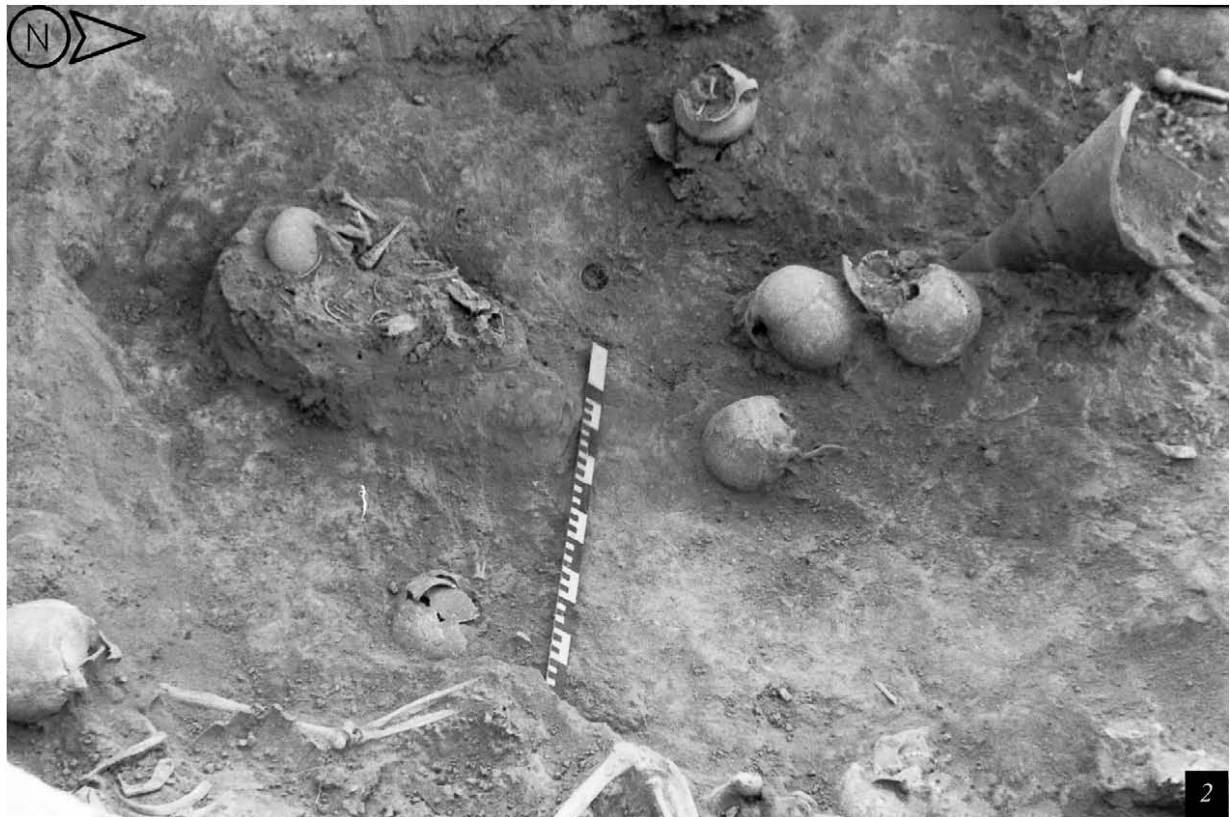


Fig. 4. Olbia Pontica. Pit 18/1974: 1 — a profile and a ground plan of the pit; 2 — the find situation in the filling layer at  $-2.40$  m; 3 — the find situation at ca.  $-2.6$  m

табл. 90; Монахов et al. 2019, с. 202). According to V. I. Kats and N. F. Fedoseev (Кац 2007, с. 429; Федосеев 2016, с. 40-44 № 26-79), the stamps of the magistrate Αιτήρ are dated to the 380s–370s BC. Considered together, these objects suggest a dating of the whole finding to the second/third quarter of the

4<sup>th</sup> century BC (Козыб 1975a, с. 28; 1975b, с. 296; 1984, с. 163) — a timeframe to which also the black-glazed vessels of the second quarter/middle of the 4<sup>th</sup> century (fig. 9) can be convincingly classified.

At last, two dog skeletons belong to the spectrum of finds. One of them was uncovered in the centre of Pit



*Fig. 5. Olbia Pontica. Pit 18/1974. The find situation in the filling layer at -2.4 m: 1 — a view from the north; 2 — a view from the east*





Fig. 6. Olbia Pontica. Pit 18/1974. Iron An iron ring (inv. no. 738) with a diameter of 12 cm on the legs of a skeleton (a view from the north)

18/1974 right beneath a large stone. In contrast to the dog burials in Olbia known previously (cf. Fornasier, Buiskykh, Kuzmishchev 2022, p. 83-84), these two animals do not seem to represent ritual burials. It should rather be considered that these two dogs were forced to share the fate of the people “buried” here.

**Grave 3/1978 on Plateau III (Qu. 542).** Grave 3/1978 was located on Plateau III in Qu. 542 and could be registered from a depth of 1.62—1.65 m (Козыб 1978, с. 8). It was a pit grave, which contours, however, could no longer be completely determined (fig. 13). In the yellow clay pit filling, the skeleton of a child was found. It was lying on its left side with the left arm alongside the body, while the head was pointing in a north-north-east direction. The preserved length of the skeleton was 1.05 m, its width 0.40 m.

Among the few grave inventories was a piece of jewellery with two herms of lead (cf. Хмелевский 2016, с. 170), which were fixed beside each other on an elongated connective piece (inv. no. 146, fig. 13: 4). It was found immediately beneath the neck vertebrae and therefore might most probably have once been worn as sort of an amulet around the neck. To the left of the head on the height of the right shoulder there was also an Attic squat

lekythos (so-called net lekythos, surroundings of the Bulas group, inv. no. 144, fig. 13: 2) and a fragmented black-glaze cup-kantharos (inv. no. 145, fig. 13: 3). Finally, all in all 37 fragmented and one completely preserved nail (inv. no. 147) were found around the skeleton, which probably belonged to a former wooden coffin.

In a direct comparison to the graves described previously, this is undoubtedly a case of a regular burial, since there are a burial pit, remains of a coffin and even a grave inventory. A dating of the finding has not been conducted at that time; follow-up investigations based on the ceramic vessels print to the second-third quarter of the 4<sup>th</sup> century BC. Despite the finding seeming unremarkable at a first glance, Grave 3/1978 on Plateau III is the first definite clue to a transformation of the former settlement area in the west of Olbia into a regular necropolis — obviously immediately after the abandonment of the living and economic areas and above all synchronous to the extraordinarily irregular multiple burials of this time. Especially this last observation on the one hand verifies a seemingly organised start of the transformation within the area; on the other hand, it points to a possibly unexpected extreme situation in the third



Fig. 7. Olbia Pontica. Pit 18/1974. Finds from the filling layers of the pit: 1 — parts of a necklace from snail shells of Nassariidae (inv. no. 737); 2 — a polychrome glass pearl with festoon-like decor (inv. no. 735) from the second half of the 4<sup>th</sup> century BC (according to A. M. Kolesnichenko, cf. Мозолевський 1979, с. 123, № 12); 3 — a cone-shaped pearl of greenish glass (inv. no. 736); 4 — bronze earrings (inv. no. 728); 5 — a bronze button (inv. no. 653); 6 — a bronze bracelet (inv. no. 652); 7 — a bronze clasp (inv. no. 730)

quarter of the 4<sup>th</sup> century BC which led to the extraordinary multiple burials.

**Pit 1/2002 in area Pivnichnyi (Severnyi) Mys 1 (Qu. 16/17).** Only several metres further north of Pit 18/1974, another multiple burial was investigated in the excavation area Pivnichnyi Mys 1 in 2002. It featured a similarly extraordinary finding. Human remains of overall 18 individuals could be verified (Козыб 2003, с. 123-124; Козыб et al. 2002, с. 9-10). This Pit 1/2002 was up to 1.39 m deep, had a roughly round shape in the plan and measured 1.92 m × 1.84 m at its upper edge. Towards the bottom it widened in a bell shape to an area of 2.25 m × 2.10 m (fig. 14: 1). The filling layers consisted of uniformly grey sandy clay and therefore seem to have been brought into the pit in one singular process (cf. Козыб 2003, с. 123-124).

Only in the cases of four people buried in Pit 1/2002 (nos. 6; 7; 16; 17), the bones laid in an anatomically correct position and only

one skeleton of a woman (no. 7, fig. 14: 2) was additionally accompanied by small finds in the form of personal adornment objects (Козыб et al. 2002, с. 9-10). The skeleton was 1.58 m long and laid roughly horizontally on its back with its arms alongside the body and the head pointing south at a depth of 1.06 m in the pit filling layer. According to the excavation reports, there were bronze earrings on both sides of the skull (one of them containing a pearl, inv. no. 330); two bronze rings in the form of a snake were found at her right hand (inv. no. 332) and a round bronze bracelet was on her right arm (inv. no. 331, fig. 14: 3). At the neck, the arms and the legs, a multitude of pearls of dark and blue glass paste (inv. no. 329) could be registered which formerly obviously served as decoration of unpreserved clothes. Based on the excavation records, a more detailed analysis of the findings is impossible; in addition, the original objects themselves are unfortunately inaccessible





Fig. 8. Olbia Pontica. Pit 18/1974. Finds from the filling layers of the pit: 1 — an iron dagger (inv. no. 654); 2 — an iron knife (inv. no. 731); 3 — an iron knife with the remains of a bone handle (inv. no. 732); 4 — an iron item (inv. no. 733)

to the authors for an indefinite period of time due to the war.

All other individuals were thrown into the pit without further consideration. Their skeletons laid contorted and with their faces down in irregular order (fig. 15: 1). In many cases, extremities were missing, as for example with Skeleton 6, which was missing a leg and the left hand. Moreover, it is striking that most skulls were found apart from the skeletons and, in contrast to the finding in Pit 18/1974, did not show signs of trauma as direct cause of death. Anthropological examinations of

the bones of 16 deceased indicated seven male and four female adults and five children. The ages of the deceased ranged from 4—7 to 65—70 (according to T. A. Nazarova). Overall, according to Yu. I. Kozub (Kozyb 2003, c. 124), the finding again points to a multiple burial which probably had to be created in Olbia as a reaction to an “extreme situation” and for which the still visible pit, which had formerly been used for settlement purposes, was re-used. It cannot generally be ruled out that — except for Skeleton no. 7 — we are dealing with a subsequent transfer of remains





*Fig. 9.* Olbia Pontica. Pit 18/1974. Attic black-glaze pottery from the filling layers of the pit: 1 — a kantharos (inv. no. 645) (375–350 BC) (cf. Sparkes, Talcott, Richter 1970, p. 283; pl. 28, № 657); 2 — a skyphos (inv. no. 646) (400–380 BC) (Sparkes, Talcott, Richter 1970, p. 280, pl. 27, № 622); 3 — a kantharos (inv. no. 647) (375–350 BC) (cf. Sparkes, Talcott, Richter 1970, p. 283; pl. 28, № 668); 4 — a skyphos (inv. no. 723) (375–350 BC) (Sparkes, Talcott, Richter 1970, p. 279; pl. 6, 26 № 608; 56, № 664)

of earlier burials into Pit 1/2002. The missing of numerous extremities could thereby be easily explained. However, the place of discovery of all

human remains in one and the same homogeneous filling layer and their stratigraphically comparable characteristics speak strongly against this. Based

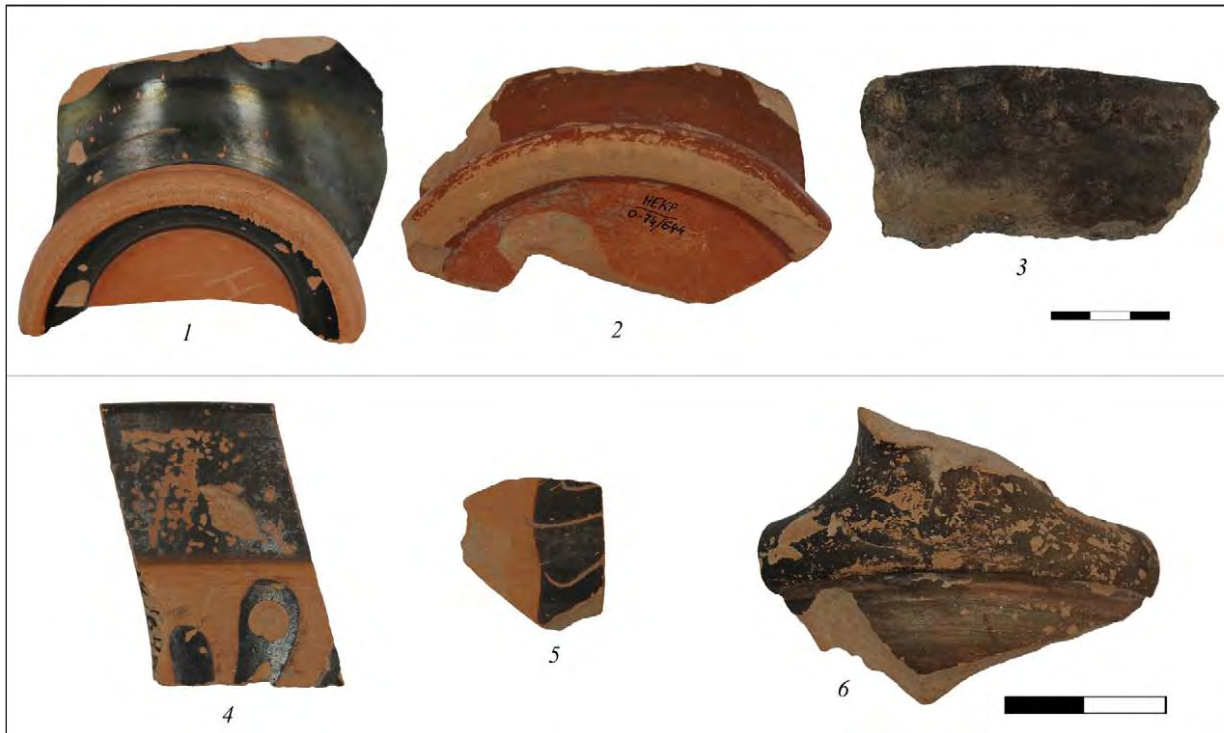


Fig. 10. Olbia Pontica. Pit 18/1974. Finds from the filling layers of the pit: 1 — a fragment of an Attic black-glaze vessel with graffiti (H) (inv. no. 722); 2 — a fragment of an Attic black-glaze vessel (inv. no. 644); 3 — a decorated rim fragment of a handmade vessel (inv. no. 642); 4 — a fragment of the rim of an Attic black-figured bowl with a decor of palmettes (inv. no. 648); 5 — a body fragment of an Attic black-figured vessel (inv. no. 649); 6 — a rim fragment with the remains of a handle from a black-glaze vessel (inv. no. 643)

on the recorded finding, only one conclusion remains: all deceased were brought to the pit at the same time. The fragmentariness of the human remains in some cases — as compared to Skeleton no. 7 — must have been caused by another extraordinary (extreme) reason.

Among the few small finds from the filling are an extremely badly preserved fragment of a dagger (inv. no. 259), a repeatedly folded small lead plate, which features scripture in its interior (inv. no. 309) and which is still to be published (A. Ivantchik, forthcoming) and an arrowhead (inv. no. 3116) and two coins, which are dated (by V. V. Krutilov) to 380—360 BC (inv. no. 260) and 330—300 BC (inv. no. 260a) (fig. 15: 2). Few shards of black-glazed pottery (inv. no. 256), of red and grey clay ware (inv. nos. 306; 307) and the fragment of a red-figured vessel (inv. no. 308) point chronologically to the second half of the 4<sup>th</sup> century BC (Kozyb 2003, c. 124). Thus, if the dating of the coin no. 260a is correct, we have a *terminus post quem* of the 330s BC for this complex, which chronologically corresponds to the time of a possible attack by Zopyrion on Olbia.

At last, immediately on the floor of the pit, there were two iron rods, which were crossed at a right angle and measured 0.78 cm and 0.85 cm (inv. no. 308a). Their purpose could not yet be determined (fig. 15: 3). Their exact positioning contradicts a coincidental find position and at least basically points to a consciously intended message. However, for lack of analogies (known to us), this message cannot be grasped more specifically. The interpretation favoured by the excavator as them being spears cannot convince.

In our opinion, these objects can neither be identified as ὀβελοί, since, on the one hand, they lack the otherwise characteristic handles necessary for usage, and, on the other hand, such ὀβελοί can be verified as funerary objects or votives in sanctuaries mainly for the 7<sup>th</sup>—5<sup>th</sup> centuries BC (cf. e.g. Furtwängler 1980; Haarer 2000; Heymans 2021). Not even the question if these two rods had been brought to this place during the primary or only during the secondary usage of the pit can be answered. A definite connection with the multiple burial is therefore not obligatory and a specific value of these objects — as opposed to unambiguously identifiable grave findings (cf.



*Fig. 11.* Olbia Pontica. Pit 18/1974. Finds from the filling layers of the pit: 1 — a fragment of a red clay fish plate of type 1.1 according to A. V. Buiskykh (Буйских 2011, с. 245; рис. 4.1) (inv. no. 639); 2 — a red clay bowl with one handle (inv. no. 716); 3 — a grey clay bowl with graffiti (ΛΕ) at the outside of the base (inv. no. 640); 4 — kitchenware (inv. no. 641); 5 — kitchenware (a casserole, inv. no. 719)





Fig. 12. Olbia Pontica. Pit 18/1974. Finds from the filling layers of the pit: 1 — a lower part of an amphora of the second/third quarter of the 4<sup>th</sup> century BC from Chios (inv. no. 638) (type V-B according to S. Yu. Monakhov, cf.: Монохов 2003, с. 21-22, табл. 12; Монохов et al. 2019, с. 95); 2 — an upper part of a Heracleian amphora with a stamp on the neck (magistrate Αιτήρ, cf. Кац 2007, с. 429; Федосеев 2016, с. 40-44, № 26–79) from the period 380—370 BC (inv. no. 713) (type I-A according to S. Yu. Monakhov, cf.: Монохов 2003, с. 143, 320-322, табл. 90; Монохов et al. 2019, с. 202); 3 — a rim fragment of a red clay louterion with white slip (inv. no. 650); 4 — a rim fragment of a light clay Sinopian louterion (inv. no. 651)

Haarer 2000, p. 121; Heymans 2021, p. 183) — cannot be defined generally. However, the two rods seem to be deliberately deepened into the natural soil, which is another and extraordinary expression of the exceptional character of this deliberate deposition.

**Pit 2/2006 in the area Pivnichnyi Mys 1 (Qu. 26).** Pit 2/2006 (fig. 16) was located ca. 30 m to the

east of Pit 1/2002 and 60 m north of Pit 18/1974 and immediately at the upper edge of the incline to Zai-acha Ravine (Ивченко, Диденко 2007, с. 195-196; Ивченко, Диденко, Ланг 2006, с. 6-14). Already in antiquity, it had been damaged by two later grave complexes from the end of the 3<sup>rd</sup>/2<sup>nd</sup> century BC. Thus, its complete southern area on a length of 2 m was disturbed by the dromos of Chamber Tomb 12



Fig. 13. Olbia Pontica. Pit 3/1978: 1 — position of the skeleton and the pottery (a view from the west); 2 — an aryballos-lekythos with a net ornament (inv. no. 144) (Bulas group, 330—320 BC; cf. Вдовиченко, Рыжов, Жесткова 2019, с. 95; табл. 27-28, № 207-2011); 3 — an attic black-glaze cup-kantharos (inv. no. 145) (375—340 BC; cf. Sparkes, Talcott, Richter 1970, p. 284, № 681-683); 4 — lead herms, 4<sup>th</sup> century BC (inv. no. 146) (Хмелевский 2016, с. 170, 175, рис. 2.1)

(2005/2006). In the north, it was additionally superimposed by the steps of the dromos of Chamber Tomb 14/2005 and was therefore only preserved to a height of 0.23 m above the original surface level. During the excavations, the pit could be localised in its outline unambiguously only at a depth of 1.02 m from the modern surface level. All in all, it was preserved to a depth of 1.33 m. In the upper part, it had a semicircular ground plan with a maximum determinable diam-

eter of 1.44 m and featured a bell-shaped cross-section which widened towards the bottom. The diameter at the bottom of the pit — as far as it can be reconstructed despite the disturbances — measured 2.45 m (Ивченко, Диденко 2007, с. 195).

The pit filling was divided into two clearly distinguishable areas. The upper stratum, up to 0.72 m high (no. 1), was heavily mixed and, on the one hand, consisted of grey, dense sandy clay with





Fig. 14. Olbia Pontica. Pit 1/2002: 1 — the profile of the pit; 2 — Skeleton 7 at the eastern edge of the pit (–1.06 m); 3 — a bronze bracelet (inv. no. 331) at the right forearm of skeleton 7





Fig. 15. Olbia Pontica. Pit 1/2002: 1 — western edge of the pit above the floor with the Skeletons 16 and 17; 2 — bronze coins, which most probably have not been part of the monetary circulation (V. V. Krutilov): a) 380—360 BC (inv. no. 260), b) 330—300 BC (inv. no. 260a); 3 — crossed iron rods on the floor of the pit (inv. no. 308a)

numerous inclusions (mainly in the upper part) and, on the other hand, of softer black soil. Among the classifiable finds from this stratum are mainly fragments of transport amphorae of the 5<sup>th</sup>/4<sup>th</sup> century BC. The oldest find is the foot of a grey clay amphora from Lesbos (inv. no. 136) belonging to type III-A according to S. Yu. Monakhov. It is dated to the second half of the 5<sup>th</sup> century BC (cf. Моnахов 2003, с. 47, 259, табл. 29). Among the youngest finds, in contrast, are fragments of a Sin-

opian amphora of type II-A-E (inv. no. 137) from the second quarter — the second half of the 4<sup>th</sup> century BC (cf. Моnахов 2003, с. 151-152, 332-332, табл. 102-103) and of an amphora of type II-B-I from Knidos (inv. no. 138), which dates to the last third of the 4<sup>th</sup> — the early 3<sup>rd</sup> centuries BC (cf. Моnахов 2003, с. 106-107, 304-305, табл. 74-75). Additionally, some shards of Heracleian (inv. nos. 47 and 48), Chian and Mendeian amphorae (inv. nos. 42 and 44) could be verified, whereas



Fig. 16. Olbia Pontica. Pit 2/2006. The filling of the pit: 1 — position of Skeletons 3 and 4 (a view from the west); 2 — skull 1a with traces of external violence; 3 — skull 2 with traces of external violence

other ceramic find categories are — according to the excavation report — only represented with few fragments of red and grey clay ceramics (inv. no. 135, fig. 17: 8; 139 and 140), black-glazed pottery (inv. no. 142–145) and kitchenware (inv. no. 141).

Apart from the ceramic small find spectrum, mainly the remains of six human skeletons in this upper pit filling should be emphasised. They were positioned — superimposing each other (Ивченко, Диденко 2007, с. 195) — mostly in anatomically correct posture in different poses: four skeletons were lying on their back (nos. 1, 2, 4 and 5), one following the curve of the rounded wall of the pit (no. 6, Ивченко, Диденко, Ланг 2006, с. 11-12) and another (no. 3, Ивченко, Диденко, Ланг 2006, с. 8-9) was found right on the lower stratum area (no. 2), whose irregular surface structure was reflected in the asymmetrical, heavily distorted position of the bones (fig. 16: 1). Three of these skeletons (no. 1 — without skull; 3; 6) were almost completely preserved, whereas two (nos. 4 and 5) were considerably damaged by the later Grave 12 and another (no. 2) by Grave 14 (Ивченко, Диденко 2007, с. 195).

In addition to these in some cases completely preserved skeletons, there were also numerous further human remains — e.g. a skull with several cervical vertebrae (no. 1a) in the central area of the pit, various scattered long bones and severed hands and feet, which could be secured be-

low Skeleton no. 6 at a depth of 0.67 m from the edge of the pit (Ивченко, Диденко, Ланг 2006, с. 12). What should be especially emphasised is the obvious injuries in two of the discovered skulls; with high probability, they point to external violence. Thus, Skull 1a featured a round hole measuring 2.2 cm × 1.4 cm at its left side in the temporal area (fig. 16: 2), whereas the skull of Skeleton 2 had two round holes with a respective diameter of 1.5 cm in its lower part (fig. 16: 3). Overall, there were human remains of at least four female and two male adults at the ages of 18 to 35 and of one child (no. 1) at the age of 7 to 13 (according to K. S. Lipatov). All of them were put into Pit 2/2006 without grave goods. Only in the case of Skeleton 5, a bronze dolphin could be secured on the right femur, a bronze fragment beside the pelvis between the legs and another iron fragment on the knee of the left leg (Ивченко, Диденко, Ланг 2006, с. 9-10). In all probability, all of them belonged to the actual pit filling and therefore laid at rather random positions.

In the midst of these human remains, under the right and left shins of Skeleton 5 (Ивченко, Диденко, Ланг 2006, с. 9-10), there were also a skull and a separate jawbone of a horse and in the close surroundings a large bone of an animal which cannot be further determined (cf. Ивченко, Диденко 2007, с. 195). The skull and jawbone of the horse feature small red round stains (ochre?)



with a diameter of 1 cm, which were positioned in a rhythmic pattern.

The lower filling layers (no. 2) of Pit 2/2006 were separated from the upper ones (no. 1) by a band with a height of 3–4 cm consisting of firm grey clay. They measure up to 0.81 m and are composed of loose black-grey soil with a high amount of ashes. It could be localised from a depth of 0.52 to 0.72 m (from the edge of the pit) (Ивченко, Диденко 2007, с. 196; Ивченко, Диденко, Ланг 2006, с. 12–14). During the excavations, singular dark brown areas with a clearly firmer texture were found above the floor of the pit, which probably have an organic origin.

Apart from numerous animal bones — among them remains of a bovine skull at the southern edge of the pit (at –1.05 m) — a high number of sherds from tableware and transport vessels of different provenance was uncovered (fig. 17). The majority of the amphora fragments which could be determined (33) belongs to vessels with swollen neck of Chian production. However, there were also shards of types III-C and IV-A-B according to S. Yu. Monakhov from the second half of the 5<sup>th</sup> century BC (cf. Монахов 2003, с. 18–20, 237–239, табл. 7–9). In addition, according to the excavation report, a handle of a grey clay amphora from Lesbos (inv. no. 300), three handles of the type I-C from Sinope (cf. Монахов 2003, с. 147, 330, табл. 100) and a rim fragment of a Knidian amphora from the third quarter of the 4<sup>th</sup> century BC could be verified (inv. nos. 301–303). The other objects also reflect the find spectrum of the end of the 6<sup>th</sup> to the middle of the 4<sup>th</sup> centuries BC, which is up to now known from the so-called suburb. Thus, there was a high number of fragments of East Greek, red-figured and black-glazed pottery (inv. nos. 325–339; 346, 347), red and grey clay vessels (inv. nos. 304–315), a clay lamp of the open type (fig. 17: 3) dating to the period 525–480 BC (inv. no. 380; type 10.1 according to I. M. Sheiko: Шейко 2015, с. 63–64; рис. 24–30), and numerous fragments of handmade pottery (inv. nos. 317–324). Among the inventoried small finds are further the fragment of a blue glass pearl (inv. no. 341), a wall fragment of a glass vessel (inv. no. 340), a processed burnishing bone (inv. no. 342) (Ивченко, Диденко, Ланг 2006, с. 14) and finally 13 small dolphins and two bronze arrowheads (without inv. no.; Ивченко, Диденко 2007, с. 196).

All in all, the finding from Pit 2/2006 can be distinguished in two phases of usage due to the filling layers which can easily be distinguished from one another. The first belongs chronologically to

the existence of the so-called suburb, whereas the second starts immediately after the actual settlement usage of this area. While the whole pit filling yielded very heterogeneous find material from the 5<sup>th</sup>/4<sup>th</sup> century BC, the youngest finds from both filling layers consistently date, according to the excavators, to the third quarter of the 4<sup>th</sup> century BC. This means that the change of usage which is evident from stratigraphy also needs to be chronologically determined within this short period of time. This thesis corresponds to the previous perception of the abandonment of the western city area of Olbia around or shortly after the middle of the century. Therefore, it coincides again with the events around the campaign of Zopyrion, which is at least recorded in literature; this fact has already been pointed out by earlier research (Ивченко, Диденко 2007, с. 196).

**Pit 7/2006 in area Pivnichnyi Mys 1 (Qu. 27/28).** Pit 7/2006 (fig. 18) was located ca. 5 m south-west of Pit 2/2006 in the transition area of Qu. 27 and Qu. 28 situated east of it. It could first be localised at a depth of 1.12 m from the modern surface level (Ивченко, Диденко 2007, с. 196–197; Ивченко, Диденко, Ланг 2006, с. 23–25). In contrast, the borders of this pit were not easily determined, since, on the one hand, it is superimposed by Pit 4/2006 in its northern part, and, on the other hand, there was only one verifiable pit wall in its western part with a height of 0.15 m (Ивченко, Диденко 2007, с. 197). Overall, the excavators at that time stated that it had originally been a natural depression only several centimetres deep with a maximum width of 1.95 m, which had been used as a burial pit for several individuals. Inside the filling layers of the depression, which consisted of loose grey soil with numerous inclusions of ashes, there were remains of all in all four fragmentarily preserved skeletons and other human bones, which could be registered only without further discernible positioning.

Skeleton 3 (fig. 18: 1) laid in anatomically correct position and thereby occupied almost the complete pit area. There are the human remains of an adult who was aligned to the east and was found lying on his back. The skull and the upper part of the sternum are missing, as is the left shoulder blade. The arms laid along the rump and the right hand was beneath the pelvis. The legs were slightly spread, whereby the knees were pointed to the outside, and the middle part of the sternum (some vertebrae and ribs) featured slight burn marks. Overall, the skeleton was not levelled but lowered



*Fig. 17.* Olbia Pontica. Pit 2/2006. Finds from the filling layers of the pit: 1 — a rim fragment of a grey smoothed bowl (inv. no. 360); 2 — a lower part of an East Greek jug with striped decor (inv. no. 309); 3 — an East Greek lamp of the open type from the period 525—480 BC (type 10.1 according to I. M. Sheiko: Шейко 2015, с. 63-64; рис. 24-30) (inv. no. 380); 4 — a burnt wall fragment of an East Greek vessel (inv. no. 314); 5 — a rim fragment of an Attic black-glaze vessel (inv. no. 326); 6 — a handle fragment of an Attic black-glaze vessel (inv. no. 332); 7 — a rim fragment of a black-glaze vessel (inv. no. 147); 8 — a fragment of a red clay jug with striped decor (inv. no. 135); 9 — a handle of an Attic black-glaze bowl (inv. no. 331)

up to 0.15 m in a west-east direction. Immediately south of Skeleton 3 and parallel to it was Skeleton 4 (fig. 18: 2), not completely preserved, which belonged to a child/teenager. In addition to the pelvis bone and parts of the spine, the long bones of both arms, a hand and the femurs could be secured. In relation to each other, they laid in anatomically correct position.

Skeleton 2 (fig. 18: 3) also belonged to a child formerly lying on its back. It was found in the south-eastern part of the pit and partly superimposed the remains of an adult person (Skeleton 3). Preserved

are the shattered skull, the upper part of the thorax with fragments of ribs and the leg and feet bones, which laid close to each other.

At a distance of about 0.3 m there was additionally a chaotic collection of human bones of an adult in an area of 0.5 × 0.2 m; among them were vertebrae, rib fragments and long bones (Skeleton 1, fig. 18: 3) and animal bones, small ceramic fragments and finally four small stones, which laid in a row with a spacing of 5—7 cm; their upper edges could be localised up to 0.15 m above the discernible pit level.





Fig. 18. Olbia Pontica. Pit 7/2006. The find situation: 1 — position of Skeleton 3 (a view from the south); 2 — skeletons 1 and 2 (a view from the north-east); 3 — skeleton 4 (view from the south); 4 — an upper part of an amphora from Mende (inv. no. 152)

Inside the filling layer of the pit there was only a small spectrum of finds mainly consisting of wall fragments of transport amphorae, which could not be dated closely, and a small limestone fragment with relief (inv. no. 159). Among the inventoried pottery are one fragment of the rim, one of the neck, two of the handles and one of the wall of amphorae from Chios belonging to type IV-A according to S. Yu. Monakhov dating to the third quarter of the 5<sup>th</sup> century BC (cf. Монохов 2003, с. 19-20, 238, табл. 8), respectively from Mende and Lesbos (inv. nos. 152–154; 179, fig. 18: 4). Further, two decorated wall fragments of handmade vessels (inv. nos. 156 and 157) and finally a handle fragment of a grey clay vessel (inv. no. 155). Thereby, the little dated finds all point to the 5<sup>th</sup> century BC. However, the special find circumstances of the very shallow pit, verifiably disturbed mainly at Skeletons 1 and 2, in addition to the fact that the whole territory was still used for settlement purposes at that time, makes a closed find context improbable. Instead, the disordered bones superimposing each other again — as the finding in Pit 2/2006 in the immediate vicinity — point to a fast, probably timely deposition of the deceased, who did not experience a regular burial and, as the in-

dividuals already described, were merely disposed of (cf. Ивченко, Диденко 2007, с. 197).

**Grave 11/2007 in the area Pivnichnyi Mys 1 (Qu. 40).** During the excavation campaign in 2007, the skeleton of a child of the age of 7–13 (*Infans* II, according to K. S. Lipatov) was unearthed in Quadrat 40. The skeleton laid at a depth of 1.03 m measured from spot elevation R outstretched on its back with the head pointing in a north-eastern direction, whereby the face was turned to the south-west (fig. 19). The left arm was bent, so that the left hand laid on the pelvis, whereas only the shoulder blade and some finger bones are preserved from the right arm. The left leg was bent to the right, the right one bent up, which led to a positioning of the deceased which is deviant from the burial norm. Overall, the skeleton could be documented to a preserved length of 0.67 m.

At a distance of 0.1 m from the skull of the deceased there were the remains of a Colchean amphora (inv. no. 890), which were divided to two areas at different heights. At a depth of 0.97–1.10 m, with the collapsed debris 1a, there were at first remains of the fragmented neck of the vessel with both handles and large body fragments (fig. 19: 2). Collapsed debris 1b covered an area of 0.78 m ×

1.04 m and consisted of large shards of the vessel's body which covered the lower leg area of the skeleton. Since the foot of the amphora as one of the most important indicators for dating was missing, this archaeological finding cannot be chronologically classified any further. According to S. Yu. Vnukov, this type of Colchean amphorae (Ch 1A by S. Yu. Vnukov) was in existence from the end of the 4<sup>th</sup> until the middle of the 2<sup>nd</sup> centuries BC. Therefore, there is at least a *terminus post quem*, and a chronological convergence with the burials mentioned above is only partly given (Vnukov 2011, p. 272, 277; on earlier attempts of dating cf. Tsetskhladze, Vnukov 1991, p. 361. 385-386). However, the extraordinary body posture of the deceased and the fact that a burial pit and grave goods are missing whatsoever speak against a regular burial and point to the transition period between the actual settlement phase in the so-called suburb and the change of usage in this area to a systematic necropolis (Ивченко, Диденко, Ланг 2007, с. 24-25).

**Grave 1/2009 in area Pivnichnyi Mys 1 (Qu. 43).** During the excavation campaign in 2009, a collection of human bones could be investigated in area Pivnichnyi Mys 1 in the south-eastern part of Quadrat 43. This collection has found its way into the excavation documentation under the name "Grave 1" (Ивченко 2009, с. 25). At a depth of up to -0.45 m from today's surface level, there were five long, heavily fragmented bones and a few ceramic shards, which all laid without any discernible order in different directions and in differing angles to each other (fig. 20). Among the few datable objects are the foot of an amphora of the third quarter of the 4<sup>th</sup> century BC. The excavation report still calls this type of amphora "pseudo-Chersonesus"; however, for a few years now, it is known that the centre of production was Ikos (cf. Монахов, Федосеев 2013, с. 258, 260).

The specific find situation led to the excavation leaders at that time judging Grave 1 as a regular but heavily disturbed burial from the second half of the 4<sup>th</sup> century BC. If this proposed thesis was to be accepted, this finding, together with Grave 3/1978, would be the second evidence of the beginning of a transformation of the former settlement area into a regular necropolis at this early time. However, for a conclusive evaluation, the preserved remains are too few and additionally too heavily disturbed. Therefore, the question of regular/irregular burial has to remain open.

**Grave 1/2010 in area Pivnichnyi Mys 1 (Qu. 37).** During the excavation campaign in 2010, the mostly destroyed Grave 1 could be localised in the

eastern part of Quadrat 37 at a depth of 1.35 m (from the modern surface level) (Ивченко 2010, с. 17). During the investigations, a human ulna and radius with a maximal length of 0.32 m were found lying next to each other. They were aligned from south-south-east to north-west-west and were embedded into a grey, rather loose clay layer with a slight admixture of humus (fig. 21: 1). With the exception of several phalanges of fingers which were scattered at different distances within 0.2 m, no other parts of the skeleton could be found. A clear grave demarcation could not be documented either.

According to the excavators' opinion, it seemed to be the few remains of an inhumation of a female person and should be dated to the 5<sup>th</sup> century BC based on a singular ceramic find. Below the bones, at a distance of about 7 cm, there was a small guttus with broken handle and base (inv. no. 100), which originally might have belonged to the grave inventory (fig. 21: 2). The vessel's glaze is of low quality; on its upper side there are parallel dark brown vertical stripes. The vessel is 5.2 cm high, the spout — 2 cm long. The diameter of the nozzle is max. 6.6 cm, the one of the opening — 2.8 cm and the one of the base — 1.6 cm.

Regardless of the fact that it is not verified that the find actually belongs to a grave context, the dating to the 5<sup>th</sup> century BC, which was favoured by the excavators back then, seems too early. Thus, a guttus in the Archaeological Museum Callatis (Mangalia, România), which was found in a Hellenistic context, is comparable in quality, form and decor<sup>4</sup>. A similar time period is more than probable for the vessel from Olbia and would in addition be in accordance with the phases of usage of the settlement in the western part of Olbia discussed until now.

Overall, Grave 1/2010 does not have a verified investigative value for the issue in the study at hand due to its unclear and highly disturbed finding. It is inserted into the observations here only to be complete, since it has been included into the context of the excavation reports as a finding of the 5<sup>th</sup> century BC and therefore was in need of a specific review. Even if the bones and the vessel

<sup>4</sup> According to Dr L. Radu (Museum Callatis, Mangalia), the guttus was found in 2016 during rescue excavations in Callatis, Mangalia in a Hellenistic context. The guttus itself is still unpublished, but a high-quality photo can already be found on the museum's website: <https://www.muzeucallatis.ro/2021/12/28/guttus-ceramic/> (17.08.2023). For the find context cf.: Alexandru et al. 2018, 145-152. We thank our colleague L. Radu very much for kindly providing this information.





Fig. 19. Olbia Pontica. Grave 11/2007: 1–3 — position of the skeleton accompanied by a Colchean amphora (type Ch 1A according to S. Yu. Vnukov: Vnukov 2011, p. 272, 277)

really belonged to a uniform context, at least the originally proposed dating needs to be revised and the finding should be chronologically determined to be not earlier than the Early Hellenistic period. The fact that all signs of a systematic burial are missing overall prevents an allocation of the finding to the irregular or respectively regular burials.

**Skeleton 1/2017 in area HEKP-7 (Qu. 2).** In the course of the examination of the moat, which was up to 4 m wide and 2.2 m deep and belonged to the newly localised fortification (area HEKP-7), a human skeleton (fig. 22) could be unearthed at a depth of 1.7 m apart from the expectable filling layers. Its find circumstances featured comparable



Fig. 20. Olbia Pontica. Grave 1/2009. The human skeletal remains and vessel fragments (a view from the west): 1 — after the first recording; 2 — after complete excavation (artificially produced pit contours)

characteristics to the already described findings (Буйських, Форнасьє, Кузьміщев 2017, с. 33, 37-39; 2019, с. 154). First of all, any clue to a secondarily built pit in which the deceased of middle age (according to T. A. Nazarova, O. D. Kozak, N. E. Kotova) was embedded was missing. In contrast, the skeleton, which was all in all 1.73 m long and 0.53 m wide, was positioned at only a small distance (0.14 m) along the eastern wall of the pit in the same yellow clay strata which were typical for the entire filling. In addition, no intentionally offered grave goods could be localised. Finally, the extraordinary position aroused doubts as to a deliberate burial.

The skeleton was positioned with a slightly bent spine in north-south direction with the head pointing to the south. The head itself was bent to the right and rested on the hoisted right shoulder-blade (fig. 22: 1—2). The right arm was angulated, resulting in the right hand resting on the pelvis, while the left arm was found distinctly higher (0.1 m). This is a clear indicator of the fact that the floor beneath the skeleton was uneven and had not been levelled properly for a regularly prepared burial pit when the body was brought here. The bone of the left upper arm was distorted unnaturally, a finding which also speaks against a regular burial. Finally, the legs of the skeleton were outstretched; however, the left one was not preserved to its full length in anatomically correct position.

At a distance of 0.12 m south of the skull was a rectangularly processed limestone block (0.53 m × 0.20 m × 0.23 m); 0.14 m east of the right knee was a vertically standing limestone slab and, after the removal of the skeleton, another limestone was found immediately below the human remains, which had added to the flexion of the

spine. Among the small finds immediately below the human bones are fragments of an amphora from Mende (inv. no. 473, fig. 22: 3), of a grey smoothed oinochoe with relief decor (inv. no. 474, fig. 22: 4), of kitchenware and handmade pottery (inv. nos. 475–477, fig. 22: 5—7) and a small, almost round clay disc (“votive”) (inv. no. 479, fig. 22: 9), which had been produced from the wall shard of a black-glazed vessel. On the left upper arm was additionally a big fragment of a handle of an amphora from Chios of the second half of the 5<sup>th</sup>–4<sup>th</sup> centuries BC. Overall, the finding below the skeleton and in its larger surroundings points to the second half of the 5<sup>th</sup> / beginning of the 4<sup>th</sup> century BC, whereas the layers above the human remains date to Late Classical-Hellenistic times.

The archaeological finding in area HEKP-7 is indicative that the deceased was placed without a regular burial — an event which only seems possible if the rampart and moat system was no longer used in its original form at that time. Thus, the stratigraphy of the filling layers in combination with the whole findings in the western part of Olbia indicate a time horizon from the second half of the 4<sup>th</sup> century onward. In this, the deceased belongs to a layer which obviously marks the abandonment of the settlement structures chronologically. The fact that the body was in some places extraordinarily distorted on an uneven ground leads to the assumption that the body was again disposed of without special consideration and was then submerged gradually over the course of time. Therefore, this finding convincingly joins in the ranks of the chronologically remarkably homogeneous secondary usage of former urban structures as irregular burial places which has been demonstrated above.





Fig. 21. Olbia Pontica. Pit 1/2010: 1 — the find situation of the human skeletal remains; 2 — a black-glazed guttus (inv. no. 100), found immediately below the human remains

The evidence of extraordinary multiple burials from a comparable timeframe, of numerous traces of massive force of violence on human remains and above all the find of the deceased in the area of the former fortification point to a special situation in the middle/second half of the 4<sup>th</sup> century BC. The abandonment of the former settlement area in the

west of the city on the one hand seems to have been — and this is consistent with the results of the living and economic structures — a short process. On the other hand, the analysis of the graves mentioned now enables us to gainfully investigate anew the determining factors which led to a reduction of the city area to the central area. This process should be



Fig. 22. Olbia Pontica. Skeleton 1/2017: 1—2 — the eastern part of the moat; 3 — a rim fragment of an amphora from Mende (inv. no. 473); 4 — a rim fragment of a grey smoothed oinochoe with relief (inv. no. 474); 5—6 — rim fragments of kitchenware (inv. nos. 475, 476); 7 — base fragments of a handmade vessel (inv. no. 477); 8 — a wall fragment of an Attic black-glazed vessel (inv. no. 478); 9 — a votive made from the body fragment of an Attic black-glazed vessel (inv. no. 479)

rated against the background of the events around Olbia of the 330s, which are (only) recorded in literature.

### ***The Campaign of Zopyrion — in the Written Tradition***

The literarily recorded conflicts “at the gates” of Olbia in the second half of the 4<sup>th</sup> century BC have been the object of a highly controversial discourse for many decades. Due to differing information

in Justin (II 3, 1-4; XII 1, 4-5. 2, 16-17), Curtius Rufus (X 1, 43-45) and Macrobius (Sat. I 11, 33), numerous different theses emerged on the goals, the actual course of events or the impacts of these events, and even the question of the historicity of this military endeavour of the Macedonian general arose (cf. e.g. with further literature: Iliescu 1971, p. 57-73; Самойлова 1993, с. 46-51; 2009, с. 300-302; Jordanov 1997, p. 70-79; Vinogradov 1997a, S. 323-335; Анохин 2010, с. 38-40; Avram, Chiriac, Matei 2013, p. 227-303; Скржинська 2015, с. 7-8;





Fig. 23. Olbia Pontica. So-called archer coinage (inv. no. O-47 3854). AV: Demeter with a mural crown; RV: an archer. Bronze, Ø 18 mm, die axis: 12

Яйленко 2017, с. 383-401; Ionescu 2021, p. 226-231). Thus, according to Justin, the Scythians acted as relevant enemies which Zopyrion opposed, as Kyros and Dareios before him, unsuccessfully despite his army of 30,000 men. According to the ancient author, Zopyrion in his function of *praefectus Ponti* (XII 2, 16) thereby followed personal goals. He tried to foster his own fame with a war against the North Pontic riding nomads — an attempt which finally ended in the complete annihilation of his army and his death (Avram, Chiriac, Matei 2013, p. 250-251). According to Curtius Rufus (X 1, 43-45) in turn, Zopyrion as *Thraciae praepositus* was on a campaign against the Getae when he and his complete army were killed in a storm (cf. Avram, Chiriac, Matei 2013, p. 251-257). Further information on the background, the course of events or even their presence at the Borysthenes River cannot be deduced from this passage in the text. This indifferent body of source material led, among other things, to the still unanswered question if Zopyrion actually saw himself forced to act as a result of the wish to make a name for himself or if he rather followed an actual plan of conquest — be it by order of Alexander or with the goal to create an empire of his own (cf. e.g.: Vinogradov 1997b, S. 314-317; Клейменов 2012, с. 12-24; Бруяко 2017, с. 323-324; Ionescu 2021, p. 230-231).

Finally, the campaign of the Macedonian general is again shortly mentioned in the *Saturnalia* of Macrobius. Contextually, the ancient author

focuses on an episode of the campaign which is not recorded in literature anywhere else: the siege of Olbia and its successful resistance with the help of freed slaves and foreign inhabitants of the city who were in turn granted citizenship (Sat. I 11, 33). Macrobius uses this referral to Zopyrion's siege exclusively as another evidence for the necessity for extraordinary interventions in the social order which might arise under certain (war) circumstances in order to reach the implemented goals during situations troubled by war. In this way, the recipient of his thoughts undergoes a change of perspective, since now the city of Olbia and no longer the Macedonian general is the centre of observation as leading protagonist. Starting from Caesar and Augustus, who used freedmen (*voluntarii*) for their military endeavours, via this skilful recourse to the events at the gates of Olbia, the ancient author then draws a line to the past in mentioning the recruitment of 9,000 freed Spartans by Kleomenes. He thereby implies an (acceptable) legitimacy of this extraordinary course of action.

The heterogeneity and the simultaneously very comprised informative content of the written records are reflected in a varying acceptance on the part of the historic-archaeological research. Scholars prefer either the textual version of Justin or the one of Curtius Rufus — in singular cases, a textual cross-linking of different variants has been proposed in order to gain an allegedly sensible concordance with historic events (cf. e.g. Suceveanu 1966, p. 635-

644: possibly, there were two campaigns; cf. Avram, Chiriac, Matei 2013, p. 251). Thereby, events like the victorious fights against the Spartan king Agis or against Alexander, king of Epirus, which are mentioned in the text passages and, according to the ancient authors, were chronologically synchronous, played an equally important role as the reconstruction of military strategic succession (Avram, Chiriac, Matei 2013, p. 251-257). Thus, for example the question if Zopyrion had assumed his office as “*praefectus*” as successor or as predecessor of Memnon has been discussed more than once (cf. Heckel 1997, S. 197; Avram, Chiriac, Matei 2013, p. 251-252). Therefore, a time period of all in all 8–9 years for the chronology of the Zopyrion campaign can be determined. Recently, D.-T. Ionescu again resumed very pointedly that this campaign “*took place between 334 BC and 326/5 BC, and any date between those years is possible,*” (Ionescu 2021, p. 227). Despite these difficulties of an actual chronological determination, the largest part of research meanwhile speaks in favour of a dating around 331 BC, although due to different motives (cf. e.g. Iliescu 1971, p. 57-73; Vinogradov 1997a, S. 323; 1997b, S. 299-303; Avram, Chiriac, Matei 2013, p. 258; Бруяко 2017, с. 323; Яйленко 2017, с. 383). In lack of convincing alternatives, the authors of the article at hand basically follow this dating, especially since the archaeological finding in Olbia cannot mirror such a differentiation in the finer chronology adequately, and therefore a determination does not contain the danger of a misinterpretation based on this.

Beyond that, the limited meaningfulness of the literary sources even led to an alternative interpretation of the siege of “Borysthenes” mentioned by Macrobius, which in established reading is a synonym for the city of Olbia. Thus, by the end of the 20<sup>th</sup> century, V. P. Yailenko developed the thesis, which is controversially discussed still today, that the Macedonian general did not campaign ostensibly against the Milesian colonial city at the lower Buh but directed his attention primarily to one of the large Scythian fortified settlements located far from the North Pontic coastline (most recently Яйленко 2017, с. 383-401). The starting point of his considerations was, on the one hand, the campaign against the Scythians recorded *expressis verbis* by Justin and, on the other hand, the missing archaeological evidence which might point to an according siege situation in Olbia (cf. Анохин 2010, с. 40). Destructures verified by excavations in the area of the western city gate (Кръжицкий,

Лейпунская 1988, с. 21) should be understood, according to V. P. Yailenko, rather in connection with the Scythian-Macedonian conflicts between Ateas and Philipp II (around 339 BC) (Яйленко 2017, с. 385), whereas the destructions evidenced by E. I. Levi (Леви 1956, с. 112-113; 1964, с. 5-6) in the central area of the city were reinterpreted as signs of urbanisation processes (Яйленко 2017, с. 385-386). Finally, the erection of an altar for Alexander in the direct reach of Olbia (Amm. XXII 8,40) would also clearly speak against a Macedonian-Olbian hostility, which he therefore consequently rejects (Яйленко 2017, с. 386-387). These theses of Yailenko met vehement criticism, which at that time was brought forth immediately and mainly by N. O. Gavryliuk and E. V. Chernenko (Гаврилюк, Черненко 1991, с. 65-69). Therefore, they have not met wide acceptance in previous historic-archaeological research.

Finally, the remarkable size of the army commanded by Zopyrion, which Justin estimated to 30,000 men (XII 2, 16), evoked serious doubts as to the historicity of the events, since even a well-fortified Olbia could have never resisted such superior numbers (Яйленко 2017, с. 384). On the one hand, research tried an expedient by understanding the size of the army as being substantially exaggerated (e.g. Heckel 1997, S. 197; Avram, Chiriac, Matei 2013, p. 254). On the other hand, an early termination of the siege was brought up which was necessary either because of events in faraway Thrace or because of the arrival of the troops allied with Olbia at the banks of the Borysthenes (cf. Anochin, Rolle 1998, S. 844-846; Stolba 2015, p. 53; 2019, p. 524; Бруяко 2017, с. 324). Regardless of a respective preference for the suggested and partly contradictory theses, ancient tradition at least agrees on the catastrophic end of the campaign, which resulted in the complete annihilation of the army and the death of Zopyrion (Just. II 3, 4. XII 2, 17; Curt. X, 1, 45). However, the sources are again substantially too imprecise to determine the actual circumstances of the demise. As expected, there is therefore no consensus in research neither as to the way back of the Macedonian general and his troops, nor to their downfall (on this extensively see Avram, Chiriac, Matei 2013, p. 227-303).

### ***A Siege of Olbia? — the Archaeological Findings***

In connection with the question if Olbia was actually faced with such a massive siege in the third quarter of the 4<sup>th</sup> century BC, previous research focussed not only on the literary sources but



repeatedly also on the material remains from this time. Thus, V. O. Anochin and R. Rolle, in their study which appeared in 1998, introduced a small group of lead sling bullets which had been found in the close surroundings of the Milesian colonial city by non-professionals with metal detectors. Of these, only three examples featured an actual finding place with the settlements Shyroka Balka and Zakysova Balka (Anochin, Rolle 1998, S. 837-848; Анохин 2010, с. 49-50). Despite the fact that they could therefore only be roughly located, the lead bullets immediately yielded special interest in the context of the question on the historicity of the Zopyrion campaign, since one specimen features the inscription [B]ΑΣΙΛΕ on the front side, while on the back side ΑΛΕΞΑΝ can be read (Anochin, Rolle 1998, S. 840-842; cf. Анохин 2010, с. 41-42; Stolba 2015, p. 53 with note 63). In combination with four other anepigraphic pieces in the Archaeological Museum in Odesa, including one case proven to come from the Olbian context, whereas the same is supposed for the others, the authors concluded: “*Diese Konzentration von Schleuderbleien in so naher Umgebung von Olbia und das Vorhandensein eines Fundstückes mit Namen und Titel Alexanders des Großen unter ihnen erlaubt es, mit aller Vorsicht, die Funde mit der Belagerung Olbias durch Zopyrion, einen Heerführer Alexanders, in Verbindung zu bringen.*” (Anochin, Rolle 1998, S. 843).

Analogous almond-shaped lead bullets, which early on could have been furnished with inscriptions (among them names of generals) or depictions of different kinds (Anochin, Rolle 1998, S. 839; cf. Анохин 2010, с. 48), originate from different finding places in the Dobruja. Two other pieces, which were published in an extensive study in 2013, also featured a reference to Alexander III (ΒΑΣΙΛΕΥΑΛΕΞΑΝ, Avram, Chiriac, Matei 2013, p. 230, Nr. 1-2), while another object names a *strategos* Alexandros (ΣΤΡΑΤΗΥΑΛΕΞΑΝΔ, Avram, Chiriac, Matei 2013, p. 230, Nr. 3), who the authors identify as Alexander of Lyncestis (Avram, Chiriac, Matei 2013, p. 237-238). By means of the distribution patterns researchers saw first indicators that the route of Zopyrion’s army on their way back from the North Pontic regions might have led along the Danube to the land of the Getae. The acceptance of such a thesis would offer a remarkably pragmatic possibility to combine the differing literary traditions reasonably: the unsuccessful campaign against the Scythians and the complete annihilation by the hands of the Getae (cf. Avram, Chiriac, Matei 2013, p. 257).

Comparable to the chronologically mostly coherent destructions in Nikonion (cf. Загинайло 1984, с. 78; Охотников 2000, с. 20; Sekerskaia 2001, 69. 86; 2007, p. 485-486; Banari 2003, 336), which might be directly connected with the military advance to the North Pontic coastal regions (cf. e.g. Самойлова 2009, с. 300), these extraordinary find objects are therefore understood as convincing evidence for a presence of Zopyrion “at the gates,, of Olbia — in which way ever this presence can be reconstructed in detail (e.g. Анохин 2010, с. 41-42; Stolba 2015, p. 53). Yet with good reason, a possible chronological discrepancy between the production and the usage of such sling bullets has been pointed out, which means that the lead sling bullets can be seen as a plausible indication but in themselves cannot be assessed as a final evidence (Avram, Chiriac, Matei 2013, p. 258).

Nevertheless, a combination with the up to 0.15 m high burnt layers which could be registered in the area of the western gate of the core city wall and which were dated to the time of the Macedonian-Scythian conflicts about 339 BC by V. P. Yailenko without any substantive argument (see above; Яйленко 2017, с. 384-385), really indicates a (military) crisis situation which befell Olbia in the third quarter of the 4<sup>th</sup> century BC. In addition, the stratigraphic features along the clay massif no. 566, which has seldomly been regarded in the discussions up to now, have been understood by the excavators as a clear indicator of a considerable destruction of the city gate, which makes a partial intrusion of enemy troops into the city area at this point at least thinkable (Крыжицкий, Лейпунская 1988, с. 21). The destruction layers in the area of the agora and the temenos mentioned by E. I. Levi could thereby be explained meaningfully and would not need to be forcefully explained by inner social commotions conforming to the time spirit of the Soviet research at that period (Леви 1956, с. 112-113; cf. Виноградов 1989, с. 175; Vinogradov 1997b, S. 306-307; Яйленко 2017, с. 386 с прим. 70).

The archaeological finding in the lower city area of Olbia (NGS) also seems to back up this thesis of an immediate military threat. Already at the end of the 1980s, comparable to the situation at the western gate, dense layers of yellowish clay could be revealed. Despite limited dating possibilities, they were interpreted as remains of a defensive wall partly destroyed during the siege (most recently Лейпунская 2007, с. 48-57; cf. Kryzhytskyi, Leipunskaiia 2010a, p. 16; 2010b,

p. 22). Follow-up excavations conducted in 2003 yielded only a meagre small find spectrum in the area of this up to 3.8 m wide structure. However, a dating of the actual city wall in this area only to the beginning of the 3<sup>rd</sup> century BC could be determined via stratigraphic observations (Kariaka 2008, p. 179; cf. also Лейпунская 2007, с. 55-56). According to the excavators this defensive line was seemingly built “at the site of a battle” (Kariaka 2008, p. 179), which is characterised by a larger number of human bones and for which a causal connection with the city’s siege by the troops of Zopyrion was assumed. If this thesis was to be accepted, it would in fact point to a picture of Olbia being attacked at several places at once, where it came to serious battles for the city.

Finally, the research results from the Olbian *chora* should be considered in this context, which show a temporal hiatus for most of the agricultural settlements especially for the turn from the third to the last quarter of the 4<sup>th</sup> century BC (cf. e.g. Крыжицкий et al. 1989, с. 99-100; 1999, с. 113-114; Buiskykh 2006, S. 123; Vinogradov 1997b, S. 312). The synchronicity of the literarily recorded campaign and the archaeologically proved abandoning of the agricultural supply of Olbia is remarkable and would be consequent from a military point of view, since it would enable the attacker to deprive the besieged city of their basis of existence and at the same time supply the own troops (cf. Vinogradov 1997b, S. 311-312). By all means, the revival of the *chora*, which would see the biggest period of prosperity in the history of the Olbian polis in the last quarter of the 4<sup>th</sup> century BC, is another indicator for the short-term political reasons instead of those motivated by long-term global changes for the abandonment of the settlements whose inhabitants seem to have left their lands following an acute need for protection (in the direction of Olbia?).

In short, every single archaeological finding mentioned here is in itself no sufficiently convincing evidence for the historicity of the literary tradition on the Zopyrion campaign and the connected siege of Olbia. They respectively highlight different aspects of a history of events which, however, permit a multitude of interpretations due to their isolated position in space and time. Nevertheless, their meaningfulness increases enormously in immediate combination with each other, so that, in our opinion, the thesis of an actual presence of Macedonian army at the gates of the city is ultimately without alternative for the time being.

Despite the basic acceptance of this reconstruction of the historic events, we do not deem all archaeological objects which have been connected with the Zopyrion campaign in previous research to be immediately suitable for a gainful discourse on this topic. Thus, the so-called archer coin series (obv.: Demeter with mural crown; rev.: archer) might coincide chronologically with the processes described here, but a causal connection between both phenomena seems to be too speculative (fig. 23). In contrast to the destruction contexts at the critical points of the infrastructure, which immediately indicate an attack on the city, coin images do not show an immediate connection with the results and therefore provide a larger span of research theses. The suggested, very tangible interpretation as coinages from Olbia which depict the successful defence of the siege in general and, in the representation of the archers, a specific usage of archers in particular (Stolba 2015, p. 43-58; cf. 2019, p. 524-525), could on the one hand be basically appropriate. However, the short time of coinage of 3–5 years (Stolba 2015, p. 52) does not seem to do justice to such an epochal event for the city, so that, on the other hand, other, unrecorded scenarios might also be befitted an important role. In any case, a specific connection with the Zopyrion campaign does not become immediately accessible to us, which is why we deliberately do not include this special coinage, whose dating is additionally controversial, into our considerations (cf. Анохин 2011, с. 44-45, № 221-226).

### ***The Eve of Hellenism — an Eventful Time for Olbia Pontica***

The second half of the 4<sup>th</sup> century BC is — so much can undoubtedly be said based on the current archaeological findings and the literary records — a very eventful time in the history of the city of Olbia. A distinct reduction of the urban structures to the actual core city area of up to 25 ha, which in itself is now secured by a newly erected fortification system, is in this regard the most obvious indicator for a comprehensively new urban appearance (Buisikikh, Fornasier 2022, p. 223). However, in its actual details, this urban transformational process has been known for only a few years and was therefore previously not a part of the scientific discourse. The state of research accepted until recently was thus still based on the



thesis of a simply structured provisional suburb settlement which only existed for few decades and was abandoned no later than at the end of the first quarter of the 4<sup>th</sup> century BC (summarising Fornasier et al. 2017, S. 28-30. 47-48). Moreover, among all graves presented in detail here, only the extraordinary Multiple Burial 18/1974 was considered in the discussion on the historicity of the campaign of Zopyrion due to an only successively enhanced archaeological knowledge level and a limited publication activity. This is why there was a distinct shift of emphasis in favour of the written tradition in interdisciplinary research. Previously, the focus was on the — as already shown — only partially meaningful literary sources and on two epigraphic evidences, whose relevance for the topic was mainly academically advocated by Yu. G. Vinogradov alone.

Thus, the Moscow researcher referred to the fragment of an amphora which had been found in the settlement Kozyrka II in the surroundings of Olbia in 1985. It featured a multi-line inscription (inv. no. K-(II/3)/5-85), which, among other things, displays the name Zopyrion and which, according to him, should be dated to the second half of the 4<sup>th</sup> century BC on the basis of the palaeography (Vinogradov 1997a, S. 323-335). In a detailed study, Yu. G. Vinogradov reconstructed this text as a (further) proof for a social crisis situation in the polis, which had meant an additional threat for the city at the time of the siege. Therefore, obviously oppositional forces had stood as a “fifth column” on the side of Zopyrion and had acted in his sense (Vinogradov 1997a, S. 331). Some of them might have been executed for their crimes by stoning (Pit 18/1974). This “interprétation romanesque” (Gauthier 1998, p. 1187) has been mainly rejected in research and the inscription was read as having rather personal content instead of representing the interests of the state, as proposed by Yu. G. Vinogradov (cf. Анохин 2010, с. 40-41; Яйленко 2017, с. 399-401).

Likewise, the interpretation of the famous Kallinikos decree (IOSPE I<sup>2</sup> 25+31), which Vinogradov saw as the result of a successful fight of democratic forces in times of utter danger and which he dated to the immediate time period after the Zopyrion campaign (in detail: Виноградов 1989, с. 150-176; Vinogradov 1997b, S. 276-322. Further Vinogradov, Kryzhytskyi 1995, S. 136-137; Vinogradov 1997a, S. 324), was heavily criticised both regarding the reconstruction of the content (e.g. Robert, Robert 1984, S. 457-458

Nr. 276) and its early dating (e.g. Яйленко 2017, с. 440-449). In this specific case, the suggested reconstruction of the content again seems to be too “novel-like” and too (mis)guided by the attempt to reach a historically stringent “overall concept” (cf. Vinogradov 1997b, S. 319-320) to be really convincing — especially due to the rather isolated character of the sources.

Socio-political transformation processes can therefore not be reconstructed for the second half of the 4<sup>th</sup> century BC solely based on the literary sources quoted here, especially not in a causal connection with the Zopyrion campaign. However, considering the currently known quantitatively and qualitatively enhanced archaeological findings from the western city area of Olbia, a final synthesis seems to be gainful. In addition to the already mentioned and partly newly assessed theses, the following conclusions can be drawn in this context:

1) An analysis of the graves on the area formerly called suburb does not only unfailingly affirm the previously postulated end of existence of the western settlement territory in the 4<sup>th</sup> century BC. It can moreover concretise the start of this urban transformational process to the middle of the 4<sup>th</sup> century BC (cf. recently Buiskich, Fornasier 2022, p. 220).

2) Both within the formerly fortified area (Graves 3/1978, 1/2009 described above) and directly outside of it (e.g. in area Pivnichnyi Mys 2, Graves 7/2006 and 8/2006, cf. Ивченко, Диденко, Ланг 2006, с. 62-67) graves were created regularly from the third quarter of the 4<sup>th</sup> century BC onward. However, due to their small quantity and their seemingly rather random distribution, they do not yet testify to a systematically structured necropolis. Nevertheless, they still unambiguously point to a fundamental change in the usage of the area already during this early time period. In combination with recently published cultic structures from early Hellenistic times along the so-called western road (object 22 in the area НЕКР-4, cf. Kuzmishchev 2021, p. 198-201) it becomes increasingly apparent that the previously supposed hiatus in the archaeological finding lasting until Roman times is no longer reconcilable with the current state of knowledge.

3) The archaeological findings of the irregular burials show unambiguously that the secondarily used former settlement structures were still visible from afar and accessible, which means that the graves were consequentially created promptly after the abandonment of the structures. This is

true for public and private structures alike — e.g. the former fortification (Skeleton 1/2017), a cistern (Pit 1/1966) or a big storage pit (Grave 18/1974).

4) The four multiple burials (Pit 18/1974; Pit 1/2002; Pit 2/2006; Pit 7/2006) with their all in all 80 deceased all originate from a comparable period of time (second/third quarter of the 4<sup>th</sup> century BC). They all display corresponding characteristics of an irregular burial and in two cases (Pit 18/1974, Pit 2/2006) feature clear signs of external violence. This suggests that they are to be understood as a result of one, or possibly even several, chronologically closely consecutive, crisis situation(s) which forced the inhabitants of Olbia to act unconventionally and pragmatically. An imagined connection with the events surrounding the siege by the army of Zopyrion is suggesting because of the chronological coincidence — if we take into account the lower timeframe. However, it can in no way be verified concretely, especially if we consider that a part of these burials also may already belong to the end of the second quarter of the 4<sup>th</sup> century BC. The only known siege around the year 331 BC is set against an unknown, since not directly preserved, number of crisis situations, perhaps only on a daily basis, within the second/third quarter of a century. Each one of them would have also justified the need for irregular multiple burials. Against this background alone, the social disturbances or even riots reconstructed in detail by Vinogradov on the basis of these few sources is to be rejected in general.

If a strict connection between the irregular multiple burials and the siege cannot be verified archaeologically, we finally need to answer the question: which exact urban situation did the Macedonian general find when he and his troops arrived “at the gates” of Olbia? First, we need to emphasise again that the area in the west of Olbia was abandoned seemingly without coercion at the exact same moment (at the middle of the 4<sup>th</sup> century at the latest) when the core city was finally secured by a complex fortification system. During the extensively conducted fieldwork, no burn marks or traces of destruction were found

which would point to a forceful evacuation of the relevant western settlement area. In contrast, this process seems to have been again part of a superior planning system whose beginnings verifiably reach back to Late Archaic times (cf. Fornasier, Buisykh, Kuzmishchev 2022, p. 67-95) and whose goal it also seems to have been to provide the core city successively with all relevant urban facilities before the western area was abandoned.

In addition, the grave findings presented above show unequivocally that these former settlement structures in the west of Olbia were not completely removed or levelled yet, since the moat of the former fortification, cisterns or storage pits still existed and could therefore be used secondarily for both regular and irregular burials. In theory, it would therefore even be possible that the rampart in its basic components also still existed and that the rampart and moat system had possibly been reactivated at least rudimentarily in the course of the siege. Thus, part of the confrontations to be anticipated would not have taken place in the immediate vicinity of the core city but far away, beyond the Late Archaic fortification. As such, the up to now only selectively verified destruction contexts along the wall of the core city could be understood better. It could now be interpreted as a “second line of defence” which could not have been attacked as a whole during a siege that normally features dynamically developing battles.

Ultimately, however, this reconstruction of the dramatic events at the gates of Olbia also remains speculation, as unequivocal proofs are still missing. The irregular graves discussed here cohesively for the first time cannot change this fact. The analysis of the relevant burials from the former settlement area does enable us at least — as shown above — to gain a new academically substantiated access to the urban transformational process from the middle of the 4<sup>th</sup> century BC onward, which was to shape the cityscape of the Milesian colony for centuries to come.



**Table 1. Graves in the area to the west of the core city of Olbia, previously enclosed by a Late Archaic fortification**

In the area to the west of the core city, formerly enclosed by the late Archaic fortification, a total of 285 graves were investigated during various excavation campaigns (1964-2017). 165 graves, which are listed below, could be dated during the excavations. The grave findings of the 4<sup>th</sup> century BC discussed in more detail in the text are highlighted in grey.

The following abbreviations are used: cent. = century; Pl. = Plateau; PM 1 = Pivnichnyi Mys 1; S. = Southern

Number	Area	Dating	Literature
1964/3	Pl. II	1 <sup>st</sup> cent. AD	Козуб 1964, c. 4-9
1964/6	Pl. II	2 <sup>nd</sup> —3 <sup>rd</sup> cent. AD	Козуб 1964, c. 9-10
1964/10	Pl. II	2 <sup>nd</sup> cent. AD	Козуб 1964, c. 10-11
1964/11	Pl. II	1 <sup>st</sup> cent. AD	Козуб 1964, c. 11-12
1964/12	Pl. II	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1964, c. 12
1965/6	Pl. I	2 <sup>nd</sup> cent. AD	Козуб 1965, c. 10-12
1965/7	Pl. III	3 <sup>rd</sup> cent. AD	Козуб 1965, c. 12
1965/8	Pl. III	1 <sup>st</sup> cent. AD	Козуб 1965, c. 12-14
1966/pit 1	Pl. II	4 <sup>th</sup> cent. BC	Козуб 1967a, c. 7-9
1966/1	Pl. III	2 <sup>nd</sup> —3 <sup>rd</sup> cent. AD	Козуб 1966, c. 6; Козуб 1967b, c. 210
1966/2	Pl. III	2 <sup>nd</sup> —1 <sup>st</sup> cent. BC	Козуб 1966, c. 6-7; Козуб 1967b, c. 210
1966/5	Pl. III	2 <sup>nd</sup> —1 <sup>st</sup> cent. BC	Козуб 1966, c. 7; Козуб 1967b, c. 210
1966/6	Pl. III	1 <sup>st</sup> cent. AD	Козуб 1966, c. 7-8; Козуб 1967b, c. 210
1966/8	Pl. III	2 <sup>nd</sup> —1 <sup>st</sup> cent. BC	Козуб 1966, 9; c. Козуб 1967b, c. 210
1967/1	Pl. III	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1967a, c. 12
1967/2	Pl. III	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1967a, c. 12
1967/3	Pl. III	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1967a, c. 12-13; Козуб 1968b, 135. c. 138
1967/4	Pl. III	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1967a, c. 13; Козуб 1968b, 135. c. 138
1967/7	Pl. III	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1967a, 1 c. 4-15; Козуб 1968b, 135. c. 138
1967/8	Pl. II	2 <sup>nd</sup> cent. AD	Козуб 1967a, 1 c. 5-16. Козуб 1968a, c. 139
1967/9	Pl. III	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1967a, 1 c. 6; Козуб 1968b, 135. c. 138
1967/10	Pl. II	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1967a, c. 16-17
1968/1	Pl. III	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1968a, c. 7-8
1968/2	Pl. II	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1968a, c. 8
1968/3	Pl. III	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1968a, c. 8-9
1968/4	Pl. III	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1968a, c. 9-10; Козуб 1971b, 175
1968/5	Pl. II	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1968a, c. 10; Козуб 1971b, 175
1968/6	Pl. II	1 <sup>st</sup> cent. BC—1 <sup>st</sup> cent. AD	Козуб 1968a, c. 10; Козуб 1971b, 175
1968/7	Pl. II	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1968a, 1 c. 0-12
1968/8	Pl. II	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1968a, c. 12.
1968/9	Pl. III	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1968a, c. 12.
1969/7	Pl. II	1 <sup>st</sup> cent. BC—1 <sup>st</sup> cent. AD	Козуб 1969, c. 15
1971/2	Pl. III	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1971a, c. 9
1971/5	Pl. III	1 <sup>st</sup> cent. AD	Козуб 1971a, c. 10-14
1971/6	Pl. III	1 <sup>st</sup> cent. AD	Козуб 1971a, c. 10-14
1972/2	Pl. III	1 <sup>st</sup> (?) cent. AD	Козуб 1972, c. 5
1972/4	Pl. III	1 <sup>st</sup> (?) cent. AD	Козуб 1972, c. 5
1972/5	Pl. III	1 <sup>st</sup> (?) cent. AD	Козуб 1972, c. 6
1972/6	Pl. III	1 <sup>st</sup> cent. BC—1 <sup>st</sup> cent. AD	Козуб 1972, c. 6
1973/1	Pl. III	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1973, c. 21

Number	Area	Dating	Literature
1973/2	Pl. III	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1973, с. 21
1973/3	Pl. III	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1973, с. 21
1973/4	Pl. III	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1973, с. 21-22
1973/5	Pl. III	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1973, с. 22
1973/6	Pl. II	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1973, с. 22
1973/7	Pl. II	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1973, с. 22-23
1973/8	Pl. II	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1973, с. 23
1973/9	Pl. III	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1973, с. 23
1973/10	Pl. II	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1973, с. 23
1973/11	Pl. III	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1973, с. 24-25
1973/12	Pl. III	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1973, с. 25
1973/13	Pl. III	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1973, с. 25-26
1973/14	Pl. II	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1973, с. 26
1973/15	Pl. III	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1973, с. 26
1973/17	Pl. III	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1973, с. 26
1973/18	Pl. II	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1973, с. 27
1973/19	Pl. II	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1973, с. 27-28
1973/20	Pl. S.	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1973, с. 28-29
1973/21	Pl. II	1 <sup>st</sup> cent. AD	Козуб 1973, с. 29-30
1973/22	Pl. II	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1973, с. 30
1973/23	Pl. II	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1973, с. 30
1973/24	Pl. III	1 <sup>st</sup> cent. AD	Козуб 1973, с. 30-33
1973/25	Pl. S.	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1973, 33
1974/pit 18	Pl. III	4 <sup>th</sup> cent. BC.	Козуб 1974, с. 26-28
1974/1	Pl. III	2 <sup>nd</sup> cent. BC	Козуб 1974, с. 28-29
1974/2	Pl. S.	1 <sup>st</sup> cent. AD	Козуб 1974, с. 29-30
1974/3	Pl. III	1 <sup>st</sup> cent. AD	Козуб 1974, с. 30
1974/4	Pl. III	2 <sup>nd</sup> cent. AD	Козуб 1974, с. 30
1974/5	Pl. II	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1974, с. 31-34
1978/2	Pl. III	1 <sup>st</sup> —2 <sup>nd</sup> (?) cent. AD	Козуб 1978, с. 8
1978/3	Pl. III	4 <sup>th</sup> cent. BC	Козуб 1978, с. 8
1978/5	Pl. III	2 <sup>nd</sup> cent. AD	Козуб 1978, с. 9-10
1978/6	Pl. III	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1978, с. 10-11
1979/1	Pl. III	1 <sup>st</sup> cent. BC—2 <sup>nd</sup> cent. AD	Козуб 1979с, с. 18
1979/2	Pl. III	1 <sup>st</sup> cent. BC—2 <sup>nd</sup> cent. AD	Козуб 1979с, с. 18
1979/3	Pl. III	1 <sup>st</sup> cent. BC—2 <sup>nd</sup> cent. AD	Козуб 1979с, с. 18-20
1979/5	Pl. III	1 <sup>st</sup> cent. BC—2 <sup>nd</sup> cent. AD	Козуб 1979с, с. 20-21
1979/6	Pl. III	1 <sup>st</sup> cent. BC—2 <sup>nd</sup> cent. AD	Козуб 1979с, с. 21
1979/7	Pl. III	1 <sup>st</sup> cent. BC—2 <sup>nd</sup> cent. AD	Козуб 1979с, с. 21-22
1979/8	Pl. III	1 <sup>st</sup> cent. BC—2 <sup>nd</sup> cent. AD	Козуб 1979с, с. 22
1979/9	Pl. III	1 <sup>st</sup> cent. BC—2 <sup>nd</sup> cent. AD	Козуб 1979с, с. 22
1979/10	Pl. III	1 <sup>st</sup> cent. BC—2 <sup>nd</sup> cent. AD	Козуб 1979с, с. 23-25
1979/11	Pl. III	1 <sup>st</sup> cent. BC—2 <sup>nd</sup> cent. AD	Козуб 1979с, с. 25-28
1979/12	Pl. III	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1979с, с. 28
1982/1	Zaiacha Gully	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб, Папанова 1982, с. 16
1982/2	Zaiacha Gully	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб, Папанова 1982, с. 17
1982/3	Pl. S.	2 <sup>nd</sup> cent. AD	Козуб, Папанова 1982, с. 17



Number	Area	Dating	Literature
1982/4	Pl. S.	1 <sup>st</sup> (?) cent. AD	Козуб, Папанова 1982, с. 17-18
1982/7	Pl. S.	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб, Папанова 1982, с. 18-19
1983/2	Pl. S.	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб, Папанова 1983, с. 12-15
1983/3	Zaiacha Gully	1 <sup>st</sup> cent. AD	Козуб, Папанова 1983, с. 15-16
1983/5	Zaiacha Gully	1 <sup>st</sup> cent. AD	Козуб, Папанова 1983, с. 16
1983/6	Zaiacha Gully	1 <sup>st</sup> cent. AD	Козуб, Папанова 1983, с. 17-18
1983/10	Pl. S.	2 <sup>nd</sup> —1 <sup>st</sup> cent. BC	Козуб, Папанова 1983, с. 19-23
1983/11	Zaiacha Gully	2 <sup>nd</sup> —1 <sup>st</sup> cent. BC	Козуб, Папанова 1983, с. 23
1983/12	Zaiacha Gully	1 <sup>st</sup> (?) cent. AD	Козуб, Папанова 1983, с. 23-26
1985/1	Pl. S.	3 <sup>rd</sup> cent. AD	Козуб, Папанова 1985, с. 2
1985/2	Pl. S.	2 <sup>nd</sup> —1 <sup>st</sup> cent. BC	Козуб, Папанова 1985, с. 2-4
1985/4	Pl. S.	3 <sup>rd</sup> cent. AD	Козуб, Папанова 1985, с. 5
1986/1	Pl. S.	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб, Папанова 1986, с. 23-24
1986/2	Pl. S.	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб, Папанова 1986, с. 24-26
1986/3	Pl. S.	2 <sup>nd</sup> —3 <sup>rd</sup> cent. AD	Козуб, Папанова 1986, с. 26
1986/4	Pl. S.	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб, Папанова 1986, с. 27
1986/5	Pl. S.	1 <sup>st</sup> cent. AD	Козуб, Папанова 1986, с. 27
1986/6	Pl. S.	1 <sup>st</sup> cent. AD	Козуб, Папанова 1986, с. 27-28
1986/7	Pl. S.	1 <sup>st</sup> cent. AD	Козуб, Папанова 1986, с. 28-29
1986/9	Pl. S.	1 <sup>st</sup> cent. AD	Козуб, Папанова 1986, с. 29-31
1986/10	Pl. S.	1 <sup>st</sup> cent. AD	Козуб, Папанова 1986, с. 31-33
1986/13	Pl. S.	1 <sup>st</sup> cent. BC—1 <sup>st</sup> cent. AD	Козуб, Папанова 1986, с. 34-35
1987/1	Pl. S.	1 <sup>st</sup> cent. AD	Козуб, Папанова 1987, с. 25
1987/2	Pl. S.	1 <sup>st</sup> cent. AD	Козуб, Папанова 1987, с. 26
1987/3	Pl. S.	1 <sup>st</sup> cent. AD	Козуб, Папанова 1987, с. 27
1987/4	Pl. S.	1 <sup>st</sup> cent. AD	Козуб, Папанова 1987, с. 28
1987/5	Pl. S.	1 <sup>st</sup> cent. AD	Козуб, Папанова 1987, с. 29
1987/6	Pl. S.	1 <sup>st</sup> cent. AD	Козуб, Папанова 1987, с. 30
1987/7	Pl. S.	1 <sup>st</sup> cent. AD	Козуб, Папанова 1987, с. 31
1987/8	Pl. S.	1 <sup>st</sup> cent. BC—1 <sup>st</sup> cent. AD	Козуб, Папанова 1987, с. 32
1987/9	Pl. S.	1 <sup>st</sup> cent. AD	Козуб, Папанова 1987, с. 33-34
1987/10	Pl. S.	1 <sup>st</sup> cent. BC—1 <sup>st</sup> cent. AD	Козуб, Папанова 1987, с. 35
1987/12	Pl. S.	1 <sup>st</sup> cent. AD	Козуб, Папанова 1987, с. 36
1987/13	Pl. S.	1 <sup>st</sup> cent. AD	Козуб, Папанова 1987, с. 38
1987/14	Pl. S.	1 <sup>st</sup> cent. AD	Козуб, Папанова 1987, с. 39
1987/18	Pl. S.	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб, Папанова 1987, с. 43
1988/1	Pl. S.	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб, Папанова 1988, с. 8-11
1988/2	Pl. S.	1 <sup>st</sup> cent. AD	Козуб, Папанова 1988, с. 11-12
1988/3	Pl. S.	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб, Папанова 1988, с. 13
1988/4	Pl. S.	1 <sup>st</sup> cent. AD	Козуб, Папанова 1988, с. 13
1994/5	Pl. I	3 <sup>rd</sup> cent. AD	Козуб 1994, с. 7
1995/4	Pl. I	2 <sup>nd</sup> cent. AD	Козуб 1995, с. 16-17
1996/1	Pl. I	1 <sup>st</sup> cent. AD	Козуб 1997, с. 25-26
1996/2	Pl. I	1 <sup>st</sup> cent. AD	Козуб 1997, с. 26-30
1996/5	Pl. I	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1997, с. 31
1999/2	Pl. I	1 <sup>st</sup> cent. AD	Козуб 1999, с. 7-8
1999/6	PM 1	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб 1999, с. 11-12; Козуб 2000, с. 23

Number	Area	Dating	Literature
2000/6	PM 1	Roman	Козуб 2000, с. 22
2000/7	PM 1	Roman	Козуб 2000, с. 22-23; Козуб, Стоянов 2001, с. 14-15
2001/5	PM 1	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб, Стоянов 2001, с. 12-13
2001/6	PM 1	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб, Стоянов 2001, с. 13
2001/7	PM 1	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб, Стоянов 2001, с. 13-14
2002/1	PM 1	4 <sup>th</sup> cent. BC	Козуб et al. 2002, с. 9-10
2002/2	PM 1	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб et al. 2002, с. 10
2002/5	PM 1	Roman	Козуб et al. 2002, с. 12
2002/6	PM 1	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб et al. 2002, с. 12-13; Козуб et al. 2005, с. 14
2003/6	PM 1	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб et al. 2003, с. 17-24
2005/1	PM 1	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб et al. 2005, с. 14-23
2005/1a	PM 1	1 <sup>st</sup> —2 <sup>nd</sup> cent. AD	Козуб et al. 2005, с. 23-25
2005/2	PM 1	2 <sup>nd</sup> cent. AD	Козуб et al. 2005, с. 25-27
2005/12	PM 1	3 <sup>rd</sup> cent. BC	Козуб et al. 2005, с. 37-38; Ивченко et al. 2006, с. 34-37
2005/14	PM 1	3 <sup>rd</sup> —2 <sup>nd</sup> cent. BC	Козуб et al. 2005, с. 39-43
2006/pit 2	PM 1	4 <sup>th</sup> cent. BC	Ивченко et al. 2006, с. 6-14
2006/pit 7	PM 1	4 <sup>th</sup> (?) cent. BC	Ивченко et al. 2006, с. 23-25
2006/8	PM 1	2 <sup>nd</sup> —4 <sup>th</sup> cent. AD	Ивченко et al. 2006, с. 37-40
2006/1	PM 1	after the 4 <sup>th</sup> cent. BC	Ивченко et al. 2006, с. 21-22. 37
2007/2	PM 1	1 <sup>st</sup> cent. BC	Ивченко et al. 2007, с. 27-32; Ивченко 2008, с. 15-17
2007/3	PM 1	1 <sup>st</sup> cent. AD	Ивченко et al. 2007, с. 32-38
2007/4	PM 1	1 <sup>st</sup> cent. BC	Ивченко et al. 2007, с. 38-39; Ивченко 2008, с. 17-19
2007/11	PM 1	4 <sup>th</sup> (?) cent. BC	Ивченко et al. 2007, с. 24-25
2008/6	PM 1	2 <sup>nd</sup> —1 <sup>st</sup> cent. BC	Ивченко 2008, с. 19-26; Ивченко 2009, с. 23-25
2009/1	SM 1	4 <sup>th</sup> cent. BC	Ивченко 2009, с. 25
2009/2	PM 1	2 <sup>nd</sup> cent. BC	Ивченко 2009, с. 25-27
2009/4	PM 1	2 <sup>nd</sup> —3 <sup>rd</sup> cent. AD	Ивченко 2009, с. 27-31
2010/1	PM 1	4 <sup>th</sup> cent. BC	Ивченко 2010, с. 17
2010/2	PM 1	3 <sup>rd</sup> —2 <sup>nd</sup> cent. BC	Ивченко 2010, с. 17-25; Ивченко 2011, с. 15-16
2013/11	PM 1	2 <sup>nd</sup> cent. BC	Ивченко 2013, с. 62-79
2017/object 6	НЕКР-7	4 <sup>th</sup> cent. BC	Буйских, Форнасье, Кузьмищев 2017, с. 33. 37-39; 2019, с. 154

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## ПОХОВАННЯ ПОМЕРЛИХ НА НЕЩОДАВНО ПОКИНУТИХ ТЕРИТОРІЯХ ПОСЕЛЕННЯ — СВДЧЕННЯ ОБЛОГИ ОЛЬВІЇ ПОНТІЙСЬКОЇ ЗОПІРІОНОМ?

Статтю присвячено поточним результатам українсько-німецького спільного проєкту, що проводить дослідження в Ольвії Понтійській з історії містобудування стародавнього міста з 2014 р. Основу увагу приділено похованням IV століття до н.е. З 1960-х років вони були виявлені в районі на захід від основного міста, яке спочатку використовувалося під житлову забудову і було оточене укріпленням. До сьогодні ці поховання були недостатньо опубліковані. Вони, вочевидь,

знаменують процес глибокої трансформації міського розвитку з середини IV ст. до н.е. та додатково проливають нове світло на історію тогочасних подій. Так, у межах колишніх поселенських структур виявлено кілька множинних поховань, у яких померлі були покладені без інвентаря та переважно у нетипових позах. Ці колишні поселенські структури: рів укріплення, побудований в пізньоархаїчний період, цистерна або навіть господарські ями – мали, таким чином, бути ще достатньо і майже цілком видимими під час їх вторинного використання. З одного боку, ці знахідки свідчать про те, що могили мали бути закладені відразу після того, як західна частина міста була занедбана. З іншого боку, (прагматичне) використання таких різноманітних споруд, які ще функціонували, схоже, не вказує на наявність у цей час звичайного некрополя в цьому районі.

У багатьох випадках на кістках вдалося зафіксувати зовнішні пошкодження, що свідчить про надзвичайну кризову ситуацію. У попередніх дослідженнях ця криза вже пов'язувалась з облогою Ольвії македонським полководцем Зопіріоном, що відображено в літературі. Збіг у часі військової кризи в Ольвії (331 р. до н. е.) з появою за міською брамою нестандартних масових поховань дійсно вражає. Однак конкретний зв'язок між цими явищами дотепер було встановлено без достатнього розгляду матеріальних доказів. Мета цієї статті, таким чином, полягає в тому, щоб розглянути обґрунтованість запропонованої тези про причинно-наслідковий зв'язок на підставі відомих археологічних знахідок, які тут уперше докладно представлені.

*К е у в о р д с:* Нижнє Побужжя, Ольвія Понтіїська, античний період, Зопіріон, облога міста, просторовий розвиток.

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