

Building Activity in Olbia in the Late Roman Time

Alla Buisykh^a

This paper is devoted to the publication of two newly excavated building structures consisting of underground and ground constructions that are attributed to the latest period of Olbia's existence. Archaeological artefacts found inside them are presented, including trading amphoras and ceramic pottery that are diagnostic for the final stage of the Cherniakhiv culture dating the last third of the 4th – the first quarter of 5th century AD. Separate attention is paid to a speculative idea about the fortified city, settled by Goths on the territory of the former Roman fortress of Olbia. The results of the recent archaeological excavations give the possibility of refuting this idea. The urban structure of the latest period, its status, and its spatial development are not yet clear and must be studied in depth.

KEY-WORDS: Olbia, late Roman period, building, dwelling, Cherniakhiv culture

The aim of this paper is to present new information about the building activity taking place in Olbia after the Roman garrison left it in the middle of the 3rd century AD. The subsequent invasion of the Goths in 269–270 AD changed the political map on the Danubian frontier of the Roman empire, and the northwestern part of the Black Sea littoral would have been fully incorporated in this process (Budanova 1990: 104–129; Shchukin 2005: 162–164, figs 53–54). Over the past few decades, researchers of Olbia have raised a number of general questions that are still under discussion. These include what kind of population occupied the former Olbian fortifications, what the political, economic, social and cultural status of this community was, and whether Olbia was still an urban structure and what it looked like. The continuous excavations at the northeastern part of the Upper Town of Olbia, conducted from the beginning of the 1980s, has produced a lot of information about the latest period of Olbia's history. In the situation when the surviving writing sources did not mention Olbia directly in the context of the military campaigns that took place from the end of the 260s to the beginning of the 270s AD (Budanova 1990: 122–125),

^a Institute of Archaeology, National Academy of Sciences of Ukraine, Volodymyr Ivasiuk Av. 12, 04210 Kyiv; e-mail: abujskikh@ukr.net; ORCID 0000-0001-7233-1288

and the latest necropolis of the city has not yet been found,¹ the remains of buildings together with the collections of different artefacts can help in re-examination of some actual archaeological and historical problems.

The modern interpretation of the results of the recent campaign of archaeological excavations conducted up to 2010 can be briefly summarised. In the Late Roman period, at the end of the 3rd–4th centuries AD, Olbia was a “small city in a dense barbarian environment”. To prove this, some important observations about the building activity were made. First of all, special attention was given to the planning networks. These had been changed – there was a mismatch between the layout of the city of the 2nd–3rd and that of the end of the 3rd to 4th centuries AD. Only individual elements of the former regular planning system were preserved in the southern part of the Upper Town. The site was determined to have been used intensively in the latest period; moreover, the new terraces, streets and squares with stone paving appeared because of the active building processes that took place there. The use of mortar in the building technique was stressed. The dwellings were determined to have been multi-chambered, they had one or two floors, 4–6 rooms and inner courtyards, sometimes with stone altars; the private apartments were joined with those used for the usual household and handicraft purposes. The defensive walls were demolished during the Goths invasion and were never restored. The city of Olbia possessed its *chora* of a radius 5–10 km, further it was surrounded with the settlements of Cherniakhiv culture. This general information about Olbia in the Late Roman time comes from the work of Valentina Krapivina, mainly determined on the basis of the annual excavations conducted under her supervision (sector of excavations R-25 in the southeastern part of the Upper Town, 1982–2010) and her analytical processing of the archaeological finds from Olbia (Krapivina 2014: 146–165).²

These conclusions mean that when the Roman soldiers left their garrison, Olbia became an unfortified city that preserved the previous, mainly Roman, tradition of city buildings, and, as it possible to understand, the necessary social and cultural organization, needed to support such an activity in the latest period of the complex's existence. This unfortified city occupied the southern part of the both terraces on the site of the former Roman fortress.

-
- 1 A single child's burial with the deposit of Cherniakhiv-type ceramic pottery and glass cup was excavated in the northern part of the Lower Town (Leypunkskaya 2006: 183–188). Two more graves of this period were excavated before 1917, but they have no modern topographic location, only the separate finds such as bronze fibulae and bone combs were noted in some specialist publications; both are mentioned by Krapivina (2014: 151).
 - 2 The ideas about the latest period of Olbia are distributed in numerous publications by Valentina Krapivina, one of the latest with the most current chronology (Krapivina and Domžalski 2008: 73–74). In order to prevent the search of a number of them, here and below I will refer the latest and the most complete publication, which appeared after the death of the author (Krapivina 2014).

To my mind, these conclusions must be re-examined because of their complete discrepancy with the real archaeological situation. The key-problem is connected with the incorrect interpretation of Olbia's historical development in the latest period. The general meaning that the building activity of this time was a successor of all (or almost all) the processes that took place in the Roman city, follows the above-mentioned problem. Moreover, the absence of the professional analysis of the excavated buildings and the necessary planning reconstructions became the reason of numerous doubts and speculations about the authenticity of the proposed conclusions. The impossibility of their verification became evident to the researchers. Without becoming acquainted with the detailed archaeological situation, it becomes impossible to create a model of the architectural and spatial development of Late Roman Olbia.

My personal many-years' experience in studying and interpretation of buildings and their constructions, obtained during Olbia's excavations, has forced me to adopt another conclusion. Taking into account that building activity really reflects the level of the development of every society, it is necessary to stress that the site was no longer subject to the planning regularity of the previous phase after the destruction of the Roman citadel in the period of the military campaign of the invading Goths. Moreover, despite Krapivina's opinion,³ the intensive development of the Upper Town and the use of the planning structures typical of the previous building period contradicts with the information about the spatial development and building activity in the Lower Town. Here the poor remains of single- or double-room houses, built without any general planning system (in a chaotic manner), were excavated (Leypunskaya 1988: 78). These contradictions and controversial points of view made me more attentive to the interpretation of the results of the newest excavations', provided in the last decade by work in the southeastern part of the former Roman citadel.⁴ Thus, the preliminary interpretation of the results of this archaeological research is given in this paper.

Some important remarks must be mentioned before starting the description and the analysis of the building activity. Since 2016, the Ukrainian and Polish international team have been conducting a joint scientific project in Olbia.⁵ One

3 The first reconstructions of the lay-out, houses and official buildings on the territory of the Roman citadel, connected with civil population, soldiers and officers of the Roman garrison, has already been proposed: Buyskikh and Novichenkova 2021: 50–58, fig. 3.

4 The continuous excavations in sector R-25 under Alla Buiskykh's supervision has taken place after 2010. The doubts about Krapivina's ideas about the preservation of the previous building traditions in Late-Roman times were expressed by Boris Magomedov but without any detailed proof because of the unavailability of published archeological evidence (Magomedov 2007: 51).

5 The joint project between Institute of Archaeology, National Academy of Sciences of Ukraine (Alla Buiskykh) and the National Museum at Warsaw, since 2019 – the Institute of Archaeology and Ethnology, Polish Academy of Sciences (Alfred Twardecki).



Fig. 1. Sector of excavations (R-25) in the southeastern part of the Roman citadel at Olbia.
Aerial photos: S. Lenarczyk, the National Museum at Warsaw.

of the main directions of this project is to conduct complex research in the territory of the Roman citadel. During four field seasons, there were excavated the remains of a multifunctional building complex that appeared here after the invasion of the Goths and which was connected with the Cherniakhiv cultural circle.⁶ Thus, the comprehensive studying of the latest Olbian chronological period became the first task. One of the most important results of this project's activity is the new chronological frames of this period from the 4th up to the beginning of the 5th century AD.⁷ The new approach to the late Roman period in Olbia together with the reexamined chronology that are used below, prompted me to propose a new look on the building processes that took place on the site of the former Roman citadel.

The excavations conducted in the southeastern part of the Roman citadel (Fig. 1) by the Olbian expedition of the Institute of Archaeology, National Academy of Ukraine for the last decade, have brought to the light a lot of fresh information about the inner organization of the everyday life of the community that occupied the territory of the former Roman fortress. It became clear that we are dealing with a totally new

⁶ See the contribution by A. Twardecki in this volume.

⁷ The first publications of the project's results (Twardecki *et al.*, 2016: 45–52; Twardecki and Buiskykh 2021: 251–273). See also the papers, devoted to the publication of the different finds according to the project, in this volume.



Fig. 2. The excavated area: 1. Building complex No 1912; 2. Building complex No 1911 and 1917; 3. Remains of stone pavement of the Roman *principia* courtyard. Aerial photos by S. Lenarczyk, the National Museum at Warsaw.

spatial organization of the living space. The regular street-net of the previous time was no longer in use with the exception, perhaps, of the main longitudinal street. It was the main communicative artery, that was organized on the ridge of the Upper Town plateau and divided it into two almost equal parts. But this street had the main infrastructural functions in the street network when the whole city-building complex had been in use. At a time of the city's total destruction, to my mind, there is no chance to suppose that only one street had to be preserved and had to have its initial function. The topographic peculiarity with central higher plateau, descending smoothly to the east and to the west, was preserved up to modern times.⁸ All the masonry of the Roman garrison's buildings was destroyed and demolished; none of it survived after the total destruction. Later the stones were taken away for use in new buildings. Thus, the Roman buildings were not reused in the latest period as it had previously been supposed. All the multi-chambered dwellings with inner courtyards, built for the needs of the Roman garrison and civil population, ceased to exist.

⁸ It was not by chance that the military trenches, dug here in 1941–1943, were made along this watershed also.



Fig. 3. Plan of the excavated area showing the extent of buildings 1912 and 1911/1917.
Graphic design: A. Buiskykh.

The archaeological excavations, held on the Upper Terrace, demonstrate that the stone pavement of the courtyard inside the monumental building that was attributed as the garrison's *principia* (Buiskykh and Novichenkova 2021: 17–18, figs 3; 12,1–2), was almost fully demolished (Figs 2 and 3). But new constructions appeared exactly on the site of the destroyed pavement. They belonged to the two main types – ground-level and underground buildings and they were connected with everyday life and household activity.



Fig. 4. Building complex No 1912. The beginning of the excavations. Photo: A. Buisykh.

The building complex labelled No 1912 was partly excavated in 2017. It was preserved at the level of the fully underground structure (Figs 2:1; 3). The square plan of this structure was visible from the beginning of the excavations; its upper level was filled with small rubble stones, the soil filling consisted of a large quantity of ash (Fig. 4). From the depth, about 0.5 m to more than 1 m, it became possible to retrieve the remains of the destroyed ceiling. This could have been from under a first floor above the structure, or it could have been from the roof of a structure that had only the underground level (Fig. 5). It was burnt by a severe fire, the remains of some burnt wooden beams (Fig. 6:1) and nearly 30 broken pieces of clay constructional elements with impressions of wattles (Fig. 6:2) were found. Their location seems to suggest that they were the remains of the roof over the underground construction. The walls were cut in a solid yellowish clay mass, the building had a square plan. The dimensions on the upper level are 2.5 × 2.7 m, and at the floor level 2.4 × 2.4 m, the area is less than 6 m², the depth is 1.5–1.6 m. The floor was paved with numerous small rubble stones, densely lying in pure yellow clay (Fig. 7). Along the eastern and southern walls of the pit were found the remains of two stone-built walls – preserved to the height of one-three rows, their inner faces were covered with a plastering of white lime mortar (Fig. 8:1–2).



Fig. 5. Building complex No 1912 in the process of excavation.
Researchers S. Didenko (left) and R. Kozlenko (right). Photo: A. Buiskykh.



Fig. 6. 1. Burnt wooden beam; 2. Remains of clay constructions with impressions of wattles.
Photos: A. Buiskykh.

The excavation of this construction was continued in 2019. Two stone walls were found on the west and the south edges of the clay-dug pit (Fig. 9). Both walls look unusual if compared with the normal walls of the stone cellars, typical for Olbian house-building in Hellenistic and the Roman times. To my mind, these walls were erected as supporting walls for protection of the clay walls of the underground



Fig. 7. Building complex No 1912. The rubble stones of the floor. Photo: A. Buiskykh.



1



2

Fig. 8. Building complex No 1912. 1. Stone constructions on eastern and southern sides; 2. Lime plastering on the surface of the southern wall. Photos: A. Buiskykh.



Fig. 9. Building complex No 1912 with remains of two walls beside the pit. Photo: A. Buiskykh.

constructions dug in soft soil with copious ash. Afterwards, the dense yellow clay was used as facing material inside it.

Besides two supporting walls, the entrance to the underground structure was found. It was in the northwestern corner of the underground construction and consisted of an outward-facing ramp coming from the north. It had a curved plan, turned to the east, and had a ramp descent from the ground level of that time. This ramp was paved with a dense layer of yellow clay. The bottom of the curved entrance was paved with the same small rubble stones; its overall length is nearly 5 m along the eastern side and 6 m along the western side, the width is 0.7–0.95 m (Fig. 10). The presence of the external entrance suggests the idea that the discussed building complex was fully buried in the ground and had no ground floor.

Another building complex was excavated in 2016, but the idea about its attribution appeared later, after the excavation of building complex No 1912. It had a complicated plan and comprised two parts: an underground part (labelled No 1911 during the excavation) and an above-ground part (No 1917). It was situated about 2 m to the southeast of the underground complex No 1912 (Fig. 2:2; 3). Its eastern part was destroyed by a terrace slope, the complete dimensions are unknown. The preserved part of the whole above ground construction has a rectangular plan, elongated from west to east and is about 6 m across, the inner part is less than 5 m



Fig. 10. Building complex No 1912. Entrance to the underground feature from the northwest.
Photo: A. Buiskykh.



Fig. 11. Building complex with the above-ground structure No 1917 from the southeast.
Photo: A. Buiskykh.

across. The southern wall, erected from small rubble stones and reused stones, is partly preserved, its length is 2 m, width 0.4 m. The entrance, perhaps, was from the west, there were used some preserved flat stones from the pavement of the Roman *principia* (Fig. 11). The preserved part of the inner space is paved with the same rubble stones, mainly small, combined with flat pieces of tile. A lot of the stones in the wall and floor show traces of fire.

The underground part of the construction was located to the north of the ground-level building, it had an almost square plan and dimensions about 2×2 m, a square floor area of 4 m^2 , the depth is little more than 1 m. The floor is levelled, it is made from clay, covered with ash. At the bottom of the northern wall, there were two rectangular stones (Fig. 12).

Both structures with underground elements and stone constructions inside were found in Olbia for the first time. In such a case, their interpretation can only be preliminary, the present conclusions may be corrected in the light of evidence from further archaeological excavations. The small dimensions of both together with the outward ramp entrance of one of them allows their interpretation as relating to



Fig. 12. Building complex with the underground structure No 1911 from the south.
Photo: A. Buiskykh.

a household usage of this underground construction. Perhaps these constructions served as cellars for the preservation of some form of products.

Archaeological material from the ceramic deposits that were found in both underground buildings, are diagnostic, they are typical for contemporary settlements of the Cherniakhiv culture in the northwestern Black Sea littoral region. Moreover, similar ceramic materials are known in Olbia from previous excavations (Magomedov 2007: 49–50; 2020: 221–223, fig. 2). They are: amphoras (Fig. 13:1) of Shelov type F, F2/F3 after Sergii Didenko (Shelov 1978: 19; Didenko 2018: 31–85) dating from the 350s to the 370s AD, and Shelov type E (Fig. 14) dating to the last quarter of the 4th to the first half of the 5th century AD; Delakeu / Zeest 100 type (Zeest 1960: tabl. XXXIX; Magomedov and Didenko 2011: 480–483); Red Slip Wares, first of all, the deep dishes, form 1A, of Pontic Red Slip Ware after Krzysztof Domzalski (Fig. 15: 1–5) dating from the second half of the 4th up to the mid-5th century AD (Olbia: Krapivina and Domzalski 2008: 78 ff., Fig. 1:1–2; compare with Tanais: Arsen'yeva and Domzalski 2002: 422 ff., cat. 1–184). Greyware table pottery is represented by open and closed forms with the specific turned ornament (Fig. 13:2–6) usual



Fig. 13. Diagnostic finds from underground structure No 1911: 1. Amphora of Shelov type F; 2–6. Greyware table ceramic; 7. Kitchen ware; 8. Loom-weight; 9–11. Cut amphoras bodies; 12. Bronze coiled wire; 13. Bone or antler three-layers comb. Drawings: E. Piatakova, Institute of Archaeology, NAS of Ukraine. Photos: A. Buisykh.



Fig. 14. Diagnostic finds from underground structure No 1912: amphora of Shelov type E. Drawings: E. Piatakova, Institute of Archaeology, NAS of Ukraine. Photos: A. Buiskykh.

in the settlements of the nearest Olbian territory (Schultze *et al.*, 2006: 300 ff.). Kitchen wares (Fig. 13:7; 15:6) add to this information (Magomedov 1987: fig. 16).

A ceramic lamp of Sunburst group with a stylized rosette on its base (Fig. 15:7) was found in the building No 1912. Sunburst lamps are widely known in the Northern Black Sea cities; their date is in the frame of the 3–4 centuries AD; the Olbian lamp belongs to the early Sorochan type II with transition from round to ovoid body (Sorochan 1982: 44–45, fig. 1; Chrzanovski and Zhuravlev 1998: cat. No 77–78). The same type of lamp was found in a grave of the Cherniakhiv settlement of Kamianka-Anchekrak to the northwest of Olbia (Magomedov 1987: 84, fig. 38, 4). There were found also a loom-weight of cylindrical shape with central rib (Fig. 13:8), like those that are known in Cherniakhiv settlements, type A122 after Magomedov (2015:19), and more than a dozen examples of a specific group of artefacts, widely known in the latest strata in Olbia – mainly the pieces of amphora bodies and other wares, that were roughly cut into discs (Figs 13:9–11; 15:8–15). Perhaps they had a role of gaming pieces in a game like the Roman *calculi*. Metal items are represented with an iron butt-spike with remains of a wooden shaft (Fig. 16:1), a bronze detail of ammunition (Fig. 16:2) from the building No 1912; and some coiled wires, perhaps for ear-rings or other decorations (Fig. 13:12; 16:3) from both buildings. The rare find in the underground structure No 1911 is a small part of a tripartite bone or antler comb (Fig. 13:13) of Thomas type III, dating from the end of the 4th to the beginning of the 5th century AD (Thomas 1960: 104 ff.). Such combs are surely attributed to the final stage of the Cherniakhiv culture (Shyshkin 2002: 244–246; Petrauskas 2021: 24–25, fig. 6.7).⁹

⁹ See the paper by Alisa Semenova about the finds of Cherniakhiv type combs from Olbia in this volume. I express my gratitude to Serhii Didenko and Oleh Petrauskas for their help in the determination of some groups of late-Roman archaeological materials published in this paper.



Fig. 15. Diagnostic finds from underground structure No 1912: 1–5. Red slipped dishes; 6. Kitchen ware; 7. Red slipped lamp; 8–14. Cut amphora bodies; 15. Cut kitchen ware body. Photos: A. Buiskykh.



Fig. 16. Diagnostic finds from underground structure No 1912: 1. Iron spear ferrule; 2. Bronze clasp; 3. Bronze coiled wire. Photos: A. Buiskykh.

To summarize, the general dating of the two building structures based on the analysis of the archaeological materials is the second half of the 4th to the beginning of the 5th century AD.

It is not yet clear if the underground structures had been inhabited, and whether there were any floors above. Moreover, there is no explanation how both constructions had two stories – underground and ground-level. Meanwhile, more arguments seem to support the idea of underground constructions. The small area of both constructions and their overall depth of more than a metre suggest that they were not inhabited. For this reason it is more likely that they were underground household cellars. But it must be specially mentioned that the people who built them were acquainted with the technologies of provincial Roman building tradition and used a mortar plastering in the interior.¹⁰ The Roman building tradition was known in principal to the population of the Cherniakhiv culture, but the archaeological examples of this idea are too rear (Shchukin 2005: 136). It is possible also to propose that both

¹⁰ I would like to mention especially that the use of the Roman building technique in Late-Roman Olbia is established for the first time. This fact, however, differs from Krapivina's previous idea about wide use of Roman mortar in the building activity of Late-Roman Olbia (Krapivina 2014: 148), because it was formulated on the basis of misinterpretation of the Roman citadel buildings.

buildings, being located so close, created a single building complex, surrounded by numerous pits.

The buildings that are excavated in Olbia have no direct similarities among the contemporary dwellings excavated in the settlements of the Cherniakhiv culture in the vicinity of Olbia, which is why they are so difficult to interpret. First of all, the normal cellars with stone walls, that are typical for Olbian Hellenistic and Roman dwellings, have no constructive and typological link with the discussed underground structures. In general, fully or partly underground dwellings with rectangular or square forms are known for the settlements of the Cherniakhiv culture; the use of clay with wooden reinforcement in the construction of walls was widespread there too (Zhurko 1983: 10–11). Underground dwellings are typical for the Cherniakhiv settlements in the southern part of the former Olbia *chora* that lacks natural building stone (Magomedov 1987: 15–16). But even there the fully underground structures had an area of about 17–29 m²; dwellings that were partly cut into the subsoil, had a smaller area of about 8–17 m² (Magomedov 2001: 21). As can be seen, the Olbian dwellings are the smallest in this list, which makes it extremely unlikely that they were used for the purposes of habitation.

The small number of excavated structures prevents us from drawing at this stage any conclusion about the origin of this building tradition in Late Roman Olbia. This point of view is based on my personal experience of annual excavations and the studying of the historical development of the building activity in the city. Up to now there is no evidence to propose a continuation of the local building tradition, existing here in the previous time, in the 1st to the first half of the 3rd century AD up to the Late Roman period. None of the previous buildings at the Roman citadel were in use more, moreover they were demolished down to the foundation after their burning during the invasion of the Goths and destruction in 269–270 AD.¹¹ It was possible only to establish the use of a small part of the flat pavement of the *principia* courtyard as an entrance to the Late Roman house. This single exception of the adoption for reuse of a part of a former construction that was more than a century old, proves the validity of my statement.

Studying the Cherniakhiv culture period buildings in Olbia allows us to turn to one question that looks to be still under discussion. It is necessary to pay special attention to the idea, expressed by Magomedov, that Late Roman Olbia, together with the former Roman fortified settlements around the city, preserved the defensive buildings that belonged to the Roman garrison. In his opinion, it was “a small fortified city, trading and handicraft centre” that was a military and administrative

¹¹ The traces of a strong fire were sought in the process of excavation of all the houses (Buiskikh and Novichenkova 2021: 19 ff.).

centre of the barbarian kingship that existed in this territory after the destruction of the empire of the Goths (Magomedov 2000: 224). This means that Olbia and the surrounding settlements would have been a kind of fortified enclave inside the territory occupied by the Huns in the northwestern Black Sea littoral. This enclave was inhabited by Ostrogoths, left here after the invasion of the Huns (Petrauskas 2021: 17 with literature). But this conclusion contradicts the excavated evidence obtained during the archaeological research in the Roman citadel.¹² This shows that in the Late Roman period, the defensive system was not in use; the walls and the towers were destroyed and their remains were being demolished for the building material.

In this connection, there is another question that must be decided, to what degree Late Roman Olbia was an urban space in the general sense of an urban space; whether the building activity conducted there permit us to define it as a city (or a fortress?), and compare it with the urban structure of the previous time. If we adopt the idea that it was a city that continued to develop the Roman building traditions, it is necessary to identify the presence of an inner organisation, local administration and city bureaucracy, responsible for this activity, first of all, connected with building of defensive structures, and finally, to answer a lot of questions connected with the political and social organisation of the Ostrogoths inside the Hunnic empire. But the narrative tradition, first of all, that of Jordanes, describing the Hunnic invasion (*Iord. Get.* 246), does not mention Late Roman Olbia, which, together with the total absence of any epigraphic documents means that any suppositions on this topic are not supported by any evidence.

That is why one can still draw only preliminary conclusions about the city of Olbia in the latest period of its existence. At the moment, it is possible to speak with more certainty about the settlement of the Cherniakhiv culture on the site of the former Roman fortress at Olbia. Besides, this settlement covered a larger area than the Roman citadel had. The archaeological materials of the latest period are distributed across the whole Lower Town together with poorly preserved buildings, including its northern part where the above-mentioned child's burial was found. The large number of imported ceramic pottery vessel, amphoras, and other goods of glass and metal, imported to Olbia as a result of sea trade, allow us to propose the harbour might have still been functioning in the Lower Town. The maritime trading connection used by the Goths, and the possible functioning of the Olbian harbour as a part of their communication network, allow us to propose this settlement as a potential distributive centre, from where these goods passed on to the surrounding sites and even further. The political, economic and social status of the new settlement on the site

12 Krapivina, who denied the presence of Cherniakhiv cultural strata in late-Roman Olbia, dated the destruction of the defensive buildings to the times of the "wars of the Goths" (Krapivina 2014: 147).

of the Roman Olbia, that existed there up to the beginning of the 5th century AD must be studied specially. The published results of the modern excavations in Olbia allow me to be optimistic.

REFERENCES

- Arsen'yeva, T. M. and Domžalski, K. 2002. Late Roman red slip pottery from Tanais. *Eurasia Antiqua* 8: 415–491.
- Budanova, V. P. 1990. *Goty v epohu Velikogo pereseleniya narodov*. Moskva.
- Buyskikh [Buiskykh], A. V. and Novichenkova, M. V. 2021. The Roman Citadel in Pontic Olbia. *Ancient Civilizations from Scythia to Siberia* 27: 11–67.
- Chrzanovskii, L. and Zhuravlev, D. 1998. *Lamps from Chersonesos in the State Historical Museum—Moscow*. Roma.
- Didenko, S. V. 2018. Antichnyi keramichniy import u cherniakhivskii kulturi na terytorii Ukrainy. Diss., Kyiv, Instytut Arkheolohii NAN Ukrainy.
- Krapivina, V. V. 2014. Olviiia Pontiiska. Hreko-rimskiy ta piznoantichnyi periodi. Kyiv.
- Krapivina, V. V. and Domžalski, K. 2008. Pozdneantichnaya Ol'viya v svete nakhodok krasnolakovoy keramiki. In V. Yu. Zuev (ed.), *Bospor i Severnoye Prichernomor'e v antichnyuy epokhu. Materialy jubileynogo kruglogo stola posvyashchennogo 10-letiyu konferentsii „Bosporskiy Fenomen”*, 73–81. Saint Petersburg.
- Leypunskaia, N. A. 1988. Predmest'e pervykh vekov nashey ery v Nizhnem gorode Ol'vii. In V. A. Anokhin (ed.), *Antichnye drevnosti Severnogo Prichernomor'ya*, 71–82. Kyiv.
- Leypunskaia, N. A. 2006. Detskoe pogrebenie III–IV vv. iz Ol'vii. In D. V. Zhuravlev (ed.), *Severnoe Prichernomor'e v epokhu antichnosti i srednevekov'ya*, 183–188. Moskva. Trudy Gosudarstvennogo Istoricheskogo muzeya, 159.
- Magomedov, B. V. 1987. *Chernyakhovskaya kul'tura Severo-Zapadnogo Prichernomor'ya*. Kyiv.
- Magomedov, B. 2001. *Chernyakhovskaya kul'tura. Problema etnosa*. Lublin.
- Magomedov, B. 2007. Olviiia i varvary v piznoantychnyi period. *Arkheolohiia* 4: 47–54.
- Magomedov, B. V. 2015. *Keramicheskiye pryaslitsa chernyakhovskoy kul'tury*. Kyiv.
- Magomedov, B. 2020. Gorod Ol'viya: chernyakhovskiy gorizont. *Keramika iz fondov Instituta arkheologii NANU. Stratum plus* 4: 219–408.
- Magomedov, B. V. and Didenko, S. V. 2011. Sinopean Amphorae and Chernyakhov Culture. *Ancient Civilization from Scythia to Siberia* 16: 479–485.
- Petrauskas, O. V. 2021. Cherniakhivska kultura ta huny (za materialamy arkheologichnykh Pamiatok Ukrainy). *Arkheolohiia* 2: 15–32.
- Schultze, E., Magomedov, B. V. and Buyskikh [Buiskykh], S. B. 2006. Grautonige Keramik des Unteren Buggebietes in römischer Zeit. Nach Materialien der Siedlungen in der Umgebung von Olbia. *Eurasia Antiqua* 12: 289–352.
- Shchukin, M. B. 2005. *Gotskiy put' (Goty, Rim i Chernyakhovskaya kul'tura)*. Saint Petersburg.
- Shelov, D. B. 1978. Uzkogorlye svetloglinyane amfory pervykh vekov nashey ery. Klassifikatsiya i khronologiya. *Kratkie Soobshcheniya Instituta Arkheologii AN SSSR* 156: 16–21.
- Shyshkin, R. G. 2002. Khronologicheskie priznaki trekhstoynykh grebney chernyakhovskoy kul'tury. In S. D. Kryzhytskyi, C. P. Pachkova, K. P. Bunatyan and N. S. Abashina (eds), *Suchasni problemy arkheolohii*, 144–146. Kyiv.

- Sorochan, S. B. 1982. Pro tak zvani rubchasti svityl'nyky z Khersonesa. *Arkheolohiia* 38: 43–49.
- Thomas, S. 1960. Studien zu den germanischen Kämmen der römischen Keiserzeit. *Arbeits- und Forschungsberichte zur sächsischen Bodendenkmalpflege* 8, 54–215.
- Tvardetskyi [Twardecki], A., Buiskykh, A. V. and Novichenkova, M. V. 2016. Polsko-ukrainska misiia v Olvii: pershi rezultaty novoho doslidnitskoho proektu. In J. Fornasier, A. Tvardetskyi [Twardecki], D. Braund, A. V. Buiskykh, N. O. Gavrylyuk, M. Matera and I. M. Sheiko (eds), *Pivnichne Prichenromoria za antychnoi doby (na poshanu S.D. Kryzhytskoho)*, 45–52. Kyiv.
- Twardecki, A. and Buyskikh [Buiskykh], A. 2021. The Cherniakhov Culture in Olbia Pontica in the Light of Polish-Ukrainian Excavations 2016–2018. *Sprawozdania Archeologiczne* 73(2): 251–273.
- Zeest, I. B. 1960. Keramicheskaya tara Bospora. Moskva. *Materialy i issledovaniya po arkheologii SSSR* 83.
- Zhurko, A. I. 1983. *Zhilye sooruzheniya plemen chernyakhovskoy kultury*. Avtoreferat dissertatsii na soiskanie uchenoi stepeni kandidata istoricheskikh nauk. Institut istorii AN USSR, Kyiv.