ARCHAEOLOGY OF THE NORTH AZOV AREA

KOMYSHUVATE BURIAL MOUNDS

† Volodymyr Kulbaka – Viacheslav Zabavin – Serhii Nebrat

Archaeologica Slovaca Monographiae

FONTES

Instituti Archaeologici
Academiae Scientiarum Slovacae

TOMUS XXXV

NITRAE MMXXIV

ARCHEOLOGICKÝ ÚSTAV SLOVENSKEJ AKADÉMIE VIED, V. V. I.
VEDA, VYDAVATEĽSTVO SLOVENSKEJ AKADÉMIE VIED

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This work was supported by the Institute of Archaeology, Nitra, SAS (Recovery plan of Slovakia, call code 09/03-03-V01) and by the grant projects VEGA 2/0017/24 and 2/0043/22.

The publication was financially supported by the Slovak Academy of Sciences on the basis of a recommendation of the Editorial Board of the Slovak Academy of Sciences.

NITRA – BRATISLAVA 2024

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Layout	Mária Kunová
Cover design	doc. Viacheslav Zabavin, CSc.
Publishing and print	VEDA, vydavateľstvo SAV, Centrum spoločných činností SAV, v. v. i., Dúbravská cesta 5820/9, 841 04 Bratislava, publication serial No. 4777, www.veda.sav.sk
Publishing and distribution	Archeologický ústav SAV, v. v. i. Akademická 2, 949 21 Nitra tel.: +421/37/6943 209 email: nraukniz@savba.sk

Cover — Calendar vessel from the burial 1, barrow 4 in Komyshuvate.

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ISBN 978-80-8196-075-8 (Archeologický ústav SAV, v. v. i.)
ISBN 978-80-224-2095-2 (VEDA, vydavateľstvo SAV)

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KOMYSHUVATE KURGANS IN THE CONTEXT OF KURGAN CEMETERIES OF THE NORTHERN AZOV REGION

(Preface from the scientific editor)

Mariupol researchers have prepared a new book devoted to the publication of materials from archaeological excavations in the Northern Azov region. To some extent, it continues the work started by the serial edition "Archaeology of the Northern Azov Region", of which I had the honour to act as scientific editor from the beginning. The very fact that such a book has been published in the conditions of full-scale Russian armed aggression – which caused the devastation of the Ukrainian city of Mariupol with a population of half a million, tens of thousands of dead and wounded people, the forced resettlement of hundreds of thousands of residents in search of shelter and protection from the invaders – is quite remarkable. This event once again attests to the indomitability of the Ukrainian people and the Ukrainian nation as a whole, as well as the stability and viability of Ukrainian science in facing the challenges of war.

In these circumstances, the author's team did not betray their scientific goals; they devoted the book to the materials of the kurgan cemetery, whose study has spanned more than three decades, and three generations of Mariupol archaeologists have participated in its excavations. Nevertheless, findings on the three kurgans at the Komyshuvate cemetery investigated by V. Kulbaka in 1989 have remained unpublished ever since.[1] Research at this necropolis in 2021 by V. Zabavin's expedition essentially brought the excavation of the site to a satisfyingconclusion; at the same time, it created conditions for introducing the obtained materials into scientific circulation, which is achieved in this volume. The importance of this event is underlined by the sad and unfortunate circumstance that the artefacts obtained during the excavations in 1989 and 2021, as well as all the archaeological collections of the Mariupol State University and the Mariupol Museum of Local History, were destroyed or looted by the Russians in 2022.

I am personally interested in the materials of the Komyshuvate burial ground: firstly, in the context of my several decades of research into the Bronze Age of Eastern Europe, Eastern Ukraine and the Azov region in particular; and secondly, in view of my first dissertation, devoted to cemeteries of the Zrubna culture of the Siverskyi Donets basin.[2] Thirdly, in the summer of 1989, when Kulbaka's Mariupol expedition excavated the Komyshuvakha burial mounds, the Donetsk State University expedition (N. Zarayska, R. Lytvynenko, O. Yevglevsky) investigated another kurgan necropolis (northwest of the village of Zakharivka). 9.6 km to the northwest of Komyshuvate cemetery. The Zakharivka kurgans also included materials of the Zrubna culture and the Middle Ages, and are quite similar to the Komyshuvate kurgans.[3] Unfortunately, the Zakharivka kurgan group was only partially excavated (3 barrows); 12 burials of the Zrubna culture were discovered in it. With the exception of separate complexes of the Zrubna culture from Kurgan 1,[4] those interesting materials still remain inaccessible to the scientific community and await publication.

The first similarity between the Komyshuvate and Zakharivka necropolises is that all the oldest kurgans were built by the people of the Zrubna culture. Secondly, in both Zrubna cemeteries, stones were actively used in the construction of burials: stone chests and cists, covering graves. Thirdly, among the ceramics in both cases, sparsely ornamented or unornamented vessels such as pots and jars predominate, while typical ribbed types with characteristic geometric ornamentation on the handles are scarce. Rare ornamentation is represented by typical horizontal rows of fingerprints or the end of a stick. Some vessels from the Zakharivka burials have roller-like thickenings and inlays on/under the crown, sometimes embossed with fingerprints or sticks. We emphasise that rollers on funerary ceramics of the Zrubna Cul-

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[1] Кульбака В. К., Гнатко И. И. Отчет об исследованиях курганов в зонах новостроек: у с. Калиновка Новоазовского р-на, у с. Раздольное Старобешевского р-на, у с. Камышеватое Першотравневого р-на, у с. Кондратьевка Константиновского р-на и г. Мариуполя Донецкой обл. в 1989 г. *Науковий архів Інституту археології НАН України*. № 1989/87.

[2] Литвиненко Р. А. Срубная культура бассейна Северского Донца (по материалам погребальных памятников): дис. … канд. ист. наук: 07.00.06 / Ін-т археології НАНУ. Киев, 1994. *Науковий архів Інституту археології НАН України*. Ф. 12, оп. 2, № 750. 345 с.

[3] Моруженко А. А., Зарайская Н. П., Кравец Д. П., Литвиненко Р. А., Евглевский А. В., Шепко Л. Г. Отчет об археологических исследованиях курганов в Донецкой области в 1989 г. *Науковий архів Інституту археології НАН України*. № 1989/52.

[4] Литвиненко Р. А. Периодизация срубных могильников Северо-Восточного Приазовья. *Древности Северо-Восточного Приазовья*. Донецк, 1999. Рис. 2; Литвиненко Р. О. Поховання зрубної культури в кам'яних гробницях з горизонтальною кладкою стін. *Археологія*. 2000. № 4. С. 3–18, рис. 4: 5–13; 5: 6–10; 7; 8: 4, 5; 10: 3, 4, 15.

tural Region are most common in the Lower Dnipro region, where vessels with a roller make up 10.8% of the ceramic complex, and in some late cemeteries of the Zrubna culture they reach 40–50%.[5] Moving towards the more eastern areas of the Zrubna culture domain, this indicator gradually decreases, to 5.5% in the Northern Azov region, and 2.8% in the Siversky Donets basin. The predominant concentration of vessels with roller ware is on the Right Bank of the Siversky Donets and the Donetsk Ridge (2.6%), while the Left Bank of Siversky Donets (0.2%)[6] and Lower Don basin (0.2–0.3%)[7] demonstrate the minimum indicators. Fourthly, in both cemeteries there were single burials accompanied by wooden dishes, which are rare for the Zrubna culture (such a coincidence cannot be accidental in small statistical samples). In Zakharivka, a wooden oval dish for meat was found, and in Komyshuvakha, a round bowl for drinking, decorated with a bronze figured plate.

Fifthly, the burial grounds are similar in the practice of placing meat in the grave, in the form of a coccyx (fixed to the sacrum bone). Incidentally, this type of ritual meat is the second most common in the burial tradition of the Zrubna culture in the steppes of the Lower Dnipro basin;[8] it occurs less often in the Azov region and in the Siversky Donets, gradually decreasing towards the east.[9] In our opinion, this fact is explained in the cultural-genetic sphere, because the practice of using coccyxes as burial meat has its roots in the traditions of the Dnipro-Prut Babyne culture (DPBC) – the only one of the three Babyne cultures whose burials contain this variety of meat offering.[10] Since the Dnipro-Dniester local variant of the DPBC was one of the basic genetic substrates in the cultural genesis of the westernmost groups of the Berezhnovka-Mayivka Zrubna culture (BMZC), the high proportion of ceramics with a roller and coccyxes in burial meat is obviously a manifestation of the local tradition of the DPBC in the local BMZC.

In view of the interesting materials from the aforementioned burial grounds of Zrubna culture in the Berda River basin, we should pay attention to a settlement of the Zrubna culture, located 2.2 km north of Starodubivka village – on the bank of a tributary that flows along the Zhuravleva brook, and runs to the right into the Karatysh River (passport No. 3307). This settlement is located 7 km from the Komyshuvakha kurgans, and was discovered by our intelligence also in the 1989 expedition. This settlement was found thanks to the granite foundations of the houses on the right bank of the stream, as well as on the basis of numerous fragments of pottery from the Late Bronze Age. There are no sufficient grounds for connecting the Komyshuvate cemetery of the Zrubna culture with the Starodubivka settlement of the Zrubna culture, but the cultural and chronological connection between them – in particular, based on the tradition of stone construction – is quite obvious.

In general, the prepared monographic publication on the Komyshuvakha kurgans is a significant event in Ukrainian archeology of the Paleometal epoch, as is the very fact of preparing such a publication during the current war.

Roman A. Lytvynenko

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[5] Отрощенко В. В. Срубная культура Степного Поднепровья (по материалам погребальных памятников): дис. … канд. ист. наук: 07.00.06 / Ін-т археології АН УРСР. Киев, 1981. *Науковий архів Інституту археології НАН України*. Ф. 12, оп. 2, № 598. С. 57.

[6] Литвиненко Р. А. Срубная культура бассейна Северского Донца ... С. 139, рис. 99; Он же. Периодизация срубных могильников ... С. 17; Он же. К истории исследования курганных могильников в окрестностях Каменных Могил. *Древности Северо-Восточного Приазовья*. Донецк, 1999. С. 100; ***Литвиненко Р. О.*** Культурне коло Бабине (за матеріалами поховальних пам'яток): дис. … д-ра іст. наук.: 07.00.04 / Ін-т археол. НАНУ. Київ, 2009. *Науковий архів Інституту археології НАН України*. Ф. 12, оп. 2, № 879. С. 407; Отрощенко В. В. До генези бережнівсько-маївської зрубної культури. *Проблеми гірничої археології*: матеріали ІІІ-го Картамиського польового археологічного семінару (15 липня 2004 р.). Алчевськ: Вид-во Дон ДТУ, 2006. С. 25–27.

[7] Шарафутдинова Э. С. Периодизация срубной культуры Нижнего Подонья. *Срубная культурно-историческая общность*. Куйбышев, 1985. С. 157.

[8] Отрощенко В. В. Срубная культура Степного Поднепровья ... С. 140.

[9] Литвиненко Р. А. Срубная культура бассейна Северского Донца ... С. 123; статистику по Приазов'ю наведено в цій книзі.

[10] *Литвиненко Р. О. М'ясна напутня їжа в поховальному обряді Дніпро-Прутської бабинської культури. Археологія.* 2023. № 2. С. 22–29.

INTRODUCTION

Today, the national cultural heritage of Ukraine, including the integral aspect of its archaeological heritage, is suffering from the enormous challenges posed by the Russian-Ukrainian war that has continued since 2014. From the very beginning of the war, the archaeological sites of eastern Ukraine were the first to experience the destructive power of Russian aggression.

The North Azov terrains within the Donetsk[11] region in the east of the country are considered to be one of the most archaeologically rich areas of Ukraine. As of the beginning of 2021, according to the regional electronic database of archaeological sites, more than 9,800 archaeological heritage objects were registered with the state in Donetsk region. Among the archaeological sites, mounds occupy a prominent place (over 90% of the total number of those registered). This figure also includes the estimated large number of undiscovered sites.

However, it is the burial mounds, concentrated mainly on watershed ridges and plateaus, that have been primarily affected by the fighting. Given their dominant topographic location, and their shape as artificially elevated ground, ancient mounds have often been used to equip defence points or lines. This was the case in Ukraine during the Second World War, and the same is happening in the current Russian-Ukrainian conflict. Thus, mounds are perhaps the most affected by the hostilities, compared to other archaeological sites. Nevertheless, other types of archaeological sites were not spared by the war, as there are numerous cases of destruction or damage to archaeological settlements, flat grave cemeteries, stone sculptures, etc. (*Lytvynennko 2023*, 32).

Steppe mounds are archaeological sites that have almost always drawn attention because of their attractiveness – including to robbers. They do not need to be specially searched for, as they were always in plain sight, and have always been an indispensable attribute of the historical and cultural landscape of the North Azov region. Thus, over the centuries, mounds have suffered the most from anthropogenic impact, among archaeological sites.

Recently, new threats, such as the destruction of archaeological objects, have emerged, which have been multiplied during the hostilities. Today, we can sadly state that not only archaeological sites are being destroyed as a result of Russian military aggression. Museums, including archaeological collections of the North Azov region, are also being attacked and robbed. For example, the Museum of History and Archaeology of Mariupol State University no longer exists physically: the exhibition space was destroyed, and the remains of the collection and funds were stolen by Russian invaders or looters. The archaeological collection kept in the city museum was also devastated, regrettably, as a result of the destruction of the Mariupol Museum of Local Lore.

The archaeological heritage of Ukraine had faced key challenges due to the enemy's gross violation of the basic principles and generally recognised norms of international law. Among these, it is necessary to emphasise a real threat to the preservation of Ukraine's national cultural heritage and its cultural values; and the Russian occupiers' illegal, violent and unjust actions against the cultural heritage of Ukraine and its cultural values. Thus, the existing threats and the state of the archaeological heritage in the conditions of war largely emphasise the necessity to publish materials obtained during archaeological research in the North Azov region.

The materials of the Komyshuvate burial mound necropolis, explored by Mariupol archaeologists in North Azov, are published in "Archaeology of the North Azov Area", launched in 2020 by Mariupol State University. This is a scientific publication devoted to regional archaeological studies; it presents materials from old and new field archaeological research, museum archaeological collections, relevant materials on heritage protection, as well as research on the history of archaeological research in the region.

The issue of publishing (putting into scientific circulation) a significant amount of excavation materials, including newly discovered expeditions of previous years, remains a painful problem. The monographic work proposed by the team of authors became a new topic for the next publication of materials on archaeological studies of the North Azov Area, and a natural outcome of more than 30 years of archaeological research of one mound group near the village of Komyshuvate.

[11] Proper names, geographical names, special terms and names of archaeological cultures are transliterated into English on the official websites: from Ukrainian – http://ukrlit.org/; from Russian – https://transliteration.pro/.

Fig. 1. Volodymyr Kulbaka (1954–2009).

During archaeological explorations in 2019–2021, the archaeological expedition of Mariupol State University (AE ASU) inspected hundreds of barrows in the North-Eastern Azov region. In parallel with these scientific studies, the expedition continued the excavations of a burial mound near the Azov Sea village of Yalta, which began in 2016. In 2020, after these excavations were completed, the question arose of choosing a new research object. Intensive archaeological research led to the decision to continue the study of burial mounds of the North Azov Area.

The research at the Komyshuvate cemetery is a vivid example of the continuity of generations in archaeology. It was started in 1989 by the Mariupol archaeological expedition (MAE) of the Laboratory of the Protection of Archaeological Heritage of the Ukrainian Cultural Foundation under the leadership of Volodymyr Kulbaka (1954–2009; Fig. 1). In this year, three mounds from this group were excavated on the lands of Starodubivka village, of the Manhush territorial community, in the Mariupol district of Donetsk region.

It is quite natural that the university expedition, founded by V. Kulbaka in 1997, became the successor to the MAE. The traditions of Azov barrow archaeology established earlier were continued, and the AE MSU focused its main scientific attention on the study of barrow burial grounds. Based on the many years of positive practical experience of generations of predecessors, in 2021 – 32 years after the original research season – the AE MSU carried out scientific excavations of two mounds from this group, located at Komyshuvate village of the Manhush territorial community, in the Mariupol

district of Donetsk region. In this year, a former employee of the MAE – V. Zabavin (a junior colleague of V. Kulbaka) – led the university expedition's research. During the excavations of the Komyshuvate barrow necropolis, a young generation of researchers of the archaeological heritage of the North Azov Area – first-year students of the MSU History Department – had the opportunity to undertake their first internship, and their colleagues, senior students, enriched the professional experience they had gained in previous years (Fig. 2).

This time, choosing a research object for the next field season proved to be a very difficult task. Since the team's leadership has long adhered to the rule of choosing a mound already damaged by robbers or economic activity for research, the number of candidates was reduced to several dozen. All the factors related to logistics and provision of supplies for the expedition, the ability to obtain earthmoving equipment, and the convenience of the camp location were taken into account. The most promising objects for excavation were a number of mounds; the authors' special attention was drawn to the barrow near the village of Komyshuvate.

The mound, which was inspected during the 2020 exploration by the AE MSU, was in a state of disrepair. The eastern part of the site was ploughed up, and the western side was overgrown with trees. A dirt road passed through the mound, next to which a small pit had once been dug, which was later flooded. In addition, back in Soviet times, the mound had been damaged by a trench dug for a water supply pipe. At the top of the mound was a hydrant, covered with a cylindrical cap of concrete for protection. After a preliminary inspection, it became clear that the mound required detailed research. During the reconnaissance in the arable field near this mound, another mound was discovered, which had been almost destroyed as a result of economic activity and sown with wheat. Given its small size, it did not seem a difficult task to explore such a mound. An additional argument was that the agricultural holding's management offered to provide the necessary equipment, as well as water and other vital ameneties.

Fig. 2. Volodymyr Kulbaka, founder of the Mariupol archaeological expedition and archaeological expedition of Mariupol State University. 1 – Studying collections in the Mariupol Museum of Local Lore (1988); 2 – MAE laboratory (1989); 3 – archaeological research of AE MSU (2004); 4 – student conference at MSU (2006).

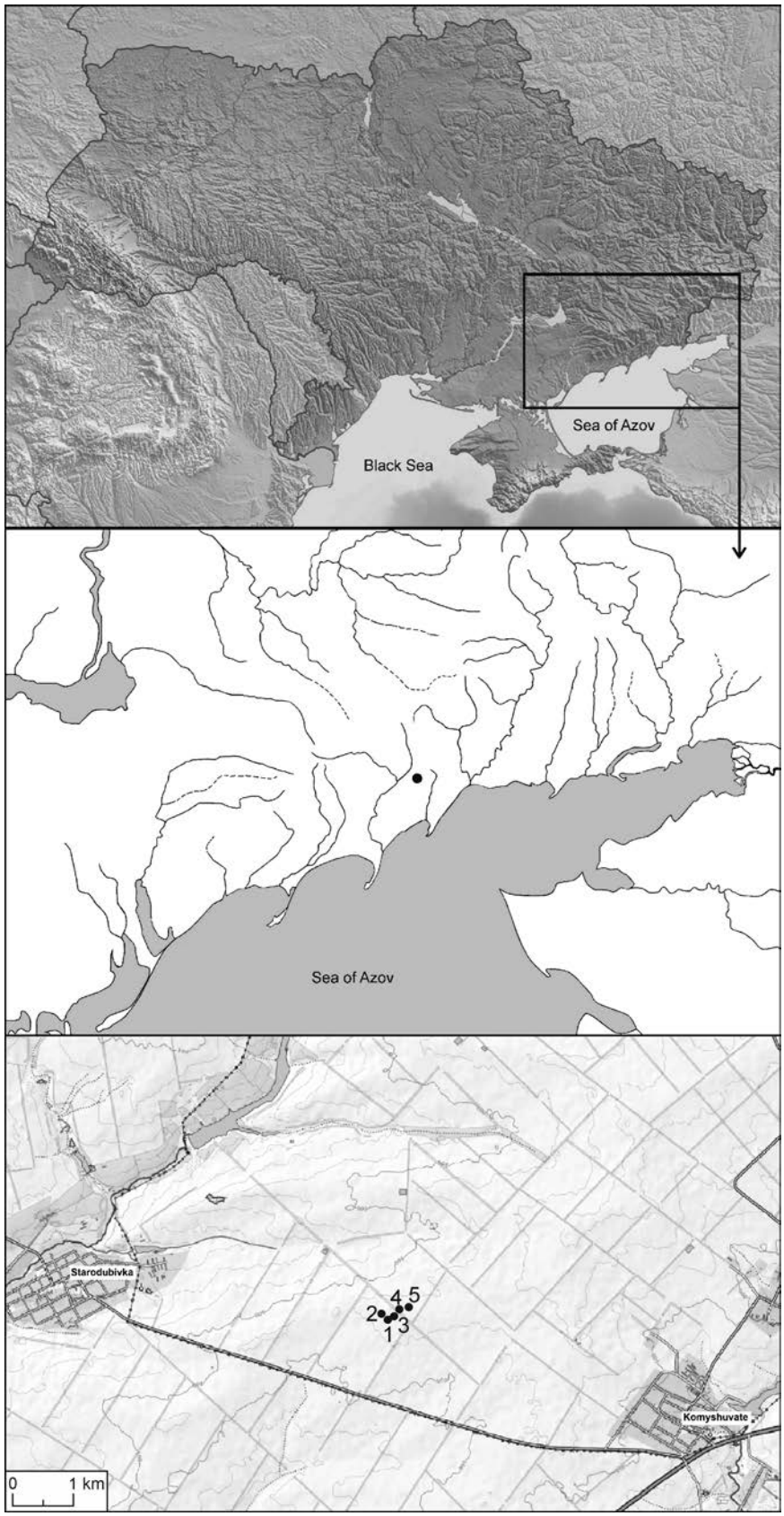


Fig. 3. Location map of the study site near Komyshuvate village in North Azov Area.

Despite all the positive factors that persuaded the authors to study this particular barrow group, certain doubts arose at the last moment. It was risky to use heavy machinery, as there was a danger of damaging the reclamation system (the exact direction of the pipe and its depth were unknown to local farmers). In addition, old unrooted stumps and trees in the western part of the mound hindered the operation of equipment. The prospect of a partial excavation of the archaeological feature in fact brought us back to the time of the birth of barrow archaeology; but modern excavation methods required more advanced techniques.

The final decision to explore these particular barrows near the village of Komyshuvate was made on the eve of the start of archaeological work, while studying archival materials. It turned out that these two barrows were once part of a large barrow group, which in 1989 was partially explored under the guidance of the authors' teacher, the head of the MAE and AE MSU, Vladimir Kulbaka. The decisive argument had been found.

The scientific interest to continue studying this particular barrow group was also taken into account. Firstly, most of the mounds of the North Azov Area that had been investigated since the late 19th century were located in the watersheds and floodplains of the Kalmius and Kalchyk river basins. The terrains of the left bank of the Berda River within the Donetsk region had remained almost unexplored. Secondly, the excavation of all the mounds in a barrow group is rather a rare phenomenon. In the days of "new-building" archaeology, the object of research was chosen on the principle of economic necessity: only those mounds were excavated that "interfered" with reclamation systems. A similar situation had occurred during the 1989 excavations, which is why the mound group was only partially investigated. An additional factor is that one mound group was located in two adjacent fields, on the lands of two different rural communities (Fig. 3).

The research of the AE MSU in 2021 was carried out as part of the compulsory archaeological practice of students at the History Department of the MSU. The work was undertaken thanks to the participa-

Fig. 4. Archaeological expedition of the Mariupol University. Komyshuvate 2021.

tion and assistance of the HarvEast agricultural holding management, with the support of the Manhush territorial community leadership and the Anastasios G. Levendis Foundation (Republic of Cyprus). The authors express their personal gratitude to Professor Haralambos Bakyrdzis, Director of the Anastasios G. Levendis Foundation, for his assistance in organising the excavations.

Teachers and students of the Faculty of History – members of the Student Scientific Historical and Archaeological Society of the MSU, teachers and pupils of Mariupol schools, and volunteers – attended the expedition (Fig. 4; CA 20). In addition to the authors, the following people took an active part in the preparation of work diaries, drawings, exploration and fieldwork, photographic recording, geodetic and cameral work: M. Boroday, M. Bulyk, V. Lytvynenko, S. Maytamal, A. Morhun, A. Tanasova, and others. O. Nebrat (Sydorova) contributed to the work with photographs and illustrations for the reports.

1 KOMYSHUVATE BURIAL MOUNDS: RESEARCH HISTORY AND ARCHAEOLOGICAL SETTING

The territorial structure, names of settlements, and administrative jurisdiction of the modern Manhush territorial community of the Mariupol district, in the Donetsk region of Ukraine, have repeatedly changed throughout its existence. As this can cause confusion when covering the history of archaeological research in the region, we consider it necessary to make a brief historical excursion in this regard.

The history of the Manhush territorial community in the North Azov Area in the south of Donetsk region is closely linked to the resettlement of Greeks from Crimea. All the lands granted to the Greeks became part of the newly formed Mariupol district of the Azov province, which was officially formed in 1780. During the imperial period of its existence, the Mariupol district also repeatedly underwent changes in administrative jurisdiction as part of the Novorossiysk and Katerynoslav provinces.

In 1920, the Manhush rural settlement was allocated to the Mariupol district of the newly created Donetsk province. In 1938, a separate Manhush district was split off from the Mariupol district, consisting of Manhush, Bilosaray, Melekino, Urzuf, Yalta, Zakharivka, and Starodubivka village councils (the latter two village councils were removed from the Volodarsk district and transferred to the Manhush district).

In 1946, Manhush was renamed Pershotravneve settlement. For a short period (1963–1966), Pershotravneve district became part of Volodarske district, with the district centre in the village of Volodarske (now Nikolske urban-type settlement). In 1995, the settlement was returned to its historical name, Manhush, and in 2015, Pershotravneve district was renamed Manhush district again.

At last, on 12 June 2020, the Cabinet of Ministers of Ukraine issued a decree "On the Determination of Administrative Centres and Approval of the Territories of Communities of Regions", which established Mariupol district. The modern Manhush amalgamated territorial community of Mariupol district was created from settlements that were previously part of Manhush district (settlements of Manhush and Yalta, villages of Urzuf, Melekine, Komyshuvate, and Starodubivka). The territories of the former Pokrovske and Berdianske rural communities were included in the city of Mariupol (Fig. 5).

1.1 Archaeological environment

The spatial boundaries of the micro-region studied in 2021 belong to the territory of the Ukrainian North Azov Area. The studied mound group is located within the Azov accumulative lowland plain, on the watershed plateau between the upper reaches of Krynezhyna and Zelena streams in the interfluve of the Berda[12] and Komyshuvatka[13] rivers (Azov Sea basin): 4.0 km west-northwest of the western outskirts of Komyshuvate village, and 4.2 km east of the eastern outskirts of Starodubivka village.

The valleys of the Berda and Komyshuvatka rivers gradually descend towards the Azov Sea. The area is a low-lying plain with a general surface slope to the south and south-west, and occupies watershed areas. The undulating and hilly surface of this plain is due to the valley and gully network. More detailed information on the natural environment, physical and geographical characteristics, and history of archaeological research in the region is contained in a special section of the monographic publication (*Zabavin/Nebrat/Bulyk 2021*).

According to the regional electronic database of the Department of Culture of the Donetsk Regional State Administration, 397 archaeological objects (including 345 mounds) were registered on the territory of the Manhush territorial community of the Mariupol district at the beginning of 2021. On the territory of the former Starodubivka and Komyshuvate rural communities, 100 archaeological sites have been recorded, including 93 mounds and 7 settlement sites. On the lands of Starodubivka village, 59 sites were registered (56 and 3, respectively), and on the lands of Komyshuvate village, 41 sites were registered (37 and 4, respectively).

At the top of the watershed between the upper reaches of the Krynezhyna and Zelena streams in the interfluve of the Berda and Komyshuvatka rivers, in the immediate vicinity of the cemetery investigated in 2021, there are a number of single mounds and mound groups: Mohyla Dovha (3 mounds), Mohyla Krasna (3 mounds) and Mohyla Byk (6 mounds). It should be noted that over the past century and

[12] The Berda is a river that flows through the Polohi and Berdiansk districts of Zaporizhzhia region and empties into the Azov Sea. The river is about 130 km long and covers an area of 1,750 square kilometres. The name comes from the old slavic *berda* – a mountain, a hill.

[13] The Komyshuvatka is a river that flows through the Mariupol district of Donetsk region and empties into the Azov Sea. The river is 27 km long and covers an area of about 190 square kilometres. The river is named after the reed beds on its banks.

Fig. 5. Manhush district (from 2020 onwards Manhush community of the Mariupol district of the Donetsk region of Ukraine).

a half, as a result of many years of anthropogenic impact on the historical and cultural landscape of this area, the number of authentic archaeological sites in the Northern Azov Sea region has significantly decreased. For example, according to the Military Topographical Map of the Katerynoslav Province of 1846–1863, the above-mentioned mound groups of Mohyla Krasna and Mohyla Byk consisted of 7 and 10 mounds, respectively (Fig. 6).

The south-western part of the Donetsk region can be regarded as one of the least archaeologically studied areas in the North-Eastern Azov region. Over the entire period of archaeological study of the region, a total of 26 mounds in 12 mound groups (according to the authors' calculations) have been excavated to varying degrees, on the territory of the former Manhush district of Donetsk region (*Usachuk at al. 2004*).

The antiquities of the outlined micro-region, including the mounds, have been attracting the attention of archaeologists for almost a century and a half, starting with the excavations of M. Brandenburg in the 1880s and ending with the AE MSU research of the mentioned mound group in 2021.

In the 1920s to 1950s, local historians and archaeologists carried out occasional exploratory work on the territory of the Manhush community. Thus, in 1928, a group of history and antiquities enthusiasts led by P. Pinevych made an exploration route along the sea coast. They examined the neighbourhood west of Mariupol in the direction of the Bilosarai Spit (*Pinevych 1928*). In 1937 and 1941, thanks to the work of expeditions of the Donetsk (Stalin) Regional Museum of Local Lore in Mariupol – led by the head of the museum's history department, V. Evseev – the location of the mound groups between the settlements of Manhush and Yalta was established, and the museum's collections were enriched by a large series of medieval stone statues from the collection of exhibits in Pershotravneve district (*Evseev 1941*; *Kuchuhura 2001*).

Next, in 1949 to 1950, the Scythian Steppe Expedition of the Institute of the History of Material Culture of the USSR Academy of Sciences, led by B. Grakov, conducted explorations along the coast of the Azov Sea. The banks of the streams and rivers flowing into the sea were examined. Including in the coastal strip from Yurivka village to Yalta village and on the Bilosarai Spit, several mound groups, and more than a dozen settlements and sites from the Bronze Age to the Middle Ages, were discovered (*Grakov 1950*).

In the 1970s and 1980s, professional expeditions continued exploration work on the territory of the Manhush community. In 1971, the Azov expedition of the Donetsk Regional Society for the Protection of Historical and Cultural Heritage, led by B. Mihlin, conducted archaeological explorations in the vicinity of Yalta village, during which they discovered a number of mound groups and single mounds, and 10 settlement sites of the Bronze Age to Middle Ages (*Mihlin 1971*).

In 1983, the Cherniakhiv expedition of the Institute of Archeology of the USSR Academy of Sciences examined several sites in the coastal zone of the Azov Sea in the district, collecting materials from the Bronze Age to the late Middle Ages (*Symonovich/Tihomirov 1985*, 359). In 1988, the staff of the Donetsk Regional Museum of Local Lore conducted archaeological explorations in the area to inspect known sites, search for new archaeological sites, and determine their parameters and current technical condition (*Shvecov/Kravchenko 1988*).

In addition, in the 1990s to 2010s, archaeological heritage protection specialists regularly conducted limited field archaeological surveys in the area, to inventory known archaeological sites and determine the modes of use of the territory in the archaeological cultural layer protection zone. In particular, in 2019–2021, the work was carried out by the AE MSU (*Zabavin et al. 2019*; *2020*; *2021*).

It is also worth noting the repeated accidental finds of artefacts in the area from the Palaeolithic to the late Middle Ages (*Catalogue 1993*; *Privalova/Privalov 1988*, 79; *Zabavin/Nebrat/Bulyk 2021*, 25, fig. 4; 5).

1.2 History of archaeological research

The first scientific research on mound antiquities in the territory of the Manhush community dates back to 1888–1889. In the vicinity of Mariupol, Major General M. Brandenburg, head of the Artillery Historical Museum of St. Petersburg, excavated mounds on the territory of Mariupol and near the village of Staryi Krym, in 1888. The following year, a mound was excavated in the Mohyla Chumatska group (*Kachalova 1974*; *Usachuk/Polidovych/Kolesnyk 2004*, 36, 37; *Zhurnal 1908*).

In 1971, an expedition led by B. Mihlin carried out protective excavations of two mounds in the vicinity of Yalta village, where two burials of the Late Bronze Age Zrubna/Timber-grave culture (Zrubna culture) and one of the late nomadic period were investigated (*Gershkovych 1982*, 17; *Mihlin 1971*; *1972*).

The next stage of research on mound cemeteries in the region is associated with the archaeological expedition of Donetsk State University. In 1978, the expedition investigated three mounds with burials of Bronze Age Pit and Zrubna cultures near Portivske village, as well as a medieval nomadic burial (*Moruzhenko/Privalov/Andrienko 1979*; *Privalov/Andrienko/Moruzhenko 1978*). In 1979, near the village of Ohorodne,

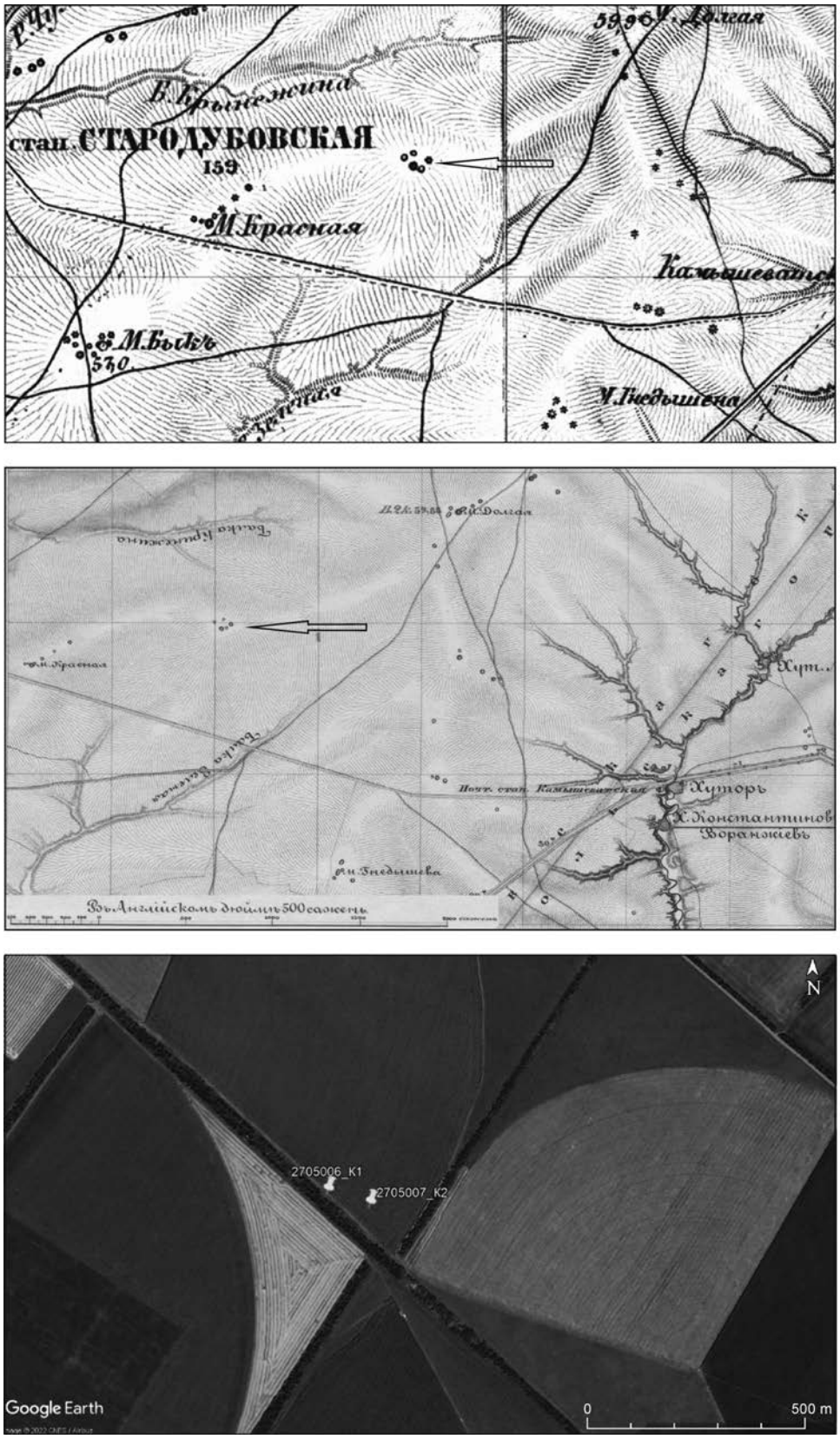


Fig. 6. The Komyshuvate burial mound. 1 – a fragment of the Military Topographical Map of the Katerynoslav Province of 1846–1863; 2 – a fragment of the map of the „Mariupol Greek District" of 1856; 3 – a satellite map „Google Earth".

53 burials of the Pit, Catacomb, and Zrubna cultures, and Cimmerian and Middle Ages, were discovered in four mounds (*Moruzhenko 1980*; *Moruzhenko et al. 1979*; *Posrednikov/Zarayska 1993*). In 1989, at least 12 burials of the Zrubna culture were investigated in three mounds near the village of Zakharivka (*Moruzhenko et al. 1989*).

This micro-region between the Berda and Komyshuvatka rivers can be considered a kind of "white spot" on the map of archaeological research in Donetsk region. Except for the excavations of three mounds conducted by MAE in 1989 (*Kulbaka/Gnatko 1989*; *Lytvynenko 1999b*, 100). This is also indirectly confirmed by the fact that Archaeological Almanac No. 1, dedicated to the publication of a catalogue of accidental finds in the Donetsk region, does not include finds originating from the interfluve of the Berda and Komyshuvatka rivers in their middle reaches (*Catalogue 1993*).

The history of archaeological research on burial grounds in the territory adjacent to the studied mound group consists of only a few events. Thus, in 1965, thanks to local residents, the archaeological collection of the Mariupol Museum of Local Lore received finds of the Early Iron Age, originating from a looted mound near the village of Komyshuvate (*Dubovska 1997*, 205). In 1989, near the village of Zakharivka, an expedition of Donetsk University excavated three barrows in a group of seven; they found materials of the Zrubna culture, which were culturally and chronologically similar to the data obtained by Mariupol State University's expedition in 2021. Among other features, burials in stone tombs were investigated (*Lytvynenko 1999a*, fig. 2; *2000*, fig. 4: 5–13; 5: 6–10; 7).

As for the research on settlement sites, we can only mention the work of the Novoazovsk archaeological expedition in 1989–2010, on the lower reaches of the Komyshuvatka River, under the leadership of V. Gorbov and A. Usachuk. During explorations in 1989, ten Late Bronze Age sites were discovered in the Mangush district of Donetsk region. The settlements were located at a short distance from each other on the capes of the right bank of the Komyshuvatka River (*Gorbov/Kabanova 2010*; *2011*; *Gorbov/Podobed 1996*; *Gorbov/Usachuk/Grib 1989*).

In 1990–1993, a more detailed survey was carried out, and finds (mainly fragments of ceramic moulded vessels) were collected, which allowed the authors to date the settlement to the Late Bronze Age (14th–12th centuries BC; *Gorbov/Usachuk 1993*; *Gorbov/Usachuk/Grib 1990*). The studied sites differed from stationary settlements by virtue of their specific topography and poor cultural layer (0.2–0.3 m thick). They were located close to each other on the promontories of the right bank of the Komyshuvatka River, and were identified as temporary (seasonal) sites belonging to the period of "the transition of the sedentary post-Zrubna culture population to nomadism" (*Gorbov/Podobed 1996*). The excavations of the settlements of Komyshuvate-XIV and Komyshuvate-XVI provided new data that revealed the economic and cultural development of the population of the Azov steppes in the Final Bronze Age. In 2004, a barrowless burial of the Final Bronze Age was discovered in the immediate vicinity of the settlement (*Gorbov/Kabanova 2004*); and in 2005, a ditch was investigated at the settlement itself. According to V. Gorbov, this was a type of archaeological site unknown in this region before: namely, a geoglyph – a cult object in the shape of a snake, filled with combustible products (*Gorbov/Kabanova 2005*; *Gorbov 2006*).

In the spring of 2020, during the reconnaissance of the AE MSU, field surveys were carried out in the south of Donetsk region, to inventory currently known archaeological sites and determine the territory's modes of use within the archaeological cultural layer protection zone. During the archaeological reconnaissance, three mound groups and three single mounds were examined on the lands of the Komyshuvate village community. According to the limited field archaeological survey of archaeological sites, the Public Cadastral Map, planning and cartographic material of the Komyshuvate village community, and previous research data, 12 archaeological sites were surveyed on the territory of the community. Within the lands of Starodubivka village community, six mound groups and a single mound were examined. In total, 22 archaeological sites were studied on the community's territory (*Zabavin et al. 2020*). In the 2021 archaeological season, the AE MSU carried out scientific excavations of two mounds on the Komyshuvate territory; these were part of a barrow group that consisted of five mounds. In 1989, the Mariupol archaeological expedition had investigated three barrows (mounds 1–3) located on the lands of the Starodubivka village community. Mounds 4 and 5, which form the eastern part of the group, remained unexplored; indeed, Mound 5 was almost not identified on the ground.

Thus, Mounds 4 and 5 were confirmed as authentic objects of the historical and cultural landscape of the North Azov Area, localised on the ground, and identified as mounds of the barrow group that was partially investigated in 1989 – thanks to work with archival sources, a GPS satellite navigation system, cartographic data, and archaeological research.

The barrow group of five mounds, located 4.0 km northwest of Komyshuvate village in the Mangush territorial community of Mariupol district, Donetsk region, was first discovered and marked on maps in the mid-19th century: 1) a military and topographical map of the Katerynoslav province of 1846–1863,

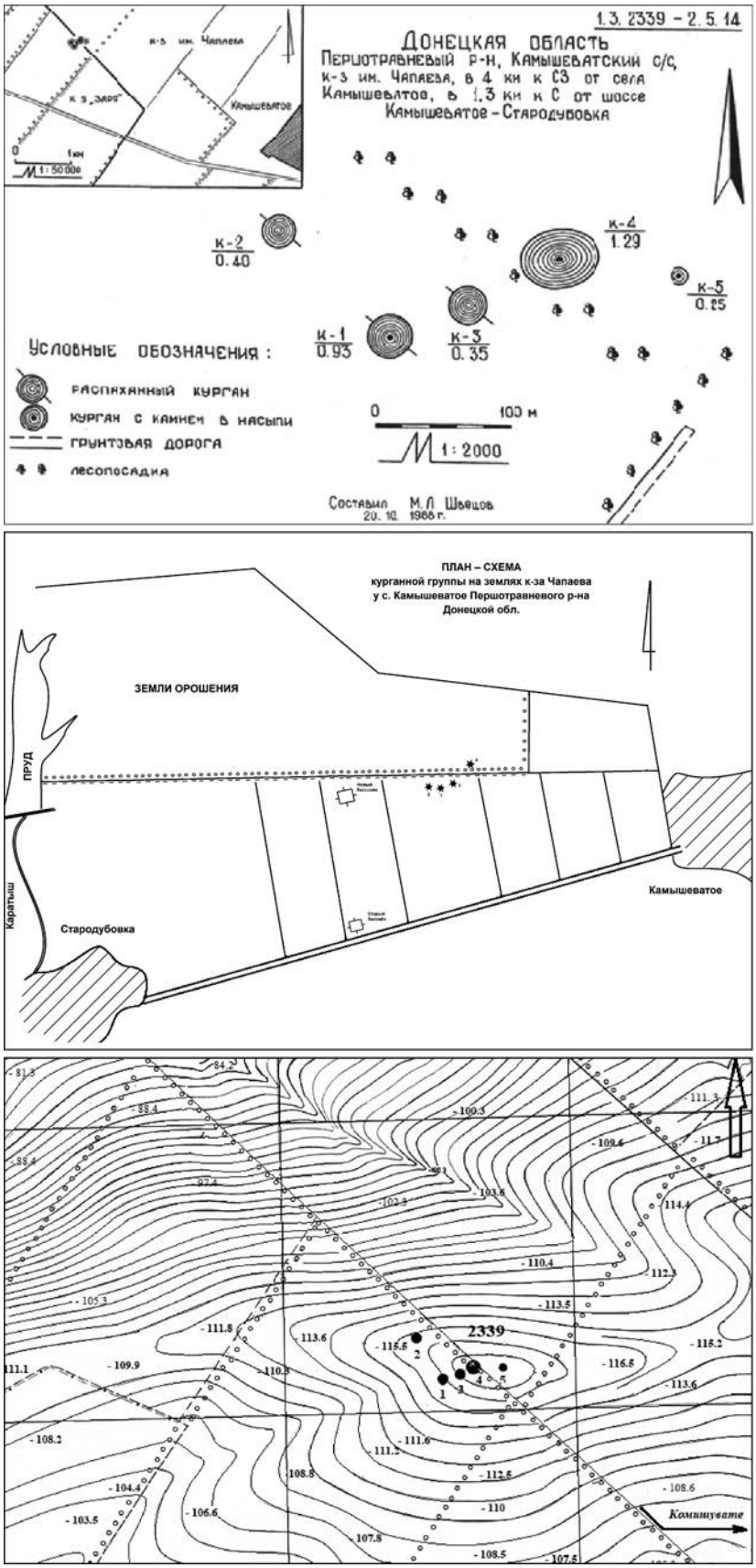


Fig. 7. Mound group No. 2339 near Komyshuvate village. 1 – on the 1988 scheme by M. Shvecov; 2 – on the 1989 scheme by V. Kulbaka; 3 – on the 2020 topographic scheme.

edited by F. Schubert (scale 3 versts to 1 inch: Row XXIX. Sheets 15–16); 2) the topographic map "Mariupol Greek District" of 1856 (scale 3 versts to 1 inch: Row XII. Sheet 17).

Scientists had discovered the burial mound No. 2339 (according to the regional electronic database of the Department of Culture of the Donetsk Regional State Administration), near the village of Komyshuvate, in 1988, during the explorations of Donetsk archaeologists M. Shvecov and O. Dubovska (Fig. 7: 1; *Shvecov/Kravchenko 1988*). In 1989, the MAE led by V. Kulbaka investigated three barrows from this group (barrows 1–3). Burials of the Late Bronze Age and the Middle Ages were discovered (Fig. 7: 2; *Kulbaka/Gnatko 1989*). An additional survey of the unexplored mounds of this group was carried out in 2009 by Y. Polidovych and A. Usachuk – employees of the Subsidiary Enterprise Scientific Union of Donbas of the State Enterprise Research Centre "Security Archaeological Service of Ukraine", of the Institute of Archaeology of the National Academy of Sciences of Ukraine. They aimed to determine the presence (absence) of the historical cultural layer, and establish the area of its distribution (*Kravchenko et al. 2009*). Two mounds in the eastern part of this group (barrows 4 and 5) were investigated by a university expedition in 2021.

The mound group, according to the limited field archaeological survey conducted by the AE MSU in October 2020, consisted of two mounds (security 2339), registration No. 2705006 – 007. Barrow 2 is located 60 m east-southeast of the edge of barrow 1 (by the general numbering of the group, these are referred to as barrows 4 and 5). Mounds 4 and 5 are the eastern part of a group consisting of five mounds (Fig. 7: 3).

Barrow 4 (2705006) is an oval-shaped mound made of soil, stretched along a northwest – southeast alignment, 0.9 m high, 40×32 m in area. Some large stone blocks were found on the surface or could be seen in the upper layers of the mound. The technical condition of the mound is in disrepair: the western part of the mound floor is partially covered by a forest belt; the eastern part and the mound's protection zone have been ploughed up. A dirt field road has been laid across the eastern part of the mound. In addition, the eastern part of the mound was damaged when an irrigation system pipe was laid through the mound. Human bones were found on the surface. The geographic coordinates (Google Maps) of the mound are 47°5′59.58″N, 37°6′39.09″E.

It should be noted that during the 2020 reconnaissance and 2021 excavations, it turned out that mound 4, oval in shape, was actually stretched along the northwest-southeast line. In the 1988 report of the expedition of the Donetsk Regional Station of Young Tourists, mound 4 is erroneously located on the diagram with a long axis along the line west-southwest – east-northeast.

Barrow 5 (2705007) was almost unidentifiable on the ground at the time of the survey; this is a rounded mound, 0.25 m high, 10 m in diameter, constructed of soil and stones. The mound and protection zone had been ploughed up. The overall condition of the cultural heritage site was also determined to be in an emergency state. The GPS coordinates of the barrow are 47°5′58.79″N, 37°6′43.76″E.

Unfortunately, summing up the results of the archaeological heritage research, it can be noted that a significant part of the mounds is in unsatisfactory or emergency technical condition. Of the archaeological sites taken into account, 33% were being ploughed up at the time of the study. All three mounds from the Mohyla Krasna group are hidden and cannot be identified on the ground; they were completely destroyed by ploughing or during the construction of hydraulic structures.

Currently, the national cultural heritage of Ukraine, including the integral aspect of its archaeological heritage, is suffering from the enormous challenges posed by the Russian-Ukrainian war that has been continuing since 2014. From the very beginning of the war, the archaeological sites of eastern Ukraine were the first to experience the destructive power of Russian aggression.

The problem of anthropogenic impact on the Azov archaeological heritage is now becoming more acute. As a result of Russian hostilities, it is the barrows that have suffered the greatest damage, due to their tactical importance for the military. These ancient burial structures have become strongholds, firing points are set up on them, and caponiers, passages and trenches are dug. It is currently impossible to calculate the number of cultural objects and sites that Ukraine has lost during the war. The number of such mounds, as well as the level of damage, will have to be determined by experts (*Zabavin/Bulyk/Nebrat 2022*).

Thus, it is considered promising in the future to conduct an additional survey of the territory of the Donetsk region as a whole, and the zone of protection of the archaeological cultural layer, in order to establish the technical condition of already known archaeological sites. It will also be possible to identify previously unknown burial and domestic (settlement) sites that saturate this territory, to obtain potential future archaeological sources of information about its development since ancient times.

Today, we can sadly state that as a result of the Russian military aggression, the Museum of History and Archaeology of Mariupol State University no longer physically exists: the exhibition space was destroyed, and the remains of the collection and funds were looted by Russian invaders or marauders. Thus, today all archaeological and anthropological materials of the Komyshuvate mound necropolis, which were stored in the museum's collections, have been completely lost (Fig. 8).

The archaeological collection stored in the city museum was also devastated, regrettably, as a result of the destruction of the Mariupol Museum of Local Lore. The buildings of all three structures of the institution were destroyed during the enemy bombing; many exhibits were burned, and the fate of 60,000 exhibits is currently unknown. The fate of those that are accounted for is also lamentable, as they are mentioned in pro-Kremlin media, which means that valuable artefacts have been stolen (Fig. 9).

Fig. 8. The Museum of History and Archeology of Mariupol State University.

Fig. 9. Ruins of the archaeological collection of the Mariupol Museum of Local Lore.

2 RESEARCH ON THE KOMYSHUVATE BURIAL MOUNDS

2.1 Barrow 1

At the beginning of the research, barrow 1 was a rounded mound, 1.4 m high and 17×17 m in area. The mound fill had been damaged by systematic ploughing; at the time of excavations, it was ploughed up.

Excavation methods. The barrow was investigated using the method of parallel trenches with stratigraphic profiles between them. The profiles passed through the top, slopes and layers of the mound in a north-south direction. Four trenches were made on the mound. The Central, I, II Eastern, and I, II Western baulks were left between the trenches (Fig. 10). The soil was removed in horizontal layers using machinery. A general-purpose caterpillar agricultural tractor DT-75 was used during the works.

Stratigraphy. The analysis of the stratigraphic profiles and field observations made during the operation of the equipment and horizontal stripping allowed us to make the following stratigraphic observations on the Central Profile (Fig. 11: 1):

– an arable layer with a thickness of 0.2 m;
– a humus layer of the barrow mound up to 1.4 m thick (together with the arable layer);
– buried soil 0.43 m thick. The length of the line of the ancient horizon was about 14 m;
– the virgin soil in the form of loam was traced from a depth of 1.83 m from the centre of the mound (R).[14]

The mound is heavily damaged by burrows of earth-moving animals.

The burial complexes in the mound

Burial No. 1 is the primary one in the mound (Zrubna culture). It was discovered at 2.4 m to the south and 3.4 m to the west of R (4.1 m 236° from R). The ground of the grave is at the level of the virgin soil layer, at a depth of 2.4 m from R.

The grave was excavated from the level of the ancient horizon. The long axis of the grave is orientated along the west – east line, with a slight deviation. The funerary structure is a stone tomb built of vertically placed stone blocks, the upper edge of which was deepened to the level of the ancient horizon. Dimensions of the blocks: 1.4×1.1 m, 0.9×1.1 m, up to 0.15 m thick.

The lower level of the stone blocks of the burial structure and the remains of the deceased were found on the virgin soil layer. The burial structure was covered by a large stone slab with overall dimensions of 1.5×1.2×0.2 m, which had sunk into the grave space. At the time of the research, it was broken by ground pressure and the central part had sunk into the grave. The space that remained uncovered by the slab was filled with smaller blocks and stones.

The remains of an adult were found at the bottom of the stone tomb. The deceased was laid crouched on his left side, with his head to the east with a slight deviation to the north. The legs were bent at an acute angle at the knee joints: left and right 20°; at the hip joints: left 90°, right 75°. Arms were bent, with hands in front of the face. In the southeastern corner of the grave, there was a ceramic pot in front of the deceased's face (Fig. 12).

Inventory:

1) Ceramic vessel – a pot of squat proportions with a rib that is gently outlined in the upper third of the body. There is a rim near the base. The outer surface is light grey with traces of soot. There is a horizontal row of finger and nail impressions on the shoulders. The sherd is black at the fracture. Dimensions: height 18.4 cm, diameter of the rim 21.6 cm, diameter of the sides 21.5 cm, diameter of the bottom 12.3 cm. Volume: 2.75 litres (Fig. 11: 2).

[14] R denotes the centre of the mound, the highest point; it is derived from the French *repère* – mark, sign, starting point. In geodesy, it is a mark located at a certain point on the earth's surface with a known relative height. This height is determined by levelling relative to the original base surface.

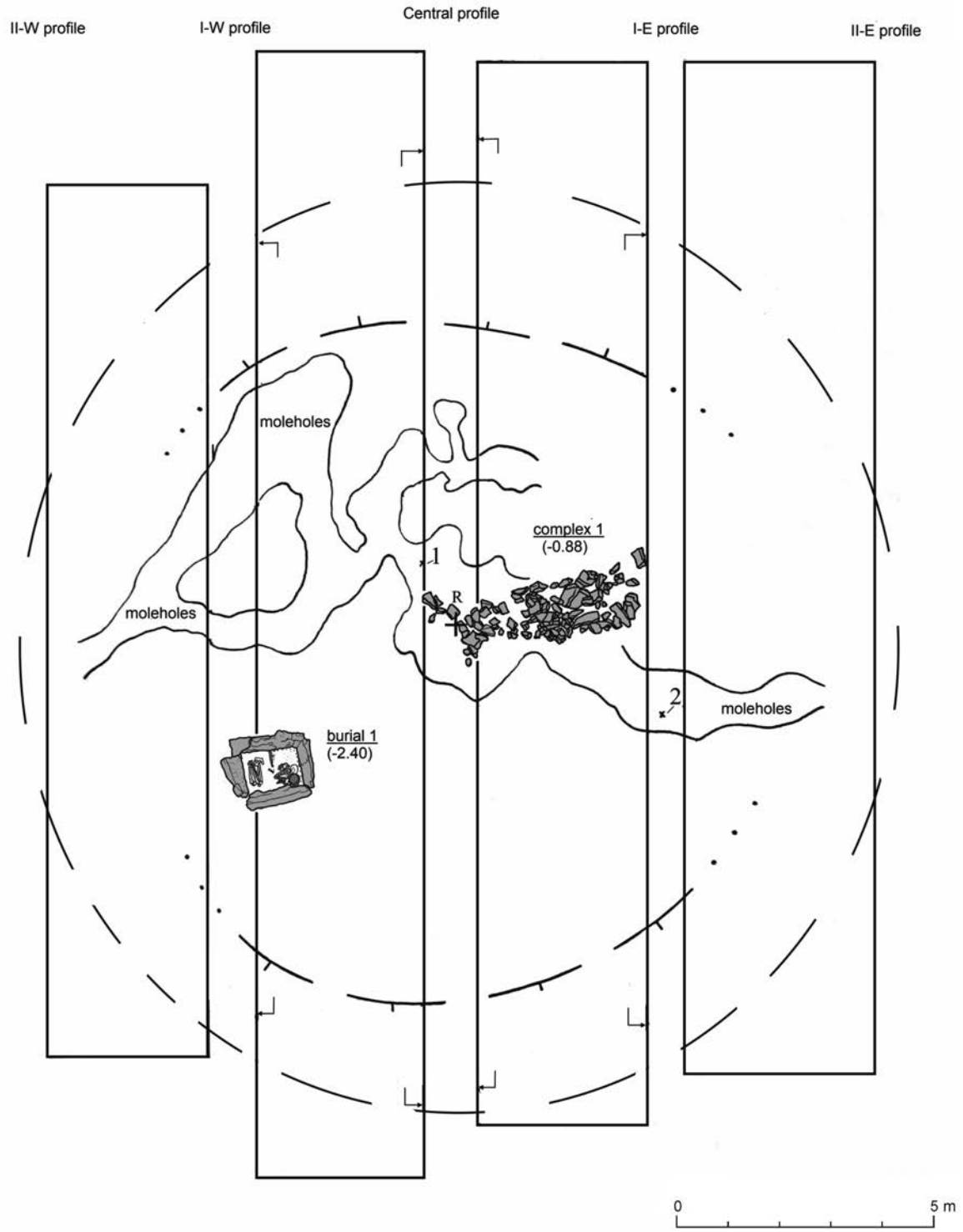


Fig. 10. Komyshuvate. General plan of barrow 1.

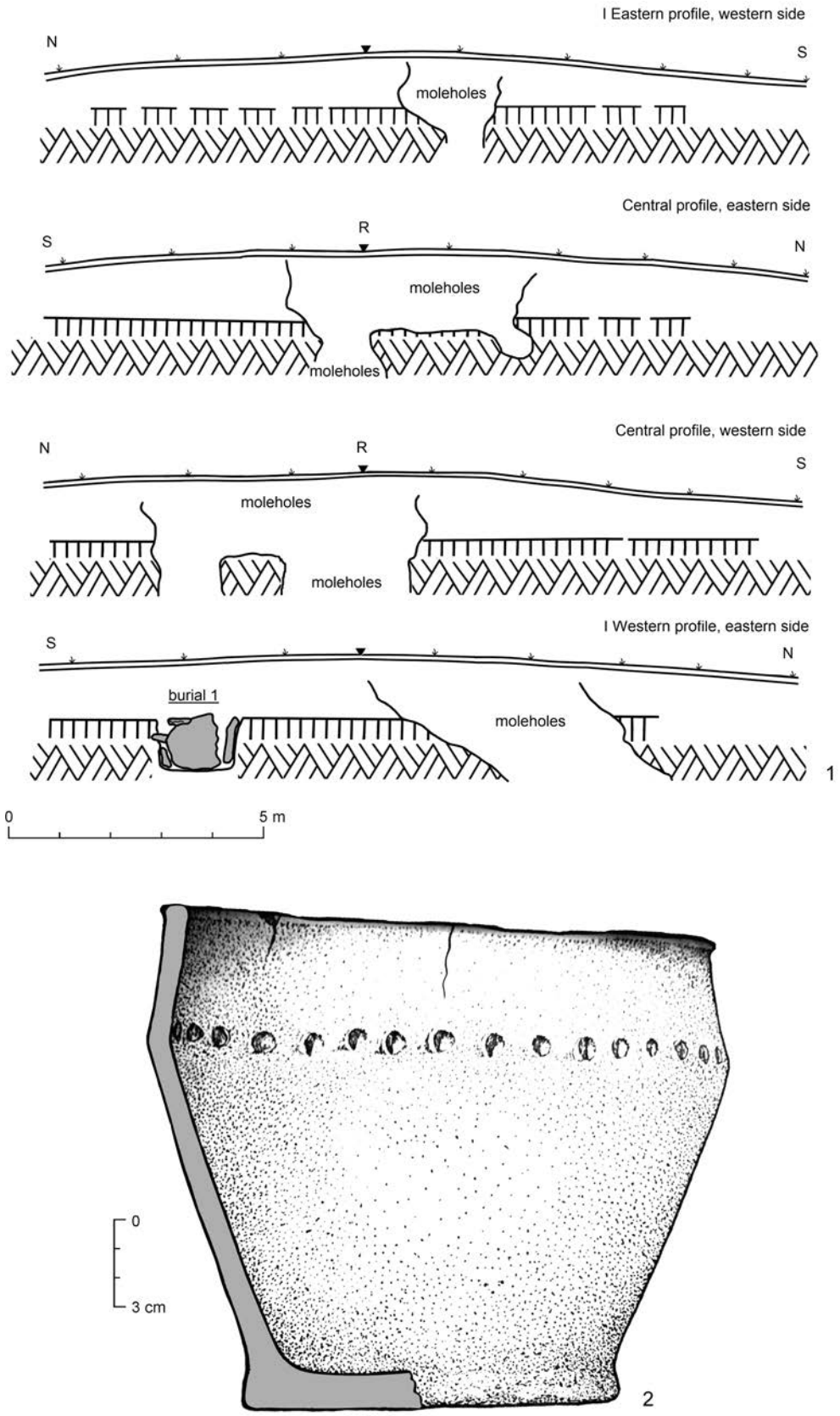


Fig. 11. Komyshuvate, barrow 1. 1 – stratigraphic profiles; 2 – vessel from burial 1.

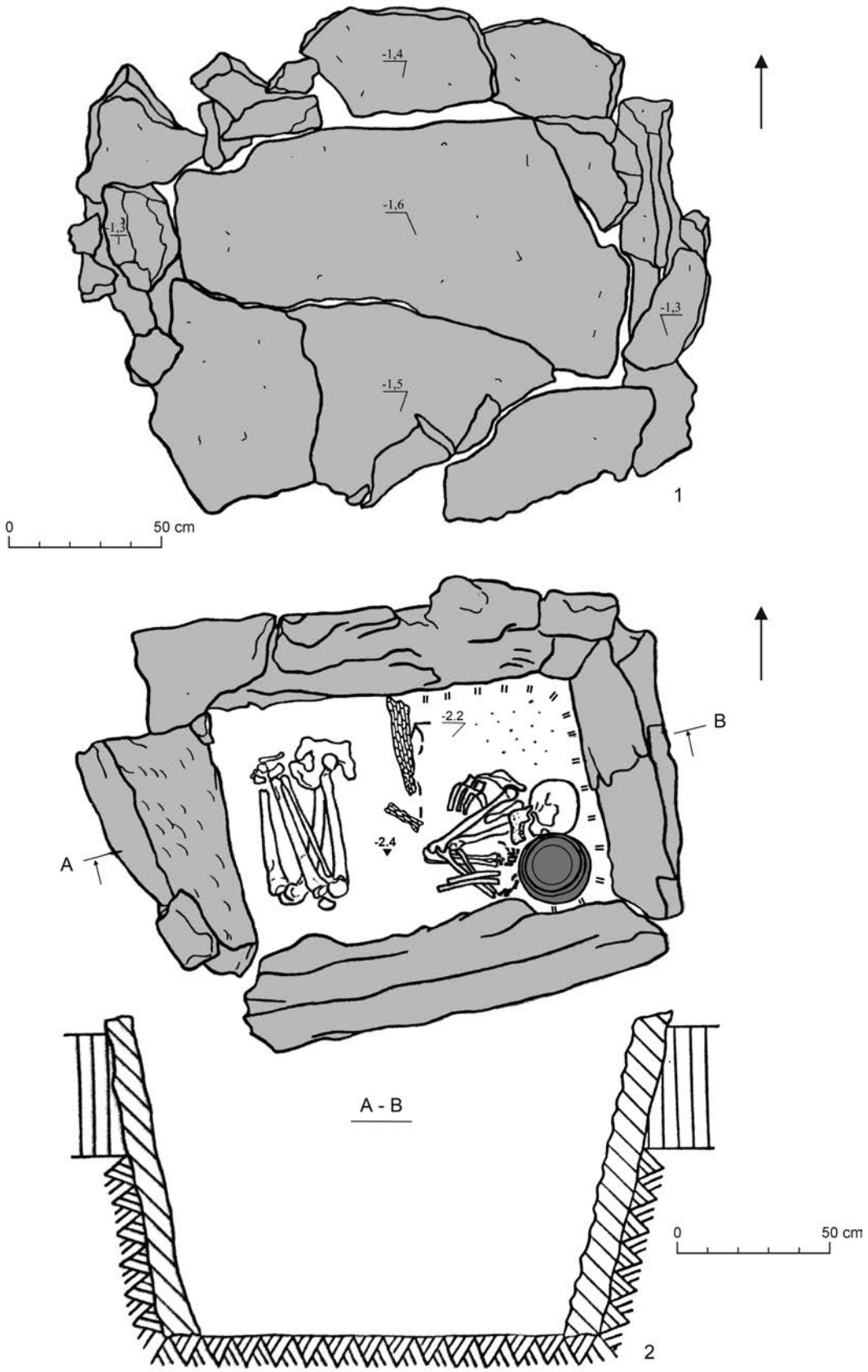


Fig. 12. Komyshuvate, barrow 1. Plan and section of burial 1.

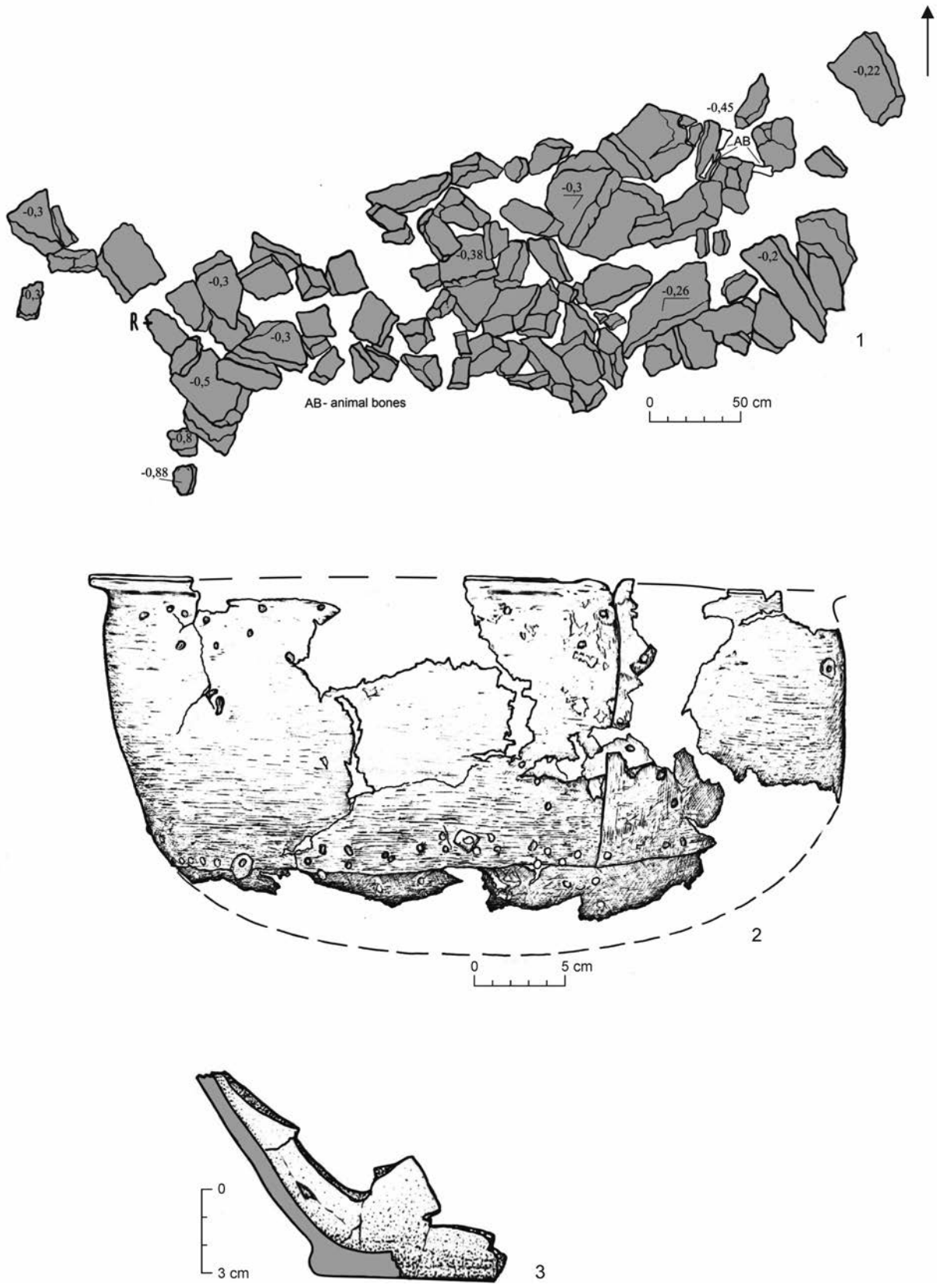


Fig. 13. Komyshuvate, barrow 1. Individual finds and complexes in the mound. 1 – ritual complex of medieval times; 2 – metal cauldron; 3 – fragments of a ceramic pot.

Other finds and ritual complexes in the mound

A ritual complex of medieval times. In the central part of the mound, at a distance of 0–4 m (70–90°) from R, from the level of the modern surface and to a depth of 0.3–0.5 m from R, a ritual site (?) in the form of a cluster of flat stones was recorded in the black soil. The stones of the lining (or pit fill) are orientated with a long axis along a south-west – north-east line. The area is 4.5×1.5 m. Among the stones were found limb bones of a large domestic animal (Fig. 13: 1).

Metal cauldron (Middle Ages, Late Nomads). In the I-Western Trench under the Central Stratigraphic Profile, at a distance of 1.3 m (331°) from R, fragments of a copper/bronze cauldron were found in the fill of a mole hole at a depth of 1.8 m. The cauldron is made of thin forged metal sheets, 0.1 cm thick. The sheets are fastened together with small uneven plates using rivets. The rim of the cauldron is everted. The sides are straight, slightly tapering towards the bottom. The cauldron has a rounded base. The height of the cauldron is 21.5 cm; diameter at the rim is 42.5 cm; diameter of the body is 40 cm (Fig. 13: 2).

Fragments of a ceramic pot (Zrubna culture). In the I-Eastern profile, at a distance of 4.0 m (113°) from R, in the fill of a hole, at a depth of 1.8 m from R, fragments of the lower part of a ceramic moulded pot were found. The bottom part has a rim. The preserved part of the vessel is 8.5 cm high (Fig. 13: 3).

2.2 Barrow 2

Barrow 2 is located on the northern edge of the mound group. At the beginning of the research, it was a rounded mound, 0.7 m high and 15 m in diameter. The mound fill was damaged by systematic ploughing.

Excavation methods. The barrow was investigated using the method of parallel trenches with stratigraphic profiles between them. The profiles passed through the top, slopes and layers of the mound in a north–south direction. Two trenches were made on the mound. The Central, I Eastern and I Western profiles were left between the trenches (Fig. 14; 15). The soil was removed in horizontal layers using machinery. A general-purpose caterpillar agricultural tractor DT-75 was used during the works.

Stratigraphy. The analysis of the stratigraphic profiles and field observations made during the operation of the equipment, and horizontal stripping allowed us to make the following stratigraphic observations on the Central Profile:

– an arable layer with a thickness of 0.2 m;
– a humus layer of the barrow mound up to 0.7 m thick (together with the arable layer);
– buried soil 0.5 m thick;
– the virgin soil in the form of loam was traced from a depth of 1.2 m from the centre of the mound;
– filling of the main burial pit;
– a clay layer from the main burial up to 0.3 m thick and about 5.0 m in diameter;
– a stone cromlech around the mound, 13.0 m in diameter.

One burial was investigated in the mound.

The burial complex in the mound

Burial No. 1 is the primary one in the mound (medieval). It was discovered in the centre of the mound (immediately below R) at a depth of 2.52 m from R and 1.95 m from the inlet level. It was dug into the virgin soil from the level of the ancient horizon (Fig. 16).

The grave had the form of a pit with offsets. The pit was subrectangular in plan, orientated along the line west–east; from the level of inlet it had dimensions 2.5×1 m. At 0.7 m from the level of the burial floor, the pit had offsets along the northern and southern walls, up to 0.2 m wide. On the offsets and at the bottom of the grave were traced the remains of wooden planks, which served as a ceiling. The pit was filled with stones and the remains of the wooden ceiling. In the western part of the pit, at the corners, two wooden posts were traced, which were part of the construction of the funerary structure.

Near the northern edge of the grave, the remains of a horse were found, lying on its left side, with its skull facing west. Stirrups were found near the bones of the animal's forelimbs, and an iron knife was found near the vertebrae. In the area of the shoulder blades and sacral bones, the remains of a leather

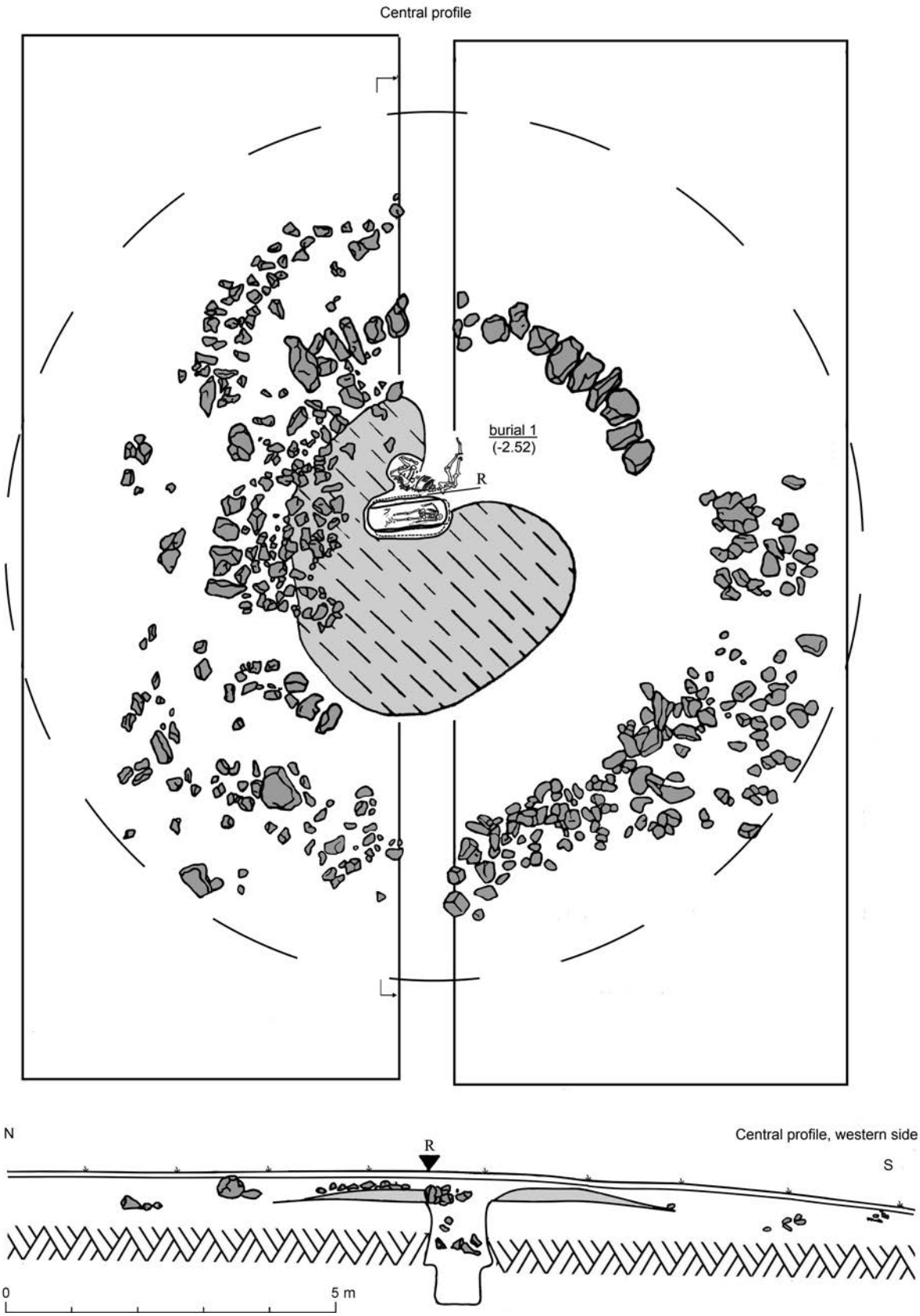


Fig. 14. Komyshuvate. General plan and stratigraphic profile of barrow 2.

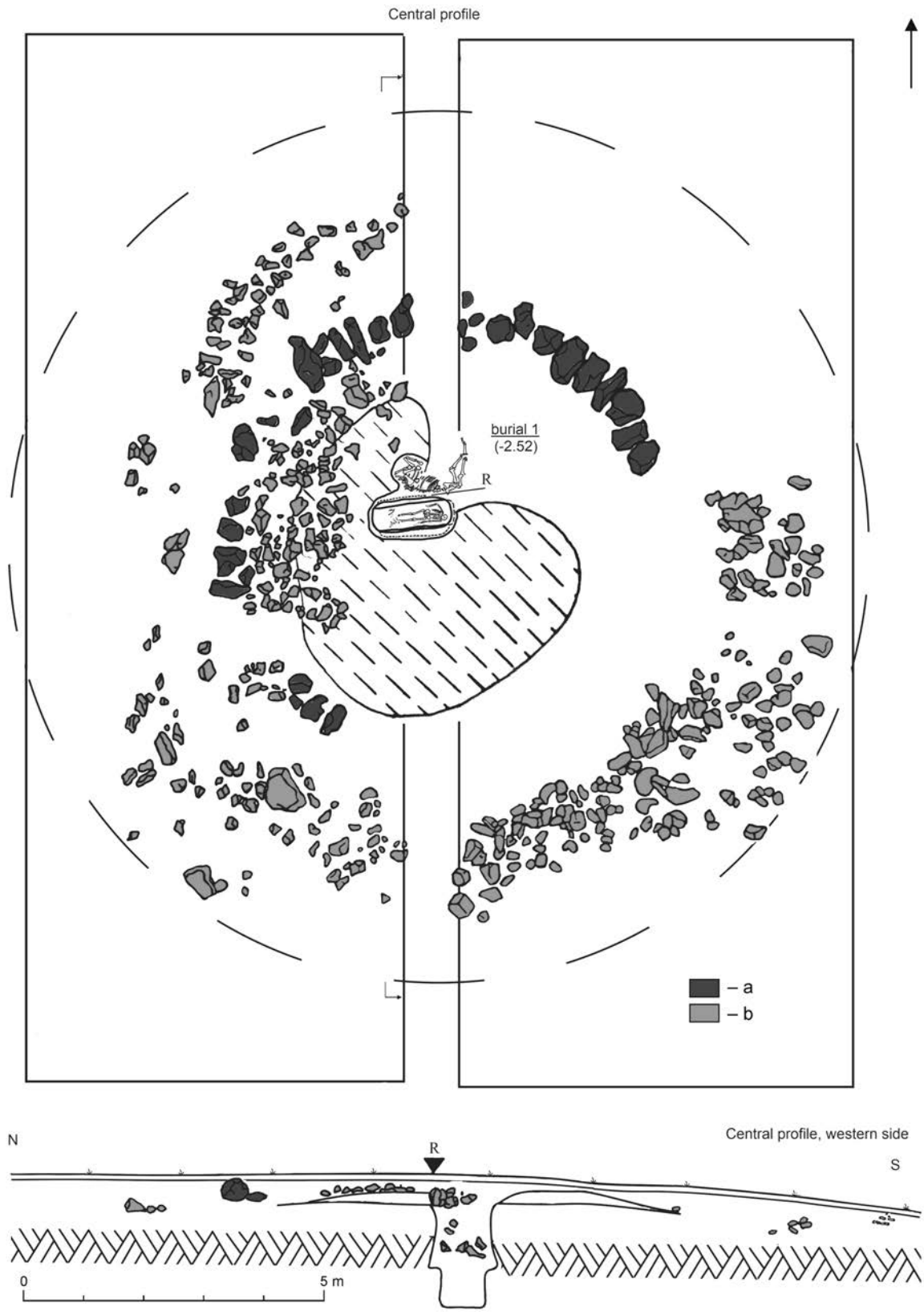


Fig. 15. Komyshuvate, barrow 2. Ritual and cult complex in the mound. a – stones of cromlech; b – ring paving with smaller stones.

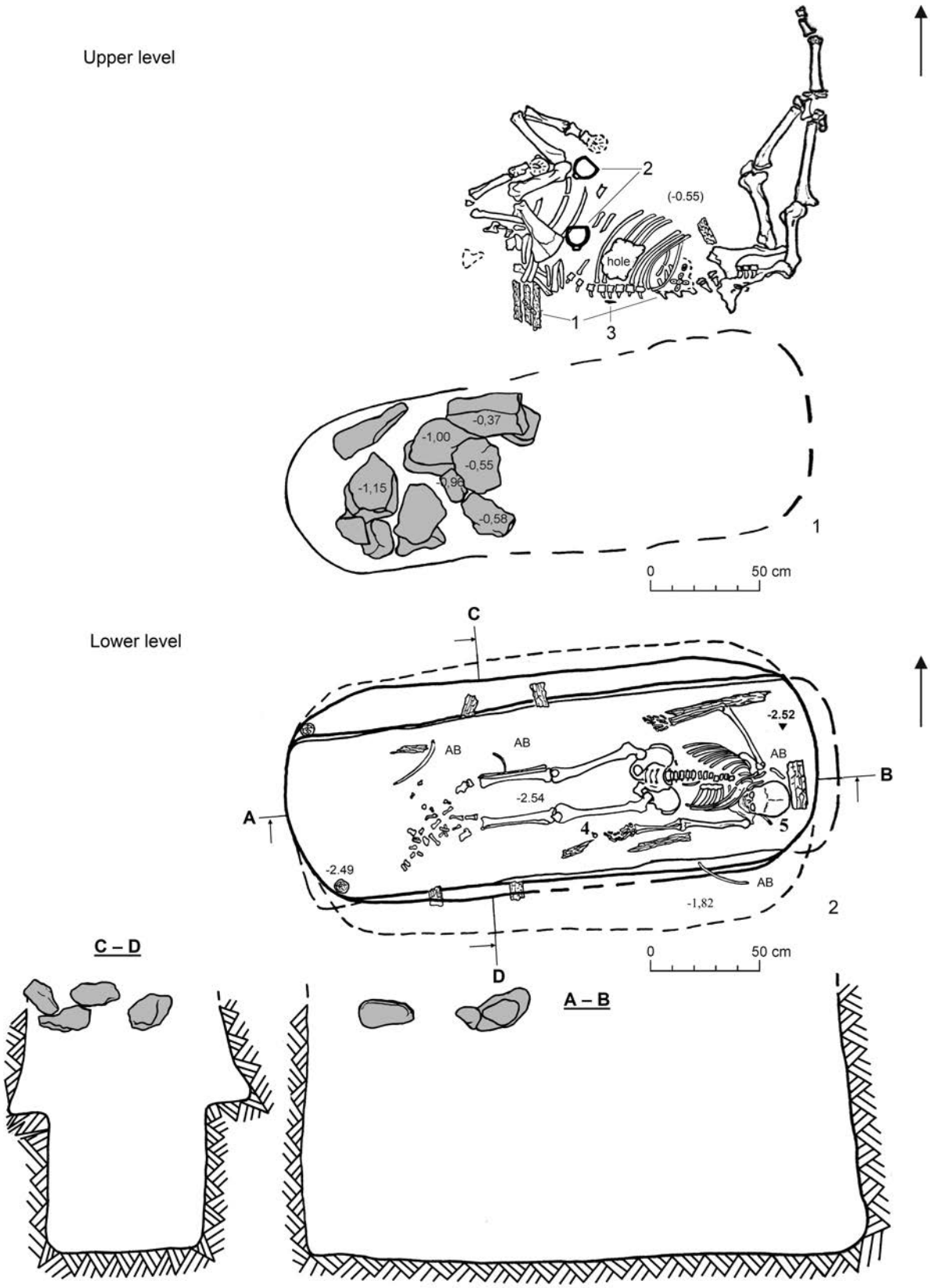


Fig. 16. Komyshuvate, barrow 2. Plan and cross-section of burial 1.

harness with bronze fasteners were found. At the bottom of the grave were the remains of an adult, laid with his head facing east. The legs were stretched out, the right arm was bent at the elbow and directed towards the pelvis, and the left arm was extended along the torso.

The funerary equipment was represented by a metal button found near the left hand and a bone plate on the left side of the skull. Animal bones were found near the feet and skull of the deceased.

Inventory:

1) Arched iron stirrups with flattened upper parts of the stirrups and wide oval footpads. There is a 0.8 cm wide bar along one of the footpads. The height of the stirrups is 13.5 cm; the dimensions of the footrests are 12×7.5 and 13×7.5 cm (Fig. 17: 1, 2).
2) A fragment of a bone lining (for a bow?). The lining is made of a sawn animal rib. One of the fragments is decorated with a composition of rectangles. In the centre of a rectangle incised with an oblique grid (1.5×2.5 cm) is a smaller rectangle (0.6×1.2 cm), not incised. The lining fragments are 1.8 cm wide, and the largest fragment is 15.0 cm long (Fig. 17: 3).
3) Bronze button – a bell with a soldered eyelet made of 1.5 mm wide, flat wire in the shape of a drop. The button is made of thin sheet bronze up to 0.5 mm thick, and consists of two equal hemispheres. The diameter of the ball is 1.5 cm and the height of the eyelet is 0.6 cm (Fig. 17: 4).
4) Horse harnesses have been preserved in the form of fragments of a leather belt with bronze brackets. The brackets have the form of narrow, thin plates 3.5 mm wide and 0.5 mm thick. There are rivets at the ends of the strap, bent at right angles. The shape of the rivets is irregular, rounded, and they are cut from a thin bronze sheet. The rivets were used to fasten the staples to the leather. The staples are of different lengths: from 1.5 cm to 3.0 cm (Fig. 17: 5).
5) An iron knife, single-bladed, with a straight back and a straight end; the handle is not preserved. The surviving part is 6.5 cm long and 1.6 cm wide (Fig. 17: 6).

Ritual complexes in the mound

We can regard the ritual and cult complex as incorporating the stone cromlech as a component of the mound architecture. The structure was made of large stone blocks, which are absent in the south-eastern arc (70°–150°), possibly as a result of agricultural activity in the last century. The diameter of this cromlech along the outer edge is about 9 m. This design is complemented by a ring paving with smaller stones on the outer side of the cromlech, and in the north-western sector (230°–350°) on the inner side. The dimensions of the entire stone circle are about 11.5×13 m (Fig. 15).

2.3 Barrow 3

At the beginning of the research, barrow 3 was a rounded mound, 0.7 m high and 14×14 m in size. The mound fill was damaged by systematic ploughing; at the time of excavations, it was ploughed up.

Excavation methods. The barrow was investigated using the method of parallel trenches with stratigraphic profiles between them. The profiles passed through the top, slopes and layers of the mound in a north–south direction. Two trenches were made on the mound. The Central, I Eastern and I Western profiles were left between the trenches (Fig. 18). The soil was removed in horizontal layers using machinery. A general-purpose caterpillar agricultural tractor DT-75 was used during the works.

Stratigraphy. The analysis of the stratigraphic profiles and field observations made during the operation of the equipment and horizontal stripping allowed us to make the following stratigraphic observations on the Central Profile:

– an arable layer with a thickness of 0.2 m;

– a humus layer of the barrow mound up to 0.7 m thick (together with the arable layer);

– the virgin soil in the form of loam was traced from a depth of 1.2 m from the centre of the mound.

The mound had been heavily damaged by burrows of earth-moving animals. The mound was constructed over the primary burial of the Zrubna culture. Later, another complex was built in the mound, which can probably be considered a cenotaph or a cult complex.

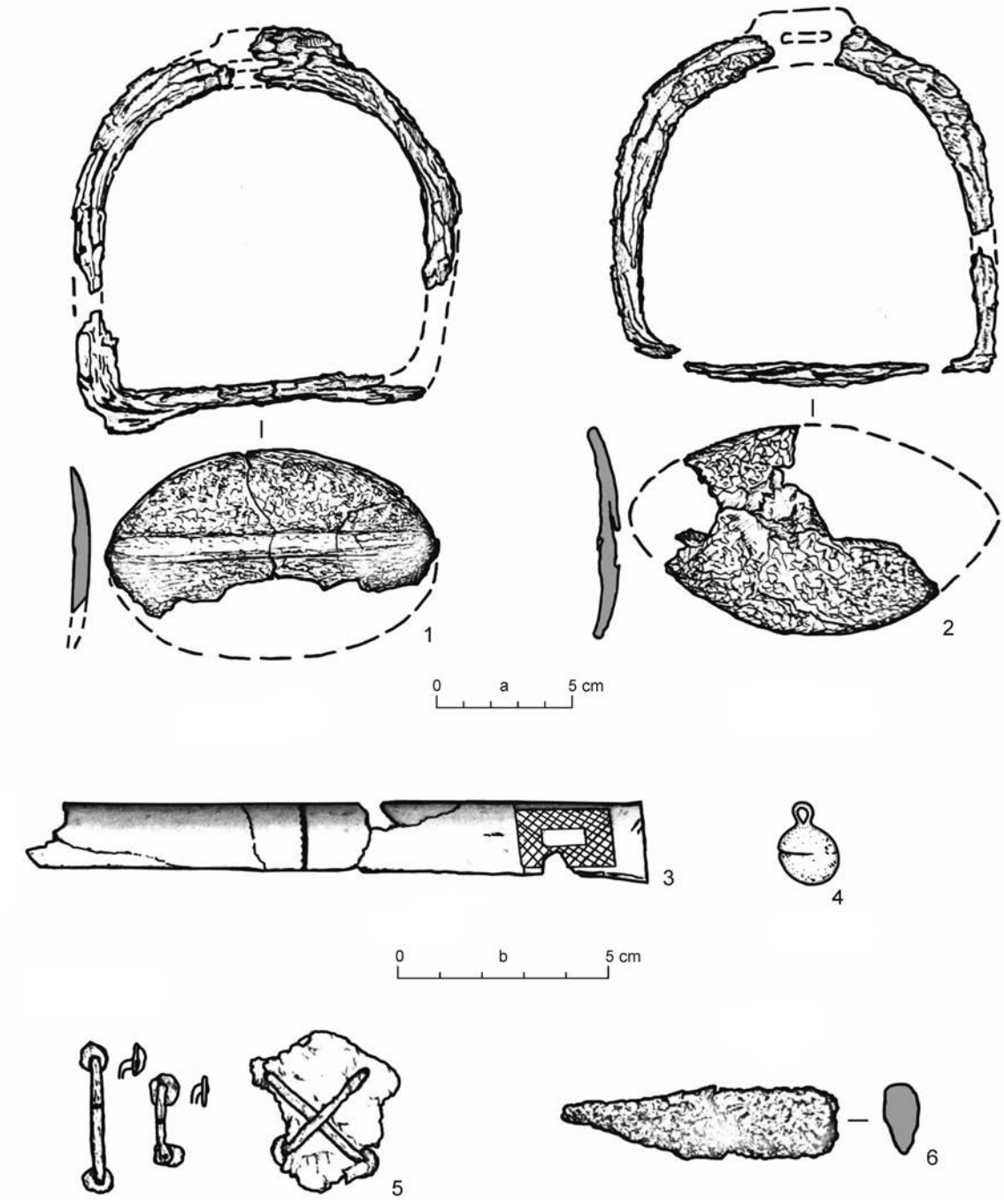


Fig. 17. Komyshuvate, barrow 2. Inventory of the burial 1: 1, 2 – iron stirrups; 3 – fragment of a bone lining; 4 – bronze button; 5 – fragments of a leather belt with bronze brackets; 6 – fragment of an iron knife. Scale: a – 1, 2; b – 3–6.

The burial complexes in the mound

Burial No. 1 is the primary one in the mound (Zrubna culture). It was discovered at 3.3 m to the south and 2.6 m to the west of R (4.5 m, 215° from R). The bottom of the grave is at the level of the virgin soil layer, at a depth of 1.22 m from R (Fig. 19: 5).

The grave is orientated along the line east-northeast – west-southwest. Dimensions of the grave at the bottom: 1.35×0.9 m. The remains of an adult were found at the bottom of the grave. The deceased was laid crouched on his left side with his head to the east, with a slight deviation to the north. The legs were bent

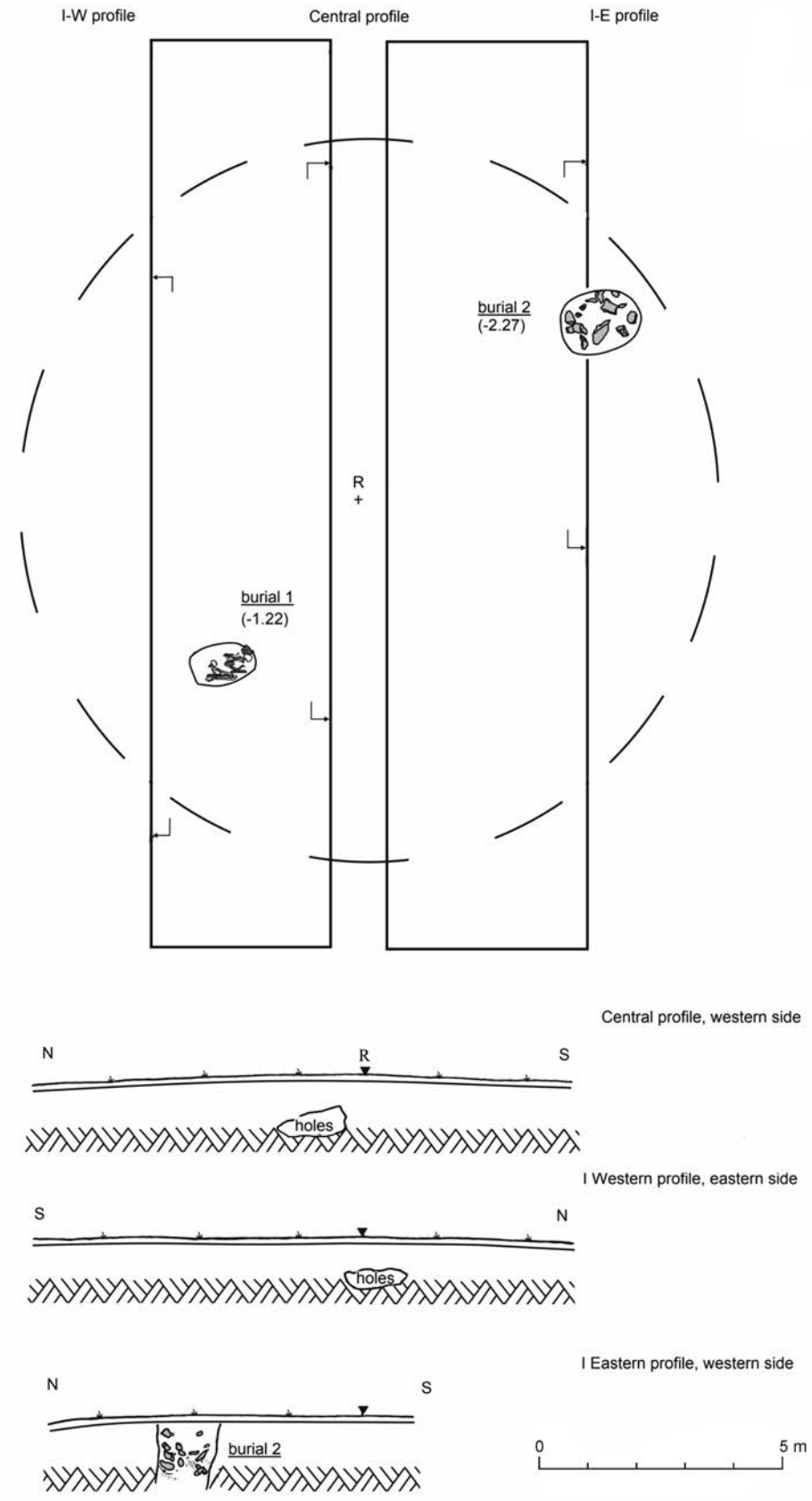


Fig. 18. Komyshuvate, general plan and stratigraphic cross-sections of barrow 3.

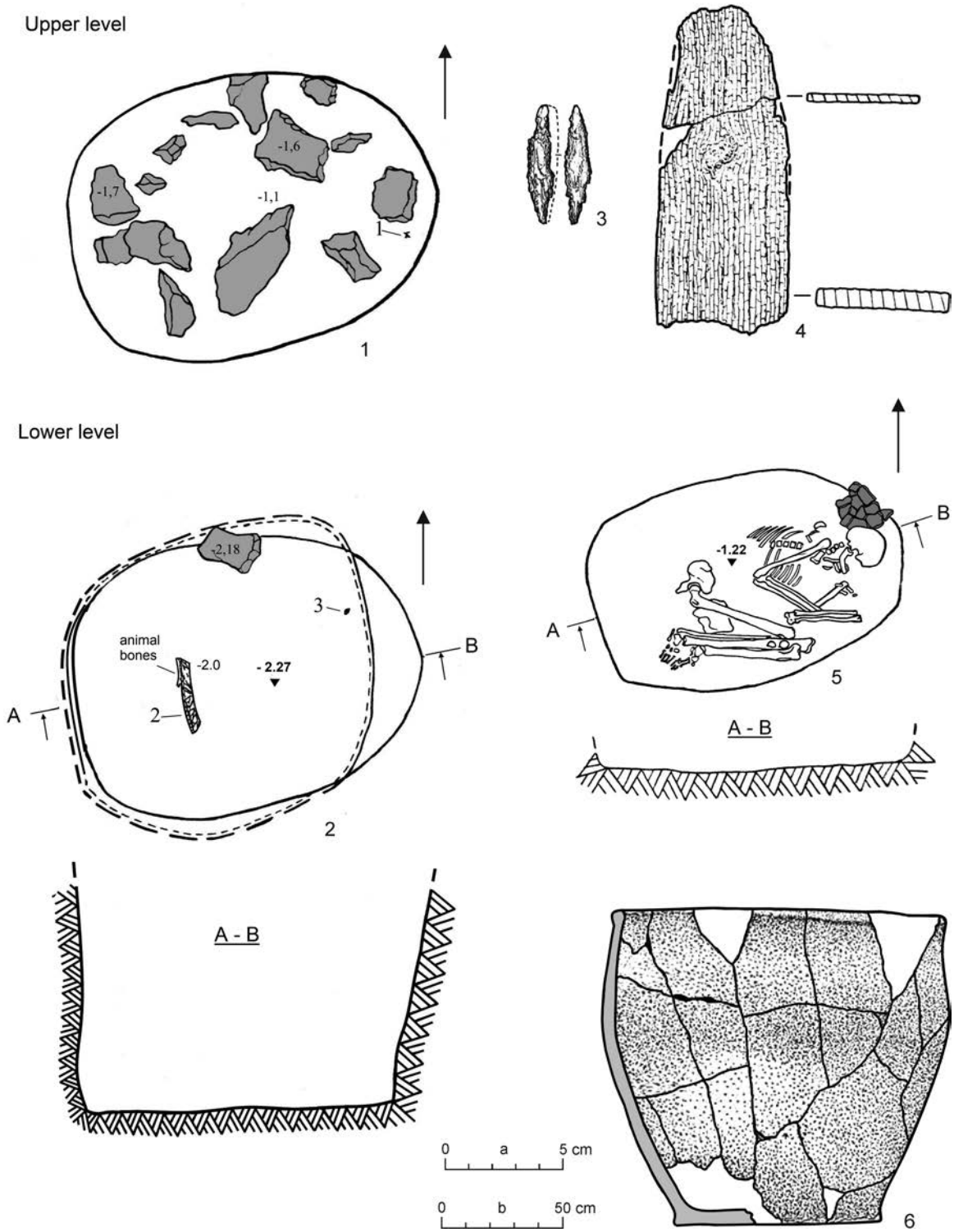


Fig. 19. Komyshuvate, barrow 3. 1–4 – plan, section and inventory of burial 2; 5–6 – plan, section and inventory of burial 1. Scale: a – 3, 4, 6; b – 1, 2, 5.

at an acute angle in the knee joints: left 30°, right 25°; in the hip joints: left and right 40°. Arms were bent at the elbow joints: left 40°, right 50°. The elbows were close to the knees. There was a crushed ceramic pot behind the back of the head.

Inventory:

1) Ceramic vessel – a pot of squat proportions, with weakly profiled sides, a small straight neck, and rim rounded in cross-section. The bottom has a ridge around the perimeter. The outer surface is grey--brown in colour. The vessel is unornamented. The sherd is black at the fracture, with an admixture of sand. Dimensions: height 15.0 cm, diameter of the rim 16.0 cm, diameter of the sides 17.0 cm, diameter of the bottom 10.0 cm. The volume is 1.3 litres (Fig. 19: 6).

Burial No. 2 is an inlet (cenotaph or ritual complex?). Cultural affiliation is not determined. It was discovered at a distance of 3.5 m to the north and 5.0 m to the east of R (2.27 m 56° from R). It was dug from the level of the modern embankment, with the grave bottom in the virgin soil layer.

The grave is oval in shape, with a longitudinal axis orientated along the line east-northeast – west--southwest. Pit dimensions: 1.55×1.15 m. The fill is mixed, containing stones. During the excavation of the grave fill, an iron arrowhead was found near the eastern wall. The pit floor was covered with white decay, and a yellow substance fragment was found near the eastern wall.

There were no remains of the deceased. In the centre of the pit, a wooden board was placed vertically, which was dug or driven into the burial floor. Nearby was an animal bone (Fig. 19: 1, 2).

Inventory :

1) An iron arrowhead, poorly preserved. Length: about 5.0 cm (Fig. 19: 3).
2) A sub-rectangular wooden board, 53×22 cm, 4.0 cm thick at the bottom and 2.0 cm at the top. The top edge of the board is rounded (Fig. 19: 4).

2.4 Barrow 4

At the beginning of the research, barrow 4 was an oval-shaped mound made of soil, stretched along the northwest–southeast line, 0.9 m high, 40×32 m in size. Some large stone blocks were found on the surface or in the upper layers of the mound. The mound fill was damaged by systematic ploughing. The geographic coordinates of the mound are 47°5′59.58″N, 37°6′39.09″E.

Excavation methods. The barrow was investigated using the method of parallel trenches with stratigraphic profiles between them. Before the work began, a grid of landmarks was laid out on the mound using a compass, stakes and tape measures. An instrumental survey of the mound was carried out using a theodolite, a leveller and a geodetic rail. Stratigraphic profiles were made across the top, slopes and layers of the mound in a north-northeast – south-southwest direction. Deviations from the north–south or west–east lines are due to the direction of the water pipeline and the forest belt.

There were five trenches on the mound (initially 4, and later, an additional one in the eastern sector of the mound). The Central, I, II, III Eastern, and I, II Western stratigraphic profiles were left between the trenches (Fig. 20; 21). The soil was removed in horizontal layers (5–10 cm) using machinery. Telescopic front-end loaders Manitou MHT-X 735 were used during the works. An MTZ-82 Borex tractor with an excavator bucket was used to uproot stumps in the western part of the mound (CA 2).

During the excavations, it became clear that the dimensions of the mound defined during archaeological research required adjustments. The natural and anthropogenic factors that influenced the shape and size of the mound do not always allow for correct measurements, even with the help of precise geodetic equipment. Ploughing and natural processes only allow us to roughly establish the edge of the mound, which "stretches" at the top of the watershed. Thus, the natural lowering of the level can be taken as the edge of the mound. A more reliable estimate of the mound height can be made by analysing the central stratigraphic profile.

Stratigraphy. The analysis of stratigraphic profiles and field observations made during the operation of machinery and horizontal stripping allowed us to make the following observations:

– a turf layer with a thickness of 0.10–0.15 m;
– a black soil layer of the mound, 0.87–0.9 m thick (together with the turf layer);
– buried soil 0.4–0.5 m thick, to the level of the ancient horizon;
– the underlying loamy subsoil was traced from a depth of 1.4 m from the centre of the mound;

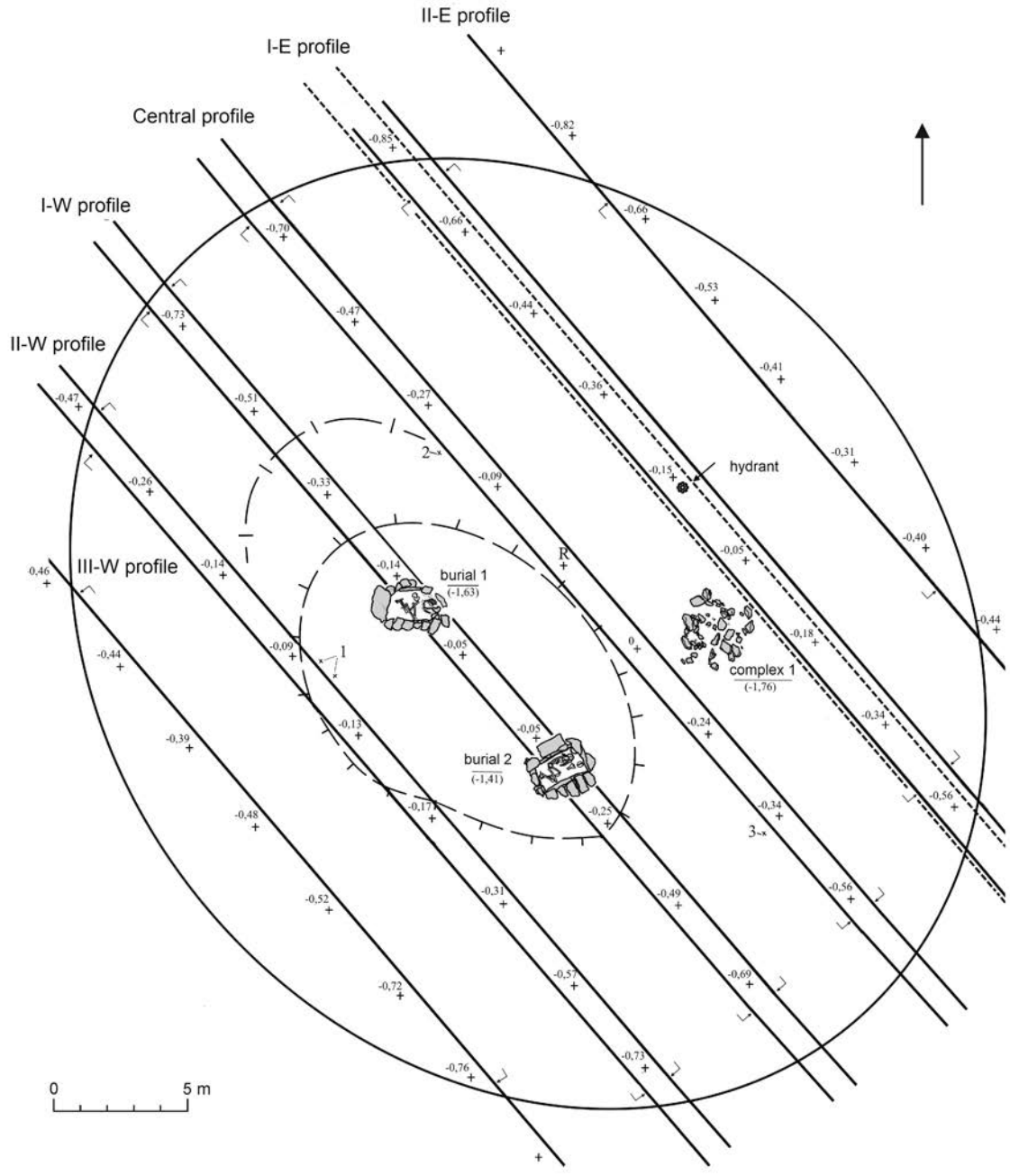


Fig. 20. Komyshuvate, general plan of barrow 4.

– a humus mound I (primary), built over burial 2;
– a humus mound II, built over burial 1 (Fig. 22).

Two burials of the Zrubna culture and a ritual complex of the medieval period were investigated in the barrow.

The burial complexes in the mound

Burial No. 1 is an inlet in the mound (Zrubna culture). It was found at a distance of 7.0 m to the west and 2.65 m to the south of R (5.55 m 250° from R). The bottom of the grave was at the level of the virgin soil

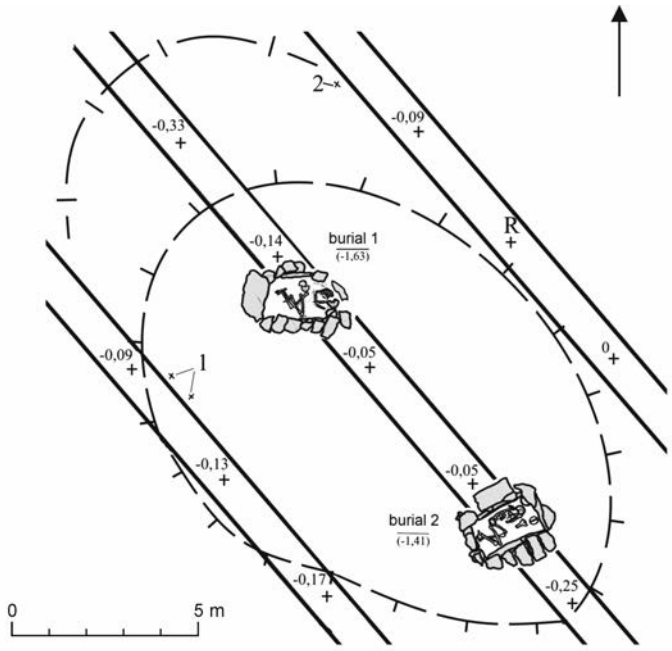


Fig. 21. Komyshuvate, central part of barrow 4.

layer, at a depth of 1.49 m from the modern surface (-1.63 m from R). The grave was dug from the level of the first mound (Fig. 23; 24).

The funerary structure is a stone tomb with predominantly horizontal masonry (sandstone). The presence of vertically placed slabs was noted (northern corner, lower part of the southern longitudinal wall). An indistinct fragment of a medieval pottery vessel was found under the turf layer. Some elements of the stone burial structure were found almost immediately under the turf layer (CA 2). During the clearing of the upper layer of the grave fill, a ceramic pot (vessel 1) was found at a depth of 0.58 m from the present-day surface (0.72 m from R). During the excavation of the Western Trench I, the horizontally placed slab of the eastern wall of the burial structure was moved by a machinery. The upper part of the eastern corner of the tomb was partially destroyed in ancient times (before the grave was filled with soil), as some small stone slabs were directly on the bones of the deceased (CA 3: 1, 2; 4).

At the bottom of the stone tomb, orientated with its long side along the west–east line, the remains of an adult were found. The deceased was laid crouched on his left side with his head facing southeast. The spine was strongly curved in the thoracic section. It seems that this was the result of a lifelong anomaly (kyphosis?) or post-mortem displacement of the remains. The legs were bent at an acute angle at the knee joints: left 30°, right 60°; at the hip joints: left 60°, right 90°. The arms were bent at the elbow joints: left 65°, right 35°, with the left hand in front of the face and the right hand under the jaw.

Under the pelvic bones, there was decay from the remains of the deceased's flooring or clothing. There was also a trace of decayed plant litter under the head. In front of his face was a ceramic pot 2, and near the knee of his left leg was a tubular bone of an animal – the remains of a farewell meal (CA 5–7).

Inventory:

1) Ceramic vessel 1 – a pot of slightly asymmetrical proportions, with convex sides and rims bent outwards, rounded in cross-section. The firing is uneven; the outer surface is yellow/grey-brown. The vessel is unornamented. The sherd is black at the fracture. Dimensions: height 14.0 cm, diameter at the rim 17.0 cm, diameter of the sides 18.0 cm, diameter of the bottom 9.2 cm. The volume is 2.1 litres (Fig. 25: 1).
2) Ceramic vessel 2 is a sharp-curved pot of squat proportions, with the maximum diameter in the upper third of the body. The outer surface is yellow/grey-brown in colour. The vessel is decorated with a geometric ornament made by imprints of a "caterpillar" (a flexible stick with a wound thread) in the

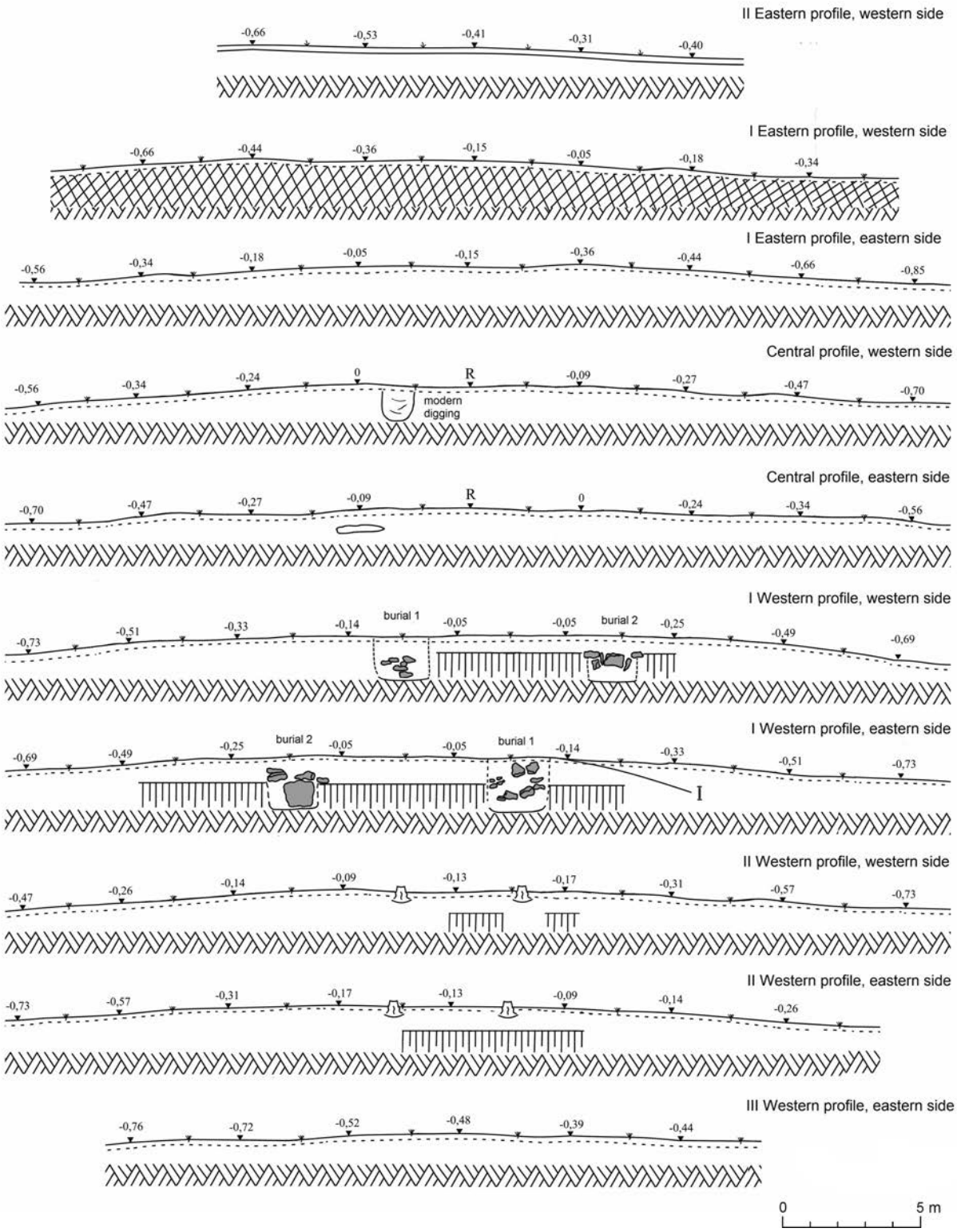


Fig. 22. Komyshuvate, barrow 4. Stratigraphic profiles.

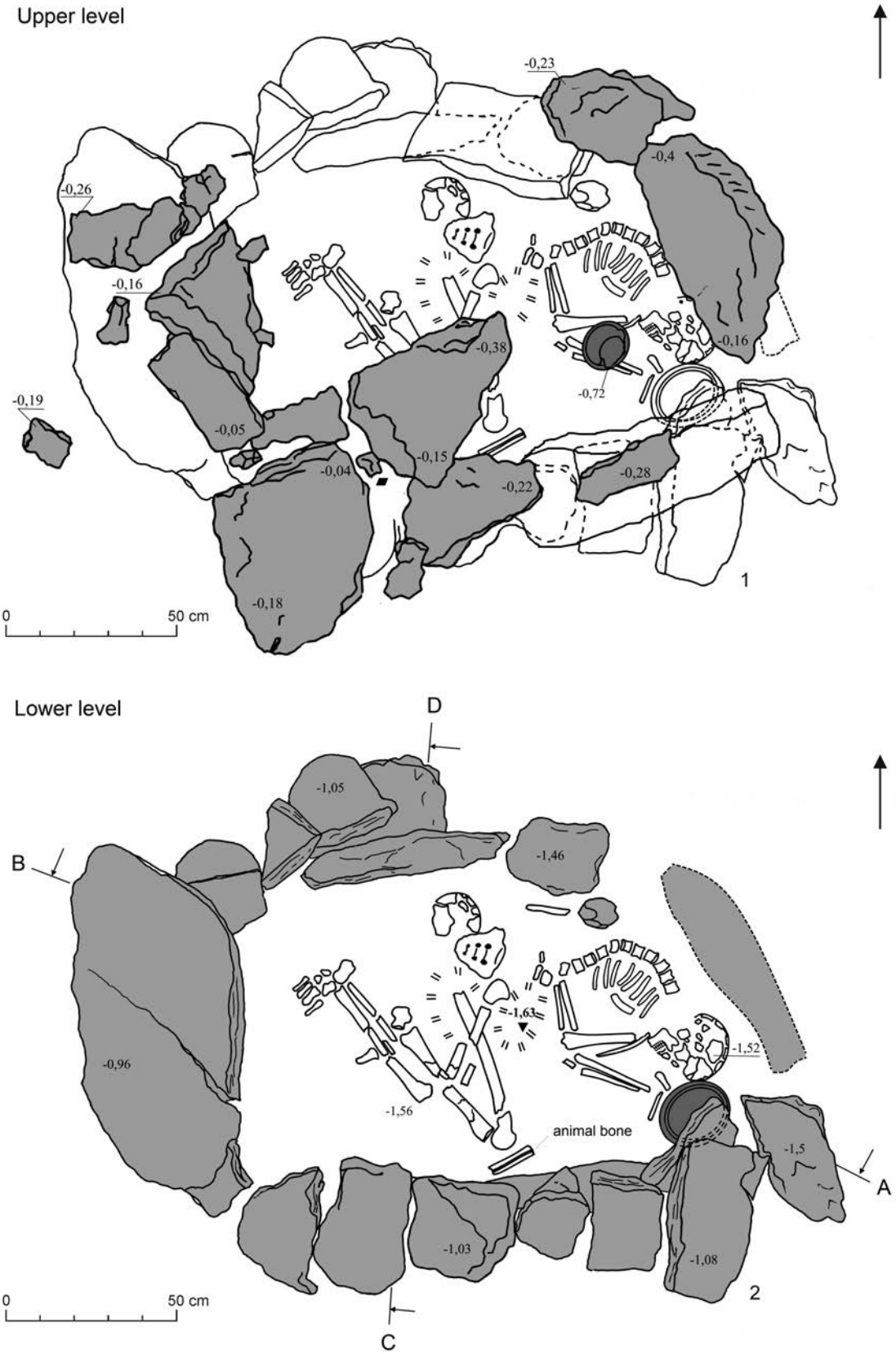


Fig. 23. Komyshuvate, barrow 4. Plan of burial 1.

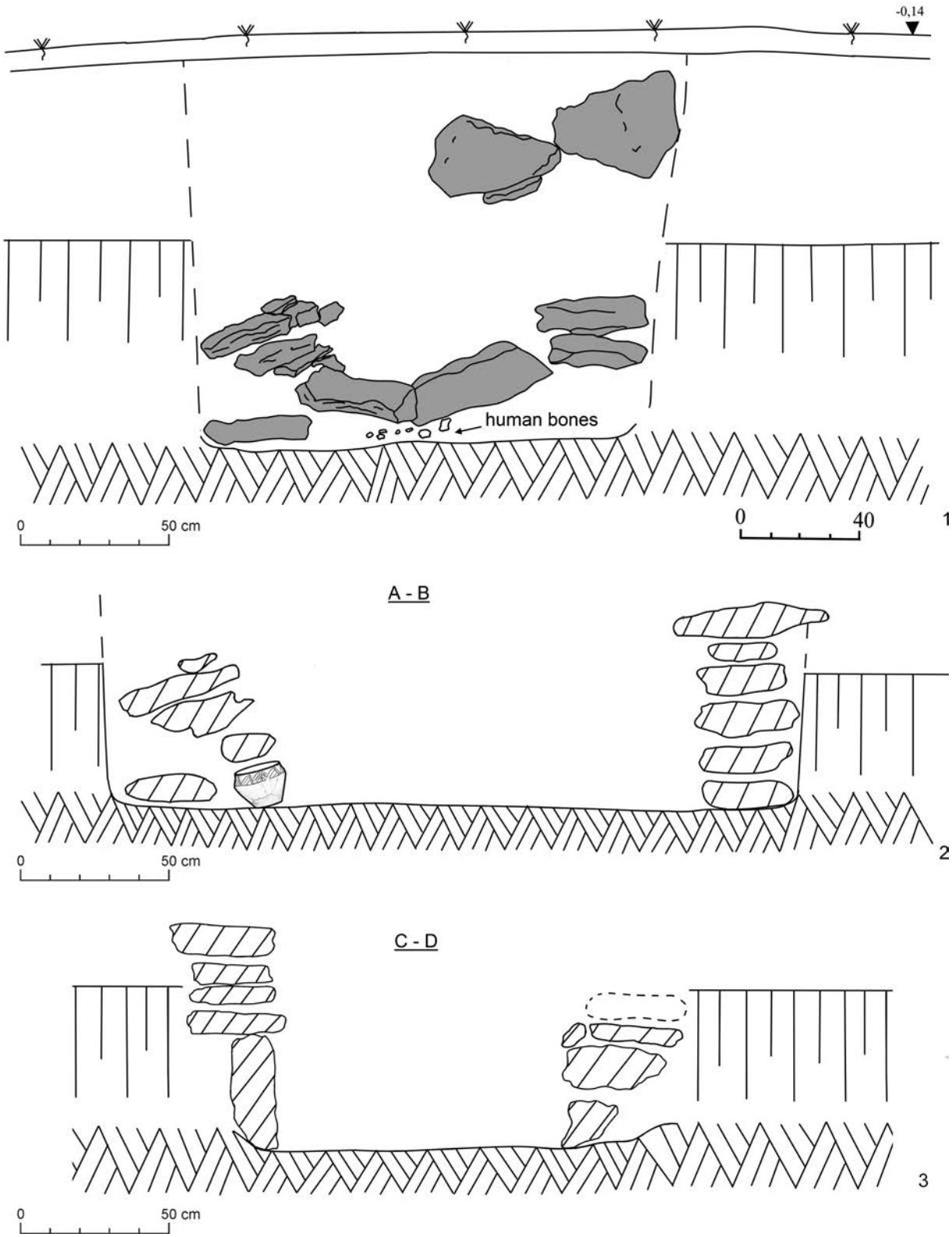


Fig. 24. Komyshuvate, barrow 4. Cross-sections of burial 1. 1 – I Western profile, eastern side; 2 – burial section A – B; 3 – burial section C – D.

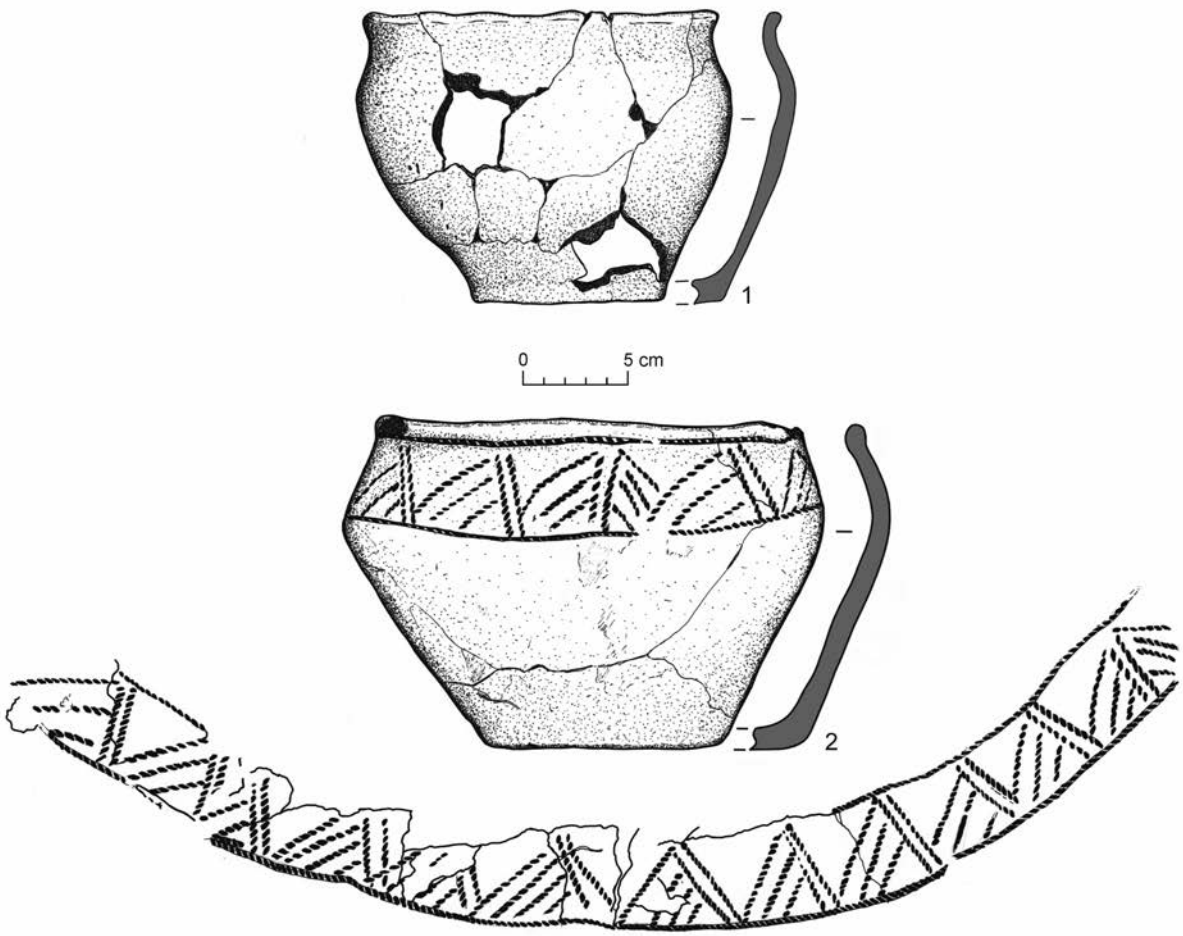


Fig. 25. Komyshuvate, barrow 4, burial 1. 1 – vessel 1; 2 – vessel 2.

form of triangles with their vertices upwards, which are located between two horizontal lines. The sherd is black at the break. Dimensions: height 16.0 cm, diameter at the top 21.0 cm, diameter of the sides 23.5 cm, diameter of the bottom 11.5 cm. The volume is 3.72 litres (Fig. 25: 2; CA 17: 1).

Burial No. 2 is the main one in the mound (Zrubna culture). It was discovered at a distance of 5.0 m to the west and 5.5 m to the south of the mound centre (7.5 m 176° from R). The bottom of the grave is at the level of the virgin soil layer, at a depth of 1.36 m from the modern surface (-1.41 m from the centre R; Fig. 26; 27; CA 12).

The grave was excavated from the level of the ancient horizon. The long axis of the grave is oriented in a southwest–northeast direction. The burial structure is a combined stone tomb composed of vertically (long and north-eastern walls) and horizontally (south-western wall) laid sandstone slabs. The upper edge of the slabs was buried to the level of the ancient horizon (CA 3: 3, 4). The lower level of the stone slabs of the burial structure and the remains of the deceased were at the level of the underlying loamy subsoil. The burial structure was covered with a large stone slab measuring 1.67×0.78 m, which had sunk into the grave space and was broken in half at the time of the research. The space that remained uncovered was filled with smaller slabs and stones that were at the level of the ancient horizon (CA 8–11).

The remains of an adult were found at the bottom of the stone tomb. The deceased was lying contorted on his left side, with his head to the east and tilted to the north. The legs were bent at an acute angle at the knee joints: left 40°, right 30°; at the hip joints: left 65°, right 90°. The arms were bent, with hands in front of the face.

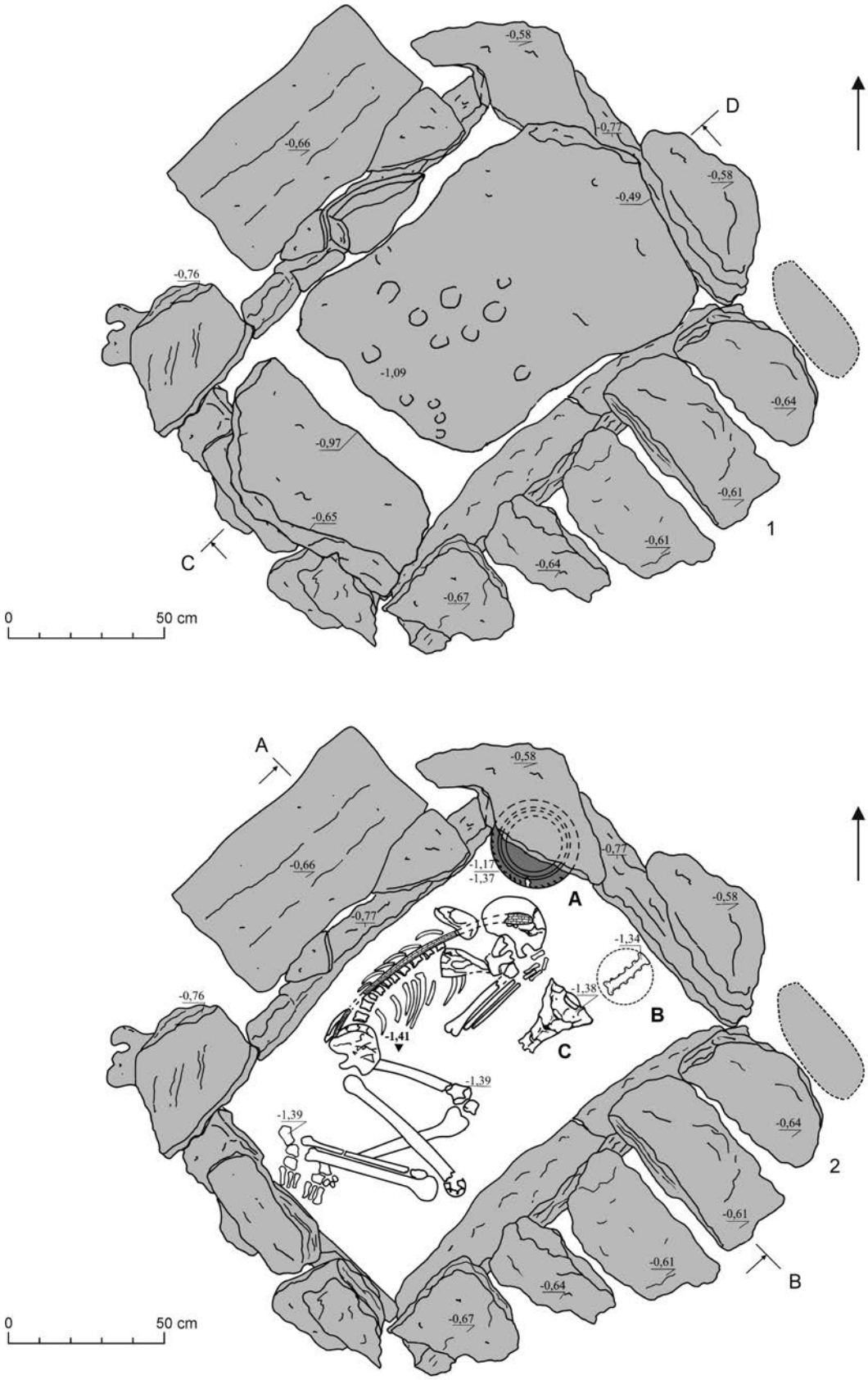


Fig. 26. Komyshuvate, barrow 4, burial 2. 1, 2 – plans of the upper and lower levels (in the plan: A – ceramic vessel, B – wooden bowl, C – animal bone).

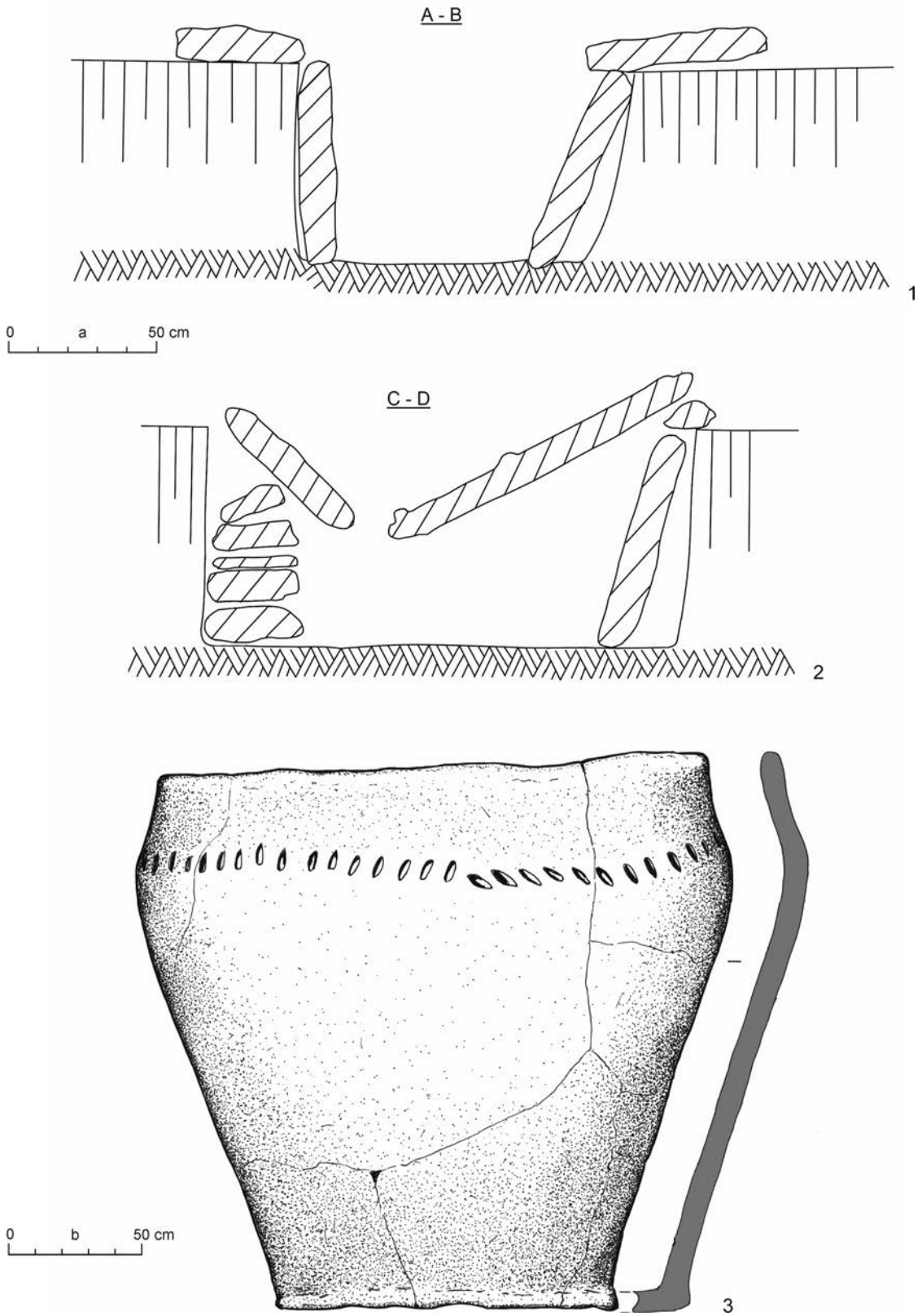


Fig. 27. Komyshuvate, barrow 4, burial 2. 1, 2 – burial sections; 3 – ceramic vessel. Scale: a – 1, 2; b – 3.

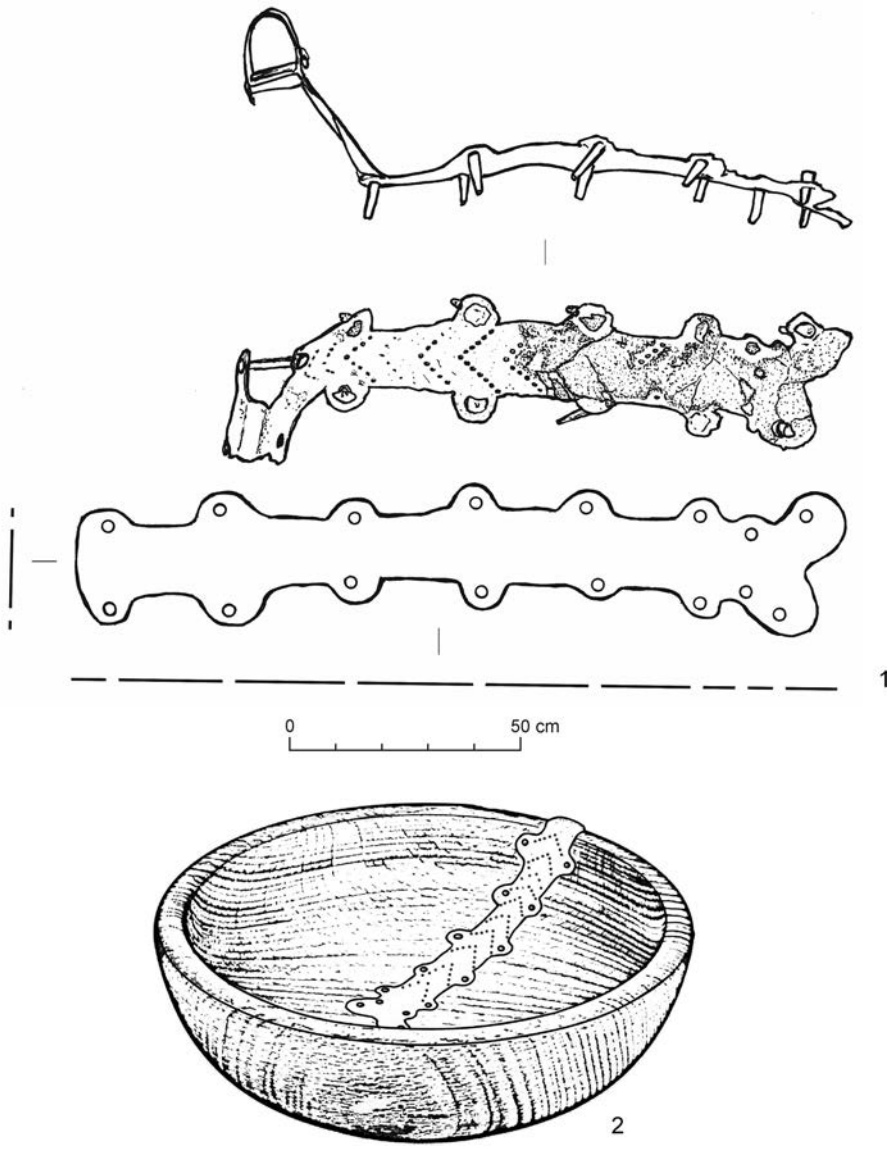


Fig. 28. Komyshuvate, barrow 4, burial 2. 1 – bronze plate (application on a wooden bowl); 2 – graphic reconstruction of a wooden bowl.

In the northern corner of the grave, behind the back of the deceased's head, there was a ceramic pot. The remains of a wooden vessel with a bronze plate were found in front of the deceased's face, and the remains of a funeral meal – the sacrum bones of an animal – were found next to it (CA 13: 3). On the bones of the skull, the vertebrae and pelvic bones, the remains of a wooden object (a staff?) was found laid along the body of the deceased.

Inventory:

1) Ceramic vessel 1 – fragments of the walls of a ceramic vessel. The sherd is black at the fracture. There are shallow vertical flutes on the outer surface and deep horizontal flutes on the inner surface. The dimensions and shape of the vessel are not established (Fig. 30: 4).
2) Ceramic vessel 2 – a jar-shaped pot of slender proportions with a smoothly defined rib in the upper third of the body. There is a small foot-rim near the bottom. The firing is uneven; the outer surface is yellow/grey-brown with traces of soot. There is a horizontal row of 74 oblique finger and nail indentations with irregular angles along the shoulders of the jar. The sherd is black at the fracture. Dimensions: height 21.5 cm, diameter of the rim 21.5 cm, diameter of the sides 23.5 cm, diameter of the bottom 13.5 cm. The volume is 5.25 litres (Fig. 27: 3; CA 13: 2; 17: 2).

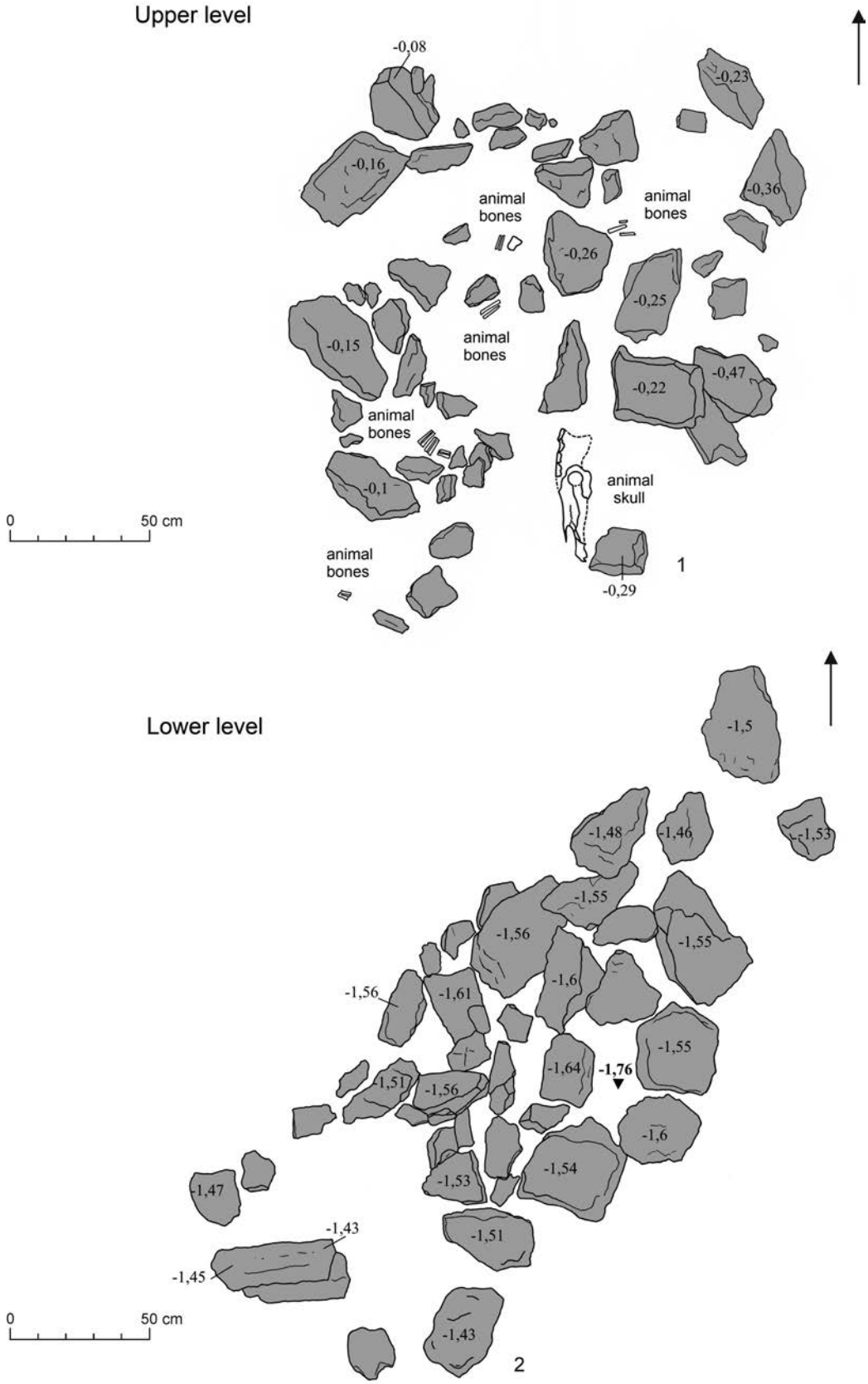


Fig. 29. Komyshuvate, barrow 4. Plan of complex 1.

3) A wooden bowl of rounded shape, of which only the remains of rotten wood and small fragments of the bronze cover (lining) have been preserved (CA 13: 4). The edges of the rim are rounded, up to 1.0 cm thick. The diameter of the reconstructed rim is 15.0 cm. The height of the bowl and the diameter of the bottom part are not established, but due to the shape of the bronze element, it was possible to establish its depth: approximately 3.5 cm; and the angle of inclination of the inner walls of the bowl is 60° (Fig. 28: 2; CA 18).

The plate thickness is 0.1–0.05 cm. Remnants of a "herringbone" ornament made with a punch can be traced on the entire surface of the product. The overlay was fastened to the wooden base from the inside with six pairs of miniature bronze nails and one pair of rivets at the ends. The rivets and nails had the form of a truncated cone, made from bronze plates twisted into a tube. Nail dimensions: length 0.6–1.1 cm; head diameter 0.3–0.5 cm; stem diameter 0.2 cm. Dimensions of rivets: external length 1.5 cm; internal length (head spacing) 1.2 cm; stem diameter 0.2 cm; embedded head diameter 0.45 cm; closing head diameter 0.35 cm (Fig. 28: 1).

4) A wooden object (staff?) of poor preservation, of which only the remains of rotten wood have been preserved. Reconstructed dimensions: length 75 cm, maximum diameter (near the skull) 4.0 cm, diameter (on the vertebrae and pelvic bones) 1.5–2.0 cm.

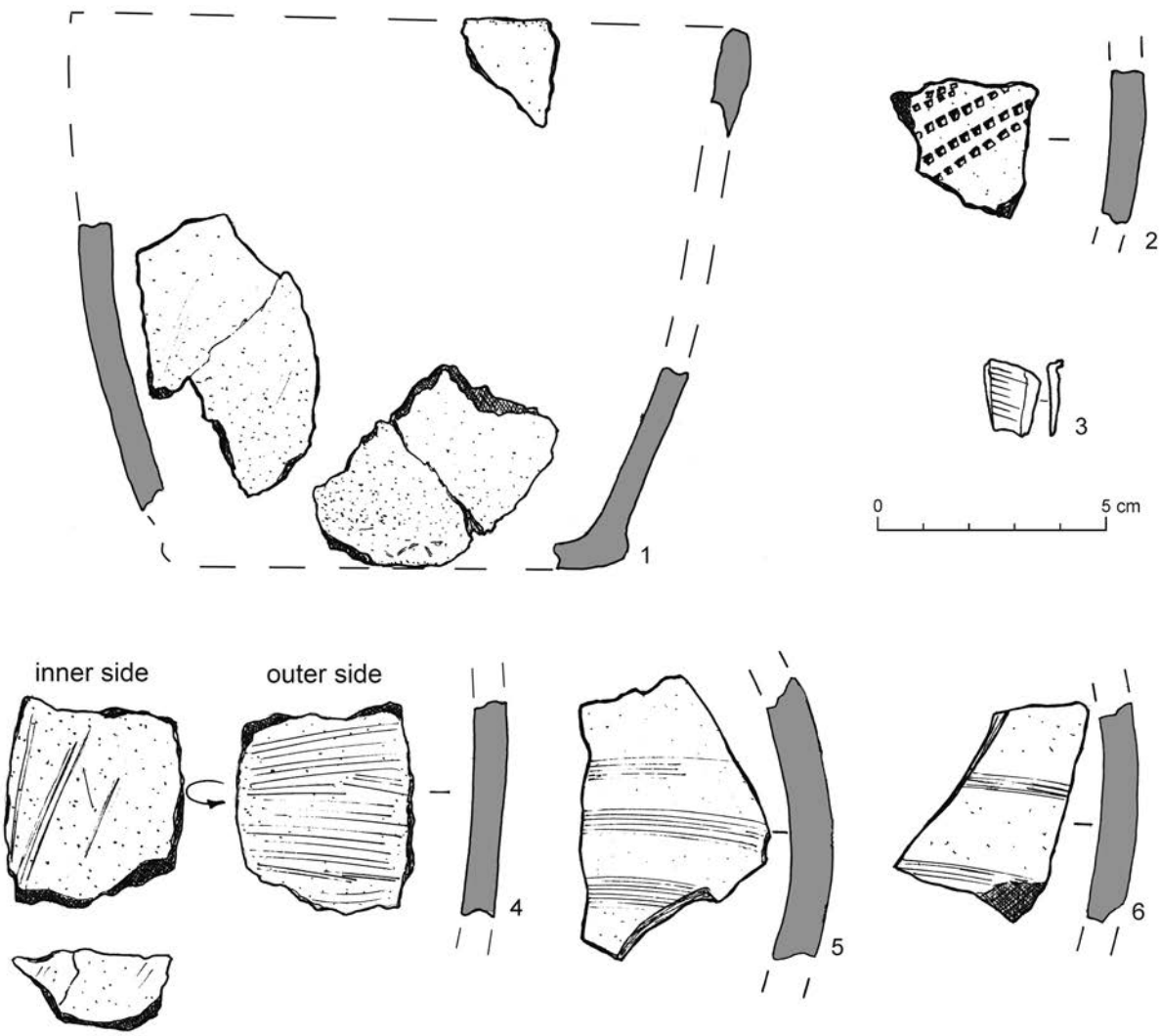


Fig. 30. Komyshuvate, barrow 4. Finds from the mound fill.

Other finds and ritual complexes in the mound

A ritual complex of medieval times. At a distance of 6.5 m (112°) from R, from the level of the modern surface to a depth of 1.76 m from R, a cluster of stones was recorded in the black soil (probably filling a pit oriented by a long axis along the southwest–northeast line, with overall dimensions: top layer 2.4×1.8 m, bottom layer 2.9×1.2 m). Numerous indistinct small fragments of red-clay circular pottery and bones of a large domestic animal were recorded among the stones at different levels (Fig. 29; CA 14; 15).

In addition, at the level of the ancient horizon, some finds of the Late Bronze Age were discovered in the mound: fragments of ceramic vessels, and the remains of a funeral feast associated with burial 2.

Fragments of ceramic pot no. 1. Found in the western part of the primary mound, at a distance of 9.6 m (243°) from the centre, at the level of the ancient horizon, at a depth of 0.9 m. The ceramic vessel is an open-ended jar-shaped pot. The outer surface is black; the vessel is unornamented. The diameter of the reconstructed bottom is 10.5 cm (Fig. 30: 1).

Fragment of ceramic pot no. 2. At a distance of 6.4 m (310°) from the centre, at a depth of 0.9 m, a fragment of the wall of a ceramic vessel was found. The sherd is black at the fracture, decorated with oblique lines made by imprints of a large serrated stamp. The size and shape of the vessel is not established (Fig. 30: 2).

Flint. A longitudinal triangular fragment (trapezoidal in cross-section) without traces of secondary processing was found in the mound. The flint is light brown in colour, and measures 1.7×1.3×0.2 cm (Fig. 30: 3).

Fragments of a ceramic vessel (Middle Ages). At a distance of 12.0 m (135°) from R, at a depth of 1.0 m from R, two fragments of the wall of a red-clay circular ceramic vessel. The sherd is decorated with low parallel lines drawn on the potter's wheel. The size and shape of the vessel are not established (Fig. 30: 5).

2.5 Barrow 5

At the beginning of the research, barrow 5 was a rounded mound, 0.25 m high and 10 m in diameter. The mound fill was damaged by systematic ploughing. Geogrpahic coordinates of the barrow: 47°5′58.79″N, 37°6′43.76″E.

Excavation methods. The barrow was investigated using the method of parallel trenches with stratigraphic profiles between them. Before the work began, a grid of landmarks was laid out on the mound using a compass, stakes and tape measures. An instrumental survey of the mound was carried out using a theodolite, a leveller and a geodetic rail. Stratigraphic profiles were made across the top, slopes and layers of the mound in a north–south direction. There were two trenches on the mound. The Central, I Eastern and I Western stratigraphic profiles were left between the trenches (Fig. 31: 1). The soil was removed in horizontal layers (5–10 cm) using machinery. Telescopic front-end loaders Manitou MHT-X 735 were used during the works (CA 16).

Stratigraphy. The analysis of stratigraphic profiles and field observations made during the operation of machinery and horizontal stripping allowed us to make the following observations:

– topsoil with a thickness of 0.2 m
– a black soil layer up to 0.25 m thick (together with the topsoil);
– loamy virgin soil was traced from a depth of 0.75 m from R (Fig. 31: 2).

The burial complex in the mound

Burial No. 1 is the main one in the mound (cenotaph or itual complex? Cultural affiliation is not determined). It was discovered at a distance of 0.7 m to the north and 2.0 m to the east of R (2.1 m 80° from R). The bottom of the grave was at the level of the virgin soil layer, at a depth of 0.78 m from the modern surface (-0.83 m from R). The contours of the pit are not traced. The pit was filled with small and medium-sized stones (sandstone). There are no remains of the deceased. The burial does not contain any inventory (Fig. 31: 3).

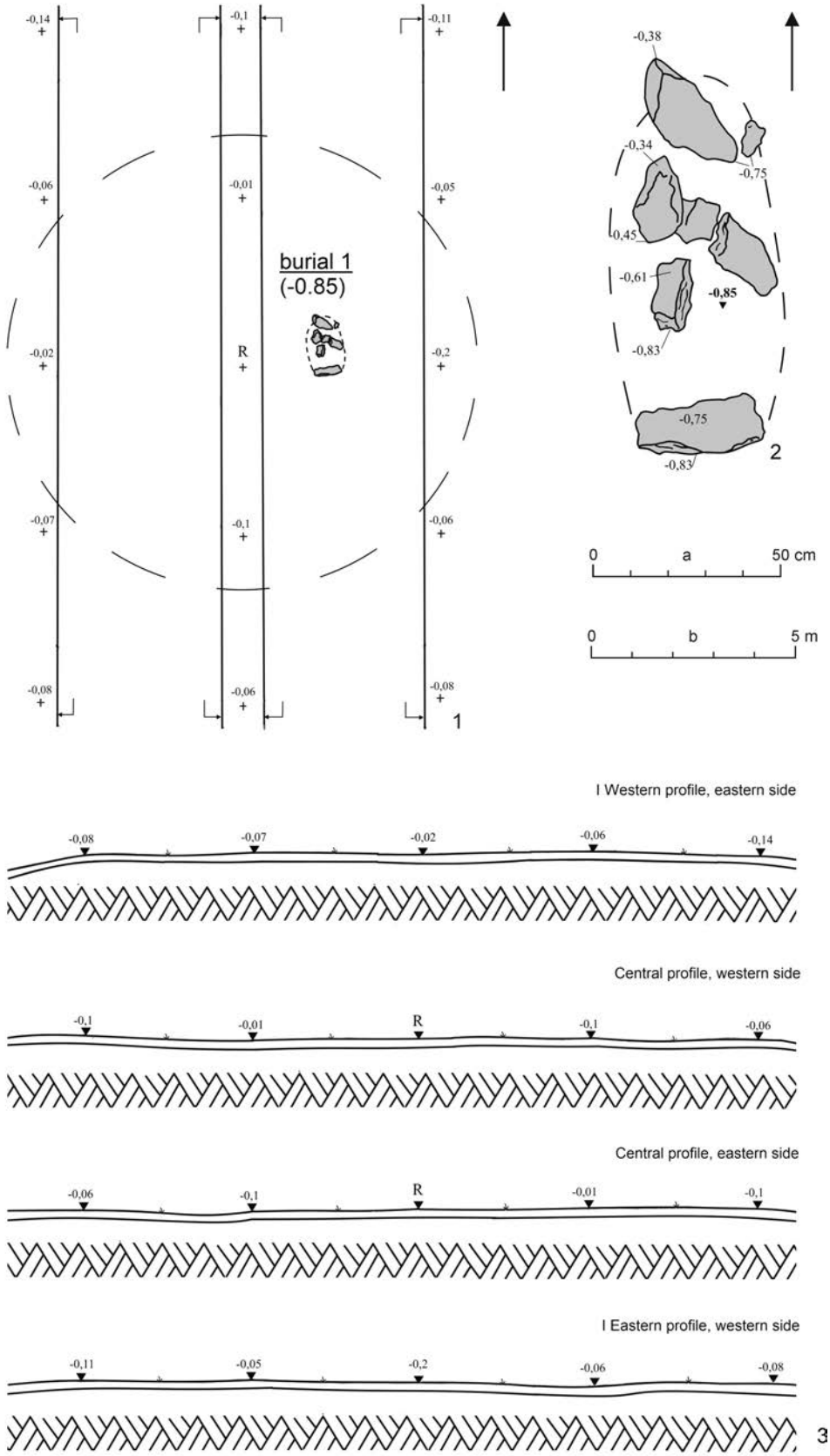


Fig. 31. Komyshuvate, general plan and stratigraphic profiles of barrow 5. Scale: a – 1, 3; b – 2.

3 CULTURAL AND CHRONOLOGICAL CHARACTERISTICS OF THE LATE BRONZE AGE BURIALS

The detailed description of the burial structures of the Zrubna culture of the North Azov Area, which includes both a set of statistical data and a description of individual elements of the burial structure, allows us to identify a certain variety of grave structures, as well as the stability of certain manifestations and elements of the funerary ritual. Despite the presence of some regional peculiarities, due to a number of natural, geographical and historical factors, the investigated burial structures reflect the general funerary traditions that are characteristic of the entire Zrubna entity.

The corpus of sources accumulated and available to the authors allows us to consider the ritual and inventory complex of the Late Bronze Age burials in the Komyshuvate mound group through the prism of the created general register of funerary sites of the Zrubna culture of the North Azov Area (Fig. 32).

The achievement of this goal will allow us to clarify and systematise the source base, to give a comprehensive formalised statistical description of the burial sites; and also to consider some aspects of the social organisation, material and spiritual culture of the Late Bronze Age tribes of the North Azov Area, based on the data of the studied necropolis near the village of Komyshuvate.

3.1 Topographical and landscape features

One of the authors of the monograph had analysed the topographical location of the mounds of the North Azov region, taking into account the identification of four zones. The zonal distribution is determined by the degree of remoteness from significant sources of fresh water, and is related to the landscape cross-section of the area: Zone I – floodplain; Zone II – first floodplain terrace (up to 1.5 km away

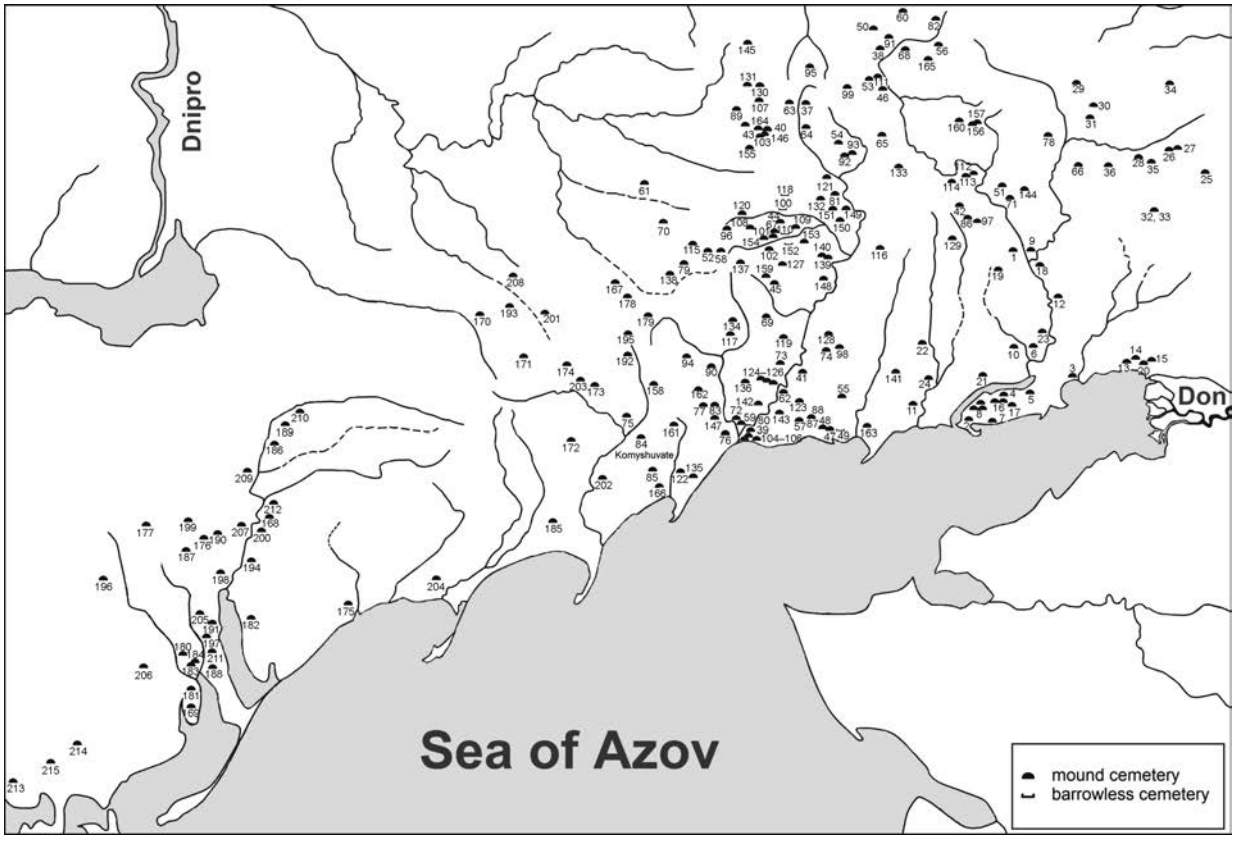


Fig. 32. Map of the investigated cemeteries of the Zrubna/Timber-Grave culture of the North Azov Area.

from the river); Zone III – second floodplain terrace, watershed ridges and edge of watershed plateaus (up to 10 km away from the river); and Zone IV – deep watershed plateaus (more than 10 km away from the river; *Zabavyn 2012*, 100–107). The barrow cemetery is located at approximately the same distance from the Komyshuvatka and Karatysh rivers (about 4 and 5 km respectively) and belongs to Zone III, as it is situated on a watershed ridge. Zone III contains 77% of the barrows of the Zrubna culture of the North Azov Area (*Zabavin 2019a*, 70).

It should be noted that the tendency of the Zrubna culture mounds to favour high areas (watershed ridges, promontories and edges of watershed plateaus) is already known to many researchers. It has been noted that watershed ridges and capes descending to water bodies are not only the most visible of the other sites, but also the closest to settlements located in the lowlands (*Lytvynenko 1994*, 67). Furthermore, according to V. Otroshchenko, the mound cemetery closest to the settlement was a place for community meetings and ceremonies; as such, the mound had not only a memorial, but also a cult function (*Otroshchenko 1990*, 6). Thus, it is considered promising to conduct an additional survey of the banks of the Komyshuvatka and Karatysh rivers in their middle reaches, in order to search for and study simultaneous settlement sites.

Researchers have repeatedly attempted to answer the question of the reasons for the intensity of the ancient population's penetration into the open steppe in different periods of history. For example, regarding the development process of waterless steppe areas in the Bronze Age, the authors assigned a decisive role to social phenomena, determined primarily by natural population growth in the context of extensive farming between the Dnipro and Molochna rivers (*Otroshchenko/Boltrick 1982*, 45). The development of extensive nomadic cattle breeding was also associated with the development of areas remote from significant sources of fresh water in the interfluve of the Oril and Samara rivers (*Kovaleva 1981*, 50). In addition, it is indisputable that the economy of any ancient society is always influenced by natural, climatic and landscape factors.

3.2 The layout of the mound group

The study of all the mounds of a mound group, rather than a single mound from its composition, opens up the prospect of scientific reproduction of the dynamics of necropolis creation, and makes it possible to trace certain patterns of mound construction of a particular archaeological culture. This approach is extremely positive, in the sense of enabling fully fledged scientific research and understanding. However, there have been few such cases.

The tasks of researching barrow cemeteries, which were assigned to Soviet-era expeditions at newly constructed sites, were motivated by economic needs during the creation of the reclamation network. In such circumstances, the mound groups were not fully investigated; only those mounds that "interfered" with economic activity were excavated. The same fate befell the Komyshuvate barrow burial ground, when in 1989 only three mounds out of five were investigated. It was only possible to complete the investigation 32 years later.

As it turned out, only three of the five mounds belong to the Zrubna culture, and are located at approximately the same distance from each other. In the vast majority of cases, the burial grounds of the Zrubna culture (Zone III) were formed next to or in proximity to older mounds of the Yamna or Babyne cultures. In our case, all three barrows of the Zrubna culture contained one main burial, and the largest of the barrows contained another inlet burial.

The cemetery we have studied is fully consistent with the general trend of mound construction of the Zrubna culture tribes in the North Azov Area. According to the arrangement of the mounds in the group, the cemetery demonstrates a linear layout, in which the mounds are lined up in a chain, more often in the latitudinal direction (*Gershkovych/Shepel 1987*; *Moruzhenko/Lytvynenko 1993*; *Posrednikov/Kravets/Tkachev 1994*; etc.), or in a north–south line (*Posrednikov/Zarayska 1993*).

In the North Azov region, the rows contained from two to four mounds of the Zrubna culture. This arrangement of mounds is mostly due to the terrain: the mounds are stretched along the ridges of watersheds, copying the contours of waterways or plateau slopes (*Kovaleva/Volkoboy 1978*; *Kramarev 2003*, 153; *Otroshchenko 1977*, 11). Moreover, in our case, the largest mound in the group, barrow 4, occupies the highest area in the watershed (Fig. 7: 3). The mounds of the Komyshuvate cemetery of the Zrubna culture (barrows 1, 3, 4) are aligned in a southwest–northeast direction. The mounds are round (barrows 1 and 3)

and oval in shape (barrow 4). It has not been possible to establish for certain which of the mounds is the oldest (or whether they were built simultaneously).

However, the fully or almost fully investigated large mound groups of the Zrubna culture allow us to speculate about the sequence of their construction. In this case, it can be assumed that the antiquity of the Zrubna culture mounds in the chain is determined by the degree of proximity to the central mound in the group. For example, in cemetery I, investigated on the Donetsk ridge near the village of Astakhove, the oldest is mound 3, built in the Early and Middle Bronze Age. In this mound there were burials of the Zrubna culture, which can be attributed to the early stage of the culture's development, according to cultural and chronological features. The nearby mound 2 contained burials of the developed and late stages of the Zrubna culture. In the Astakhove IV cemetery, the oldest burials were mound 22, of the Yamna culture (Pit Grave culture), and mound 18, of the Catacomb culture. Mound 18 and mound 17, which were merged, contained burials of the early and advanced stages. The chain of log mounds 15, 16 and 19 built next to them contained burials belonging to the late stage (*Evdokimov 1992*; *Lytvynenko 1994*, 70).

3.3 Funerary structures

The analysis of the funerary structure as an integral part of the funeral rite includes a description of the shape and size of the grave, its structural features, as well as the structures made of wood and stone in and above the grave.

Previously, one of the authors analysed a sample of 1,324 burials of the Zrubna culture of the North Azov region. The entire array of burials was divided into three groups according to the types of grave structures: burials in pits; burials in log chambers; and burials in stone tombs. The most common type of grave structure in the study area was a simple pit; in total, 88.2% of graves were classified as pit burials.[15] Wooden log chambers should be recognised as a rather rare type of burial structure. The group is represented by only five tombs, comprising 0.35% of the total sample. The type of funerary structure with stone tombs of various designs is represented by 157 complexes – 11.7% of the total sample (*Zabavin 2013*, 58–61).

The burial structures of the Zrubna culture of the Komyshuvate cemetery belong to the most common types: burials in pits and burials in stone tombs. Of the four graves, only one (burial 1 of barrow 3) is represented by a simple pit. The covering of the burial 3 of barrow 3 has not been preserved, but it can be assumed that it was organic (wood, reeds, etc.). All other burials of the mound group were arranged in stone tombs. In the main burials (barrows 1 and 4), stone blocks were set on their edges. For the secondary grave (burial 1 of barrow 4), horizontal masonry was traced.

In the Ukrainian archaeological literature, there is no established scheme of classification and typology of Bronze Age burial and domestic masonry structures; hence, researchers have borrowed from ancient archaeology to some extent. This statement, for example, applies to stone tombs built by horizontal masonry walls of stone blocks or slabs. These constructions have already attracted close attention of researchers (*Gershkovych 1982*, 15–21; *Lytvynenko 1992a*, 37–39; *2000*). Sometimes authors refer to this particular type of stone tombs as "cists" (Latin *cista*, English *cist* – stone box or tomb; *Lytvynenko 2000*, 3–18; *Tsymidanov 2004*, 48) or "stone crypts" (*Otroshchenko 1981*, 97). Thus, in addition to such well-established definitions as "stone box" and "cist", in Ukrainian historiography, the terminology system is beginning to use "orthostatic masonry" (vertical), "flagstone masonry" (horizontal), etc.

Consequently, the authors highlight their interest in S. Kryzhytskyi's research on the development of a methodology for describing the masonry of ancient cities of the Northern Black Sea region. According to this researcher, a clear, detailed description of the found structures and a unified terminology make it possible to conduct a comparative analysis between different structures, identify their inherent features and look for analogies to them. Thus, all descriptions must be carried out according to a certain system, which is the same for all objects of the study group. On this basis, the author proposed a scheme for the classification and description of masonry, which consisted of four main sections: general description, material characteristics, masonry system, drawings and photographs (*Kryzhytskyi 1965*, 39–47).

To a large extent, the mounds of the Zrubna culture of the North Azov Area are characterised by a variety of stone architecture. In addition to burials in stone tombs, three main types of stone mound

[15] It is often difficult to accurately trace the contours of a burial pit, as most secondary graves are made in the black earth layer of the mound. The grave structure is recorded in cases where the pit is dug in the virgin soil soil. It would be logical to assume that in cases where the pit was not recorded in black soil, an ordinary pit also served as a grave structure.

structures are known in the region: 1) cromlechs and enclosures; 2) stone casings and outlines; 3) stone mounds and establishments. The area of distribution of mounds with stone structures is quite extensive. However, the use of stone in mound construction is unevenly distributed and is not typical for the entire region under study. The mapping method allowed us to identify the location of burials with stone structures in the immediate vicinity of the raw material base. These cemeteries tend to occupy the areas of the Donetsk Ridge and the Azov Upland, which are rich in open outcrops of natural stone. The Don delta is the eastern border of the area with a widespread use of stone in funerary rites. In the western part of the Donetsk Ridge, in the upper reaches of the Dnipro basin, the use of stone in burial mound construction was not practised. Large-scale stone structures to the west of the Berda River also remain unknown (Fig. 33).

Stone tombs of the North Azov Area are traditionally divided into three main groups according to their design features (*Lytvynenko 1992a*, 37–39). The first group includes the most characteristic and widespread type of stone tombs, constructed of stone slabs placed vertically on an edge (single-row orthostatic masonry). This group includes 114 burials, which constitutes 8.5% of all complexes, or 72.6% of all tombs in stone boxes. In addition, 42 complexes (36.8%) are main burials in mounds, and in 27 cases (23.7%) topsoil was poured over the burial (Fig. 34).

Stone tombs of Group I were usually built in pits similar in size to ordinary ground burial structures. However, the constructions of stone tombs of the first group have some variability. In most cases, the stone blocks were lowered into the pit and placed vertically or with some inclination along its walls. There are known tombs where the transverse short walls are made of a single slab, and the longitudinal long walls are made of several small vertically installed blocks. Sometimes during the fieldwork it was possible to trace shallow grooves along the bottom of the pit, into which the wall slabs were dug. The space between the stone slabs and the pit was subsequently filled with soil, and occasionally with stones. Sometimes the stones were fitted to each other quite tightly, with the remaining gaps filled with small stones. In some cases, it can be assumed that some of the installed slabs were fixed or wedged

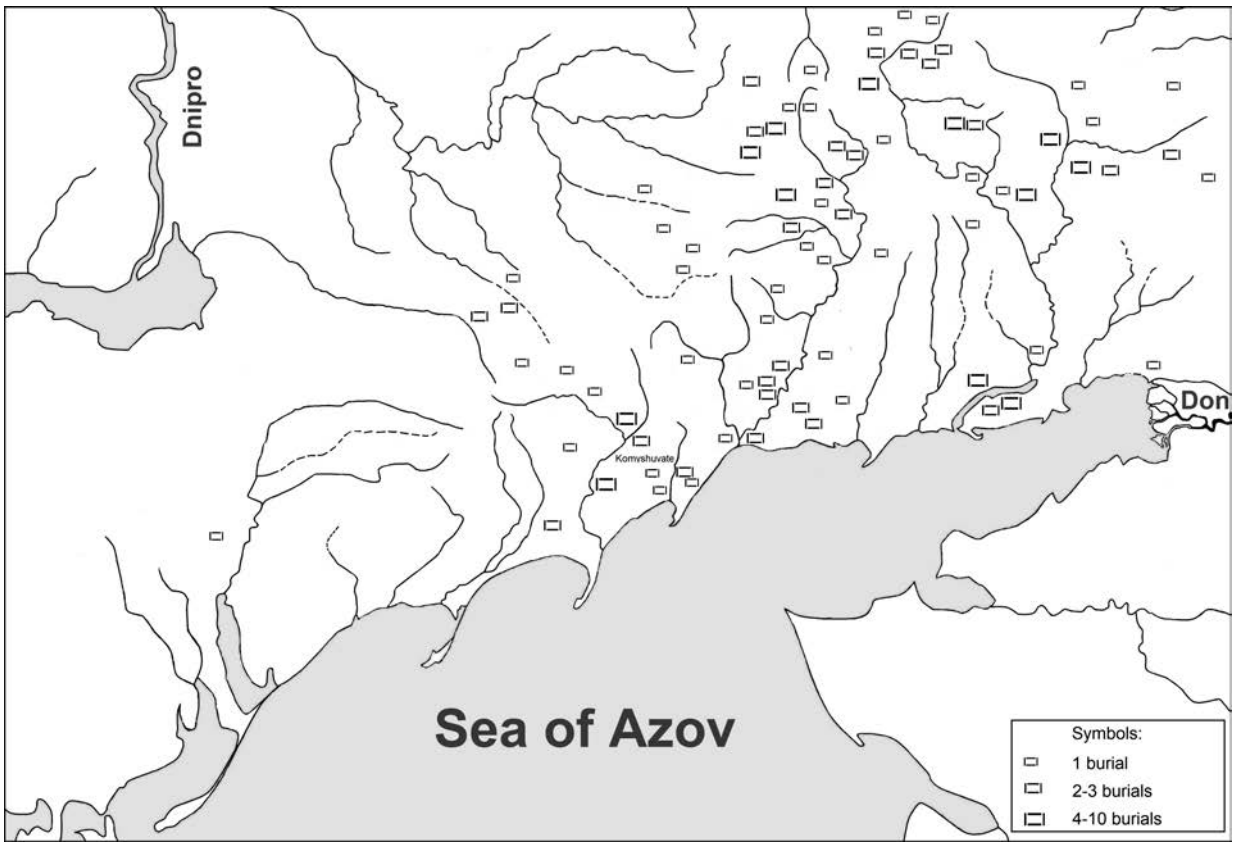


Fig. 33. Map of the distribution of burials in stone tombs.

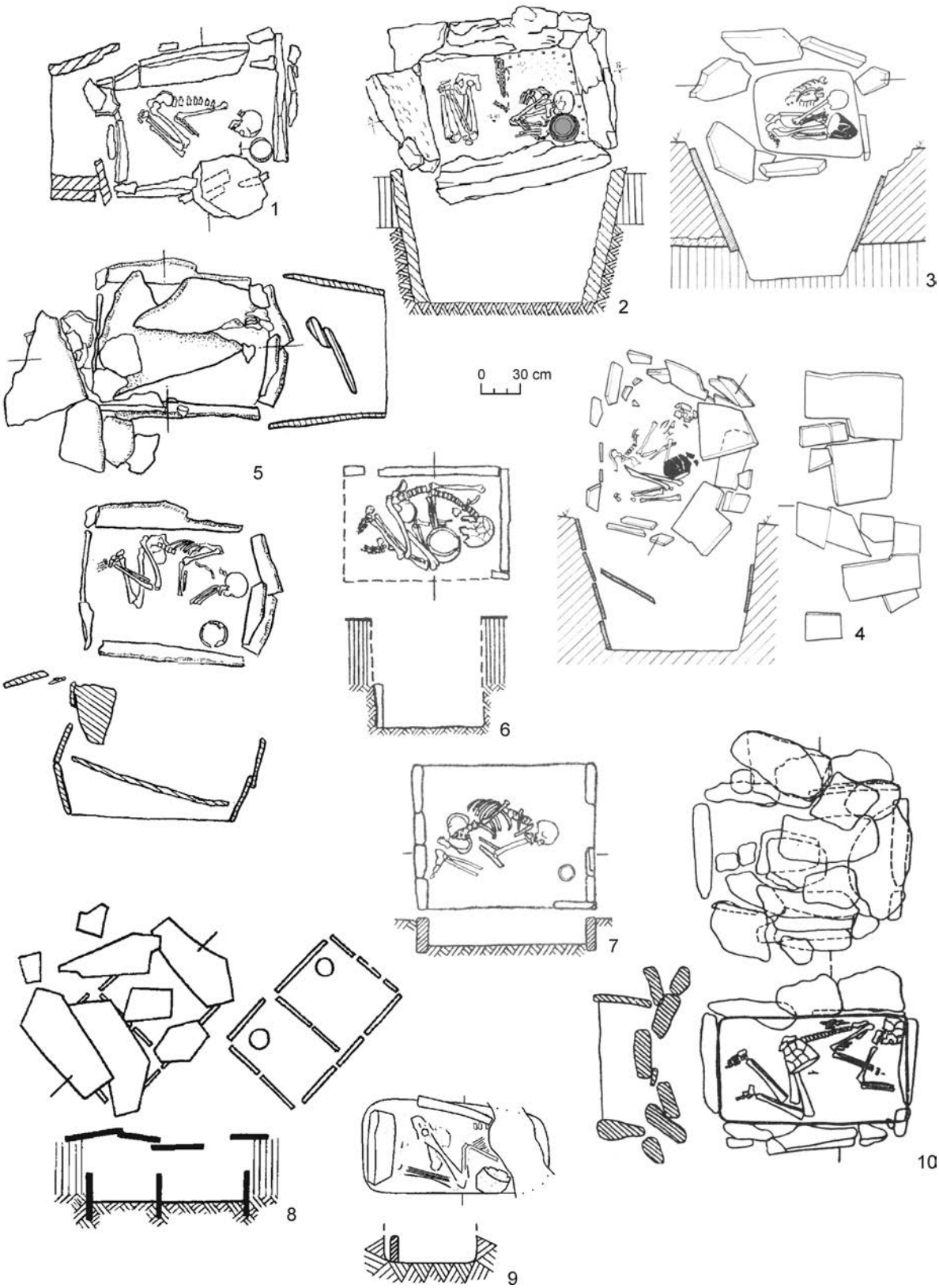


Fig. 34. Burials in stone constructions – group I. 1 – Rozdolne, mound (m) 3 burial (b) 4; 2 – Komyshuvate, m. 1 b. 1 (*Kulbaka/Gnatko 1989*); 3–4 – Zrubne, m. 7 b. 7, m. 1 b. 3 (*Moruzhenko/Lytvynenko 1993*); 5 – Pishchane, m. 3 b. 1 (*Bratchenko 1997*); 6 – Novoamvrosiivka, m. 1 b. 1 (*Kosikov 1996*); 7 – Mykolaivka, m. 4 b. 2 (*Privalova 1999*); 8 – Druzhnyi, m. 2 b. 3 (*Klimenko/Usachuk/Cymbal 1994*); 9 – Vysoke, m. 5 b. 4 (*Kulbaka 1988*); 10 – Kinski Rozdory, m. 3 b. 8 (*Pleshivenko 1995*).

with wedges. Some tombs had walls consisting of a single solid slab or were lined with small flat stones (Fig. 34: 1–5).

In some cases, the upper edges of the vertical slabs slightly protruded above the level of the ancient horizon, and sometimes the walls of the tomb were framed by single-layer horizontal masonry. There are cases of similar structures inside stone fences (*Lytvynenko 1990*, 74, 75; *1992a*, 37; *Potapov 2013*, 85). A small number of the tombs of the first group is characterised by incomplete construction, with one or two walls missing (Fig. 34: 6, 7, 9). Moreover, similar features have been repeatedly documented in intact, closed burial complexes of various cemeteries (*Lytvynenko 1992a*, 37). In total, we have noted 16 such cases in the Azov region (14% of all burials in chests of the first group), of which in 11 burials (9.6%) the box consisted of only three walls, and in 5 cases (4.4%), of two.

A. Usachuk called such stone structures "half-chests". According to the researcher, these tombs constitute a separate group of burials. In addition, the subgroup of incomplete chests, with certain reservations, includes the only burial known to us (Obilne, burial 4 of barrow 1) where the presence of a single vertically installed wall was recorded (*Usachuk 1991*, 48). In the other case (Druzhnyi, burial 2 of barrow 2), the division of the stone chest by a vertical slab partition into two almost equivalent chambers can be recognised as a structural feature of the grave (Fig. 34: 8).

The second group of burial structures comprises stone tombs built by horizontal masonry walls of stone blocks or slabs. Considering the burial structures of the Zrubna culture of the Azov-Donetsk region, R. Lytvynenko classified complex structures as groups II and III (*Lytvynenko 1992a*, 37–39). Group II includes stone tombs with horizontal masonry walls (Fig. 35: 1–3, 7), and Group III contains combined tombs or mixed-type structures, with walls made of vertically installed slabs in various combinations with horizontal masonry (Fig. 35: 4–6).

Since both types involve the use of horizontal masonry walls in the construction of the funerary structure, we tend to consider burials in classical cists and combined chests as part of a single group of burials, in stone tombs of complex construction. In addition, the transition from one type to another is often difficult to distinguish, due to the multitude of design options, the degree of site preservation, and the quality of field recording.

Thus, according to the proposed classification, burial 1 of mound 1 of the Komyshuvate cemetery belongs to Group I (tombs with vertical masonry walls), burial 1 of mound 4 to Group II (tombs with horizontal masonry walls), and burial 2 of mound 4 to group III (combined tombs with horizontal and vertical masonry walls).

Researchers have already noted that the technique of masonry used in the walls of complex tombs is usually determined by the nature of the available building material. Thus, in accordance with the geological features of the Donetsk Ridge, the walls of all tombs in this region are multilayered masonry of flat slabs of sandstone or other shales (*Lytvynenko 1994*, fig. 57).

The Azov upland, which is rich in granite outcrops, is characterised by tombs built from this material. Here, the lower, bottom part of the walls is always made of massive blocks, while the upper part is made of thinner flat stones. In the Azov Lowland, there have been found tombs made of rock containing shells, whose natural unevenness causes some disorder in the masonry of the walls (*Lytvynenko 2000*, 3, 4).

In such cases, a technique was probably used that involved filling internal irregularities in the wall surfaces, or gaps between slabs, with mud or clay solutions. A similar technique has been traced on the lower reaches of the Kalmius River (Zhovtneve, burial 5 of barrow 1), where clay putty was found between the "shell-rock" stones that made up the oval-shaped tomb (*Gershkovych 1982*, 17, fig. 2). Similar cases have also been found in burials of the Sabatynivka and Zrubna cultures, made in structurally similar stone tombs, which were investigated on the right bank of the Dnipro (*Kliushyntsev 1989*, 254; *Otroshchenko 1981*, 97).

Since the main types and design features of this group of burials in stone tombs have already been described in detail many times, we will present only some statistics and a general description. The group under consideration includes 43 burials of the Zrubna culture of the North Azov Area, which is 3.1% of the burials of the entire massif (or 27.4% of all graves in stone tombs). Furthermore, 16 burials (37.2%) were in mounds, and in 28 cases (65.1%) a topsoil layer was laid over the burial.

We have divided by horizons the Azov complexes of the Zrubna culture, according to different types of burial structures (Table 1). This allows us to clearly illustrate the previously identified chronological features, reflecting the time of appearance of a particular type (*Lytvynenko 1992a; 1999a*).

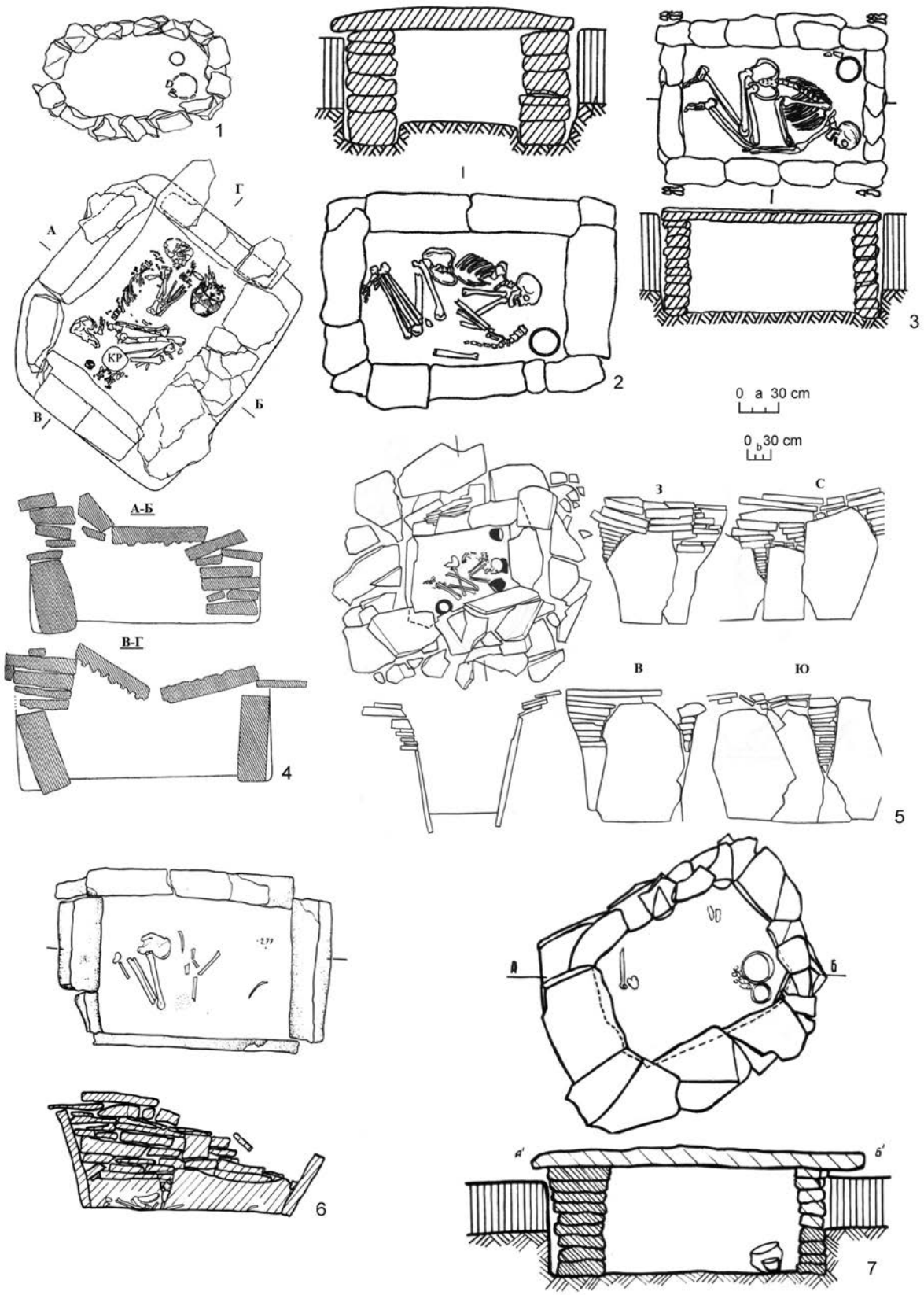


Fig. 35. Burials in stone constructions – group II and III. 1 – Kominternove, m. 1 b. 3 (*Kulbaka/Zabavin/Nebrat 2009*); 2–3 – Mykolaivka, m. 3. b. 1, m. 6 b. 1 (*Privalova 1999*); 4 – Zintseva balka, m. 1 b. 2 (*Usachuk etc. 2007*); 5 – Videnske, m. 1 b. 1 (*Kulbaka/Kachur 2002*); 6 – Novozarivka, m. 1 b. 3; 7 – Pryovrazhne, m. 3 b. 1 (*Lytvynenko 2000*). Scale: a – 1–4, 6, 7; b – 5.

Table 1. Distribution of different types of burial structures by horizons.

Structure / Horizons	log chambers		pits		boxes		cists		Total	
	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%
I horizon	-	-	64	100	-	-	-	-	64	100
II horizon	5	0.6	699	87.4	73	9.1	23	2.9	800	100
III horizon	-	-	431	88.5	32	6.6	24	4.9	487	100
In total	5	0.4	1194	88.4	105	7.7	47	3.5	1351	100

In general, the use of stone tombs is associated with the developed and late stages of the existence of the Zrubna culture. As for the cists and boxes of complex construction, the available materials allow us to attribute them to the end of the developed to the beginning of the late stage of the Zrubna culture of the Donets River (*Lytvynenko 1992a*, 42); or to the II–III horizons of the cemeteries of the North-Eastern Azov region (*Lytvynenko 1999a*, 19).

3.4 The position of the bodies of the deceased and ritual food

It is often observed that the funerary rites of the Zrubna culture look somewhat "standardised". Perhaps this is primarily due to the ritual norms of corpse laying (inhumation). Statistical calculations have shown that the most common form of burial in the North Azov Area is an individual corpse lying crouched on the left side, with the arms bent at the elbows and placed near the face or in front of the chest.

The dominant form is the placement of the body on the left side with the head pointing to the east (Fig. 36). According to our estimates, in 92.5% of burials (in which the primary position of the bodies was established), the deceased were laid on their left side. In the burials of the Zrubna culture of the North Azov Area, the positions of the deceased's hands were recorded, among which six main variants were identified: 1) both arms bent at the elbows, the hands placed in front of the skull or chest – W (75.6%); 2) the right arm is extended to the knees or along the body, the left arm is bent at the elbow with the hand in front of the face or in front of the chest – ⌞| (1.7%); 3) the left arm is extended to the knees or along the body, the right arm is bent at the elbow with the hand in front of the face or chest – |⌟ (7.9%); 4) one bent arm is brought to the skull with the hand, the other to the elbow joint of the first – LV (12.2%); 5) both arms are at right angles to the spinal column – ⌞⌞ (1.4%); 6) both arms are folded on the chest or abdomen –⌞⌟(1.2%; Table 2).

The position of the hands of the deceased, when both arms are bent at the elbows, with the hands placed in front of the skull or chest (W), was recorded in 75.6% of Azov burials (*Zabavin 2018*; *Zabavin/ Bulyk 2020*, tab. 2, fig. 2). The studied burials of the Zrubna culture of the Komyshuvate burial ground to some extent demonstrate these patterns.

Table 2. Positions of the deceased's arms in North Azov Zrubna culture burial sites.

Position	I	II	III	IV	V	VI	TOTAL
	W	⌞|	|⌟	LV	⌞⌞	⌞⌟	
Quantity	478	11	49	77	9	8	632
Ratio (%)	75.6	1.7	7.9	12.2	1.4	1.2	100

The remains of funerary meat food are recorded in burials, in the form of individual animal bones. They were present in burials 1 and 2 of barrow 4. In burial 1, a small part of a tubular bone was found near the knee of the left leg. In burial 2, the remains of a farewell meal in the form of lumbar (sacral) bones of an animal were found near a wooden vessel.

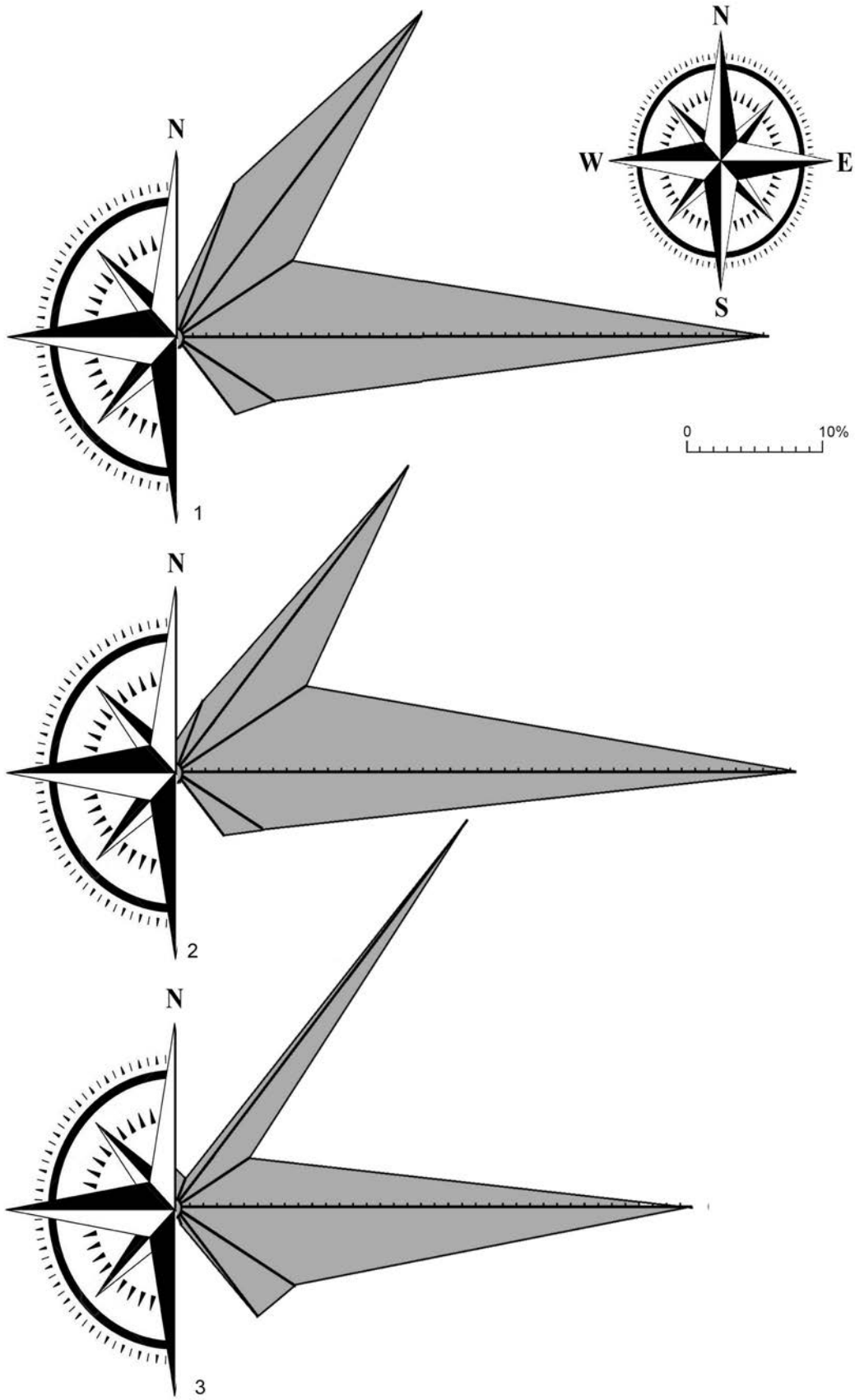


Fig. 36. Diagrams showing the orientation of the buried people in graves of Zrubna culture. 1 – North Azov Area; 2 – Azov Area (lowlands and highlands); 3 – Donets ridge.

Meat food, which is recorded by the presence of animal bones in the complexes, was widely used in the funerary practice of the carriers of the Zrubna culture of the North Azov Area. According to our data, 7% of the burials contained animal bones, which can be interpreted as the remains of funeral food. In a number of cases, animal bones were located close to funerary vessels, but the remains of meat food directly in the vessel were recorded in only three cases (including once when the bones of a small animal were directly on a fragment of pottery). In two other cases, the bones were located directly on a wooden dish or in a vessel (*Zabavin/Nebrat/Bulyk 2021*, 97).

Funeral food in the form of an animal sacrum was found in only 10 burials of the Zrubna culture of the North Azov Area (approximately one case per 150 burials), including the one investigated in the Komyshuvate cemetery. The mapping of burials containing the remains of farewell food in the form of animal bones, including sacral bones (Fig. 37), allowed us to identify most of these complexes in the territory of the Azov Upland and Lowland between the Berda and Kalmius rivers (70% of cases).

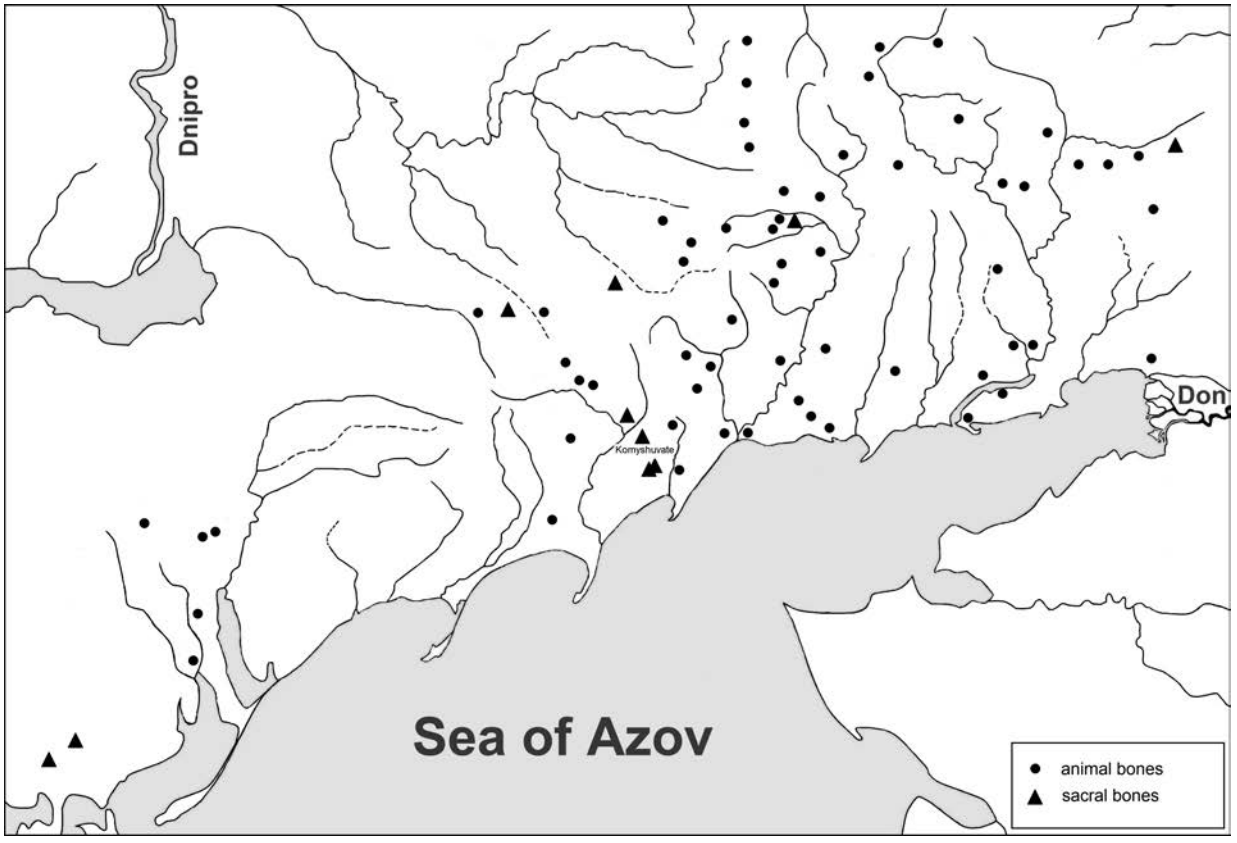


Fig. 37. Map of the distribution of burials containing animal bone remains, including sacral bones.

3.5 Ceramic vessels

An integral part of the funeral rite was the tradition of accompanying the deceased with food/drink in ceramic vessels. Ceramics remains the most widespread category of finds in the burials of the Zrubna culture. The burials of the Komyshuvate cemetery contained one vessel each. In addition, during soil research, fragments of ceramic vessels were also found in the grave fill above the stone roof in burials 1 and 2 of barrow 4 (Fig. 38).

The ceramic complex of the Zrubna culture of the North Azov Area is formed by several types of vessels, which are grouped according to morphological characteristics or functional features. According to a simplified but generally accepted classification scheme for the ceramic ware of the Zrubna culture

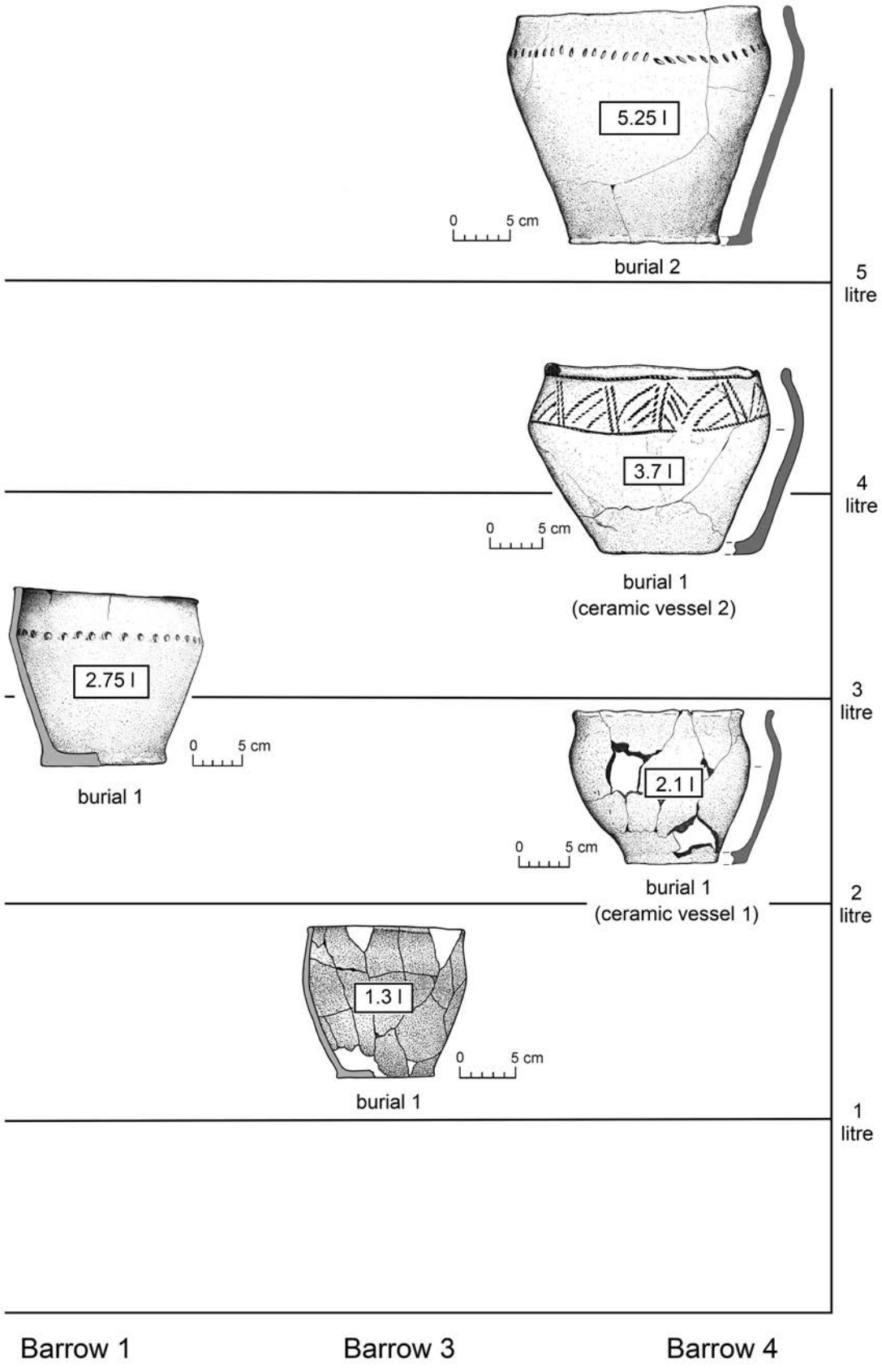


Fig. 38. Table of the volume of ceramic vessels from the Komyshuvate burial site.

("ceramic triad"), these consist of sharp-curved vessels, round-sided pots, and jars. However, it should be noted that these three main types cannot cover the entire variety of pottery. Researchers have repeatedly emphasised the distinction between these types of transitional forms (*Cherednichenko 1973*, 16; *Gorbov 2001*, 29; *Lytvynenko 1994*, 127; *Zabavin 2019b*, 92).

The qualitative features manifested in the shape and proportions of the vessels, the composition of the clay matrix, surface treatment and ornamentation allowed us to attribute the ceramic corpus of the burials of the Komyshuvate cemetery to the second (developed) horizon of the Zrubna culture of the North Azov Area.

The ceramic complex from the Komyshuvate burials is divided into two classes depending on the presence or absence of a neck: vessels without a neck and vessels with a distinct neck. The jar-shaped vessel from burial 2 of barrow 4 is classified as type A – closed jars with shoulders and a rim pulled inwards. The rest of the ceramics – vessels with a distinct neck – are divided into two groups: pots and sharp-curved vessels. Low necks, outwardly curved rims and pronounced shoulders located in the upper third of the vessel characterise pots. In turn, the pots are classified as type B – squat – if the diameter of the body is larger than the height of the vessel (Fig. 39; *Zabavin 2019b*, 97).

We have information on 742 burials of the Zrubna culture of the North Azov region, for which it is possible to zone the location of ceramic vessels in the grave. Zone I, in front of the chest and head, is the most characteristic for ceramic placement (84.3% of cases). In the overwhelming majority of cremations, the vessels were also located in the southeastern corner of the grave structure. That is, given the predominantly eastern orientation and left-sided position of the deceased, they was also located in Zone I. Vessels in Zone IV – located behind the head and back above the pelvis – were found in only 9.8% of cases.

It was suggested that the selected Zones II–V location of ceramic vessels in relation to the body of the deceased could be recognised as "extraordinary" for the funerary practice of Zrubna culture of the North Azov region. The presence of pottery in these positions should also be considered as indirectly indicating that the complex belongs to earlier chronological horizons (*Zabavin 2019b*, 92, tab. 3).

3.6 Wooden bowl with a bronze overlay

The degree of preservation of wooden objects in the burials of the Zrubna culture of the North Azov Area does not always allow us to identify and determine their functional purpose. In eight cases, in addition to the wooden bowl studied in burial 2 of barrow 4 near the village of Komyshuvate, we observe finds of wooden vessels, which are proposed to be divided into three types: dishes, bowls, and scoops.

The structural elements of Bronze Age wooden vessels include bronze or copper overlays or application shackles (sometimes with wood residues), nails or rivets, and possibly hanging rings. Here we can also mention all kinds of brackets or staples, which were intended for connecting and fastening parts of various small wooden objects. Their shape and purpose is not always clear. Wooden vessels in funerary complexes are most often identified by these metallic elements; hence, they are frequently used to resolve a number of technological and cultural-chronological questions.

The analysis of the remains of a wooden bowl studied in burial 2 of barrow 4 allows us to make some observations on the technology of manufacturing this category of funerary equipment. The wooden bowl is probably round in shape, of which only the remains of rotten wood and small fragments of the bronze plate (application overlay) have survived. The edges of the rim are rounded, up to 1.0 cm thick. The diameter of the reconstructed rim is approximately 15.0 cm. Based on the length of the bronze nails (0.6–1.1 cm) used to fasten the bronze plate to the wood, we can assume that the thickness of the object's wooden base was at least 1.5 cm. The height of the bowl and the diameter of the bottom part are not known. However, thanks to the shape of the bronze plate, it was possible to establish its depth of approximately 3.5 cm, and the angle of inclination of the inner walls of the bowl at 60°.

The bronze application from Komyshuvate was completely reconstructed and glued. The product is of a complex elongated shape, rectangular with rounded protrusions on the sides and ends, which had holes for fastening.

The plate's thickness is 0.1–0.05 cm. The total length in the unfolded state is 16.5 cm, and the maximum width is 3.0 cm. Remnants of a "herringbone" ornament made with a punch can be traced on the entire surface of the product. The overlay was fastened to the wooden base from the inside, with six pairs

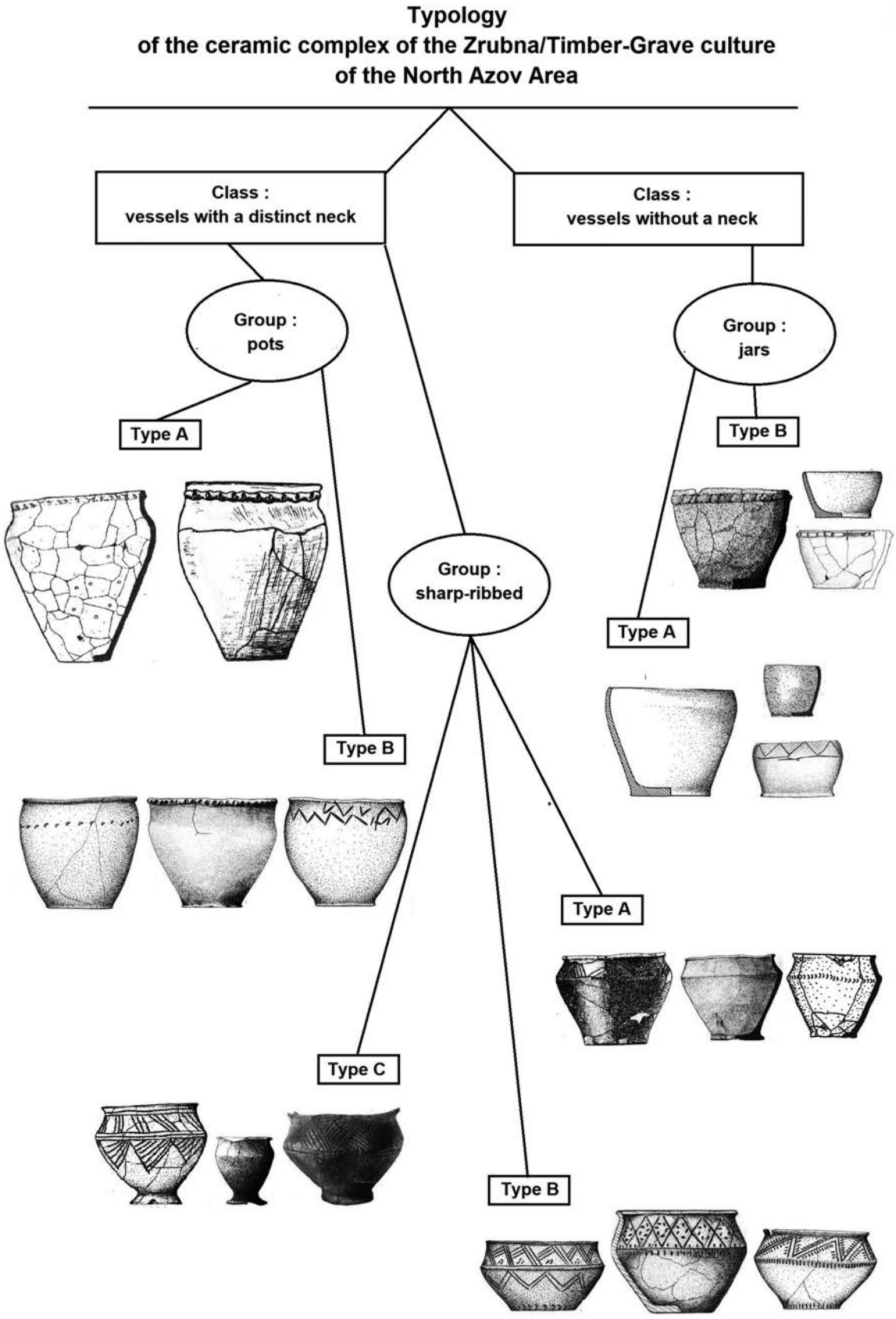


Fig. 39. Typology of the ceramic complex.

of miniature bronze nails and one pair of rivets at the ends. The rivets and nails take the form of a truncated cone, made from bronze plates twisted into a tube. The nails with the thinner end are inserted into the hole in the plate and driven into the wall of the bowl. Nail dimensions: length 0.6–1.1 cm; head diameter 0.3–0.5 cm; stem diameter 0.2 cm. The rivets are inserted into a pair of matching holes in the rim of the bowl: the outer end of the rivet is flared and the inner end is loose. Dimensions of rivets: external length 1.5 cm; internal length (head spacing) 1.2 cm; stem diameter 0.2 cm; embedded head diameter 0.45 cm; closing head diameter 0.35 cm.

As for the type of wood from which the bowl was made, it should be noted that there are no special laboratory tests for wood from the investigated complex. However, it was previously suggested that burl wood species were traditionally chosen for the manufacture of utensils. In particular, utensils made of oak, birch bark and vine wood were used (*Lyashko 1994*, 145–147). Through the analysis of wooden vessels from the Bronze Age and the Early Iron Age, the raw materials for the manufacture of wooden vessels were identified: the Catacomb culture – chestnut, oak bark, alder and maple; the Zrubna culture – maple; the Scythian culture – maple; the Sarmatian culture – maple (*Minakova 2018*, 140).

According to the researchers, a comparison of the physical properties of the wood species used to make the wooden vessels showed that neither hardness nor resistance to rotting, cracking and deformation were decisive in the choice of raw materials. The only feature that distinguished the trees from which the wooden vessels were made was that they could be cut easily. Aesthetic preferences also played a role. For example, maple, among other characteristics, has a very beautiful texture, which may have contributed to its popularity in woodcarving. Also, later analogies (in particular, medieval) indicate that maple was preferred as a material for tableware in the forest-steppe zone (*Minakova 2018*, 142).

Wooden containers are quite rare in the burials of the Zrubna culture of the North Azov Area (Fig. 40). Despite the fact that the range of bronze products in the Late Bronze Age is quite wide, this is a relatively rare category of finds in settlements and burials of the Zrubna culture. Among the array of 1,515 burials studied, bronze objects were recorded in only 44 burial complexes, which is about 2.9% of the total.

The mapping of the barrow cemeteries of the Zrubna culture of the North Azov Area containing metal objects (especially knives) has shown a tendency of a decreased proportion of burials with metal as one moves south and east in the Azov region. Thus, the vast majority of burials with metal are concentrated on the territory of the southern spurs of the Donetsk Ridge, in the upper reaches of the rivers of the Azov Sea basin. The mounds of the North Azov Area proper (Azov Lowland and Upland) are much less rich in bronze products (Fig. 41; *Zabavin 2022*, fig. 1).

In the North Azov Area, in addition to the published complex, there are two burials with wooden vessels with bronze plates (appliqués). Both were surveyed in the western part of the study area within Zaporizhzhia oblast. In the burial of an adult (Vysoke, burial 1 of mound 6), mainly in the mound, a wooden vessel with bronze bands containing ram bones was found: this is an oval-shaped wooden dish measuring 30×25 cm with widely curved walls. The plates are thin bronze strips, bent in half, curved on the inside. One plate, 2.5 cm wide and about 7.0 cm long, was attached to the wood with two 0.3 cm diameter rivets. The second plate is similar to the first, but smaller: 2 cm wide and 5 cm long (*Boltryk/Havryliuk/Fyalko 1985*).

The second set of bronze plates also comes from the burial of an adult (Novoukrainka, burial 7 of barrow 3). These are the remains of a wooden vessel with bronze appliqués on the rim. The set of overlays for a severely deformed wooden vessel consists of two flat and two curved plates, which are sub-rectangular in plan. The ends were fitted with truncated cone-shaped rivets, made from a flat plate twisted into a tube. One end was inserted into the plate hole and flared. The other end was passed through the wall of the bowl, then bent and flattened. The plates were fixed by sliding one under the other. The dimensions of the plates are: flat 2.5×3.3×0.02 cm and 2.0×3.3×0.02 cm; curved 3.9×2.1×0.02 cm and 3.1×2.0×0.02 cm. The rivets are 1.3 cm to 2.0 cm long, 0.3 cm to 0.5 cm in diameter at the base, and 0.2 cm to 0.3 cm at the top. The same burial contained a bronze object of unclear purpose, square in shape and flat in cross-section. It is made of a flat plate bent in half twice; one of the corners is deformed. It measures 1.3×1.3 cm, and is 0.2 cm thick (*Antonov/Otroshchenko 2004*, 23, fig. 3).

Dishes were recorded in five burials; in all cases they contained animal bones, and once a bronze meat knife was combined with a dish. In all cases, the dishes had an elongated oval or ellipsoidal shape. In burial 4 of barrow 1 near the village of Klunykove, Luhansk region, the remains of an ellipsoidal dish

Fig. 40. Map of the distribution of burials with wooden utensils. 1 – Vysoke, m. 6 b. 1; 2 – Komyshuvate, m. 4 b. 2; 3 – Zakharivka, m. 1 b. 1; 4 – Novoukrainka, m. 3 b. 7; 5 – Tekstylnyk, m. 3 b. 1; 6 – Shakhtarsk, m. 10 b. 1; 7 – Klunykove, m. 1 b. 4; 8 – Bobrykove, m. 5 b. 1; 9 – Blahivka, m. 1 b. 2.

were found: the preserved dimensions are 37×22 cm (reconstructed length is 50 cm). An oval dish measuring 70×36 cm was found in burial 1 of mound 10 of the Shakhtarsk burial ground. In burial 1 of mound 3 of the Donetsk "Tekstylnyk" cemetery, a dish of ellipsoidal shape, measuring 70×27 cm and 5 cm high, is well preserved. The dish has a gently sloping rim 2.5 cm high along the short sides; 1.2 cm high legs were carved near the base (*Lytvynenko 1994*, 134). In burial 1 of barrow 1 near the village of Zakharivka, the remains of an ellipsoidal dish, preserved in fragments, measuring 37×25 cm (reconstructed length 45 cm) were recorded (*Moruzhenko etc. 1989*). In the aforementioned burial near Vysoke, an oval-shaped wooden dish measuring 30×25 cm with widely bent sides and bronze plates was found, containing ram bones (*Boltryk/Havryliuk/Fyalko 1985*).

In two cases, the wooden bowls were so well preserved that details could be recorded. A rounded bowl with a diameter of 14 cm was found in burial 2 of barrow 1 near the village of Blahivka. The poor preservation of the product does not allow us to judge its design features (*Lytvynenko 1994*, 134). The second bowl, with a set of bronze plates, comes from the above-described burial 7 of barrow 3 near Novoukrainka village – the remains of a wooden vessel with bronze plates on the edges (*Antonov/Otroshchenko 2004*, 23, fig. 3).

The presence of wooden scoops was recorded probably in two burials. In burial 1 of barrow 5 near Bobrykove village, Luhansk region, a bronze plate with a through hole for fastening was found inside a ceramic vessel, which could be a part of a wooden scoop. In the aforementioned burial with a dish from barrow 10 near Shakhtarsk, a boat-shaped wooden scoop with a rounded base and inwardly curved edges, 24 cm long, 9 cm wide, 8 cm high, and 0.4 cm thick walls, was partially preserved (*Lytvynenko 1994*, 135).

Figure 41. Map of the distribution of burials containing metal objects.

In addition, a piece of a bronze flat wire (clip) bent in the shape of an irregular rectangle was found in burial 7 of barrow 1 near the village of Orlovske, Donetsk region. Dimensions of the item are 1.0×0.5 cm, width 0.2 cm, thickness 0.1 cm (*Zabavin 2010*, 180). Regarding all kinds of bronze brackets, staples or loops that have been repeatedly recorded in the funerary complexes of the Zrubna culture, the following explanation can be noted. According to V. Otroshchenko, bowls could be worn on the belt (*Otroshchenko 1992*, 72).

3.7 Conclusions

In general, according to V. Otroshchenko's concept of two funerary traditions or lines of development of the Zrubna cultural entity, the investigated site belongs to the zone of absolute predominance of the Berezhnivka-Mayivka Zrubna culture (BMZK), in terms of its territorial and cultural-chronological features (*Otroshchenko 1994*; *2003*; etc.).

The analysis of the topographic location of the Komyshuvate burial ground, taking into account the identification of four zones determined by the degree of remoteness from significant sources of fresh water and the peculiarities of the landscape cross-section of the area, allowed us to assign the mound group to Zone III (up to 10 km distance from the river, and location on a watershed ridge or on the edge of a watershed plateau).

According to the shape of the mounds in the group, the cemetery demonstrates a linear layout. This corresponds with the general trend of mound construction among tribes of the Zrubna culture in the Northern Azov region. The mounds of the burial site are lined up in a chain stretching along the south-west–northeast line.

The studied funerary structures of the Komyshuvate kurgan cemetery demonstrate common funerary traditions that are to some extent characteristic of the sites of the entire Zrubna cultural area. In particular, the most common form of burial is considered to be individual inhumation in a regular pit, in a bent position on the left side, with the arms bent at the elbows and placed near the face or in front of the chest of the deceased, with the head facing east. A mandatory attribute of a funerary dowry is a ceramic vessel (or, more precisely, food/drink in a ceramic vessel), which is located near the head or chest of the deceased. Such ritual norms are widespread throughout the entire area of the Zrubna culture.

Stratigraphic observations and analysis of the ritual and inventory complex of the Zrubna culture burials in the Komyshuvate barrow cemetery made it possible to establish with reasonable degree of probability the construction sequence of the barrow mounds in the group and the burials within them. The mounds belonging to the Zrubna culture (mounds 1, 3 and 4) are orientated along the watershed slope in a southwest–northeast direction.

Taking into account the location of the largest mound in the group, mound 4, which occupied the highest area in the watershed, it can be assumed that it was this mound that initiated the construction of the necropolis in the Late Bronze Age. Thus, burial 2 of barrow 4 can be considered the oldest in the group.

We have no reliable grounds for establishing the sequence of construction of mounds 1 and 3. However, taking into account the above-mentioned hypothesis, according to which the antiquity of the Zrubna culture mounds in the chain is determined by the degree of proximity to the central mound in the group, we can also assume that the construction of mound 3 preceded the construction of mound 1.

Burial 2 of mound 4, and burials from mounds 1 and 3, can be confidently attributed to the second (developed) horizon of the Zrubna culture cemeteries of the Northern Azov, according to the ritual and inventory complex of features.

In general, the second (developed) horizon of the burial mounds of the Zrubna culture of the North Azov Area is characterised by both main and inlet burials in pits. In the same period, stone chests appeared, made of stone slabs placed vertically on an edge. At the end of the period, another type of stone tomb, called stone crypts by researchers, became widespread, as well as combined chests or mixed-type chests, the walls of which were built of vertically installed slabs in various combinations with horizontal masonry. The position of the deceased is dominated by a moderately to strongly contorted posture on the left side, with an orientation to the northeast with deviations. The characteristic features of the ceramic pottery from the Komyshuvate burials are also typical of the second (developed) horizon.

We also have no basis for establishing a reliable stratigraphic sequence or synchronisation of burial 1 of mound 4 and the burials from mounds 1 and 3. However, the secondary stratigraphic position and the ritual and inventory complex of burial 1 of barrow 4 allows us to attribute it to the end of the II (developed) or beginning of the III (late) horizon of the Zrubna culture of the North Azov Area. It is the late horizon that is characterised by secondary burials (rarely primary burials), in mounds, in dirt pits under stone structures, as well as in classical cists and combined tombs, which were most common in this period. The position of the deceased is dominated by a strongly contorted posture on the left side, with an orientation to the eastern sector with deviations; but it is during this period that some southeastern deviations are noted (*Zabavin 2019a*, 63).

According to the comparative-typological and natural methods, as well as the method of extrapolation using objects-chronological indicators, the chronological framework of the Zrubna culture of the North Azov Area is determined within 1700–1200 BC. The fund of finds, together with stratigraphic observations, allowed us to develop an internal chronology of the culture we studied, and to divide its development into three phases. The second (developed) horizon dates back to 1600–1400 cal. BC (phase BB1/BB2 [C1] according to Reinecke's scheme, or MD III according to Hänsel's scheme; *Zabavin 2022*, 267, fig. 6).

Thus, the relative chronology of the Zrubna culture burials in the Komyshuvate barrow necropolis can be established as shown in Fig. 42.

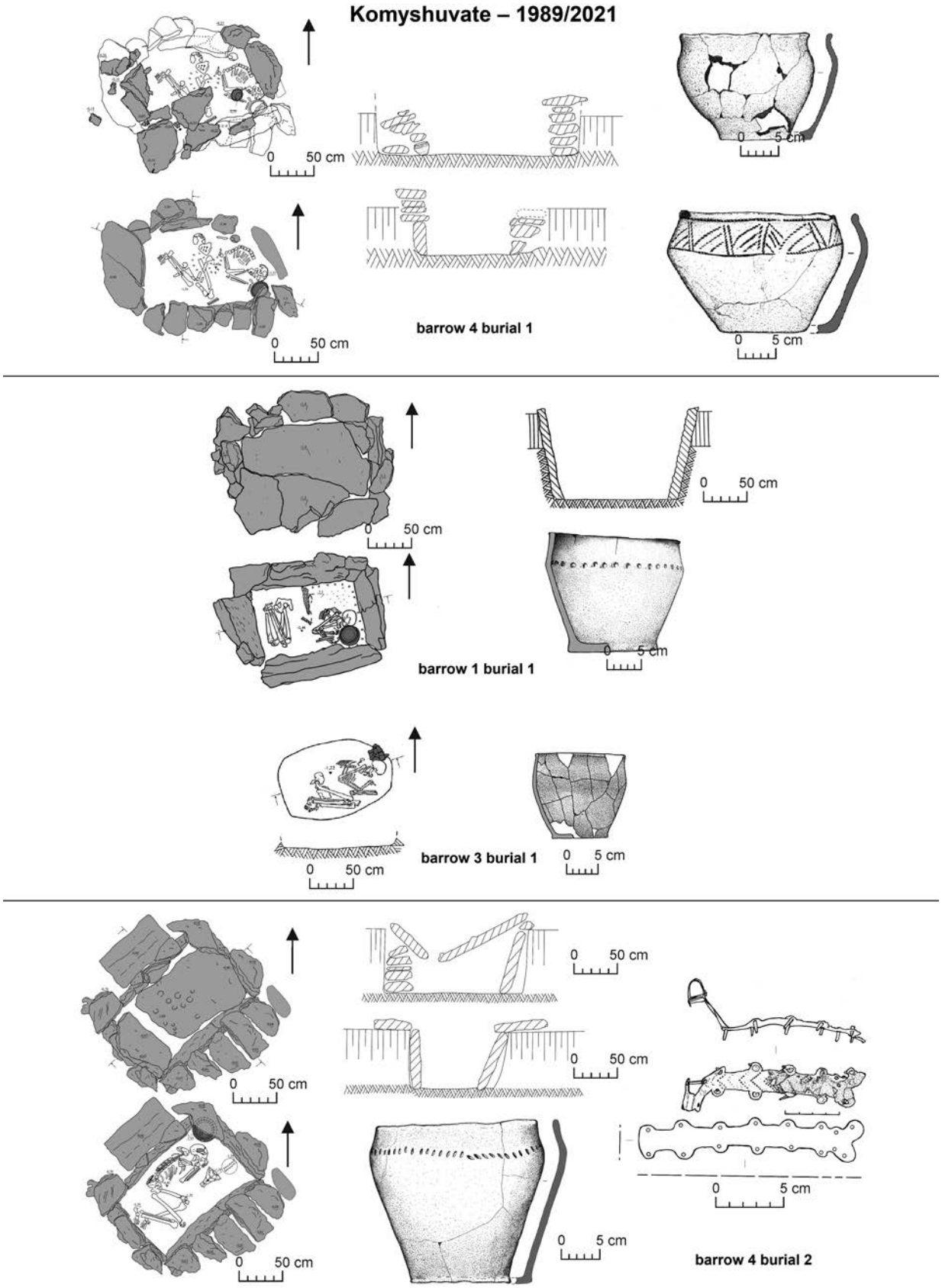


Fig. 42. The relative chronology of the burials of the Zrubna culture of the Komyshuvate barrow necropolis (oldest graves are at the bottom of the picture).

4 NOMADS OF THE MIDDLE AGES

The study of medieval antiquities in the North Azov Area remains a topical issue. Due to the fact that the medieval population of the steppes lived and conducted economic activities in nomadic conditions, the main types of archaeological sources are burials and stone monumental sculptures. Hence, the introduction of such materials into scientific circulation is of great interest to researchers.

During the research of the burial ground near the village of Komyshuvate, one burial of a medieval nomad was discovered (mound 2). In addition, cases of ritual activities in other Bronze Age mounds were traced, which are also associated with nomads (mounds 1 and 4). With a certain degree of probability, the cenotaph graves from barrows 3 and 5 can also be dated to the medieval period. Despite the poverty of the funerary equipment, according to a set of features, including ritualistic actions, burial 1 from mound 2 can be attributed to the time when the Azov steppes were inhabited by medieval nomads.

4.1 Burials

The use of stone in barrow architecture

The most famous works on the typology of late nomadic burials are those by G. Fedorov-Davydov and S. Pletneva. The typology was based on the orientation of the deceased to the cardinal points, the shape of the burial structures, and the presence or absence of horse bones. It is worth noting that today this typology is outdated and does not include all existing burial types. The general ritual features inherent in the burials of the Pechenegs, Torks, and Polovtsians (Kumans) were outlined. In particular, the Polovtsian funerary rite (12th–13th centuries) is characterised by the use of stone in the construction of a mound (*Fedorov-Davydov 1966*, 123).

The architectural features of the mound over burial 2 suggest the presence of a stone casing (mostly small and medium-sized stones) and a stone cromlech constructed of large blocks. In mound 1, a ritual site was discovered, whose medieval date is indicated by a metal cauldron. a ritual complex in the form of a pit filled with stones was arranged in the south-eastern part of barrow 4. a skull and bones of animal(s) were also present here. Some indistinct sherds of container pottery allow us to date the complex to the medieval period.

As noted by G. Fedorov-Davydov, the practice of using stone in the construction of mounds in the steppe of Eastern Europe appears in the Polovtsian period. This is because the Polovtsians, who originally lived in eastern Kazakhstan, built their mounds of stone there. The researcher suggests that this practice was inherited by the nomads who built the mounds of southern Eastern Europe. In addition, it should be noted that the deposition of an animal or an animal head (bull, cow, horse, wild boar, etc.) is also characteristic of the Polovtsians (*Fedorov-Davydov 1966*, 122, 123). The tradition of using stone for burial in a mound did not completely disappear in the Golden Horde period, as evidenced by the materials of burials of nomads of the Azov steppes (for example, Zhytenko, mound 5; Polkove, mound 3; *Evglevsky 1992*, 108–110).

The burial structure and inhumation

The burial was carried out in a pit with ledges. The deceased was laid with his head to the east. Such features are considered typical of the Polovtsian funeral rite (*Fedorov-Davydov 1966*, 145; *Pletneva 1981*, 218, 219).

As for the form of the burial structure, a number of researchers note that ledges along the northern and southern walls of the pits is a feature common to only two chronologically different groups: 1) burials of the 10th to the first half of the 11th century, and 2) burials of the second half of the 13th to the 14th century (*Evglevsky/Danylko/Kupriy 2008*, 199–214).

A horse in a funeral rite

The deceased in the Komyshuvate mound was accompanied by a dead horse with its face to the west. The tradition of placing the remains of a horse (facing both east and west) is inherent in the Polovtsians, but continued to be practised in the Azov steppes during the Golden Horde period. Thus, for example, in a burial

of that period, investigated near the village of Zhytenko (burial 2 of mound 5), the deceased was laid with his head in the easterly direction, and the horse's head towards the west (*Evglevsky 1992*, 110).

Considering the semantics of this aspect of the funeral rite, it is quite logical to assume that the horse was assigned its own function in the funeral rite – it was to take the deceased to the afterlife. Perhaps this is why the horse in a burial is usually bridled and saddled, indicating its transport function.

Burial inventory

The stirrups found next to the horse's hocks (Fig. 17: 1, 2), according to the classification of G. Fedorov-Davydov, belong to group B, type II (*Fedorov-Davydov 1966*, 13). According to the classification of antiquities by S. Pletneva, similar stirrups belong to type B-I (*Pletneva 1973*, 17). Both researchers broadly date them to the 12th – early 13th centuries, on the basis of similar finds at medieval settlements. K. Armarchuk classified stirrups from the North-Eastern Black Sea region, which are similar in their morphological features, into Division III (types 1 and 2). In her opinion, these stirrups could have been used by nomads of the North-Eastern Black Sea region until the end of the 13th century (*Armarchuk 2006*, 21, 22).

The leather strap of the horse's harness has bronze horseshoe-shaped brackets, which were attached to the leather base with rivets (Fig. 17: 5). a similar fastening system was found on a plaque from the Chaika cemetery in the Kuban, in the burial of a horse. According to the classification of K. Armarchuk, the plaque with a similar fastening system is included in Section II, Subsection B, Division I. In general, the complex dates from the 12th – early 13th centuries (*Armarchuk 2006*, 103, 197; fig. 33).

We tend to interpret the bone plates found in the tomb of the Komyshuvata nomad as constituent elements of a composite bow (Fig. 17: 3). Bone linings are known from medieval materials of the pre-Mongol and Golden Horde periods; some specimens were covered with carvings. In particular, such items come from Polovtsian burials (*Narozhnyi/Plutov 2009*, 276; *Pletneva 1981*, 215; *Shalobudov 2012*, 87). The image of a rectangle on a shaded background is noteworthy. Stylistically close is the image of an animal on a shaded background, made on a bone quiver lining, from the nomadic burial Vysocyno II, mound 11, burial 1 from the Don-Kahul interfluve (*Bespalyi/Lukiashko 2008*, 43).

The metal button (Fig. 17: 4) also finds a wide range of analogies; thus, it cannot be a cultural and chronological indicator. Such items are also known among the antiquities of the Polovtsian period (*Pletneva 1981*, 217).

4.2 Cult complexes in mounds

Of particular note is the discovery of a metal (copper) cauldron in mound 1 (Fig. 43: 4). With a degree of reasonable probability, this find can be linked to the disturbed nomadic burial 2. According to M. Shvecov's typology, our cauldron belongs to type 2, subtype 2 (cylindrical cauldrons, with walls connected to each other and the base with rivets; *Shvecov 1980*, 198). However, there are no cauldrons with similar rims in this group. Cauldrons of type 2, subtype 2 come from the basin of the Dnipro and Azov Area. Researchers have repeatedly drawn attention to the findings of cauldrons that were part of the funerary escort of nomads of the pre-Mongol and Golden Horde periods. The majority of such complexes are dated to the 13th–14th centuries (*Chkhaidze 2015*, 280, 281; *Evglevsky 1992*, 111; *Shvecov 1974*, 97).

In the studied cemetery we encountered a slightly different variant of this tradition, where the cauldron was not directly in the grave. During archaeological explorations in the North-Eastern Azov region, the authors of this paper have repeatedly found fragments of medieval cauldrons on the surfaces of ploughed mounds (*Zabavin/Nebrat 2023a*).

During the explorations of the archaeological expedition of Mariupol State University in the south of Donetsk region in 2021, several dozen archaeological sites were examined, the vast majority being mounds. Unlike settlement sites, accidental finds (uplifted material) on mounds are quite rare, but nevertheless worthy of attention. Thus, one of the categories of such finds was fragments of metal utensils. The authors have every reason to believe that fragments of medieval nomadic cauldrons were found during the expedition. The fragmentary nature of these finds is due to the fact that the mounds were damaged by ploughing, and the cauldrons themselves were placed not in the graves, but on the surface of the mound, or at a shallow depth in some cult place.

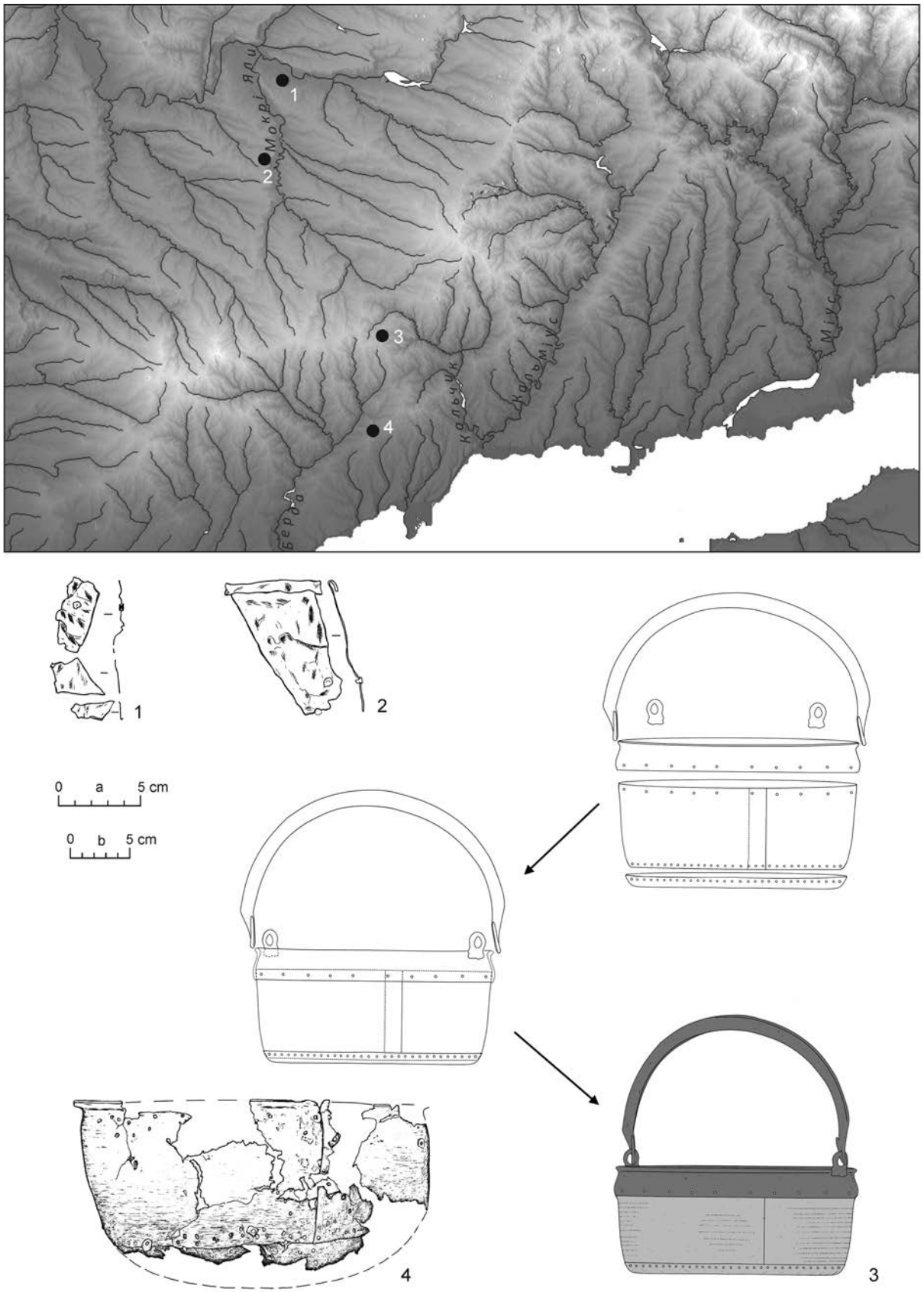


Fig. 43. Medieval cauldrons. 1 – Bohatyr; 2 – Staromaiorske; 3 – Maloianysol; 4 – Komyshuvate.

Accidental finds of medieval cauldrons:

1. Bohatyr (Velykonovosilkivka community, Volnovakha district, Donetsk region). Fragments (four pieces) of a cauldron made of sheet copper were found on the surface of the mound No. 0403623. One rivet has been preserved. The fragments measure from 4.5×3.0 to 1.5×1.0 cm, 0.06 cm thick. The diameter of the rivet hole is 0.12 cm. The fragments are crushed and corroded (Fig. 43: 1).
2. Staromayorske (Velykonovosilkivka community, Volnovakha district, Donetsk region). On the surface of the mound No. 0414005, a fragment of a product (cauldron) made of sheet copper was found. One rivet has been preserved. Dimensions of the preserved fragment are 8.5×6.0 cm, 0.08 cm thick. The diameter of the rivet hole is 0.15 cm. The fragments are crushed and corroded (Fig. 43: 2).
3. Maloyanysol (Kalchyk community, Mariupol district, Donetsk region). During the survey of a plot of arable land near the village of Maloyanysol, a damaged cauldron was discovered between mounds No. 0607035 and No. 0607036. It is made of sheet copper. The neck, with the rim of the cauldron, was constructed separately, from an iron plate. The ears were made of iron separately and attached to the rim with rivets; the handle is of iron. The cauldron is riveted: a bent sheet was connected with rivets to form the body of the cauldron. The bottom was also connected to the body with rivets. Almost all fragments of the cauldron were found. The condition of the find is unsatisfactory: all copper parts are crumpled, and iron fragments are damaged by corrosion. Nevertheless, careful measurements of the deformed fragments allowed us to determine its dimensions and make a graphic reconstruction. Reconstructed dimensions: diameter of the base 34–35 cm; rim 35–36 cm; holes for rivets 0.2 cm; height 15.0 cm; wall thickness 0.05 cm (Fig. 43: 3).

Such finds, in our opinion, should be associated with offering places (sanctuaries within grave mounds). For example, a Polovtsian sanctuary was discovered in a mound near the village of Pervomayivka in the Kherson region, where a metal cauldron was found (*Narozhnyj 2003*, 262; *Toločko/Murzin 1991*, 265). Another sanctuary of the Polovtsian period, in which a metal cauldron was found, was discovered in a mound investigated near the Novyi hamlet on the left bank of the Don (*Gurkin 1987*, 101–103).

All of this once again indicates that the cauldron was not only part of the burial escort of the deceased, but could also be used as an object necessary during ritual and cultic actions in the sanctuary (*Dzhumabekova/Bazarbaeva 2017*). Probably, we have come across traces of the manifestation of the rite of feeding the ancestors. Such circumstances of the finds of cauldrons are no less interesting from the point of view of studying the spiritual culture of the medieval population of the Azov region.

The cult complex at mound 3 of the Komyshuvate burial ground is particularly noteworthy. Here, in the centre of the pit, a board was placed vertically, which was dug or driven into the pit floor. The wooden board is sub-rectangular in shape, 53×22 cm in size, 4 cm thick at the bottom, and 2 cm at the top. The upper edge of the board is rounded. An animal bone was found next to the board. An iron arrowhead was also found in the pit (Fig. 44: 1).[16]

The iron arrowhead found in the fill of this complex is very poorly preserved and cannot be a chronological indicator. Despite all the difficulties of dating this complex, we are inclined to assume that its appearance is also connected with the nomads of the Middle Ages. The pit with a wooden plank vertically dug into the centre of the floor reminds us of the Polovtsian (Cuman–Kipchak) tradition of arranging pits/shrines with wooden or stone statues in mounds (Fig. 44: 2–5).[17] With a certain degree of probability, it can be assumed that this is a simplified manifestation of this tradition, which is widely known from the materials of the mounds on the left bank of the Don (*Guguev 2009*, 14; *Gurkin 1987*, 101–103; *Potapov 2013*, 129).

Perhaps it is no coincidence that the wide surfaces of the wooden stele were facing in the latitudinal direction. In this regard, it is worth noting that the wooden statues from the mounds of the Lower Don basin were facing east. Furthermore, the presence of animal bones in a pit with a wooden (or stone) sculpture also brings together the Polovtsian sanctuaries of the left bank of the Don and the Komyshuvate complex from mound 3. In this case, it would be appropriate to recall the words of the Azerbaijani (Persian) medieval poet Nizami Ganjavi (circa 1141–1209), to which D. Telegin refers. The author reports that the Kipchaks (Cumans/Polovtsians) horsemen stuck an arrow into the ground near the sculpture, and local shepherds must leave a sacrifice – a sheep – in front of the idol (*Telehin 1991*, 73).

[16] The authors of the 1989 report presented this complex as an Early Iron Age burial site.

[17] The authors of the 1989 report drew attention to the shape of the board and suggested that it was anthropomorphic.

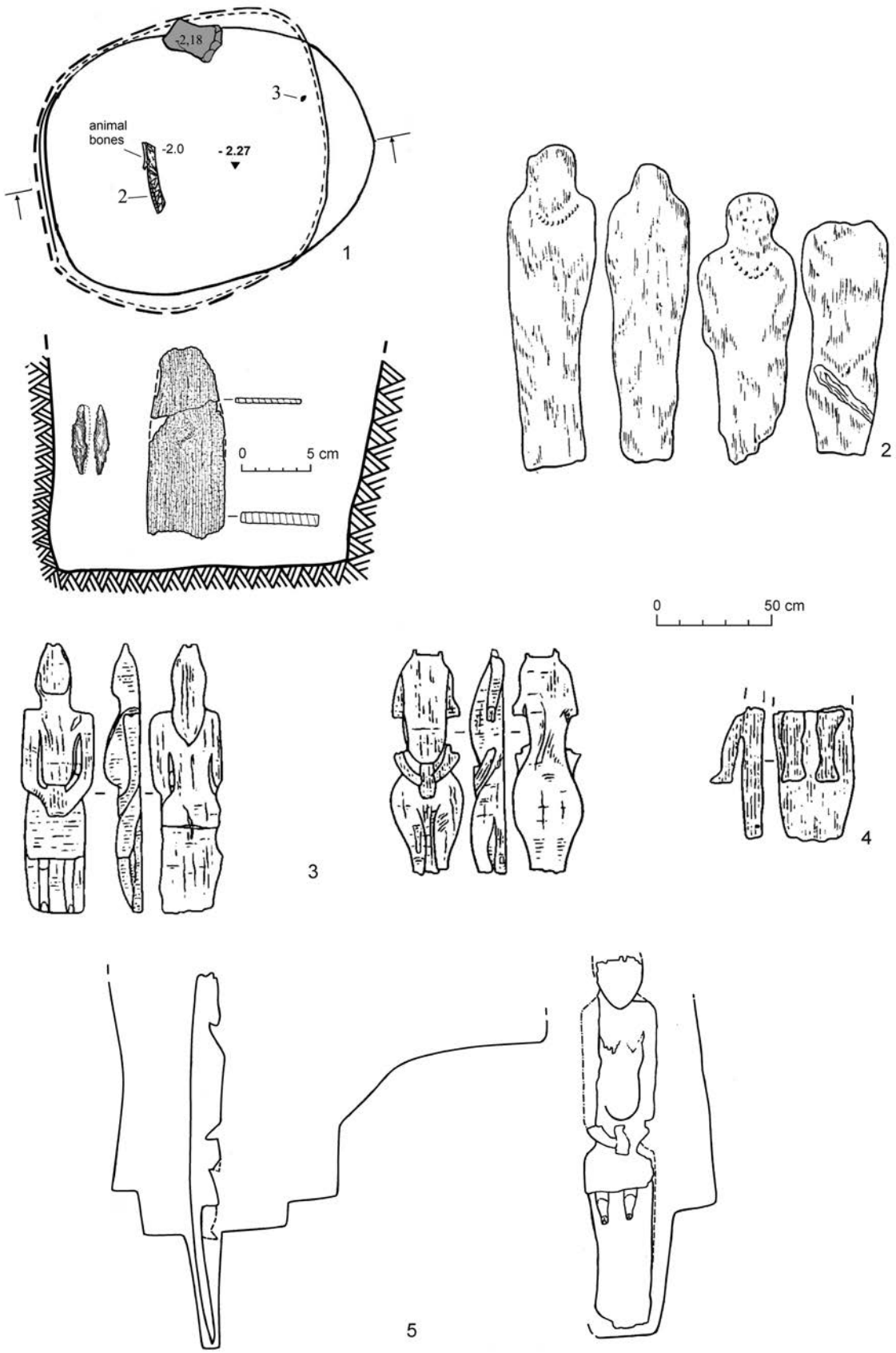


Fig. 44. Cumans wooden sculptures. 1 – Komyshuvate (*Kulbaka/Gnatko 1989*); 2 – Middle Ayula; 3 – Zhukovka; 4 – Kholodny burial ground (*Gurkin 1987*); 5 – Ryabichev (*Guguev 2009*).

4.3 Conclusions

The practice of using stone in the construction of burial mounds in the steppe of Eastern Europe was inherited by the nomads, and appeared in the Polovtsian period. The analysis of the funeral rite and inventory indicates that a burial was made in the mound of the Komyshuvate burial ground, which probably dates to the 13th–14th centuries.

Medieval nomads carried out ritual and memorial actions on some of the burial mounds. The discovery of a metal (copper) cauldron in mound 1 is likely to be associated with nomadic burial 2. The cylindrical cauldron from Komyshuvate, with walls connected to each other and the base with rivets, belongs to type 2, subtype 2 according to M. Shvecov's typology, and can be dated to the 13th–14th centuries. Cauldrons were not only part of the funeral escort of the deceased, but were also used as a necessary item during ritual and cultic actions.

The cult complex from mound 3 is also associated with the nomads of the Middle Ages. The pit with a wooden board vertically inserted in the centre probably reflects, in a simplified form, the Polovtsian tradition of arranging pits with wooden or stone idols in mounds.

5 KOMYSHUVATE CEMETERY AS A SOURCE FOR STUDYING THE SPIRITUAL CULTURE AND SOCIAL STRUCTURE OF THE ANCIENT POPULATION OF THE AZOV STEPPES

5.1 The ceramic pot with a cyclic ornament: regional features of the Late Bronze Age tribal calendar

In the case of most archaeological cultures, ceramics are the dominant type of finds that contain extremely rich historical information. For instance, pottery is a reliable source for dating archaeological sites. The study of ceramic pottery is one of the broadest research areas in archaeology, and ceramic products are one of the most informative resources for the study of ancient populations. Over the past two centuries, archaeologists have developed many approaches and methods with different goals: from the study of ceramics as an art object, to the reconstruction of production technologies, and the study of pottery as a "mediator" for understanding the everyday life of ancient populations. The researchers have divided the methods of studying ceramics into four groups: 1) description of technological information; 2) description of the form; 3) analysis of the ornament; 4) reconstruction of the cultural tradition of pottery. along with the development of physical methods in archaeological research, the methods and models of analysis are also changing (*Andriiovych 2019*, 143).

The descriptive approach emerged in the late 19th and early 20th centuries, at the formative stage of archaeological science and ceramic studies. It still exists (albeit in a slightly modernised form) in contemporary publications by Ukrainian researchers, and is in fact one of the dominant methods. Based on this approach, morphological (shape, colour, ornament) and some technical and technological features (impurities, moulding methods, etc.) of ancient ceramics are distinguished. Its use is highly justified when working with large collections of ceramics, grouping them, and forming a source base for further research. Through visual observation, the ceramics are first grouped and classified according to the main categories inherent in the archaeological site. Each category is then considered separately, and further divided into groups and subgroups in the context of existing typologies. The main drawback of this approach is that the interpretation of finds and their description is often subjective (*Puholovok 2018*, 84, 85).

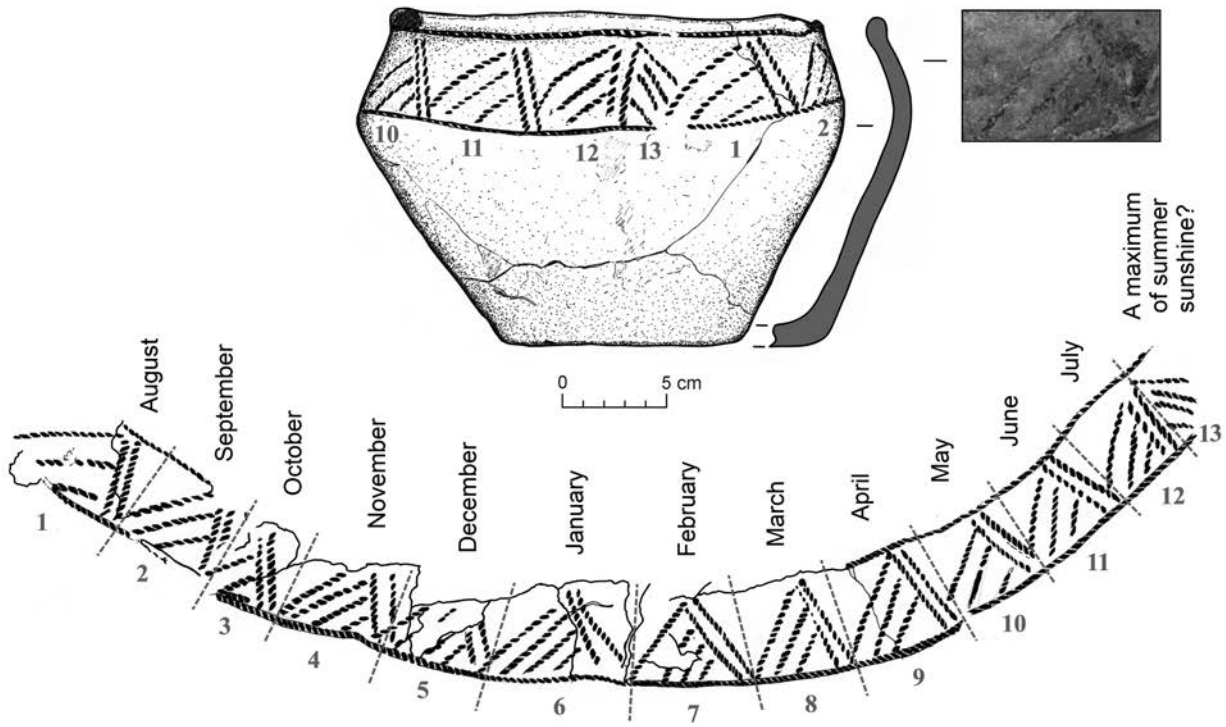
The next stage of the study involves the application of formal classification and formal typological approaches. Their use involves the analysis and systematisation of ceramics according to certain criteria, which enables a comparative analysis of the selected groups. The semantic-technological approach makes it possible to study the historical patterns of ceramic decoration's development, in relation to the technological features of its manufacture. at the current level of knowledge, after the phase of description and classification, the main issue is to correlate ceramic products with specific population groups; the aim is to clarify contacts and influences between communities, and, ultimately, to culturally interpret and reconstruct the spiritual culture of the ancient population, based on the analysis of ornamental compositions found on ceramics (*Zabavin/Nebrat 2023b*, 53).

Ceramic vessels are the most common category of equipment in the funerary dowry, in the graves of the Zrubna culture. The findings of vessels with extraordinary ornaments – which researchers interpret as pictograms, proto-literacy, and plot drawings – have always been of particular interest. The calendar ornamentation on the pots deserves special attention. a pot with ornamentation, which, in our opinion, was of a calendrical nature, comes from burial mound 1 of barrow 4 of the Komyshuvate graveyard. Therefore, we will analyse the cyclic ornament on the pot from this burial in more detail. Since the main characteristic of cyclic compositions is the presence of a finite sequence of alternating elements, we took a large element as a unit of significance in our analysis (Fig. 45).

The ceramic vessel is a sharply ribbed pot of squat proportions, with the maximum diameter in the upper third of the body. The outer surface is yellow/grey-brown in colour. The vessel is decorated with a geometric ornament made by imprints of a "caterpillar"," (a flexible stick with a wound thread) in the form of triangles with their vertices upwards, which are located between two horizontal lines – the first under the upper rim, the second along the rib. The composition is represented by 12 isosceles triangles incised with two (8 triangles) or three (4 triangles) diagonal lines. The right side of each triangle is formed

by two lines, and the left side by one line. The basis for all shapes is a horizontal line drawn along an edge. The first and the last triangles are connected by four diagonal lines, which stand out from the context of a single regular composition.

Despite the fact that the authors have a source base (1,515 burials of the Zrubna culture of the North azov area), we were unable to draw a wide range of analogies (Fig. 46). The vast majority of illustrations in reports and publications do not contain depiction of the complete ornament and its detailed description. Despite all the difficulties of making any interpretation of the drawings on the ceramics of the Zrubna culture, pots with calendar ornaments are easier to identify due to a certain number of images



An element of ornamental composition	Quantity	Application technique
	8	rope prints
	4	rope prints
	1	rope prints

Fig. 45. Ornamental composition of 12 or 13 elements on a vessel from the Komyshuvate burial site. Regional calendar of the tribes of the Zrubna culture of the North Azov Area.

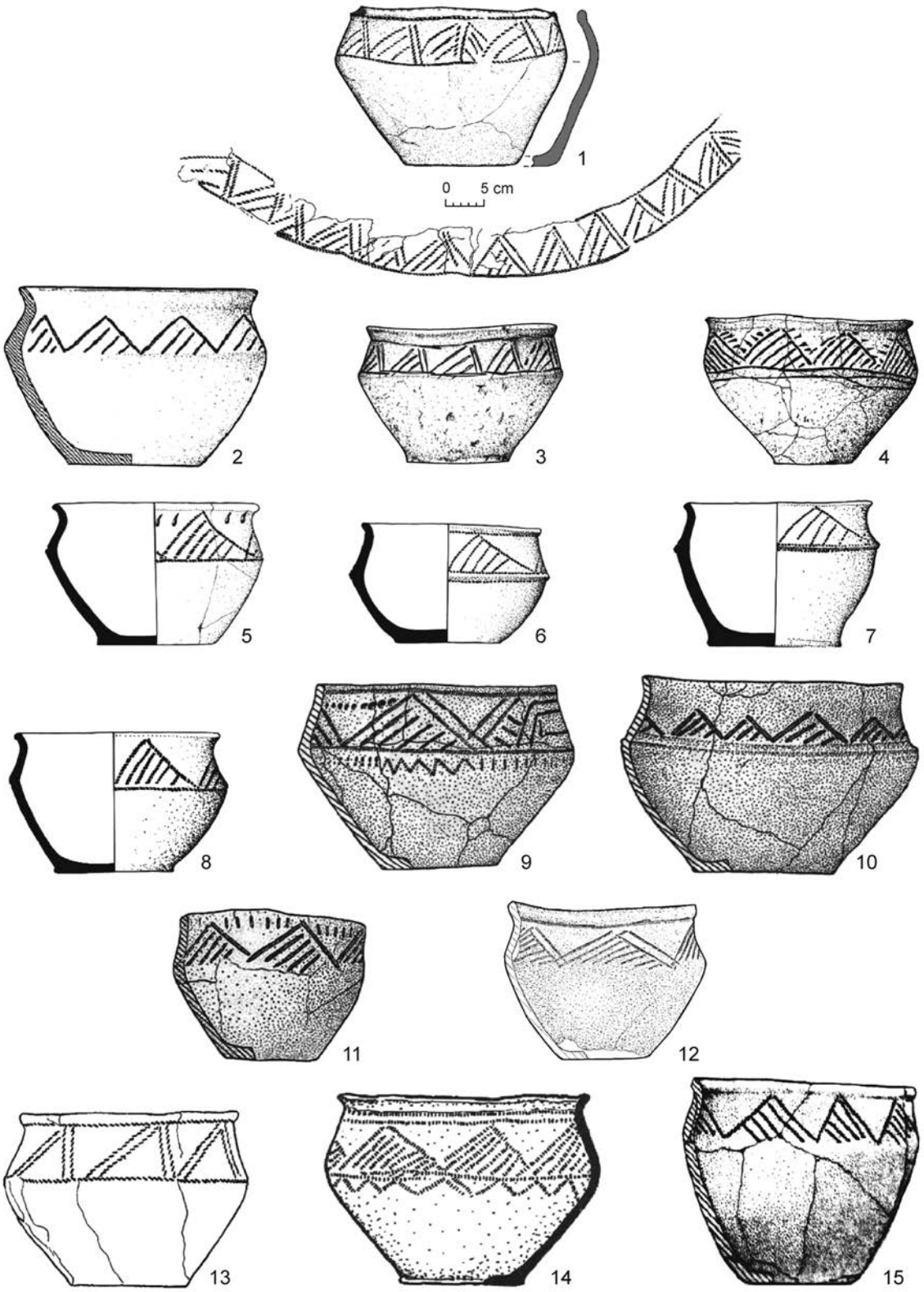


Fig. 46. Shaded triangles in the system of ornamental composition of the Zrubna culture of the North Azov Area. 1 – Komyshuvate, m. 1 b. 1; 2 – Zaporozhets, m. 1 b. 12 (*Lytvynenko/Zarayska 2004*); 3–8 – Ohorodne, m. 4 b. 11; m. 4 b. 21; m. 4 b. 3; m. 4 b. 12; m. 4 b. 18; m. 4 b. 20 (*Posrednikov/Zarayska 1993*); 9, 10 – Orlovske, m. 1 b. 8; m. 1 b. 12 (*Zabavin 2010*); 11 – Kominternove, m. 1 b. 4 (*Kulbaka/Zabavin/Nebrat 2009*); 12 – Rozdolne, m. 3 b. 4 (*Kulbaka/Gnatko 1989*); 13 – Pishchane, m. 1 b. 1 (*Bratchenko 1997*); 14 – Novoandriivka, m. 6 b. 2 (*Klimenko 1998*); 15 – Vedenske, m. 1 b. 1 (*Kulbaka/Kachur 2002*).

that can be identified with the months of the solar, lunar or lunisolar calendar. Thus, with reasonable degree of probability, an ornamental composition containing 12 or 13 elements can be associated with a calendar. Of course, conclusions drawn only on the basis of the limited number of ornamental elements will be tentative, since chance cannot be ruled out either.

The vessels with the signs of the tribes of the Zrubna culture have always attracted researchers' attention as one of the brightest manifestations of the ancient population's ceramic tradition. The largest compilation of such vessels is contained in the monographic study by O. Zaharova, in which the author pays considerable attention to historiographical analysis, along with issues of their systematisation and interpretation (*Zaharova 2000*).

One of the directions in interpreting the symbolic compositions found on the Zrubna culture's ceramics relates to the desire to link them to calendrical ideas. This interpretation of the symbolic friezes on the ceramic vessels was first proposed by V. andrienko, who suggested that the calendar of the annual cycle used by the Zrubna culture tribes was recorded in this way (*Andrienko 1979*, 70).

According to a number of researchers, the agrarian cults that existed among the population of the Zrubna culture community are reflected in compositions with calendar semantics (*Gershkovych/Yakubenko 2001*, 72–80; *Gershkovych/Evdokimov 1982*, 228–231; *Kovaleva 1989*, 62; *Otroshchenko 2007*; *2019*; *Suprunenko 1999*). In connection with the ornamental composition of 12 or 13 elements on the vessel from the Komyshuvate burial ground, it should be noted that the idea of the calendar semantics of 12/13-element compositions was also expressed by Ya. Gershkovych and I. Kovaleva (*Gershkovych/Yakubenko 2001*, 72–80; *Gershkovych/Evdokimov 1982*, 228–231; *Kovaleva 1989*, 63).

Based on statistical methods of material processing, the researchers were able to identify digital patterns of iconic friezes on the ceramics of the Zrubna culture. This allowed them to demonstrate the presence of information related to the idea of time on the vessels. Thus, it is proposed to consider 12/13-element symbolic compositions as variations of the lunisolar calendar, with an additional 13th month for the leap year (*Besedin/Safonov 1996*, 22–32; *Safonov 1996*, 66–70; *Zaharova 2000*, 83–86).

According to O. Zaharova's calculations, out of the 65 vessels with cyclic compositions, the largest number (14) contained 13-element compositions. The researcher, referring to the developments of her predecessors, pointed out the connection between 12/13-element compositions presented in various archaeological cultures, starting from the Eneolithic era, with the ideas of the calendar year within the relevant tradition. The existence of a 13-month (leap) year was characteristic of many ancient cultures that kept track of time according to the lunisolar calendar in this way; they solved the problem of counting months by the moon and years by the sun (*Zaharova 2000*, 81–83).

In our opinion, the 13-element composition on the ceramic vessel from burial 1 of barrow 4 of the Komyshuvate burial ground reflects the ideas about the annual cycle that existed among the population of the Zrubna culture of the North azov area. The presence of a series of 12 elements in the composition on the vessel – in the form of shaded triangles connected by four diagonal lines, which stand out from the context of a single regular composition – is also significant. This confirms the researchers' opinion about the special semantics of the additional 13th month.

In addition, two types of symbols arranged in groups were recorded on the vessel: 8 isosceles triangles incised with two diagonal lines, and 4 triangles incised with three lines (Fig. 45). according to researchers, this dualism in the 13-element compositions of the annual cycle, expressed in the use of two groups of symbols, reflects the division into seasons. The first is a time of active economic life, full of various events and holidays, while the second is associated with the "dying" of nature and the freezing of economic life (*Zaharova 2000*, 84). This may to some extent indicate the existence of two seasons in the regional calendar system of the Zrubna culture tribes that inhabited the Northern azov Sea region, which demonstrates local climatic features: a longer warm summer (spring and autumn) and a shorter cold winter.

Thus, the above facts allow us to assume that the cyclic composition depicted on the ceramic vessel from the Zrubna culture burial at the Komyshuvate burial ground records the recurring time intervals that were significant for the population. It also possibly reflects the annual and lunar cycles, with the timing of the transition from the old to the new year.

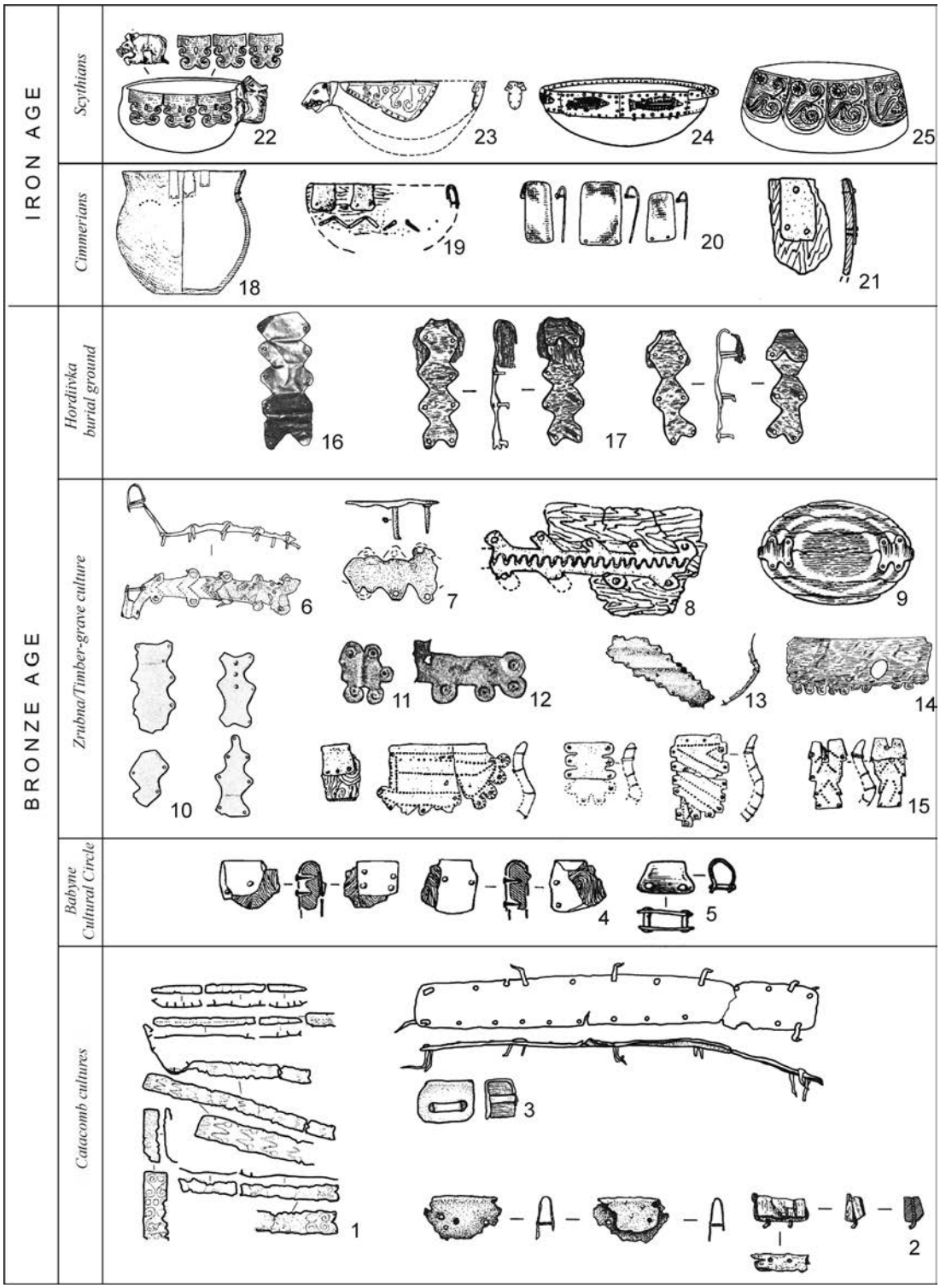


Fig. 47. The tradition of making wooden vessels with metal applications. 1 – Nyzhnobaranykivka, 5/9 (*Bratchenko et al. 1977*); 2 – Ipatiivskyi Kurhan, 122 (*Korenevskij/Belinskij/Kalmykov 2007*, 44–46, 172); 3 – Polyakov, 1/8 (*Parusimov 2005*, 192); 4 – Cherkasy, 6/2 (*Kushtan 2013*, 105); 5 – Zakharkina Mohyla, 43 (*Subbotin/Toshchev 2002*, 37, 46); 6 – Komyshuvate, 4/2; 7 – Minkivka, 4/1 (*Kravets/Posrednikov 1990*, 74); 8 – Left-bank Dnipro region (*Kovaleva 1989*, 81); 9 – Verkhnia Maivka V, 2/5 (*Tsymidanov 2004*, fig. 32: 1) 10 – Loboikivka (*Leskov 1981*); 11, 12 – Urochyshche Nosaki, 8/2 (*Bidzilya et al. 1977*, 127); 13 – Bykovo I, 9/4; 14 – Karamysh (*Pyatyh 1984*, 146); 15 – Velyka Bilozerka, 12/2 (*Tsymidanov 2004*, fig. 53: 1); 16 – a find from a private collection (*Klochko 2011*, 252, 253); 17 – Hordiivka burial ground, 21 (*Berezanska/Klochko 2011*, 81); 18 – Kalynivka, 1/2 (*Makhortykh 2005*, 417); 19 – Velykooleksandrivskyi kurhn (*Shylov 1995*, 734); 20 – Vysoka Mohyla (*Bidzilya/Yakovenko 1974*, 152); 21 – Hola Mohyla II, 4/7 (*Kovaleva/Shalobudov/Teslenko 1999*, 20); 22 – Oleksandrivskyi Kurhan; 23, 24 – Solokha; 25 – Yablunivka (*Melyukova 1989*, tab. 46: 13–16).

5.2 The wooden bowl as an element of the material culture of the ancient population of southern Eastern Europe

The tradition of making wooden vessels is an integral part of the material culture of the forest steppe and steppe zones populations of southern Eastern Europe, dating from the Early Bronze age and throughout the Early Iron age (Fig. 47). The main provisions of modern historiography and a detailed analysis of different points of view on the problems of wooden vessels have been presented in the works of many researchers (*Dubovska 1993*, 142; *Makhortykh 2008*, 293; *Minakova 2018*) – including the works devoted to this category of the funerary inventory of the Zrubna culture (*Minakova 2015*). This frees us from the need to repeat such a procedure.

Thus, a few finds of this category of funerary equipment are known in burials of the Yamna culture (*Otroshchenko 1992*, 71; *Minakova 2011*) and Catacomb cultures (*Nebrat 2017*). Later, the tradition of making wooden vessels became widespread in the burials of the Babyne cultural circle (*Lytvynenko 2004*). Researchers' interest in this category of inventory grew significantly after the discovery of a series of Zrubna culture burials, in which wooden bowls with metal overlays were found (*Antonov/Otroshchenko 2004*; *Lytvynenko 1997*; *Otroshchenko 1984*; *Pyatyh 1984*). The number of finds of wooden vessels in the burials of the Sabotynivka and Bilozirsk cultures of the Late Bronze age is significantly lower. In the pre-Scythian period, the tradition of making wooden vessels revived with renewed vigour in the material culture of early nomads. Thus, researchers state that wooden vessels are quite common in the Cimmerian complexes of the Northern Black Sea region. according to various sources, the proportion of Cimmerian burials with wooden vessels is 13–16% of the total massif (*Makhortykh 2008*, 138; *Otroshchenko 1989*, 112). Later, the tradition was further developed by the Scythian and Sarmatian populations (*Dudin 2009*, 123–125).

It can be assumed that among the archaeological cultures of the Bronze age and Early Iron age in southern Eastern Europe, a much higher proportion of burials contained wooden vessels as part of the funerary inventory. It is difficult to trace the remains of wooden products in the burial (subject to the quality of the excavations), given the poor preservation of the material. The fact that a wooden vessel was placed in the grave is sometimes indicated only by individual elements made of metal. These include, in particular, bronze decorative applications and overlays of various shapes and sizes, nails, and ribbon wires.

It is worth noting that O. Krivcova-Grakova was the first to pay attention to this category of bronze products. During her research on the Bessarabian treasure, she drew attention to metal plates that were supposed to decorate wooden vessels (*Krivcova-Grakova 1949*, 4). The most numerous and striking examples of bronze overlays were found in the burials of the Zrubna culture in the 1970s and 1980s, during excavations of expeditions at new building sites in Ukraine (*Kovaleva 1981*, 65, 66; *Otroshchenko 1976*, 186, 187).

In our opinion, it remains relevant to consider the time when wooden bowls with metal plates/applications appeared among the ancient population of the Northern Black Sea region. K. Minakova, in her monograph on wooden vessels, mentions three burials of the Yamna culture where metal plates were found: the Sugoklei grave (burial 5 of mound 1), Tiraspol (burial 19 of mound 3), and Karagash (burial 2 of mound 1)[18] (*Minakova 2018*, 178). We will now examine these in more detail.

A review of the available publications on the Suhoklei mound, investigated within the city of Kropyvnytskyi (Kirovohrad) in 2004 (*Boltrik/Nikolova/Razumov 2005*, 69, 70; *Nikolova 2012*, 20; *Nikolova/Kaiser 2009*, 219), indeed allows us to state that a unique ornamented wooden bowl of the Yamna culture was found in burial 5. However, it had no metal decoration.

In the Karagash burial, a metal plate with holes for fastening was found, which served as an application for a wooden bowl.[19] So far, this discovery can be considered among the oldest metal overlays. However, it should be noted at the outset that the attribution of this complex to the Yamna culture may be somewhat dubious. Firstly, the Karagash barrow was located at a considerable distance from the main area of the Yamna culture sites. Secondly, it demonstrates features of both the Pit and afanasievo

[18] The researcher made a mistake when she marked Karagash on a map of the location of the Yamna culture sites with wooden vessels, as being in Moldova (Transnistria). In fact, the mound in which this burial was investigated was located in Kazakhstan, southeast of Karaganda.

[19] Let us make a correction – in the monograph, the researcher mistakenly included the Karagash complex in her register as a burial investigated in mound 1. according to the publication, this grave was investigated in mound 2.

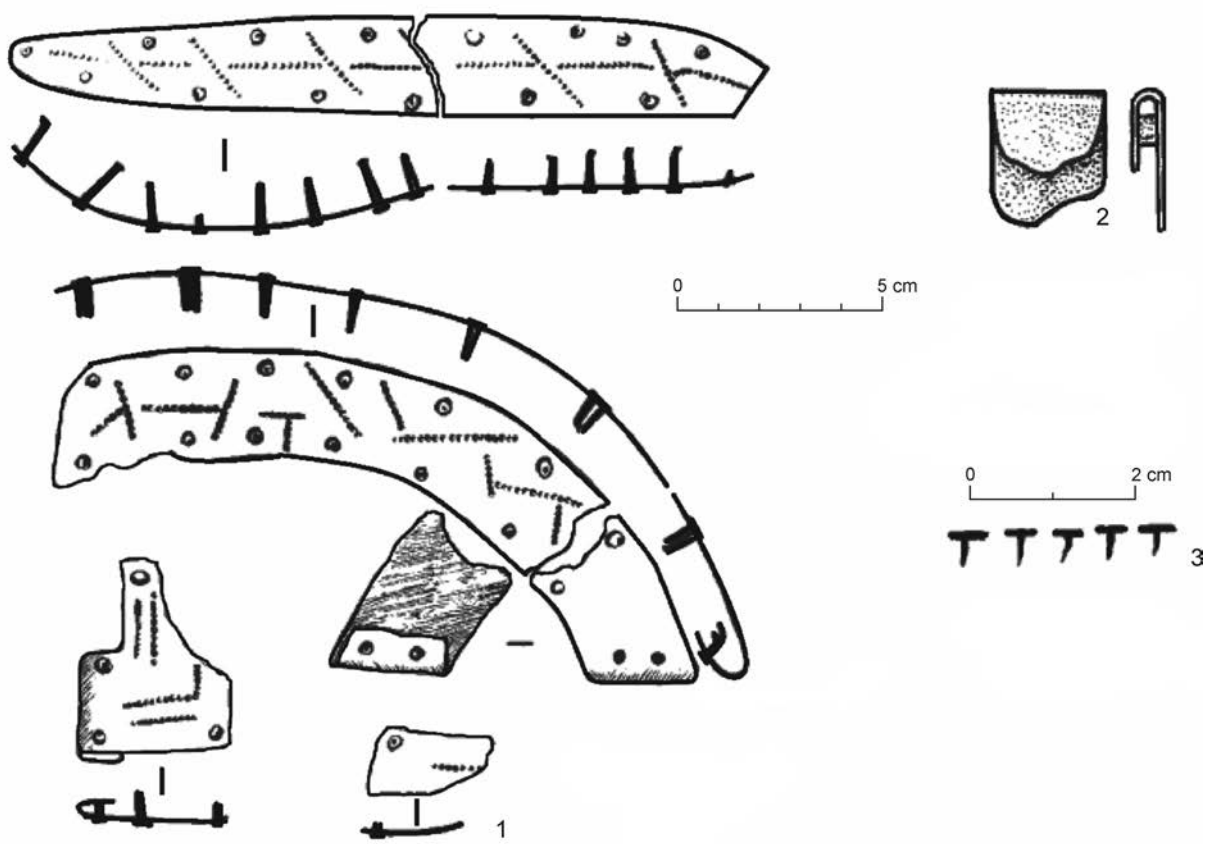


Fig. 48. Copper linings of wooden bowls of the Poltavka culture.

cultures (*Evdokimov/Loman 1989*, 43, 44). In addition, wooden vessels with metal overlays are also known in the antiquities of the afanasievo culture (*Borodovskij 2013*).

In the Yamna culture burial discovered in a mound near Tiraspol, the remains of an adult were excavated. The funerary accompaniments included a pot and a metal plate with two holes found near the femur at the level of the grave bottom (2 cm long, 1.4–1.2 cm wide, 0.05 cm thick; *Savva 1988*, 51, 52). The conditions of the discovery, the absence of wood remains, and the quality of the illustration do not allow us to claim that this find is in any way connected with wooden vessels. This is indirectly supported by a certain pattern: it is very rare for two (or more) vessels to be found in an adult grave (we do not take into account the Karagash complex, due to its remoteness from the area of the Yamna culture and its hypothetical belonging to it). On the contrary, there are no ceramic pots in the burials of the Yamna culture, in which wooden vessels were found. In this regard, the Tiraspol burial should also be excluded from the register of pit burials with wooden vessels, and even more so those with metal overlays. The use of metal wire (staples) began earlier, in the Yamna culture age, and became widespread in the Catacomb period.

In the south of Eastern Europe, perhaps the oldest example of wooden vessels with metal applications was found in Kalmykia: the Three Brothers tract, burial 9 (*Minakova 2018*, 177, 254). The most expressive finds of the time before the Zrubna culture come from Catacomb culture. In a burial on the left bank of the Siverskyi Donets (Nyzhnobaranykivka, burial 9 of barrow 5), an ornamented bronze plate overlay from a wooden vessel was discovered (*Bratchenko et* a*l. 1977*). a metal plate with nails and application on the rims was found in the catacomb of a cemetery on the right bank of the Don (Polyakov, burial 8 of barrow 1; *Parusimov 2005*, 192). It is interesting to note that these two burials were cenotaphs and did not contain the remains of the deceased. another catacomb burial with a wooden vessel with a metal plate was discovered in Stavropol, in the interfluve of the Western Manich and Egorlyk rivers, in the Great

Ipatievsky Kurgan (burial 122). Bronze bands and staples were found in the grave (*Korenevskij/Belinskij/Kalmykov 2007*, 44–46, 172).

Copper linings, which were used to decorate the rims of wooden bowls, are also known from the Poltavka culture; two specimens from the Lower Volga region have been recorded. Some plates are decorated with punch ornamentation. The most striking combination was found on a wooden bowl from burial 1 of the Solnechny barrow; this bowl's plates are made of metal with arsenic content. The covers were attached to the bowl with copper nails made of short cone-shaped coiled plates. Similar items were found in the burial sites of Berezhnovka II, barrow 29, burial 3, and Krasnosamarskoe I, barrow 1, burial 4 (Fig. 48; *Kuznecov 2021*, 310).

On wooden vessels of the Catacomb period from the basin of the Siverskyi Donets and Don, metal elements are mainly staples and bronze wire bands. It should be noted that wooden vessels with metal decoration from the Inhul Catacomb culture are unknown to the authors. Thus, it can be noted that the practice of decorating wooden vessels with metal plates among the population of the Black Sea and azov Sea steppes emerged not in the Early but in the Middle Bronze age, in the Catacomb environment; but the practice was not widespread.

We would like to draw attention to one more find, which, with a certain degree of probability, can be attributed to the metal overlay of a wooden bowl belonging to the abashevo culture, as interpreted by S. Sanzharov. It comes from the cultural layer of the Prokazyno settlement on the aidar River (left bank of the Siverskyi Donets River; *Sanzharov 2010*, 299, fig. 202: 9, 10).

The wooden vessels of the Babyne cultural circle probably inherited the tradition of Catacomb cultures. The finishes are dominated by bronze brackets and ribbon wires. Wooden vessels of the Babyne cultural circle were very rarely decorated with metal bands, although such cases are known in the Dnipro basin and the North-Western Black Sea region (*Kushtan 2013*, 105; *Lytvynenko 2004*, 27; *Subbotin/Toshchev 2002*, 37, 46). We do not know of any items similar to those from catacomb burials among the antiquities of the Babyne cultural circle.

It seems that the tradition of decorating wooden vessels with metal overlays is more likely to have had local roots. Elongated figured overlays with lateral projections (similar to the Komyshuvate overlays) were common in the Late Bronze age in the Zrubna community. The bronze plates of this form first came to researchers' attention after the discovery of the Loboikivka treasure in 1966 (*Leskov 1981*).[20] Over the next two decades, archaeological research on the steppe mounds of Ukraine led to the accumulation of a significant amount of material. Hence, figured overlays of the Loboikivka type were found during the study of the Zrubna culture burials.

The earliest example of this decoration, in our opinion, is from the complex investigated on the right bank of the Siverskyi Donets (Minkivka, burial 1 of mound 4). according to a number of features (northeastern orientation, the shape of the bronze knife, the longitudinal wooden roof of the grave), this complex can be attributed to the first (early) horizon of the Zrubna culture. The burial contained the remains of a funeral meal (animal bones), a ceramic pot, a knife, and a wooden vessel with metal figural appliqué similar to our find (*Kravets/Posrednikov 1990*, 74).

As noted by R. Lytvynenko, the largest number of wooden vessels of the Zrubna culture with figured overlays come from the steppe region of the Dnipro River (*Lytvynenko 1997*, 109). as a striking example, let us cite the complex from Velyka Bilozerka (burial 2 of mound 12; *Tsymidanov 2004*, 165). One of the plates in this burial had a "herringbone" ornament made with a punch, which allows us to see certain parallels with the specimen we found in the burial from Komyshuvate. The plates from the burials investigated near Nosaky (graves 2 and 3 of mound 8) and Verkhnia Maivka V (grave 5 of mound 2) can also be considered as direct analogies (*Bidzilya et al. 1977*, 127).

The register of similar finds can be expanded to include a bronze overlay with subrectangular projections originating from the Dnipro region of Ukraine. a metal figured plate is distinguished by the fact that its side protrusions, when placed horizontally, are directed to the left on one side and to the right on the other. In addition, the plate was decorated with a "snake" (wavy line) ornament (*Kovaleva 1989*, 81). More eastern analogues in the burials of the Zrubna culture were found in the Volga region (*Pyatyh 1984*, 146).

[20] Despite V. Klochko's attempt to include items of the "Loboikivka metallurgical tradition" in the circle of finds of the Eastern Trzciniec or Sosnytsia cultures, the authors tend to attribute this type of ornamentation to the Zrubna culture antiquities.

Over time, wooden vessels with shaped metal wrapping became a prestigious item. This is supported by such a finding in the mound of the 21st elite Hordiivka burial ground, in the Vinnytsia region of Ukraine. The researchers noted that this is the only evidence of the Hordiivka burial ground's early connections with its eastern neighbours, the Berezhnovka-Maevka Zrubna culture (*Berezanska/Klochko 2011*, 81). In addition, there is another known gold overlay; however, this find is without the finding context, as it comes from a private collection (*Klochko 2011*, 252, 253).[21] Other specimens were found in later burials: graves of the Berezhnovka-Maevka Zrubna culture in the Dnipro region, and in the Loboikivka treasure.

The tradition of decorating wooden vessels with metal continued in the Early Iron age, in particular among the Cimmerian population. Examples of this are the pieces found in burials in the Northern Black Sea region: Kalynivka, mound 1, burial 2; Zvonetske, mound 15, burial 2; Vysoka Mohyla, burial 5; Velykooleksandrivskyi kurhn; and Hola Mohyla II, mound 4, burial 7 (*Bidzilya/Yakovenko 1974*, 152; *Kovaleva/Shalobudov/Teslenko 1999*, 20; *Makhortykh 2005*, 417; *Shylov 1995*, 734). a geographically close find from the North-Eastern azov area should be noted separately. In 2019, the aE MSU investigated a Chernohorivka culture burial near the village of Yalta (mound 2, burial 3), which contained the remains of a wooden vessel decorated with metal coverings. The bronze overlay has survived in the form of small fragments of plates 0.06–0.08 cm thick, which bear traces of ornamentation made with a punch and miniature rivets (*Zabavin/Nebrat/Bulyk 2021*, 43).

In the Scythian period, the tradition of decorating wooden vessels with metal overlays did not disappear. Similar finds are also known at sites that are among the few remains of temporary settlements of the Scythian population of the Forest-Steppe in the Poltava region of Ukraine (left bank of the Sula River). These include fragments of a wooden tray ("dish"), 42 cm in diameter, in the form of pieces of thin bronze band (*Suprunenko/Skoryi/Sydorenko 2012*, fig. 2).

On the contrary, instead of geometric stylised images made with a punch, the Scythian overlays are distinguished by their particular sophistication and jewellery craftsmanship; they include zoomorphic images. The overlays were made of gold, and wooden vessels decorated similarly are found in the graves of wealthy members of the nomadic community. Striking examples come from the Voronezh Kurgan, Yablunivka, Solokha, Oleksandropil Kurgan, First Zavadska Mohyla, and other burial mounds (*Melyukova 1989*, 111, 351; *Polidovych/Velychko/Bilan 2019*, 366). In the First Zavadska Mohyla alone, five wooden bowls with golden overlays were investigated (CA 19; *Gulyaev 2017*, fig. 1: 1; *Ilinskaya/Terenozhkin 1983*, 101, 115; *Riabova 1991*, 153–156).

Occasionally, wooden vessels with bronze decoration are found that belong to the Sarmatian period (*Bespalyi/Lukiashko 2008*, 13). In the medieval period, wooden vessels with metal wrapping almost disappeared from use in the ritual sphere; hence, rare cases of such finds are interesting. Similar drinking bowls were found in an early medieval catacomb cemetery of the 13th–14th centuries in the Caucasus (*Tuallagov 2017*, 160).

Thus, it can be argued that the tradition of making and using ritual wooden vessels with metal covering was long-lasting, among the inhabitants of various archaeological cultures of the Bronze age, Early Iron age, and even the Middle ages; although for the latter period this practice appears to be a relic. Wooden vessels of the Zrubna culture decorated with metal wrapping are not a remarkable exception or a unique phenomenon, against the background of ancient cultures. On the contrary, Zrubna culture artefacts are a material expression of one of the stages in the tradition of making and using this type of vessel.

The analysis of finds of wooden vessels in Bronze age burials in the south of Eastern Europe allowed V. Otroshchenko to conclude that there were two traditions of using metal in the manufacture and repair of wooden vessels in the first half of the second millennium BC: 1) the Volga–Ural region (Pit, Poltavka and Sintashta cultures), using bindings and nails; 2) the Dnipro–Don region (catacomb cultures; the Babyne cultural circle), with metal tape-wire (*Otroshchenko 1992*, 71, 72).

According to O. Dudin, after a partial migration of the Zrubna culture population of the Volga region to the west in the Black Sea steppes, the first tradition began to prevail over the second. This can be clearly seen in the findings of wooden vessels from the burials of the Zrubna culture of the Dnipro

[21] Collection of A. Kozimenko. This is one of the artefacts recognised by the Ukrainian prosecutor's office as "his grandmother's inheritance".

region. The metal parts of wooden vessels here were mostly made of bronze, in the form of small forges (overlays), and attached to the crown of the vessel with similar bronze miniature nails. almost all the plates were multi-figured in shape. In most cases, they were rectangular, with different framing along the edges, in the form of jagged ends. Some plates have a punch pattern in the form of inclined straight lines and arcs. The size of the overlays ranges from miniature, about 2×4 cm, to larger ones of 9×6 cm (*Dudin 2009*, 123, 124).

A drinking cup or a priest's bowl?

The functional purpose of metal overlays on wooden vessels, including bowls in the burials of the Zrubna culture of the North azov area, is of some interest. For example, E. Maksimov suggested that such plates were used exclusively for utilitarian purposes, such as to repair burst vessels (*Maksimov 1956*, 120–122). Following *K. Smirnov* (*1960*, 246), O. Dudin states that in solving this problem, the decorative function of the overlays comes to the fore, of course. Decorating wood with metal is a fairly common tradition in the material culture of many nations. However, the researcher also notes the importance of determining the semiotic status of metal overlays. It is unlikely that only one goal – a decorative one – was pursued when attaching metal plates to the rim of a wooden vessel. In some cases, there are wooden vessels with several overlays, or only one overlay, attached to the rims in a haphazard manner. as the author observes, the compositional idea that is often inherent in decorative art is obviously not visible here. The question of the semiotic status of metal overlays can be naturally linked to the status of wooden vessels themselves. as is well known, wooden vessels, especially bowls, are perceived by many researchers as objects of cultic purpose (*Dudin 2009*, 126).

M. Cherednichenko was the first researcher to suggest the connection of these vessels with priestly practice (*Cherednichenko 1977*). Later, the idea of this association was developed in a number of works which used the term "bowl" for these vessels (*Cherednichenko 1986*, 60; *Kovaleva 1989*, 27, 28; *Otroshchenko 1984*, 92). Subsequently, when distinguishing among all the burials of the Zrubna community the burials of priests or cultists, the authors use the findings of wooden bowls as the main criterion for selecting such complexes. at the same time, according to V. Otroshchenko, it is possible to compare wooden bowls from the burials of the Zrubna culture with a container for the drink of the gods – Soma, known from the hymns of the *Rigveda*. according to the researcher, the stanzas from the Hymn dedicated to Soma (IX, 1) in the *Rigveda* can serve as proof of this statement (*Otroshchenko 1984*, 92).

In the Vedic society, the bowl was traditionally one of the essential attributes of various categories of priesthood. In particular, priestly ritual bowls or cups are repeatedly mentioned in the *Rigveda*. as an example, here is just one fragment of a Hymn dedicated to deities accepting sacrifices at a certain time (Hymn XXXVII. Various Gods):

1. Enjoy thy fill of juice (Soma) out of the Hotar's cup: adhvaryus he desires a full draught poured for him. Bring it him: seeking this he gives. Granter of Wealth, drink Soma with the Rtus from the Hotar's cup.
2. He whom of old I called on, him I call on now. He is to be invoked; his name is He who Gives, Here brought by priests is Soma meath. Granter of Wealth, drink Soma with the Rtus from the Potar's cup.
3. Fat may the horses be wherewith thou speedest on: Lord of the Wood, unharming, strengthen thou thyself. Drawing and seizing, Bold One, thou who grantest wealth, drink Soma with the Rtus from the Nestar's cup.
4. From Hotar's cup and Potar's he hath drunk and joyed: the proffered food hath pleased him from the Nestar's bowl. The fourth cup undisturbed, immortal, let him drink who giveth wealth, the cup of the wealth-giving God. (*Rig Veda online*)

The texts of the *Rigveda* indicate the diversity of the priestly stratum in ancient society: Hotar – the chief priest; adhvaryu – a priest who performs various actions during sacrifices (in the ritual of preparing a Soma, he squeezes the juice with a pressure stone); Potar – a priest who purifies the juice of the Soma; Neshtar – a priest who brings the wife of the sacrificer to the sacrifice of the Soma (*Rigveda 1999*, 758–762).

The ritual wooden bowl is also known from the ancient Iranian written tradition. Thus, G. Vertiienko notes that according to avestan sources, the tašta-bowl is the weapon of both priests and Zarathustra

(*Videvdat* 14.8; 19.9). It is intended for libations (*Vesperad* 10.2–11.18) and is the bowl for the Haoma (*Videvdat* 14.8; *Yasna* 10.17). *Yasna* 10.17 *a*llows for silver and gold bowls in the ritual of preparing the Haoma. a fairly wide range of materials from which it could have been made is given by *Videvdat* 7.73–75: gold, silver, bronze, iron, stone, soil, wood and clay. according to the etymology, tašta was part of the original Indo-European semantic circle of objects made of wood. In other words, according to the researcher, in ancient Iran, the ritual tašta-bowl was probably made of wood. The author also mentions that the Vedic tradition preserves various names for utensils associated with the Soma cult. The bowls are united by their material of manufacture: wood. Of the entire range of known lexemes, the most semantically justified name for a drinking bowl is camasâ, which was created as the first wonderful bowl for Soma by the divine carpenter, the creator of all forms, Twashtar. Hence, it is the name that can be linked to the Iranian tašta (*Vertiienko 2021*, 40).

Thus, wooden bowls with metal application, known in the Northern Black Sea region since the Bronze age (in particular, in the Zrubna culture), are associated by H. Vertiienko with the data of the Indo-Iranian writing tradition, and are considered to be the closest to tašta and camasâ. according to the author, in this nomadic environment, far from India and Iran, certain changes took place in the cult of Soma/Haoma, which manifested themselves in the tradition of decorating wooden bowls with metal plates (*Vertiienko 2021*, 40).

According to V. Tsymidanov, I. Dremov proposed a rather logical explanation for the presence of metal overlays on these bowls: when drinking from the bowl, the lips should not have touched the wood (*Dremov 1997*, 154; *Tsymidanov 2004*, 20). Thus, the bowl placed in the burial, including those with metal applications, was supposed to serve the deceased for the ritual function (*Antonov/Otroshchenko 2004*, 25).

Subsequently, V. Tsymidanov expressed another rather interesting idea about the special semiotic status of metal overlays. The author suggests referring to the Ossetian Narts epic, which mentions copper plates, though not attached to a wooden bowl, but to a skull. This discrepancy, according to the researcher, does not change anything in the understanding of metal plates as sacred objects that are suerimposed on a certain base. The semantic connection between the bowl and the skull can be found in the culture of many nations; an example is the well-known tradition of making bowls from skulls (*Tsymidanov 2007*, 20).

In support of this opinion, O. Dudin cites Herodotus, according to whom the Scythians had a custom of making a bowl from the skull of a defeated enemy. as proof of this, the researcher cites the discovery of the remains of a bowl decorated with gold zoomorphic overlays, with fragments of lamellar bones around the perimeter, and the legend of the death of the Old Rus prince Sviatoslav at the hands of the Pechenegs, who made a bowl from his skull (*Dudin 2009*, 127). In general, according to Herodotus, in one version of the Scythian ethno-genetic epic, the bowl is one of the sacred symbols and attributes of power among the Scythians (*Herodotus IV*, 5).

In connection with the above, the metrical and morphological features of the bronze overlay on a wooden bowl from the Komyshuvate necropolis are of particular interest for the reconstruction of the world-view and ideological ideas of the ancient Indo-Iranian tribes.

It is well known that objects whose functional affiliation is not obvious or cannot be interpreted unambiguously – as well as phenomena that accompany deliberately cultic actions – are usually interpreted by researchers as ritualistic (*Ul'yanov 2004*, 126). In ancient societies, the basis of the spiritual realm was the dominant mythological system, which performed world-view and regulatory functions (*Umerenkova 2011*, 89). In the specialised literature, there is an understanding of myth as a world-view scheme, where not only pragmatic but also semiotic meaning is put into a "thing". Some objects, such as tools, were usually included in the sphere of material culture, while others (religious objects, various kinds of images, jewellery) were part of the spiritual sphere. People attributed a certain semiotic status to them, which for the same thing could vary significantly depending on the situation (*Bajburin 1981*, 217). For an ancient craftsman, the creation of an object of predominantly practical use was associated with a wide range of ritual and mythological ideas. as a result, the final product acquired the features of a cosmic scheme to a greater or lesser extent, which acted as a kind of model.

The surrounding reality – the flora and fauna – has always served not only as a source of inspiration for the craftsman, but also as a natural basis of images and patterns to be embodied in products. However, unlike modern man, the ancient masters had a slightly different perception of the image and the original itself. We tend to focus primarily on objective real features in the original, and only on these

features: for example, shape, size, colour, etc. For ancient man, the image of a person, animal or plant is a mix of objective features and mystical properties. The image can also be terrifying or beneficent, just like the reproducible and similar creature that the image represents.

The bronze covering of the wooden bowl from burial 2 of barrow 4 is a complex elongated shape, rectangular with rounded projections on the sides and ends, which have holes for fastening. The total length in the unfolded state is 16.5 cm; the maximum width is 3.0 cm. The remnants of a herringbone ornament made with a punch can be seen all over the surface of the piece. The length and morphological features of the bronze piece allow us to assume with a reasonable degree of probability that in this particular case the snake was the original and source of inspiration for the surrounding animal world. Specifically, this was the steppe viper (*Vipera renardi*), which had a zigzag stripe on its back – one of the main features that can distinguish a venomous snake from other steppe snakes that are not dangerous for humans (CA 18: 4). as additional arguments, it is relevant to pay attention to the serpentine (zigzag or wave-like) images on the catacomb overlay from Nyzhnobaranykivka (*Bratchenko et* a*l. 1977*), and on the overlay of the Zrubna culture from the Left Bank of Ukraine, published by *I. Kovaleva* (*1989*, 81).

The outlines of the metal applications of the wooden bowls of the Zrubna culture somewhat resemble the image applied with a punch to the surface of a metal belt buckle from the early-Catacomb complex akkermen II, mound 4, burial 1 (*Viazmitina et* a*l. 1960*, 70). The subconscious identification of the snake with the long leather ribbon from which the belt was made prompted the master to decorate the metal overlay in a "snake" style. and in our case, this once again indicates that semantically the Komyshuvate overlay (and other similar examples of the Zrubna culture) was associated with the image of a snake.

On ceramic pottery, cord imprints and traced images in the form of spirals and waves can also be interpreted as snakes. Snake-ornamentation is also known on the ceramic pottery of the Zrubna culture, but it is extremely rare.

An example of this is a ceramic vessel from barrow 2, burial 16, investigated near the village of Kremenivka in the North-Eastern azov region. The pot was decorated with an ornamental composition in the form of a frieze of spiral curls (*Bratchenko et* a*l. 1977*). In burial 9 of mound 3, investigated near the Khmelnitsky hamlet on the right bank of the Dnipro in the basin of the Chortomlyk, Bazavluk and Solona rivers, a jar-shaped vessel with a wavy line made by a rope imprint was found (*Kostyuchenko 1960*, 97). Furthermore, a pot from the interfluve of the Don and Kahalnyk, from burial 2, mound 10 of the Vysochyno V cemetery, has ornamentation that also combines triangles with spirals (*Bespalyi/Lukiashko 2008*, 70). To a certain extent, such elements of geometric ornamentation as horizontal and vertical zigzags, and a series of diamond-shaped figures, are also stylised images of snakes.

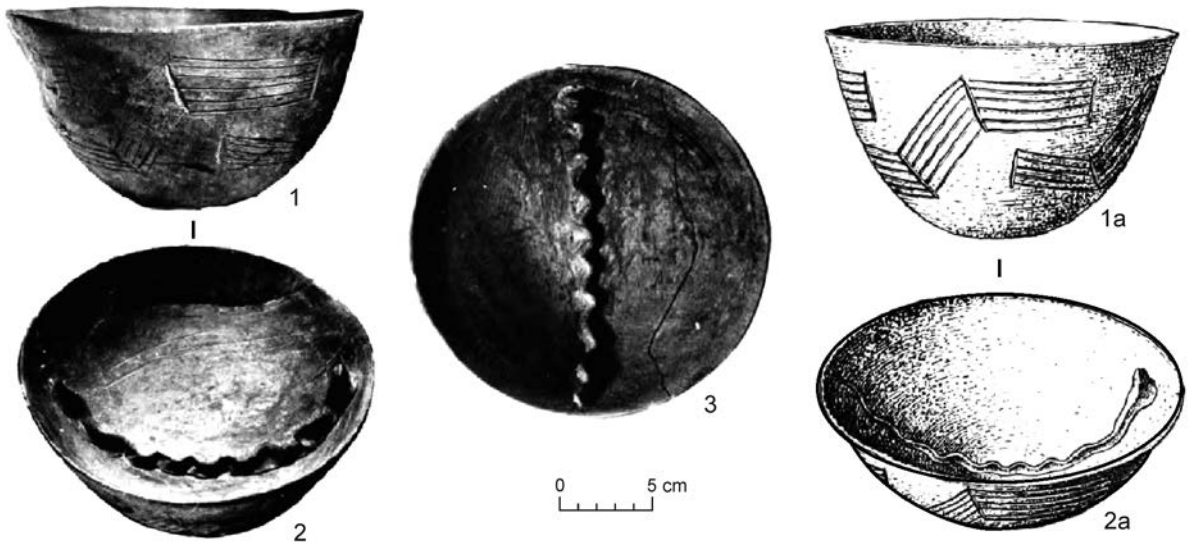


Fig. 49. Ceramic bowl with a snake. Nové Zámky, western Slovakia (*Pavúk 1964*).

According to O. Zaharova, the depiction of snakes on the Zrubna culture's pottery is difficult to explain by any rational and pragmatic reasons, because snakes played an extremely minor role in the life and everyday life of people (*Zaharova 2000*, 66). However, as an object of worship, the serpent has been known since the Upper Palaeolithic era. at the same time, one of its defining features is its duality: the serpent is both beneficent and dangerous. Originally associated with fertility, the earth, rain, and the hearth, as well as being one of the most common symbols of the Moon, the serpent also represents chthonic or underground forces in their opposition to the heavenly, which manifests primarily its negative role (*Halyapin 1999*, 94; *Toporov 1994*, 470; *Zaharova 2000*, 67). Thus, according to I. Kovaleva, the image of a snake on vessels can be linked to the view of the relationship between the earthly and the underworld, and the cult of ancestors (*Kovaleva 1981*, 67).

Of particular interest are the "serpentine" metal ornaments originating from the inventory complex of the Zrubna culture. The bronze temple pendants with one-and-a-half turns are indicative in this regard. Some of them are decorated with transverse notches, tubercles or bulges, which, according to researchers, imitate the skin and ornaments on the snake's body. Many of these pendants have widened blades, which, together with the ornamentation, creates the image of a snake (*Halyapin 1999*, fig. 1). It cannot be ruled out that the image of the snake was conveyed by a bronze ring from the North azov area (Pokrovka, burial 10 of mound 3), made of a thin detachable wire, round in cross-section, with spiral flat shields twisted in opposite directions (*Lytvynenko 1999a*, fig. 9: 10).

According to a number of researchers, in many ancient cultures the most frequent and varied of the animal representations are snakes. It is noted that coiled snakes appear on sculpted mud walls, carved wooden doors, war-drums, wall paintings, and shrine furniture. In this case, they seem to be symbols of key ritual offices. The snakes thus occupy a status "between worlds", mediating the relationships between gods and men (*Preucel 2010*, 105, 110, 142).

The analysis of a wide range of well-documented archaeological sources, including the texts of the *Rigveda* and a*vesta*, ethnography, linguistics and semiotics, allowed M. Halyapin to conclude that the population of the Zrubna culture engaged in a snake cult. although this cult was not the main one, its manifestations were quite diverse. It was associated with both funeral and memorial practices, as the world of the dead, and the everyday life of the ancient population, as the world of the living. The author explains the diversity of connections by noting the multivalued symbolism of the snake image among all ancient peoples. In addition, the researcher characterises a set of archaeological artefacts reflecting the snake cult. Firstly, these are the findings of both whole snake skeletons and individual bones in burials and settlements; secondly, images of snakes on ceramic vessels and other objects; and thirdly, objects that convey the appearance of snakes or are somehow related to the cult of the snake. as for the findings of snake skeletons in burials, the author associates them with the performance of an unconventional funeral ritual: for example, in relation to a magician priest, a snake spellcaster – one of the lowest categories of cult servants (*Halyapin 1999*, 92).

In relation to our assumption that the image of a snake is connected with a wooden bowl, in this particular case, the following point is interesting. V. Tsymidanov, in his search for similarities in the Zrubna culture and the Ossetian Narts epic, notes that we do not yet understand how the carriers of the Zrubna culture used bowls, except in the field of funeral rites. In the Ossetian Narts epic, the bowl's functions are diverse. In a number of stories, the bowl is used for its intended purpose – to drink from, and the bowl sometimes acts as a kind of horn of plenty: its contents do not run out. The researcher pays special attention to the moment when the Narts dance with a bowl on their heads: the bowl is filled with snakes, lizards, frogs – creatures that live in the earth and water. This may reflect the bowl's connection with the chthonic world. However, the author assumes the same connection for the bowls of the Zrubna culture. This is evident from the fact that no bowls have been found in sanctuaries at settlements, but more than three dozen have been found in burials. One of the Zrubna culture bowls has an ornament in the form of oblique lines (compare the punch ornament on the overlay from Komyshuvate), which can be interpreted as a representation of rain. Thus, according to V. Tsymidanov, similar to the Narts bowl, the Zrubna culture bowls were associated not only with the earth, but also with water (*Tsymidanov 2007*, 20).

Another striking analogy indicates the connection of the snake cult with the bowl in general. This ceramic bowl dates back to the Neolithic period and comes from a rich burial investigated in the Carpathian-Danube region (Nové Zámky, western Slovakia). The analogy is distant from our find, both chronologically and geographically, and gives us only comparative possibilities in terms of interpretation (Fig. 49).

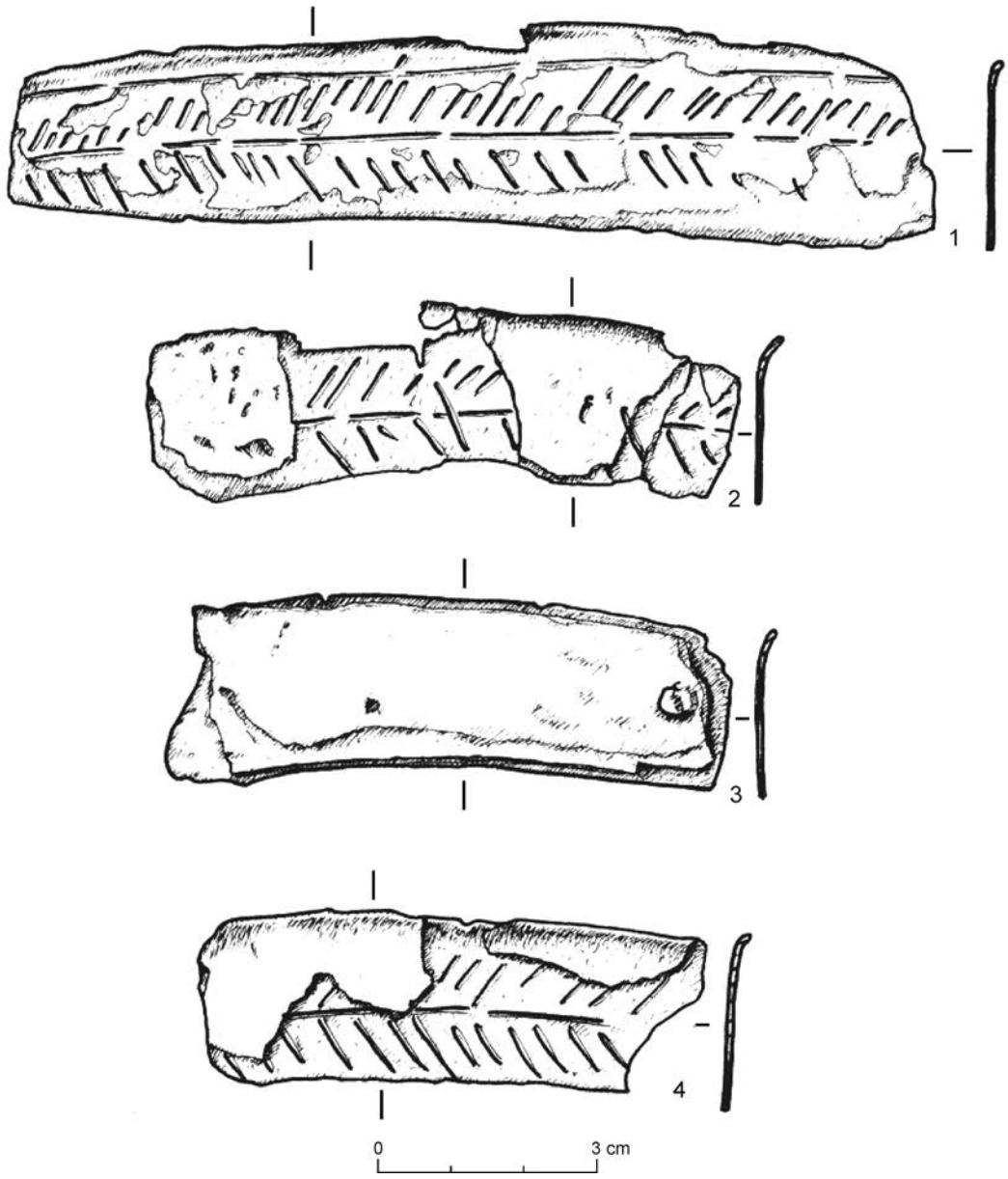


Fig. 50. Dubyna II. Fragments of a bronze appliqué from a wooden dish.

The find is a ceramic thin-walled conical bowl with a straight base and wide rim. The height of the bowl is 10.0 cm, diameter of the rim 19.0 cm, diameter of the base 5.3 cm. This vessel is notable for its interior decoration – on the inner side in the centre there is a plastic modelled ceramic snake. The preserved part is 20 cm long; the original length was 28.5 cm. The snake sculpture was modelled separately and subsequently glued to the inner surface. The head is most clearly modelled. The sculpting of the body results in a true undulating line that characterises the crawling figure's pose (*Pavúk 1964*, 5, fig. 1; 2; 5; 6).

According to J. Pavúk, it is unlikely that this bowl could serve as a utensil and assume everyday practical use; rather, it is an object apparently made for ritual purposes. This small serpent vessel could conceivably be attributed a role in the realm of views of the beyond. The researcher has suggested that the human soul lives in the afterlife in the image of a snake. at the same time, the image of the snake represents a magical tool for awakening and ensuring the continuation of life (*Pavúk 1964*, 14, 15).

Also of interest is a symbol that can be interpreted as a representation of the world tree. We see it both on the Komyshuvate decoration and on a specimen from Velyka Bilozerka (burial 2 of mound 12; *Tsymidanov 2004*, 165). In this regard, it is worth mentioning an accidental discovery from the Scythian settlement of Dubyna II in the Poltava region of Ukraine (left bank of the Sula River): fragments of a bronze appliqué of a wooden dish, about 42 cm in diameter. The band is 2.2–2.6 cm wide and 7.1–13.1 cm long. The band was fastened with bronze nails. The outer surface was ornamented with a pattern in the form of a longitudinal dashed line, from which short lines extended on both sides, forming a kind of "tree of life" (Fig. 50; *Suprunenko/Skoryi/Sydorenko 2012*, 385, 386).

It can be assumed that some pieces of wooden vessels were made from tree species that were considered sacred. a similar practice existed in India: bowls for the ritual drink Soma were made from the sacred tree ashvattha (*Ficus religiosa*; *Rigveda 1999*, 628).

In general, taking into account the above, we support the researchers' assumption that the findings of wooden bowls in the burial complexes of the Zrubna culture community can be considered a reliable marker for identifying the burials of a priest or another agent in cultic processes. The bronze plates on the wooden bowls were not functional or aesthetic, but primarily magical. However, we can also see the compositional intention in decorativeness. at the same time, according to some authors, it is possible to compare wooden bowls from the burials of the Zrubna culture with a vessel for the drink of the gods: namely, Soma/Haoma.

5.3 Indications of the social extraordinariness

The analysis of the materials allows us to approach the problem of social reconstruction. The burials of the Zrubna culture of the Komyshuvate cemetery, studied in mounds 1 and 3, to some extent meet the criteria of a "standardised" funerary rite. a number of deviations from the model of ordinary burials of the Zrubna culture of the North azov area, as well as indications of social extraordinariness, are clearly demonstrated by burials 1 and 2 of mound 4, investigated by the aE MSU in 2021.

The problem of finding the criteria for extraordinary aspects of the Zrubna culture's funerary rituals has been of interest to many researchers. a number of features were identified and different approaches were proposed. The following features can be distinguished: the location of the barrow at the top of the watershed, higher up the slope relative to other barrows (*Bagautdinov 1991*, 43); a mound/refill (*Berestnev 2001*, 141; *Kovaleva 1981*, 60; *Lytvynenko 1992b*, 139; *Otroshchenko 1979*, 86), a deep pit (*Berestnev 2001*, 83; *Kovaleva/Volkoboj 1978*, 37; *Otroshchenko 2001*, 116); a stone roof over the grave (*Halyapin 1998*, 65); excessive inventory (*Tsymidanov 1996*, 202); meat food, including the part of the sacrum (*Androsov 1986*, 77; *Kovaleva 1981*, 66; *Lytvynenko 1992b*, 140; *Tsymidanov 1996*); traces of ritual actions outside the grave (*Kovaleva 1981*, 66; *Otroshchenko 1979*, 86; *Tsymidanov 1996*, 202), etc.

Researchers have also repeatedly paid attention to the fact that the burials in the stone tombs denoted a high social status, according to their equipment and a set of ritual signs (*Gershkovych 1982*, 18; *Lytvynenko 1990*, 75; *1992b*, 140; *2000*, 13; *Olhovskij/Otroshchenko 1991*, 121; *Pleshivenko 1993*, 155). V. Tsymidanov in his study also focused on the stone tombs, and came to the conclusion that the complex stone construction itself is a sign of social rank rather than status (*Tsymidanov 2004*, 49).

Since the main types and design features of this group of burials of the Zrubna culture of the North azov area have already been described in detail (*Zabavin 2013*), we will present only some statistical data and a generalised description. There are 43 burials in this group, which constitute 3.1% of the burials in the entire massif (or 27.4% of all graves in stone tombs). Furthermore, 16 burials (37.2%) were in mounds, and in 28 cases (65.1%) a topsoil was laid over the burial. as a rule, the burial structures of this group are of considerable size, and the internal dimensions of the tombs are much larger than the average for the first group.

The gaze of the zooarchaeologist has in the past been limited by the consideration of animals solely as food, and must now be expanded. Russell argues that animals must be considered in a variety of contexts – as pets, symbols, wealth, objects of feasting and sacrifice – in order to explore the social relations that are enacted through animals. From the outset, the potential value of this approach is evident; no longer constrained by economic themes, faunal remains provide a bounty of information pertaining to social relations in the past (*Russell 2012*, 7). The author presents a large body of evidence covering a broad

range of themes – from structured deposition to scapulimancy – to demonstrate that ritual practices involving animal remains are ubiquitous in human societies, and, crucially, are visible in the material record (*Russell 2012*, 142).

The presence of meat food (especially the prestigious hindquarters) is a clear indicator of the social extraordinariness of the buried person and a sign of elevated rank. V. Tsymidanov focuses on a certain gradation of animal parts. In particular, the most high-status part was the hindquarters. The burials of the western region of the Zrubna culture, in which the sacrum was found, necessarily show other signs of deviation from the model of ordinary burial. In burials of the highest rank (complexes accompanied by connecting additions), the remains of the spinal and hind parts of the carcass prevailed (*Tsymidanov 2004*, 49, 50, tab. 13). The very presence of an animal's sacrum in a burial is considered an extraordinary phenomenon (*Androsov 1986*, 77). In confirmation of this fact, it can be noted that the funeral food in the form of an animal sacrum was found only in 10 burials of the Zrubna culture of the North azov area (approximately one per 150 burials) – including burial 2, investigated in mound 4 of the Komyshuvate mound group.

Meat food was recorded in 30.2% of the stone tombs, with the average for the North azov region being 7.1%. Moreover, in some cases, the presence of the skull and limbs of a large animal (bull, horse), which were cut off at the knee joints, can be interpreted as a folded or stretched animal skin, associated with a transport or draft animal for transportation to another world (*Lytvynenko 1997*, 11). Of the 20 complexes with prestigious parts of the carcass (brisket and hindquarters), 7 (35%) burials were in stone tombs of complex shape. Excessive inventory was noted in 14 (32.5%) cases. In three cases the grave structure was a cenotaph (7%), and in three cases cremation was noted (7%).

The results we obtained, by most indicators, were close to those previously reported by researchers (*Tsymidanov 1996*, 201, tab. 1; *2004*, 116, tab. 8). However, the analysis of socially significant features led to the conclusion that they are generally more expressed in stone tombs with horizontal masonry than in tombs of mixed type (*Lytvynenko 2000*, 14). It is noted that in all regions of the Zrubna culture, the proportion of burials in stone tombs is lower than the proportion of burials in stone boxes; and in terms of the degree of socially significant deviations, the array of complexes in stone tombs exceeds that in ordinary boxes (*Tsymidanov 2004*, 48).

Despite the fact that there are too few anthropological definitions for the sex and age characteristics of burials in stone chests of complex construction, some general conclusions can be drawn using data from publications and archival materials. Thus, almost all the skeletons in the burials belonged to adults, except four children and adolescents (9.3%). among them, two males and one female were anthropologically identified. In addition, using the identified sex/age features of the funerary rite and the inventory of the Zrubna culture cemeteries (*Lytvynenko 1996*, 62–66), it is possible to more or less confidently classify five more burials as male (with pure features); and with a high degree of probability, at least 10 burials (separate features).

The Komyshuvate burials 1 and 2 of barrow 4 contained one ceramic vessel each. During the soil clearing, fragments of a second ceramic vessel were found in both burials, in the grave fill above the stone roof. In addition, during the study of the mound fill, fragments of two ceramic vessels were found at the level of the ancient horizon – the remains of a funeral feast associated with the main burial 2. a number of authors also consider traces of rituals outside the grave, such as a funeral feast or sacrificial platform, to be one of the criteria of originality in the funerary rituals of the Zrubna culture tribes (*Galkin 1975*, 189; *Kovaleva 1996*, 91; *Minaeva 1959*, 214; *Otroshchenko 1979*, 86; *Pleshivenko 1993*, 154; *Sharafutdynova 1982*, 65; *Terenozhkin 1976*, 213; *Tsymidanov 1996*, 202).

The above-mentioned "ceremonial" ceramic vessel from burial 1 of mound 4, a sharp-curved pot of squat proportions decorated with geometric ornaments, can also be considered one of the criteria for determining the extraordinary nature of the burial complex (*Androsov 1986*, 77; *Mamontov 1996*, 61). A similar ornament in the form of a closed frieze bounded by horizontal lines has been interpreted by researchers as a calendar (*Andrienko 1979*; *Gershkovych/Evdokimov 1982*, 228; *Otroshchenko 1986*, 230, 231). according to V. Tsymidanov, the burial complexes of the Zrubna culture containing similar vessels with "calendars", "writings" and "pictograms" are burials of the cult's servants (*Tsymidanov 2001*, 227; *2004*, 52).

In addition, burial 2 from mound 4 near the village of Komyshuvate demonstrates certain features of extraordinary nature (CA 1). Wooden vessels are among the prestigious categories of funerary equipment. all burials containing wooden vessels stand out for their social significance. Thus, according to our calculations, all eight burials of the Zrubna culture of the North azov area were main burials in mounds or were covered with topsoil; in six cases the burial was made in a large pit, or had a complex grave structure in the form of a stone tomb; four burials were made according to an extraordinary rite (two cenotaphs and two cremations), and the remaining four belonged to adults; six burials were accompanied by bone or metal objects (two with bronze knives).

For comparison, in the azov-Donetsk region, according to R. Lytvynenko's estimates, among the burials containing wooden vessels, 89% had their own mound or were covered with soil fillings, 89% were distinguished by large and/or complex grave structures, 50% contained excessive equipment, and 78% were accompanied by meat farewell food and 33% by animal skin. Furthermore, 11% and 22% were cremations and cenotaphs, respectively. according to the three available anthropological definitions, all the deceased were men aged 22–40, 30–35, and 40–55 years old (*Lytvynenko 1997,* 108). Previously, R. Lytvynenko considered the presence of a wooden dish or bowl in a grave, as well as a bronze knife, awl or needle, to be among the pure signs characteristic of male burials (*Lytvynenko 1996*, 63). Thus, the researcher also regarded the rest of the complexes containing wooden vessels as being burials of men of high social status, based on a set of features (*Lytvynenko 1997*, 108).

According to V. Tsymidanov's observations, some of the artefacts that were found in ceramic vessels – the so-called "mailboxes" of the Zrubna community – also show a less or more stable correlation with individuals of the adult age group. In particular, only in the burials of adults (including men aged 25–30 and the elderly) was such a "text" as "a wooden bowl with a lining in a vessel" recorded. According to the researcher, the wooden bowls with bronze overlays placed in such a "mailbox" were probably a hint of a desire to receive a large amount of food, as a wooden bowl in one of the afghan tales acts as a source of abundance (*Tsymidanov 2016*, 59, 65).

There is no rigid connection between the wooden dishes present in the burials and a certain social role; therefore, it is assumed that these objects marked not status, but a higher rank, which is confirmed by the analysis of socially significant deviations present in the array of burials with dishes. As for the wooden vessels (bowls), such artefacts should be considered as attributes of ritual manipulations (*Tsymidanov 2004, 53–55*).

In turn, a number of authors consider the presence of a bowl or another wooden vessel in a burial to be a criterion for identifying extraordinary or socially significant burials (*Cherednichenko 1986*; *Kovaleva 1981*; *1989*; *Malov 1989*; *Otroshchenko 1976*; *1984*; *1990*; *1993*; *Posrednikov/Kravets 1992*; *Pyatyh 1984*; *Smirnov 1960*; *Tsymidanov 1996*; *2004*; etc.).

Thus, burials 1 and 2 of barrow 4 of the Komyshuvate kurgan cemetery reflect certain signs of extraordinary features, including:

1) the location of the barrow at the top of the watershed, higher up the slope than other barrows;
2) the presence of a mound/fill;
3) traces of ritual activities outside the grave;
4) a stone roof over the grave;
5) the burial structure – a stone chest of complex construction;
6) excessive inventory;
7) meat food (including the hindquarters);
8) wooden vessels with metal figurative decoration;
9) a "ceremonial" ceramic vessel with a "calendar" plot.

Thus, the Late Bronze age burials of barrow 4 of the Komyshuvate burial ground, investigated by the archaeological expedition of Mariupol State University in the North-Eastern azov region, demonstrate a number of deviations from the model of a regular burial. The presence in the burial of a wooden bowl with a metal figured rim, and a "ceremonial" ceramic vessel with a "calendar" plot, are status signs that mark people who were involved in ritual activities. The presence of traces of ritual activities outside the grave, a stone slab over a complex stone structure, excessive equipment, and meat food (the prestigious hindquarters) are clear indicators of the social extraordinariness of the buried, and signs of their elevated rank.

CONCLUSIONS

The publication of the materials of the Komyshuvate burial mound necropolis, explored by Mariupol archaeologists in the North Azov Area in the south of Donetsk region, Ukraine, is a logical continuation of the new series "Archaeology of the North Azov Area" launched in 2020 at Mariupol State University. This is a scientific publication devoted to regional archaeological studies: publication of materials from old and new field archaeological research, museum archaeological collections, relevant materials on heritage protection, as well as research on the history of archaeological research in the region.

The issue of publishing (putting into scientific circulation) a significant amount of excavation materials, including newly discovered expeditions of previous years, remains a complex problem. The monographic work proposed by the team of authors became a new topic for the next publication of materials on archaeological studies of the North Azov Area, and a natural outcome of more than 30 years of archaeological research of one mound group near the village of Komyshuvate.

In archaeological terms, the south-western part of the Donetsk region is considered the least studied area in the territory of the North-Eastern Azov region. The authors consider an additional archaeological survey of the area in the future to be a promising direction. The aim of this work is to identify previously unknown funerary and settlement sites – potential archaeological sources of information about its development since ancient times.

The investigated burial mound group was located within the Azov Lowland (the Azov accumulative lowland plain), on a watershed plateau between the headwaters of small water sources in the interfluve of the Berda and Komyshuvatka rivers of the Azov Sea basin. Materials of the Late Bronze Age and Middle Ages obtained during excavations by the Mariupol Archaeological Expedition (MAE) in 1989 and by the Archaeological Expedition of the Mariupol State University (AE MSU) in 2021 are introduced into the scientific context. Some features of the material and spiritual culture of the ancient and medieval population of the Azov steppes, their social organisation and burial rites, are considered.

The study of the Komyshuvate cemetery is a striking example of intergenerational continuity in archaeology. The research was begun in 1989 by the MAE under the leadership of Volodymyr Kulbaka, a former member of one of the influential expeditions in eastern Ukraine, the Severodonetsk Expedition of the Institute of Archaeology of the Academy of Sciences of the Ukrainian SSR. During this year, three mounds from this group were investigated. The University Expedition, which was also founded by V. Kulbaka, became the successor of the MAE. The AE MSU continued the earlier traditions and concentrated on the research of the Azov kurgan burial grounds. Thirty-two years later, in the 2021 field season, the AE MSU carried out excavations of two barrows from this group. In that year, the research was headed by a younger colleague of V. Kulbaka, a former member of the MAE: namely, V. Zabavin. The fieldwork was carried out as part of the compulsory archaeological practice for history students at MSU. Teachers and students of the Faculty of History – members of the Student Scientific Historical and Archaeological Society of the MSU, teachers and pupils of Mariupol schools, and volunteers – took part in the expedition. The research was carried out thanks to the participation and assistance of the HarvEast agricultural holding management, with the support of the Manhush territorial community management and the Anastasios G. Levendis Foundation (Republic of Cyprus).

The publication examined the topographical and landscape features of the kurgans of the Komyshuvate cemetery. Analysis of the topographical location of the mounds, based on four zones (according to the degree of distance from significant freshwater sources), led to the classification of the study group within Zone III: i.e., watershed ridges and the edge of watershed plateaus (with a distance from the river of up to 10 km).

In general, the existence of the Komyshuvate kurgan burial mound group is associated with the tribes of the Zrubna culture of the Late Bronze Age. Based on stratigraphic observations and typological analysis of the ceremonial-inventory complex, the sequence of barrow mounds in the group and the burials within them has been suggested. A variant of the relative periodisation of the burials of the Zrubna culture of the Komyshuvate burial mound necropolis is proposed. All the funerary complexes of the Late Bronze Age are classified as belonging to the II – final II/beginning III horizons of the Zrubna culture burial grounds of the Northern Azov region. The next stage of the burial ground's existence is

connected with the medieval nomads. Ritual activities were traced on barrows from the Bronze Age (barrows 1, 3 and 4), and two barrow mounds were built over the burial of a medieval nomad (barrow 2) and a cenotaph grave (barrow 5).

Only three barrows in the studied group were built by tribes of the Zrubna culture; these were located at about the same distance from each other. All three barrows contained one main burial each. The largest of the barrows (barrow 4) contained another inlet burial. The burial site we studied is quite consistent with the general trend of the barrow construction of the Zrubna culture tribes in the Northern Azov region. According to the placement of barrows in the group, the burial site demonstrates a linear layout, whereby the burial mounds are arranged in a chain.

The burial structures of the Zrubna culture found in the cemetery belong to the most widespread types: burials in pits and burials in stone boxes. Of the four tombs examined, only one was set in a pit; all other burials were in stone boxes. Burial 1 of barrow 1 belongs to Group I (tombs with vertical masonry walls), burial 1 of barrow 4 belongs to Group II (tombs with horizontal masonry walls), and burial 2 of barrow 4 belongs to Group III (combined tombs with horizontal and vertical masonry walls). In general, the use of stone boxes occupies the developed and late stages of the Zrubna culture. Available materials allow us to attribute the tombs with horizontal masonry walls and boxes of complex structure to the late stage of the Zrubna culture of the Northern Azov region.

The funerary constructions of the Late Bronze Age at the Komyshuvate cemetery show common funerary traditions, which are to a certain extent characteristic of the sites of the entire area of the Zrubna culture. In particular, the most widespread form of burials is individual interment (inhumation) in an ordinary pit; the deceased is oriented with his head to the east, in a hunched position on his left side; with his arms bent at the elbow and placed near the face or in front of the chest. An obligatory attribute of the funerary dowry is a ceramic vessel (more precisely, food/drink in a ceramic vessel), which is placed near the head or chest of the deceased. Such ritual norms are common throughout the area of the Zrubna culture.

Qualitative features, which were manifested in the shape and proportions of vessels, ceramic composition, surface treatment and ornamentation, allowed us to attribute the ceramic inventory of the Komyshuvate burials to the II (developed) horizon of the Zrubna culture burial grounds of the North Azov Region. The authors have divided ceramic vessels into two classes according to the presence or absence of a neck: vessels without a neck, and those with a defined neck. The jar vessel from burial 2 of burial mound 4 is of type A – closed jars with shoulders, with the edge of the rim pulled inwards. The rest of the pottery, vessels with a distinct neck, is divided into two types: pots, and vessels with a sharp profile. This vessel has the following characteristics: a low neck, outwardly bent rims, and pronounced shoulders located in the upper third of the vessel. The pots, in turn, depending on the ratio of the height of the vessel to the largest diameter of the torso, are classified as type B – squat (the diameter of the body is greater than the height of the vessel).

Wooden vessels are a rare category of funerary implements in the burials of the Zrubna culture of the North Azov Area. Remains of a wooden vessel were examined in burial mound 2 of burial mound 4; the analysis made it possible to draw certain observations concerning the technology of making such funeral implements. Wooden vessels in funeral complexes are most often fixed by metallic elements; hence, they were used to solve a number of technological and cultural-chronological questions.

Stratigraphic observations and analysis of the ceremonial-inventory complex of the Zrubna culture burials at the Komyshuvate cemetery allowed us to establish with a certain degree of probability the sequence of building burial mounds in the group, and the burials made within them.

The second (developed) horizon of the Zrubna culture burial grounds of North Azov is characterised by both main and inlet burials in ground pits. Stone funerary structures made of vertically placed stone slabs appeared at the same time. At the end of the period, a type of stone tomb, which scholars call stone vaults, and combined structures or mixed-type boxes, with walls made of vertically placed slabs in various combinations with horizontal masonry, became widespread. The position of the deceased is dominated by a middle-placed and strongly bent posture on the left side, with orientation to the north-eastern sector with deviations. Characteristic features of the ceramic complex from the above-mentioned burials are also inherent in the II (developed) horizon.

An analysis of the burial rites and equipment of burial 1, barrow 2, allows us to date it to the 13th–14th centuries. In addition, all the burial mounds bear traces of ritual and memorial activities associated with medieval nomads. The find of a metal (copper) cauldron in barrow 1 is also connected with nomadic burial with some probability, and is dated to the 13th–14th centuries. Similar finds are likely to have been connected with kurgan sanctuaries. The cauldrons were not only part of the funerary accompaniment of the deceased, but were also used as a necessary object during ritual and cult activities. The cult complex from barrow 3 is also connected with the medieval nomads. The pit with a wooden plank vertically embedded in the center probably reflects, in a simplified form, the Cumans' tradition of arranging sanctuary pits with wooden or stone statues in barrows.

The materials of the Komyshuvate burial ground are also an important source for studying the spiritual culture and social structure of the ancient population of the steppes of the North Azov Area. Pottery is the most widespread of all funeral dowry in the Zrubna culture tombs. Finds of pottery with uncommon ornamentation have always aroused particular interest; researchers have interpreted such ornamentation as pictographs, proto-writings or narrative drawings. The calendar ornamentation on the pot from burial 1 of mound 4 deserves special attention. In particular, 12/13-element iconic compositions are proposed to be considered as variations of the lunar-solar calendar, with an additional 13th month for a leap year. In our opinion, the 13-element composition reflects the ideas about the annual cycle that existed among the population of the Zrubna culture. It is suggested that the cyclical composition depicted on a ceramic vessel from the Komyshuvate burial mound captures recurring intervals of time significant to the population; it possibly reflects annual and lunar cycles, with a fixation of the time of transition from the old to the new year.

The making and use of ritual wooden vessels with metal overlays is a rather ancient and long-standing tradition. It is an indispensable component of the material culture of the Steppe and Forest-steppe population in southern Eastern Europe, from the Early Bronze Age and throughout the Early Iron Age. Wooden dishes decorated with metal bands in the Zrubna culture is not a phenomenal exception or a unique case among ancient cultures. On the contrary, the artefacts of the Zrubna culture are the material expression of a stage in the tradition of making and using this type of containers. The tradition of decorating wooden dishes with metal ornaments most probably had local roots. This practice emerged not in the Early Bronze Age, but in the Middle Bronze Age, during the Catacomb period, but it was not widespread. The elongated shaped overlays with lateral projections, similar to those found near the village of Komyshuvate, became widespread in the Late Bronze Age in the Zrubna culture.

Obviously, the attachment of metal plates to wooden vessels was not just for decorative purposes. In general, the authors agree with a number of researchers that the bronze plaques on wooden vessels were not functional or aesthetic, but primarily magical. Thus, such wooden bowls in the funerary complexes of the Zrubna community may be regarded as a reliable marker for determining the burials of priests or cult servants. In this case, it is possible to compare the wooden bowls from the burials with the receptacle for the drink of the gods (Soma/Haoma), known from the ancient texts of the *Rigveda* and *Avesta*.

Analysis of the materials of the Komyshuvate cemetery has made it possible to approach the problem of social reconstruction. The burials studied in barrow 4 clearly show signs of social exceptionality, and a number of deviations from the model of an ordinary burial of the Zrubna culture of the North Azov Region. The presence of a wooden bowl with a shaped metal casing, and a "ceremonial" ceramic vessel with a "calendar" motif in the burial chamber are status signs. These objects mark individuals who have been involved in ritual activities. Expressive indicators of the social unorthodoxy of the buried, and signs of a higher rank, are: traces of ritual actions outside the grave, a stone slab over a complex stone structure, excessive funerary implements, and meat food (the prestigious hindquarters of the carcass).

Overall, the publication of materials from the Komyshuvate burial mound necropolis investigated by Mariupol archaeologists has been a continuation of a new series launched in 2020, dedicated to regional studies on the archaeology of the North Azov Region. The work enriches the collection of sources for the study of the pastoral tribes of the Azov steppes, from the Bronze Age to the Middle Ages.

ARCHEOLÓGIA SEVERNÉHO PRIAZOVIA

MOHYLNÍK NA LOKALITE KOMYŠUVATE

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Súhrn

Štúdia o nálezoch z mohylovej nekropoly v katastri obce Komyšuvate v severnom Priazoví, ktorá bola preskúmaná mariupoľskými archeológmi, je pokračovaním série publikácií „Archeológia severného Priazovia“, založenej v roku 2020. Ide o vedecké monografie zaoberajúce sa regiónom severného Priazovia, so zameraním na analýzu prameňov zo starých aj nových archeologických výskumov, múzejných archeologických zbierok, na ďalšie relevantné materiály o pamiatkovej ochrane, ako aj na dejiny archeologického bádania v regióne.

Predložená kniha o mohylníku neďaleko obce Komyšuvate je 3. zväzkom série a vedeckým výstupom vyše 30 rokov trvajúceho archeologického výskumu jednej skupiny mohýl. Juhozápadnú časť Doneckej oblasti, v ktorej sa lokalita nachádza, pritom možno považovať za najmenej archeologicky prebádanú oblasť v severovýchodnom Priazoví. Perspektívny bude doplňujúci prieskum oblasti ako celku s chráneným archeologickým územím, s cieľom identifikovať doteraz neznáme sídliskové a hrobové nálezy.

Skupina mohýl je situovaná v Priazovskej nížine, na vyvýšenine medzi riekami Berda a Komyšuvatka. Archeologický materiál z výskumu, datovaný do mladšej doby bronzovej a do stredoveku, bol získaný počas vykopávok Mariupoľskej archeologickej expedície (MAE) v roku 1989 a archeologickej expedície Mariupoľskej štátnej univerzity (AE MSU) v roku 2021. Analyzované sú vybrané komponenty materiálnej a duchovnej kultúry pravekého i stredovekého obyvateľstva azovských stepí, ich pohrebný rítus aj spoločenská organizácia.

Výskum mohyly v Komyšuvate je dobrým príkladom kontinuity generácií archeológov. Začala ho MAE v roku 1989 pod vedením V. Kulbaku, bývalého člena jednej z najväčších expedícií na východe Ukrajiny – Severodoneckej expedície Archeologického ústavu Akadémie vied Ukrajinskej SSR. V uvedenom roku sa preskúmali tri mohyly. Univerzitná expedícia, ktorú založil V. Kulbaka, sa stala nástupcom MAE. V nadväznosti na už zavedenú tradíciu sa AE MSU zamerala na výskum azovských mohylníkov. V sezóne 2021 vykopala AE MSU po 32 rokoch ďalšie dve mohyly. Výskum v tomto roku viedol V. Zabavin, mladší kolega V. Kulbaku, bývalý účastník MAE. Terénne práce sa uskutočnili v rámci povinnej archeologickej praxe študentov histórie na Mariupoľskej univerzite. Expedície sa zúčastnili pedagógovia a študenti Historickej fakulty, členovia Študentskej vedeckej historickej a archeologickej spoločnosti MSU, pedagógovia, študenti mariupoľských škôl a dobrovoľníci. Výskum sa realizoval aj vďaka účasti a pomoci vedenia poľnohospodárskeho podniku HarvEast a s podporou vedenia územného spoločenstva Mangush. Vyjadrujeme vďaku aj profesorovi H. Bakyrdzisovi, riaditeľovi Nadácie „Anastasios G. Levendis“ (Cyperská republika), za pomoc pri organizovaní vykopávok.

Mohylové pohrebisko v Komyšuvate je v knihe vyhodnotené aj z hľadiska archeológie krajiny. Topografia polohy mohýl s prihliadnutím na definované štyri zóny (podľa vzdialenosti od významných zdrojov sladkej vody) dovoľuje preskúmanú skupinu mohýl zaradiť do zóny návrší v povodiach a na okrajoch vyvýšených plošín (so vzdialenosťou od vodného toku do 10 km).

Začiatky mohylového pohrebiska sa všeobecne spájajú s nositeľmi zrubovej kultúry mladšej doby bronzovej. Na základe stratigrafických pozorovaní, typologickej analýzy pohrebného rítu a hrobového inventára poukazujeme na postupnosť výstavby mohýl v skupine a na postupnosť ukladania hrobov v nich. Predkladáme aj relatívnu chronológiu hrobov zrubovej kultúry na nekropole Komyšuvate. Všetky hrobové nálezové celky z mladšej doby bronzovej možno zaradiť na koniec druhého alebo na začiatok tretieho horizontu pohrebísk zrubovej kultúry v severnom Priazoví. Ďalšia etapa využívania mohylového pohrebiska sa spája so stredovekými kočovníkmi. V mohylách z doby bronzovej (mohyla 1, 3 a 4) boli identifikované rituálne aktivity, dve mohyly boli navŕšené nad hrobom stredovekého nomáda (mohyla 2) a nad kenotafickým hrobom (mohyla 5).

Z piatich preskúmaných mohýl patria tri zrubovej kultúre. Nachádzali sa približne v rovnakej vzdialenosti od seba. Všetky tri mohyly obsahovali jeden hlavný hrob a v najväčšej z mohýl bol preskúmaný dodatočne zapustený hrob. Analyzované pohrebisko plne zodpovedá všeobecnému trendu výstavby mohylníkov nositeľov zrubovej kultúry v severnom Priazoví. Mohyly v skúmanej skupine boli usporiadané lineárne („reťazovito“).

Na lokalitách zrubovej kultúry patrí k najrozšírenejším typom hrobu pochovávanie v jamách a v kamenných schránkach. Zo štyroch preskúmaných zrubových hrobov je len jeden v hrobovej jame bez obloženia, všetky ostatné hroby mali kamenné konštrukcie. Hrob 1 mohyly 1 patrí do skupiny I (hroby s vertikálne murovanými stenami), hrob 1 mohyly 4 do skupiny II (hroby s horizontálnymi murovanými stenami) a hrob 2 mohyly 4 do skupiny III (hroby s horizontálne a vertikálne murovanými stenami). Vo všeobecnosti sa kamenné konštrukcie používajú od rozvinutej a neskorej fázy zrubovej kultúry. Pokiaľ ide o hroby s horizontálnymi murovanými stenami a o schránky zložitej konštrukcie, dostupné súbory nám umožňujú zaradiť ich na koniec rozvinutej až na začiatok neskorej fázy zrubovej kultúry severného Priazovia.

Preskúmané hroby zrubovej kultúry vykazujú spoločné pohrebné tradície, do istej miery charakteristické pre pamiatky v celej oblasti tejto kultúry. Za najbežnejšiu formu pochovávania sa považuje individuálny pohreb (inhumácia) v hrobovej jame, kde je kostra v skrčenej polohe na ľavom boku, s rukami ohnutými v lakťoch, uloženými pri tvári alebo pred hrudníkom zosnulého, s hlavou otočenou na východ. Základným atribútom hrobového inventára je keramická nádoba (presnejšie jedlo/nápoj v keramickej nádobe), uložená v blízkosti hlavy alebo hrude zosnulého. Takéto rituálne normy sú rozšírené v celej oblasti zrubovej kultúry.

Kvalitatívne znaky prejavujúce sa v morfológii nádob, v zložení hliny na ich výrobu, v ich povrchovej úprave a výzdobe, umožňujú keramický súbor z mohylníka v Komyšuvate zaradiť do druhého (rozvinutého) horizontu pohrebísk zrubovej kultúry v oblasti severného Priazovia. Súbor keramických nádob možno rozdeliť na dve skupiny, a to na nádoby bez hrdla a nádoby s výrazným hrdlom. Nádoba v tvare pohára z hrobu 2 v mohyle 4 patrí k typu A – uzavreté nádoby s plecami a okrajom vtiahnutým dovnútra. Ostatná keramika, nádoby s výrazným hrdlom, sa delí na dve skupiny: hrnce a ostro profilované nádoby. Keramiku charakterizuje nízke hrdlo, von vyhnuté okraje a výrazné plecia v hornej tretine nádoby. V závislosti od pomeru výšky nádoby k najväčšiemu priemeru tela sa hrnce zaraďujú ku keramickým nádobám typu B, ktoré majú priemer tela väčší ako výšku.

Pomerne zriedkavou kategóriou hrobového inventára zrubovej kultúry severného Priazovia sú nádoby z dreva. Analýza zvyškov drevenej nádoby, odkrytej v hrobe 2 mohyly 4, umožnila predložiť niekoľko zistení k technológii výroby tejto kategórie výbavy. Hrobové nálezy drevených nádob sú často opatrené kovovými prvkami, aj preto sa v tejto súvislosti riešili viaceré technologické a kultúrno-chronologické otázky.

Druhý (rozvinutý) horizont pohrebísk zrubovej kultúry severného Priazovia sa vyznačuje hlavnými aj sekundárnymi hrobmi v hrobových jamách. Zároveň sa objavili schránky z vertikálne uložených kamenných blokov. Na konci tohto obdobia sa rozšíril typ kamenných hrobiek s horizontálne murovanými stenami, ako aj kombinované kamenné konštrukcie, ktorých steny sú postavené zo zvisle uložených plochých kameňov v rôznych kombináciách s horizontálnym murivom. V uložení zosnulého prevláda stredne až silne skrčená poloha na ľavom boku s orientáciou hlavy na severovýchod s odchýlkami. Keramika nachádzajúca sa v analyzovaných hroboch v Komyšuvate je typická pre druhý (rozvinutý) horizont.

Analýza pohrebného rítu a inventára hrobu 1 mohyly 2 z obdobia stredoveku ho umožňuje datovať do 13.–14. storočia. Okrem toho boli na všetkých mohylách pohrebiska zaznamenané stopy po rituálnych úkonoch a po aktivitách súvisiacich so spomienkami na zosnulých, spojených so stredovekými nomádmi. Nález kovového (medeného) kotlíka v mohyle 1 pravdepodobne tiež súvisí s nomádskym pohrebom a pochádza z 13.–14. storočia. Kotly boli nielen súčasťou pohrebnej výbavy zosnulého, ale nevyhnutne sa používali aj ako predmet pri rituálnych a kultových činnostiach. Rituálne nálezy z mohyly 3 sa tiež spájajú so stredovekými nomádmi. Jama s drevenou doskou, vertikálne postavenou v strede mohyly, pravdepodobne v zjednodušenej podobe odráža tradíciu Polovcov (jamy so zahĺbenými drevenými alebo kamennými idolmi v mohylách).

Keramický riad je najrozšírenejšou kategóriou inventára v hroboch zrubovej kultúry. Mimoriadny záujem vždy vzbudzovali nádoby s neobyčajnou výzdobou, ktoré bádatelia interpretujú ako piktogramy, prototypy písma a kresby s príbehom. Osobitnú pozornosť si zaslúži kalendárna výzdoba na hrnci z hrobu 1 mohyly 4. 12 alebo 13 výzdobných prvkov by mohlo byť symbolickým znázornením variantu lunisolárneho kalendára s dodatočným 13. mesiacom priestupného roka. Podľa nášho názoru odráža 13-prvková kompozícia predstavy o ročnom cykle, ktoré boli vlastné spoločnosti zrubovej kultúry. Predpokladá sa, že cyklická kompozícia zobrazená na keramickej nádobe z mohylového pohrebiska v Komyšuvate zaznamenáva opakujúce sa časové intervaly, ktoré boli pre obyvateľstvo významné a možno odrážajú ročné a lunárne cykly s časom prechodu zo starého do nového roka.

Tradícia výroby a používania rituálneho dreveného riadu má dlhú tradíciu a je neoddeliteľnou súčasťou materiálnej kultúry stepného a lesostepného obyvateľstva na juhu východnej Európy od staršej doby bronzovej až do konca mladšej doby železnej. Drevený riad zrubovej kultúry zdobený kovovými prvkami nie je na pozadí starých kultúr výnimočným fenoménom či ojedinelým javom. Naopak, takéto artefakty zrubovej kultúry sú materiálnym vyjadrením jednej z etáp tradície výroby a používania tohto typu riadu. Zvyk zdobenia drevených výrobkov kovovými aplikáciami mal skôr lokálne korene a objavil sa nie v mladšej, ale už v strednej dobe bronzovej, v období katakombovej kultúry, kde však nebol natoľko rozšírený. V mladšej dobe bronzovej sa v zrubovej kultúre rozšírili podlhovasté figurálne aplikácie s bočnými výčnelkami podobné tým, aké sa našli v Komyšuvate.

Je zrejmé, že aplikácie kovových prvkov na drevených nádobách nemali iba dekoratívny účel. Vo všeobecnosti sa stotožňujeme s predpokladom, že bronzové prvky na drevených nádobách nenesú funkčné alebo estetické, ale predovšetkým magické posolstvo. Nálezy drevených misiek v hrobových inventároch zrubovej kultúry možno považovať za spoľahlivý atribút pohrebov kňazov alebo šamanov. V tomto prípade je možné porovnať drevené misky z pohrebísk zrubovej kultúry s nádobou na nápoj bohov – Soma/Haoma, ktoré sú známe zo starovekých textov Rigvédy a Avesty.

Analýza materiálu umožnila riešiť aj sociálne otázky. Hroby v mohyle 4 jednoznačne vykazujú viaceré odchýlky od všeobecného modelu pochovávania zrubovej kultúry v severnom Priazoví a nesú znaky sociálne výnimočných jedincov. Prítomnosť drevenej misky s kovovou figurálnou aplikáciou a „obradnej" keramickej nádoby s „kalendárovou" výzdobou sú znakmi charakterizujúcimi osoby zapojené do rituálnych činností. Prítomnosť stôp po rituálnych aktivitách mimo hrobu, kamenná doska nad zložitou kamennou konštrukciou, bohatá výbava a mäsité jedlo (z cenných zadných častí tiel zvierat) sú jasnými indikátormi spoločenskej výnimočnosti pochovaného a znakmi jeho vyššieho postavenia.

Možno zhrnúť, že publikácia zverejňujúca materiály z mohylovej nekropoly v Komyšuvate, ktorú preskúmali mariupoľskí archeológovia, obohacuje poznatky o pastierskych kmeňoch azovských stepí v dobe bronzovej a v stredoveku.

АРХЕОЛОГІЯ ПІВНІЧНОГО ПРИАЗОВ'Я

КОМИШУВАТСЬКИЙ КУРГАННИЙ МОГИЛЬНИК

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Резюме

Сьогодні національна культурна спадщина України, в тому числі її невід'ємна частина, археологічна спадщина, потерпає від величезних викликів, спричинених російсько-українською війною, що триває з 2014 року. Від самого початку війни археологічні пам'ятки сходу України першими відчули на собі руйнівну силу російської агресії. Північне Приазов'я в межах Донецької області на сході країни вважається одним з найбільш археологічно багатих регіонів України. Серед археологічних пам'яток чільне місце посідають кургани. Саме кургани, зосереджені переважно на вододільних хребтах і плато, в першу чергу страждають від бойових дій.

Болючою проблемою й досі залишається питання публікації (введення у науковий обіг) значного масиву матеріалів розкопок, зокрема й новобудовних експедицій попередніх років. Таким чином, існуючі загрози та стан археологічної спадщини в умовах війни значною мірою актуалізують потребу та вимагають публікації матеріалів, отриманих під час археологічних досліджень у Північному Приазов'ї. Запропоноване колективом авторів монографічне дослідження стало закономірним підсумком більш ніж тридцятирічної історії археологічного вивчення однієї курганної групи.

Публікація матеріалів Комишуватського курганного некрополя, дослідженого маріупольськими археологами у Північному Приазов'ї, стала логічним продовженням започаткованої у 2020 році нової серії „Археологія Північного Приазов'я". Це наукове видання, яке присвячено регіональним археологічним студіям: публікації матеріалів старих і нових польових археологічних досліджень, музейних археологічних колекцій, актуальних матеріалів з пам'яткоохоронної справи, а також розвідок з історії археологічного вивчення регіону.

Досліджена на півдні Донеччини біля с. Комишувате курганна група знаходилась в межах Приазовської низовини (Приазовської акумулятивної низинної рівнини), на вододільному плато між верхів'ями балок у межиріччі річок Берда та Комишуватка басейну Азовського моря. У науковий обіг вводяться матеріали доби пізньої бронзи та середньовіччя, здобуті під час розкопок Маріупольською археологічною експедицією у 1989 році та археологічною експедицією Маріупольського державного університету у 2021 році. Розглянуто деякі особливості матеріальної і духовної культури давнього та середньовічного населення приазовських степів, їх соціальної організації та поховальної обрядовості.

Було розглянуто топографічні та ландшафтні особливості розміщення курганів Комишуватського могильника. Аналіз топографічного розташування насипів з урахуванням виділення чотирьох зон, зумовлений ступенем віддаленості від значних джерел прісної води, дозволив віднести досліджену групу до III зони, вододільні гребні та край вододільних плато (видалення від річки до 10 км).

В цілому, початок існування курганного могильника пов'язаний з племенами зрубної культури доби пізньої бронзи. На підставі стратиграфічних спостережень та типологічного аналізу обрядово-інвентарного комплексу було висловлено припущення щодо послідовності зведення курганних насипів у групі та здійснених в них поховань. Запропоновано варіант відносної періодизації поховань зрубної культури Комишуватського некрополя. Всі поховальні комплекси доби пізньої бронзи віднесено до II, фіналу II або початку III горизонтів могильників зрубної культури Північного Приазов'я. Наступний етап існування могильника пов'язаний з середньовічними номадами. Було простежено випадки ритуальних дій на курганах доби бронзи (кургани 1, 3 та 4), споруджено два курганних насипи над похованням середньовічного кочівника (курган 2) та могилою-кенотафом (курган 5).

З 5 досліджених курганів групи тільки 3 належали до зрубного часу та були розташовані приблизно на однаковому віддалені один від одного. Всі 3 зрубних кургани містили по одному основному похованню, а найбільший з курганів ще одне впускне. Досліджений нами могильник цілком узгоджується із загальною тенденцією курганного будівництва зрубних племен в Північному Приазов'ї. За формою розміщення курганів у групі могильник демонструє лінійне планування. При такому плануванні насипи могильника вишикувані ланцюгом.

Поховальні споруди зрубної культури могильника належать до найбільш розповсюджених типів: поховання в ямах та поховання в кам'яних скринях. З чотирьох зрубних могил лише одна влаштована у ямі, всі інші поховання – у кам'яних скринях. Поховання 1 кургану 1 належить до I групи (гробниці, стіни яких складені вертикальною кладкою), поховання 1 кургану 4 – до II групи (гробниці, стіни яких складені горизонтальною кладкою), поховання 2 кургану 4 – до III групи (комбіновані гробниці, стіни яких складені горизонтальною та вертикальною кладкою). У цілому ж побутування кам'яних ящиків посідає розвинений і пізній етапи існування зрубної культури. Щодо цист та ящиків складної конструкції, то наявні матеріали дозволяють віднести їх до кінця розвиненого, початку пізнього етапу зрубної культури Північного Приазов'я.

Досліджені поховальні споруди зрубної культури могильника, демонструють загальні поховальні традиції, певною мірою характерні для пам'яток всієї зрубної культурної області. Зокрема найбільш масовою формою поховань вважається індивідуальне трупопокладення (інгумація) у звичайній ямі, в зібганому стані на лівому боці, з руками зігнутими в ліктях і розташованими біля обличчя або перед грудьми померлого з орієнтуванням головою у східний

сектор. Обов'язковим атрибутом поховального приданого є керамічна посудина (точніше – їжа/питво у керамічній посудині), яка розташована біля голови або грудей небіжчика. Такі ритуальні норми поширені по всьому ареалу зрубної культури.

Якісні ознаки, що проявлялися у формі та пропорціях посудин, складі тіста, обробці поверхні й орнаментації, дозволили віднести керамічний корпус поховань зрубної культури Комишуватського могильника до II (розвиненого) горизонту могильників зрубної культури Північного Приазов'я. Керамічний комплекс поділено на два класи в залежності від наявності або відсутності шийки: посуд без шийки та посуд з виділеною шийкою. Банкоподібну посудину з поховання 2 кургану 4 віднесено до типу А – закриті банки з наявними плічками зі стягнутим в середину краєм вінця. Решта кераміки, посуд з виділеною шийкою поділяється на два відділи: горщики та гостро реберні посудини. Невисока шийка, відігнуті назовні вінця та виражені плічка, розташовані в верхній третині посудини, характеризують горщикоподібний посуд. Своєю чергою горщики в залежності від показника співвідношення висоти посудини та найбільшого діаметра тулуба віднесено до типу Б – приземкуваті (діаметр тулуба більший за висоту посудини).

Досить рідкісною категорією поховального реманенту в зрубних похованнях Північного Приазов'я є дерев'яний посуд. Аналіз решток дерев'яної посудини, дослідженої в похованні 2 кургану 4, дозволив зробити деякі спостереження щодо технології виготовлення подібної категорії поховального інвентарю. Дерев'яний посуд в поховальних комплексах найчастіше фіксується за металевими елементами, саме тому вони були використані для вирішення ряду технологічних і культурно-хронологічних питань.

Стратиграфічні спостереження та аналіз обрядово-інвентарного комплексу поховань зрубної культури Комишуватського курганного могильника дозволили з певною часткою ймовірності встановити послідовність зведення курганних насипів у групі та здійснених в них поховань.

Для II (розвиненого) горизонту могильників зрубної культури Північного Приазов'я: характерні як основні, так і впускні поховання в грунтових ямах. У цей же період з'являються кам'яні скрині, споруджені з вертикально поставлених на ребро кам'яних плит. Наприкінці періоду набуває поширення тип кам'яних гробниць, іменований дослідниками цистами або кам'яними склепами, а також комбіновані скрині або скрині змішаних типів, стіни яких зведені з орфостатно встановлених плит в різних поєднаннях з постелістою кладкою. У положенні небіжчиків переважає середньо і сильно скорчена поза на лівому боці з орієнтацією в північно-східний з відхиленнями сектор. Характерні ознаки керамічного комплексу з вищезазначених поховань Комишуватського могильника також притаманні для II (розвиненого) горизонту.

Аналіз поховального обряду та інвентарю поховання 1 кургану 2 середньовічного часу дозволяє датувати його XIII–XIV ст. Крім того, на всіх курганах могильника зафіксовано сліди ритуально-поминальних дій, пов'язаних з середньовічними кочівниками. Знахідка металевого (мідного) казана в кургані 1 з певною вірогідністю також пов'язана із кочівницьким похованням та датується XIII–XIV ст. Подібні знахідки можливо були пов'язані із курганними святилищами. Казани не тільки входили до складу поховального супроводу небіжчика, але й застосовувались як необхідний предмет під час ритуально-культових дій. Культовий комплекс з кургану 3 також пов'язаний із кочівниками середньовіччя. Яма з дерев'яною дошкою, вертикально вкопаною по центру, можливо у спрощеному вигляді відображає половецьку традицію влаштовувати у курганах святилища-ями з дерев'яними або кам'яними бабами.

Матеріали Комишуватського могильника також є важливим джерелом для вивчення духовної культури та соціальної структури давнього населення Приазовських степів.

Керамічний посуд є найбільш масовою категорією інвентарю у складі поховального приданого у могилах зрубної культури. Особливий інтерес завжди викликали знахідки посуду з неординарним орнаментом, який дослідники трактують як піктограми, протописемність, сюжетні малюнки. На окрему увагу заслуговує календарна орнаментація на горщику з поховання 1 кургану 4. 12/13-елементні знакові композиції пропонується розглядати як варіації місячно-сонячного календаря з додатковим 13-м місяцем високосного року. На наш погляд, 13-елементна композиція відображає уявлення про річний цикл, що існували в населення зрубної спільноти. Висловлено припущення, що циклічна композиція, відображена на керамічній посудині з поховання зрубної культури Комишуватського курганного могильника, фіксує значущі для населення проміжки часу, що повторюються, та можливо відбиває річний і місячний цикли з фіксацією часу переходу від старого до нового року.

Традиція виготовлення та використання ритуального дерев'яного посуду відзначилася тривалістю та є неодмінною складовою матеріальної культури населення Степу та Лісостепу на півдні Східної Європи, починаючи з доби ранньої бронзи та протягом всього раннього залізного віку. Дерев'яний посуд зрубної культури, прикрашений металевим окуттям, не є феноменальним виключенням або унікальним явищем на тлі стародавніх культур. Навпаки, зрубні артефакти є матеріальним вираженням одного з етапів традиції виготовлення та використання цього типу посуду. Традиція оздоблювати дерев'яний посуд металевими накладками-окуттями скоріш мала місцеве коріння та виникла не у ранню, а у середню добу бронзи, у катакомбному середовищі, але широкого поширення не зазнала. Видовжені фігурні накладки з боковими виступами, подібні знахідці біля с. Комишувате, зазнають розповсюдження у пізню бронзу у зрубній культурі.

Вочевидь, при закріпленні металевих накладок до вінець дерев'яної посудини переслідувалася не лише декоративна мета. В цілому, автори приєднуються до припущення дослідників про те, що бронзові накладки на дерев'яні посудини несли не функціональне або естетичне, а насамперед магічне навантаження. Знахідки дерев'яних чаш в поховальних комплексах зрубної спільноти можуть розглядатись як надійний маркер для визначення поховань жерців або служителів культу. При цьому, можливе порівняння дерев'яних чаш з поховань зрубної спільноти з місткістю для напою богів, соми/хаоми.

Аналіз матеріалів дозволив наблизитись до проблеми соціальних реконструкцій. Поховання, досліджені у кургані 4, яскраво демонструють низку відхилень від моделі рядового поховання зрубної культури Північного Приазов'я та ознаки соціальної неординарності. Наявність в похованні дерев'яної чаші з металевим фігурним окуттям та „парадної" керамічної посудини з „календарним" сюжетом є статусними знаками, що маркують осіб, що мали відношення до ритуальної діяльності. Факти наявності слідів ритуальних дій поза могилою, кам'яного перекриття над складною кам'яною конструкцією, надлишкового інвентарю та м'ясної їжі (почесної задньої частини) є виразними показниками соціальної неординарності похованих та знаками підвищеного рангу.

В цілому, публікація матеріалів Комишуватського курганного некрополя, дослідженого маріупольськими археологами, стала продовженням започаткованої у 2020 році нової серії, присвяченій регіональним студіям з археології Північного Приазов'я, що збагачує джерельний фонд з вивчення скотарських племен приазовських степів доби палеометалу, середньовіччя.

LIST OF ABBREVIATIONS

AB	animal bones
AE MSU	Archaeological Expedition of Mariupol State University
AS USSR	Academy of Sciences of the USSR
B	burial
BMZC	Berezhnovka-Mayivka Zrubna culture
DPBC	Dnipro-Prut Babyne culture
GPS	Global Positioning System
M	mound
MAE	Mariupol Archaeological Expedition
NASU	National Academy of Sciences of Ukraine
R	Repère (centre of the mound)
URSR	Ukrainska Radianska Sotsialistychna Respublika (Ukrainian Soviet Socialist Republic)

BIBLIOGRAPHY

Andrienko 1979 — V. P. Andrienko: O semantike ornamenta sosuda iz Vladimirovki. In: A. A. Moruzhenko (red.): *Problemy epokhi bronzy Yuga Vostochnoy Yevropy*. Donetsk 1979, 70.

Andriiovych 2019 — M. Andriiovych: The Brief „Walk-Through" in the Archaeological Ceramic investigations in the way to a New Approach in Neolithic Ceramics Styles Research. *Antiqua* 11, 2019, 138–143. DOI: https://doi.org/10.37098/VA-2019-11-138–143

Androsov 1986 — A. V. Androsov: Kurgan epohi bronzy u s. Novyj Mir. In: I. F. Kovaleva (red.): *Problemy arheologii Podneprov'ya*. Dnepropetrovsk 1986, 67–78.

Antonov/Otroshchenko 2004 — A. L. Antonov/V. V. Otroshchenko: Osoblyvosti rytualnoho posudu zrubnoi spilnoty. *Arkheolohiia* 1, 2004, 18–30.

Armarchuk 2006 — E. A. Armarchuk: *Konskoe snaryazhenie iz mogil'nikov Severo-Vostochnogo Prichernomor'ya X – XIII vekov*. Moscow 2006.

Bagautdinov 1991 — R. S. Bagautdinov: Kurgany bronzovogo veka u s. Kanadej. In: G. I Matveeva (red.): *Arheologicheskie issledovaniya v lesostepnom Povolzh'e*. Samara 1991, 36–58.

Bajburin 1981 — A. K. Bajburin: Semioticheskij status veshchej i mifologiya. *Material›naya kul›tura i mifologiya* 37, 1981, 215–226.

Berestnev 2001 — S. I. Berestnev: *Vostochnoukrainskaya lesostep› v epohu srednej i pozdnej bronzy (II tys.do n.e.)*. Kharkov 2001.

Berezanska/Klochko 2011 — S. S. Berezanska/V. I. Klochko: Hordiivskyi mohylnyk. In: V. I. Klochko (red.): *Hordiivskyi mohylnyk*. Vinnytsia 2011, 7–113.

Besedin/Safonov 1996 — V. I. Besedin/I. Ye. Safonov: Chisla v ornamentatsii keramiki srubnoy kultury. *Rossiyskaya arkheologiya* 2, 1996, 22–33.

Bespalyi/Lukiashko 2008 — E. I. Bespalyi/S. I. Lukiashko: *Drevnee naselenie mezhdurech›ya Dona i Kagal›nika. Kurgannyj mogil›nik u s. Vysochino 1*. Rostov na Donu 2008.

Bidzilya et al. 1977 — V. I. Bidzilya/Yu. V. Boltrik/B. N. Mozolevskij/I. P. Savovskij: Kurgannyj mogil'nik v uroch. Nosaki. In: V. I. Bidzilya (red.): *Kurgannye mogil'niki Ryasnye Mogily i Nosaki*. Kyiv 1977, 61–157.

Bidzilya/Yakovenko 1974 — V. I. Bidzilya/E. V. Yakovenko: Kimmerijskie pogrebeniya Vysokoj Mogily. *Sovetskaya arheologiya* 1, 1974, 148–159.

Boltrik/Nikolova/Razumov 2005 — Yu. V. Boltrik/A. V. Nikolova/S. M. Razumov: Doslidzhennia kurhanu bronzovoi doby u m. Kirovohradi. *Arkheolohichni doslidzhennia v Ukraini 2003–2004 rr*, 2005, 69, 70.

Borodovskij 2013 — A. P. Borodovskij: Prestizhnaya derevyannaya utvar' s metallicheskimi nakladkami afanas'evskoj kul'tury Sayano-Altaya. *Arheologiya, etnografiya i antropologiya Evrazii* 4, 2013, 119–122.

Bratchenko 1997 — S. N. Bratchenko: Kurgany u sel Peschanoe i Razdol'noe v Priazov'e. *Doneckij arheologicheskij sbornik 7*, 1997, 116–129.

Catalogue 1993 — Catalogue of accidental finds from archaeological collections of Donetsk region. *Arheologicheskij almanakh* 1, 1993, 235.

Cherednichenko 1973 — N. N. Cherednichenko: *Istoriya srubnyh plemen Podon'ya (XV – IX vv. do n.e.).* Abstract of dissertation. Kyiv 1973.

Cherednichenko 1986 — N. N. Cherednichenko: Zrubnaia kultura (Zrubna culture). In: S. S. Berezans kaya/V. V. Otroshchenko/N. N. Cherednichenko/I. N. Sharafutdynova (red.): *Kulturyi epohi bronzyi na territorii Ukrainyi*. Kyiv 1986, 44–82.

Chkhaidze 2015 — V. N. Chkhaidze: Kotly iz pogrebenij kochevnikov stepnogo Predkavkaz'ya XI – XIV vv. *Kratkie soobshcheniya Instituta arheologii* 237, 2015, 280–291.

Dremov 1997 — I. I. Dremov: Materialy iz kurganov u s. Berezovka Engel'sovskogo rajona i nekotorye voprosy sociokul'turnyh rekonstrukcij epohi pozdnej bronzy. In: A. I. Yudin (red.): *Arheologicheskoe nasledie Saratovskogo kraya. Ohrana i issledovaniya v 1996 g.* Saratov 1997, 147–164.

Dubovska 1993 — O. R. Dubovska: Voprosy slozheniya inventarnogo kompleksa chernogorovskoj kul'tury. *Arheologicheskiy almanakh* 2, 1993, 137–160.

Dubovska 1997 O. R. Dubovska: Ob etnokul`turnoj atribuczii „novocherkasskikh" pogrebenij Severnogo Prichernomor›ya. *Arkheologicheskij al`manakh* 6, 1997, 181–218.

Dudin 2009 A. A. Dudin: O metallicheskih detalyah derevyannoj posudy rannih kochevnikov yuga Vostochnoj Evropy v predskifskij period. *Vita antiqua* 7/8, 2009, 123–129.

Dzhumabekova/Bazarbaeva 2017 G. S. Dzhumabekova/G. A. Bazarbaeva: O simvolike metallicheskih kotlov v kul'ture kochevnikov. *Samarskij nauchnyj vestnik* 2, 2017, 114–117.

Evdokimov 1992 G. L. Evdokimov: *Pogrebeniya epohi pozdnej bronzy Astahovskogo mogil'nika*. Kyiv 1992.

Evdokimov/Loman 1989 V. V. Evdokimov/V. G. Loman: Raskopki yamnogo kurgana v Karagandinskoj oblasti. In: V. V. Evdokimov (red.): *Voprosy arheologii Central›nogo i Severnogo Kazahstana*. Karaganda 1989, 34–46.

Evglevsky 1992 A. V. Evglevsky: Pogrebeniya zolotoordynskogo vremeni iz raskopok novostroechnoj ekspedicii Doneckogo universiteta. *Doneckij arheologicheskij sbornik* 1, 1992, 107–116.

Evglevsky/Danylko/Kupriy 2008 A. V. Evglevsky/N. M. Danylko/S. A. Kupriy: Ryadovoe pozdnekochevnicheskoe pogrebenie s neryadovym obryadom iz kurgana 2 gruppy Tokovskie mogily na Pravoberezh'e Dnepra. In: A. V. Evglevsky (red.): *Stepi Evropy v epohu srednevekov›ya* 6. Donetsk 2008, 199–214.

Fedorov-Davydov 1966 G. A. Fedorov-Davydov: *Kochevniki Vostochnoj Evropy pod vlast›yu zolotoordynskih hanov*. Moscow 1966.

Galkin 1975 L. L. Galkin: Odno iz drevnejshih prakticheskih prisposoblenij skotovodov. *Sovetskaya arheologiya* 3, 1975, 186–192.

Gershkovych 1982 Ya. P. Gershkovych: Pro kamiani pokhovalni sporudy zrubnoi kultury Pivnichno-Skhidnoho Pryazovia. *Arkheolohiia* 41, 1982, 15–21.

Gershkovych/Shepel 1987 Ya. P. Gershkovych/E. A. Shepel: Makeevskij kurgannyj mogil'nik epohi bronzy. In: O. G. Shaposhnikova (red.): *Drevnejshie skotovody stepej yuga Ukrainy*. Kyiv 1987, 58–74.

Gershkovych/Yakubenko 2001 Ya. P. Gershkovych/O. O. Yakubenko: Kalendarniy friz na posudini bronzovoï dobi z Aksyutinetskikh kurganiv. In: L. S. Klochko (red.): *Muzeini chytannia*. Kyiv 2001, 72–80.

Gershkovych/Evdokimov 1982 Ya. P. Gershkovych/G. L. Evdokimov: Ob odnoy kategorii kostyanykh izdeliy srubnoy kultury. *Sovetskaya arkheologiya* 4, 1982, 228–231.

Gorbov 2001 V. N. Gorbov: O naimenovanii chastej sosudov pozdnego bronzovogo veka. In: *Epoha bronzy Dono-Doneckogo regiona*. Kyiv – Voronezh 2001, 29–32.

Gorbov 2006 V. M. Gorbov: Unikalnyi kultovyi kompleks na poselenni Komyshuvata-XIV. *Litopys Donbasu* 14, 2006, 11–22.

Gorbov/Kabanova 2010 V. N. Gorbov/E. V. Kabanova: Nekotorye aspekty kul'tovoj praktiki naseleniya epohi bronzy Severo-Vostochnogo Priazov'ya. *Arheologicheskij al›manah* 21, 2010, 86–103.

Gorbov/Kabanova 2011 V. N. Gorbov/E. V. Kabanova: Kamyshevataya-XIV – poselenie pozdnego bronzovogo veka v Severo-Vostochnom Priazov'e. In: *Arkasivski chytannia*. Mykolaiv 2011, 49–52.

Gorbov/Podobed 1996 V. N. Gorbov/V. A. Podobed: O hronologicheskoj pozicii pamyatnikov kamyshevatskogo tipa. In: *Severo-Vostochnoe Priazov›e v sisteme evrazijskih drevnostej (eneolit – bronzovyj vek)* 2. Donetsk 1996, 96–99.

Guguev 2009 Yu. K. Guguev: Poloveckoe svyatilishche iz mogil'nika Ryabichev na levoberezh'e Dona. *Trudy arheologicheskogo nauchno-issledovatel'skogo byuro* IV. Rostov-na-Donu 2009, 12–17.

Gulyaev 2017 V. I. Gulyaev: Derevyannye chashi skifskogo vremeni s zolotymi obkladkami v vide hishchnyh ptic. *Kratkie soobshcheniya Instituta arheologii* 248, 2017, 149–165.

Gurkin 1987 S. V. Gurkin: Poloveckie svyatilishcha s derevyannymi izvayaniyami na Nizhnem Donu. *Sovetskaya arheologiya* 4, 1987, 100–109.

Halyapin 1998 M. V. Halyapin: Kurgany srubnoj kul'tury u s. Sverdlovo. *Arheologicheskie pamyatniki Orenburzh›ya* 2, 1998, 57–86.

Halyapin 1999 M. V. Halyapin: K voprosu o kul'te zmei u naseleniya srubnoj kul'turno-istoricheskoj obshchnosti. In: *Etnichna istoriia ta kultura naselennia Stepu ta Lisostepu Yevrazii (vid kamianoho viku po rannie serednovichchia)*. Dnipropetrovsk 1999, 92–94.

Herodotus Herodotus: *Istorii v deviaty knyhakh Knyha IV. Melpomena*. Translated by A. Biletsky. Kyiv 1993.

Ilinskaya/Terenozhkin 1983 V. A. Ilinskaya/A. I. Terenozhkin: *Skifiya VII–IV vv. do n.e*. Kyiv 1983.

Kachalova 1974 N. K. Kachalova: Ermitazhnaya kollekciya N. E. Brandenburga. *Svod arheologicheskih istochnikov* B 4–12, 1974, 56.

Klimenko 1998 V. F. Klimenko: *Kurgany yuga Donetchiny*. Enakievo 1998.

Klimenko/Usachuk/Cymbal 1994 V. F. Klimenko/A. N. Usachuk/V. I. Cymbal: *Kurgannye drevnosti Centralnogo Donbassa*. Donetsk 1994.

Kliushyntsev 1989 V. N. Klyushincev: Pogrebeniya v kamennyh yashchikah sabatinovskoj kultury na r. Ingulec. *Sovetskaya arheologiya* 4, 1989, 250–254.

Klochko 2011 V. I. Klochko: Novi znakhidky rechei ta kompleksiv hordiivskoho typu na Vinnychchyni. In: V. I. Klochko (red.): *Hordiivskyi mohylnyk*. Vinnytsia 2011, 250–258.

Korenevskij/Belinskij/Kalmykov 2007 S. N. Korenevskij/A. B. Belinskij/A. A. Kalmykov: *Bol'shoj Ipatovskij kurgan na Stavropol'e kak arheologicheskij istochnik po epohe bronzovogo veka na stepnoj granice Vostochnoj Evropy i Kavkaza*. Moscow 2007.

Kosikov 1996 V. A. Kosikov: Kurgannaya gruppa u p. Novoamvrosievka na r. Krynka (iz raskopok T. A. Shapovalova). *Doneckij arheologicheskij sbornik* 6, 1996, 63–75.

Kostyuchenko 1960 I. P. Kostyuchenko: Mogil'nik epohi bronzi poblizu hut. Hmel'nic'kogo. *Arkheolohichni pamiatky URSR* 9, 1960, 88–101.

Kovaleva 1981 I. F. Kovaleva: *Sever Stepnogo Podneprovya v srednem bronzovom veke*. Dnepropetrovsk 1981.

Kovaleva 1989 I. F. Kovaleva: *Social›naya i duhovnaya kul›tura plemen bronzovogo veka (po materialam levoberezhnoj Ukrainy)*. Dnepropetrovsk 1989.

Kovaleva 1996 I. F. Kovaleva: Komu prinadlezhali srubnye pogrebeniya s bronzovymi iglami i shil'yami. In: *Severo-Vostochnoe Priazov›e v sisteme evrazijskih drevnostej (eneolit – bronzovyj vek)* 1. Donetsk 1996, 91–93.

Kovaleva/Shalobudov/Teslenko 1999 I. F. Kovaleva/V. M. Shalobudov/D. L. Teslenko: Doslidzhennia kurhaniv doby bronzy poblyzu s. Kyslychuvata. In: I. F. Kovaleva (red.): *Problemy arkheolohii Podniprovia*. Dnipropetrovsk 1999, 4–35.

Kovaleva/Volkoboj 1978 I. F. Kovaleva/S. S. Volkoboj: Srubnye kurgannye mogil'niki Nizhnego Priorel'ya. In: I. F. Kovaleva (red.): *Kurgannye drevnosti Stepnogo Podneprov›ya*. Dnepropetrovsk 1978, 32–45.

Kramarev 2003 A. I. Kramarev: Pogrebal'nye pamyatniki srubnoj kul'tury Yuzhnogo Srednevolzh'ya. In: V. S. Bochkarev (red.): *Abashevskaya kul'turno-istoricheskaya obshchnost': istoki, razvitie, nasledie*. Cheboksary 2003, 153–160.

Kravets/Posrednikov 1990 D. P. Kravets/V. A. Posrednikov: *Metodicheskie ukazaniya k organizacii samostoyatel'noj raboty na arheologicheskoj praktike: „Raskopki kurganov v zonah novostroek Donbassa"*. Donetsk 1990.

Krivcova-Grakova 1949 O. A. Krivcova-Grakova: Bessarabskij klad. Trudy Gosudarstvennogo istoricheskogo muzeya. *Pamyatniki kul›tury* 13, 1949, 26.

Kryzhytskyi 1965 S. D. Kryzhytskyi: Pro metodyku opysu kladok mist Pivnichnoho Prychornomoria VII st. do n. e. – IV st. n. e. *Arkheolohiia* 18, 1965, 39–47.

Kulbaka 1988 V. K. Kulbaka: *Otchet ob issledovaniyah kurganov v zonakh stroitelstva orositelnykh sistem v Doneckoj obl. v 1988 g.* Scientific archive of the Institute of Archeology of the NASU. Case 1988/105. Kyiv 1988.

Kulbaka/Kachur 2002 V. Kulbaka/V. Kachur: *Davni indoievropeitsi Ukrainy v svitli novitnikh arkheolohichnykh doslidzhen*. Mariupol 2002.

Kulbaka/Zabavin/Nebrat 2009 V. K. Kulbaka/V. Zabavin/S. H. Nebrat: Kurgan srubnoj kul'tury u s. Kominternovo. *Hileia* 29, 2009, 136–141.

Kushtan 2013 D. P. Kushtan: Pivden Lisostepovoho Podniprovia za doby piznoi bronzy. *Arheologicheskiy almanakh* 29, 2013, 232.

Kuznecov 2021 P. F. Kuznecov: Pamyatniki poltavkinskoj kul'tury. In: A. G. Sitdikov (red.): *Arheologiya Volgo-Ural›ya*. Eneolit i bronzovyj vek 2. Kazan' 2021, 296–315.

Leskov 1981 A. M. Leskov: *Jung- und spätbronzezeitliche Depotfunde in nördlichen Schwarzmeergebiet I. (Depots mit einheimischen Formen*). München 1981.

Lyashko 1994 S. N. Lyashko: Derevoobrabatyvayushchee remeslo epohi bronzy. In: S. S. Berezanskaya/E. V. Cvek/V. I. Klochko/S. N. Lyashko (red.): *Remeslo epohi eneolita – bronzy na Ukraine*. Kyiv 1994, 135–148.

Lytvynenko 1990 R. A. Lytvynenko: Ob odnoj iz grupp kamennyh podkurgannyh sooruzhenij srubnoj kultury. In: N. P. Olenkovskij (red.): *Problemy pervobytnoj arheologii Severnogo Prichernomor'ya*. Herson 1990, 74–75.

Lytvynenko 1992a R. A. Lytvynenko: Pogrebal'nye sooruzheniya srubnoj kul'tury Podoncov'ya i Severo-Vostochnogo Priazov'ya. *Doneckij arheologicheskij sbornik* 1, 1992, 29–46.

Lytvynenko 1992b R. A. Lytvynenko: O social'nom chlenenii pogrebenij srubnoj kul'tury lesostepi. In: A. N. Bessudnov (red.): *Teoriya i metodika issledovanij arheologicheskih pamyatnikov lesostepnoj zony*. Lipeck 1992, 138–140.

Lytvynenko 1996 R. A. Lytvynenko: Nekotorye cherty polovozrastnoj organizacii srubnyh mogil'nikov Doneckogo regiona. In: A. V. Kiyashko (red.): *Drevnosti Volgo-Donskih stepej v sisteme vostochnoevropejskogo bronzovogo veka*. Volgograd 1996, 62–66.

Lytvynenko 1997 R. A. Lytvynenko: Derevyannaya posuda v pogrebeniyah srubnoj kul'tury Azovo-Doneckogo regiona. In: P. D. Rau/A. I. Yudin (red.): *Epoha bronzy i rannij zheleznyj vek v istorii drevnih plemen yuzhnorusskih stepej*. Saratov 1997, 106–109.

Lytvynenko 1999a R. A. Lytvynenko: Periodizatsiya srubnyih mogilnikov Severo-Vostochnogo Priazovya. In: *Drevnosti Severo-Vostochnogo Priazovya*. Donetsk 1999, 4–23.

Lytvynenko 1999b R. A. Lytvynenko: K istorii issledovaniya kurgannyh mogil'nikov v okrestnostyah Kamennyh Mogil. In: *Drevnosti Severo-Vostochnogo Priazovya*. Donetsk 1999, 98–1001.

Lytvynenko 2000 R. O. Lytvynenko: Pokhovannia zrubnoi kultury v kamianykh hrobnytsiakh z horyzontalnoiu kladkoiu stin. *Arkheolohiia* 4, 2000, 3–18.

Lytvynenko 2004 R. A. Lytvynenko: Derevyannaya posuda kul'tury Babino. *Doneckij arheologicheskij sbornik* 11, 2004, 20–54.

Lytvynenko 2023 R. O. Lytvynenko: Povoienna arkheolohiia Donechchyny: zavdannia i perspektyvy riatuvalnykh doslidzhen. In: *Materialy Vseukrainskoi naukovo-praktychnoi onlain-konferentsii „Kraieznavchyi rukh na Donechchyni"*. Kramatorsk 2023, 31–36.

Lytvynenko/Zarayska 2004 R. A. Lytvynenko/N. P. Zarayska: Kurgan epohi bronzy u sela Zaporozhec (bassejn Kal'miusa, Severo-Vostochnoe Priazov'e). *Arheologicheskij al›manah* 14, 2004, 203–232.

Makhortykh 2005 S. V. Makhortykh: *Kimmeryijcy Severnogo Prichernomor›ya*. Kyiv 2005.

Maksimov 1956 E. K. Maksimov: Pamyatniki epohi bronzy u stancii Karamysh, Saratovskoj oblasti. *Trudy Saratovskogo oblastnogo muzeya kraevedeniya* 1, 1956, 115–123.

Malov 1989 N. M. Malov: Pogrebal'nye pamyatniki pokrovskogo tipa v Nizhnem Povolzh'e. *Arheologiya Vostochno-Evropejskoj stepi* 1, 1989, 82–101.

Mamontov 1996 V. I. Mamontov: Ob insigniyah vlasti v pogrebeniyah epohi pozdnej bronzy iz rajonov Povolzh'ya i Dona. In: A. V. Kiyashko (red.): *Drevnosti Volgo-Donskih stepej v sisteme vostochnoevropejskogo bronzovogo veka*. Volgograd 1996, 57–61.

Melyukova 1989 A. I. Melyukova: Derevyannaya i metallicheskaya posuda. In: A. I. Melyukova (red.): *Stepi evropejskoj chasti SSSR v skifo-sarmatskoe vremya*. Moscow 1989, 110–113.

Mihlin 1972 B. Yu. Mihlin: Raskopki v Doneckoj oblasti. *Arheologicheskie otkrytiya 1971 goda*, 1972, 321.

Minaeva 1959 T. M. Minaeva: Kurgan epohi bronzy bliz stanicy Durnovskoj Stalingradskoj oblasti. *Sovetskaya arheologiya* 3, 1959, 212–215.

Minakova 2011 E. V. Minakova: Derevyannaya posuda v pogrebeniyah yamnoj kul'turno-istoricheskoj obshchnosti Ukrainy. In: V. S. Travinskyi (red.): *Arkheolohiia & fortyfikatsiia Serednoho Podnistrovia*. Kamianets-Podilskyi 2011, 11–15.

Minakova 2015 E. V. Minakova: K istorii izucheniya derevyannoj posudy srubnoj kul'turno-istoricheskoj obshchnosti. In: V. E. Rodinkova (red.): *Novye materialy i metody arheologicheskogo issledovaniya*. Moscow 2015, 60–61.

Minakova 2018 K. V. Minakova: *Narysy z arkheolohii doby bronzy Stepovoi zony Pivnichnoho Prychornomoria. Pro derevianyi posud*. Dnipro 2018.

Moruzhenko 1980 A. A. Moruzhenko: Raskopki v Doneckoj oblasti. *Arheologicheskie otkrytiya 1979 goda*, 1980, 310, 311.

Moruzhenko/Lytvynenko 1993 A. A. Moruzhenko/R. A. Lytvynenko: Mogil'nik epohi bronzy u s. Zrubnoe na r. Mius. *Doneckij arheologicheskij sbornik* 3, 1993, 72–93.

Moruzhenko/Privalov/Andrienko 1979 A. A. Moruzhenko/A. I. Privalov/V. P. Andrienko: Issledovaniya na yuge Doneckoj oblasti. *Arheologicheskie otkrytiya 1978 goda*, 1979, 375, 376.

Narozhnyj 2003 E. I. Narozhnyj: O poloveckih izvayaniyah i svyatilishchah XIII–XIV vv. Severnogo Kavkaza i Dona. In: A. V. Evglevsky (red.): *Stepi Evropy v epohu srednevekov›ya* 3. Donetsk 2003, 245–274.

Narozhnyi/Plutov 2009 E. I. Narozhnyi/V. I. Plutov: Kostyanye ornamentirovannye nakladki na luki iz srednevekovyh kochevnicheskih zahoronenij XIII–XIV vv. (nekotorye aspekty izucheniya). In: I. I. Marchenko (red.): *Pyataya Kubanskaya arheologicheskaya konferenciya*. Krasnodar 2009, 275–280.

Nebrat 2017 S. Nebrat: Ingul Catacomb culture burials with woodenware. *Bulletin of Mariupol State University. Series History. Political Studies* 18, 2017, 52–64.

Nikolova 2012 A. V. Nikolova: Absoliutna khronolohiia yamnoi kultury Pivnichnoho Nadchornomoria v svitli dendrodat. *Arkheolohiia* 4, 2012, 14–33.

Nikolova/Kaiser 2009 A. Nikolova/E. Kaiser: Die absolute Chronologie der Jamnaja-Kultur im nördlichen Schwarzmeergebiet auf der Grundlage erster dendrochronologischer Daten. *Eurasia Antiqua* 15, 2009, 205–236.

Olhovskij/Otroshchenko 1991 V. S. Olhovskij/V. V. Otroshchenko: Kurgannoe svyatilishche epohi bronzy v Krymu. *Drevnosti stepnogo Prichernomor›ya i Kryma* 2, 1991, 111–125.

Otroshchenko 1976 V. V. Otroshchenko: Pogrebeniya s truposozhzheniyami u plemen srubnoj kul'tury Nizhnego Podneprov'ya. In: D. Ya. Telegin (red.): *Eneolit i bronzovyj vek Ukrainy*. Kyiv 1976, 172–190.

Otroshchenko 1977 V. V. Otroshchenko: Katakombnye i srubnye kurgany v okrestnostyah s. Balki. In: V. I. Bidzilya (red.): *Kurgannye mogil'niki Ryasnye Mogily i Nosaki*. Kyiv 1977, 5–15.

Otroshchenko 1979 V. V. Otroshchenko: O social'nom chlenenii pogrebenij srubnoj kul'tury Podneprov'ya. In: A. A. Moruzhenko (red.): *Problemy epohi bronzy yuga Vostochnoj Evropy*. Donetsk 1979, 86, 87.

Otroshchenko 1984 V. V. Otroshchenko: Derevyannaya posuda v srubnyh pogrebeniyah Podneprov'ya. In: I. F. Kovaleva (red.): *Problemy arheologii Podneprov'ya* 1. Dnepropetrovsk 1984, 84–96.

Otroshchenko 1986 V. V. Otroshchenko: Kostyanye detali pletok iz pogrebenij srubnoj kul'tury. *Sovetskaya arheologiya* 3, 1986, 227–232.

Otroshchenko 1989 V. V. Otroshchenko: Osobennosti pogrebenij chernogorovskoj gruppy. In: G. N. Toshchev (red.): *Problemy skifo-sarmatskoj arheologii Severnogo Prichernomor'ya*. Zaporozh'e 1989, 111, 112.

Otroshchenko 1990 V. V. Otroshchenko: Ideologicheskie vozzreniya plemen epohi bronzy na territorii Ukrainy (po materialam srubnoj kul'tury). In: V. M. Zubar' (red.): *Obryady i verovaniya drevnego naseleniya Ukrainy*. Kyiv 1990, 5–17.

Otroshchenko 1992 V. V. Otroshchenko: Tradiciya izgotovleniya derevyannyh sosudov v epohu bronzy i rannego zheleznogo veka na yuge Vostochnoj Evropy. In: B. N. Mozolevskij (red.): *Kimmerijcy i skify*. Melitopol' 1992, 71, 72.

Otroshchenko 1993 V. V. Otroshchenko: „Zhrecheskie“ kompleksy v sisteme pogrebenij srubnoj obshchnosti. In: N. P. Olenkovskij (red.): *Arheologichni ta istorichni doslidzhennya Hersonshchini*. Herson 1993, 17–31.

Otroshchenko 1994 V. V. Otroshchenko: O dvuh liniyah razvitiya kul'tur plemen srubnoj obshchnosti. In: G. N. Toshchev (red.): *Problemy skifo-sarmatskoj arheologii Severnogo Prichernomor›ya* 2. Zaporozh'e 1994, 150–153.

Otroshchenko 2001 V. V. Otroshchenko: *Problemy periodyzatsii kultur serednoi ta piznoi bronzy Pivdnia Skhidnoi Yevropy (kulturno-stratyhrafichni zistavlennia)*. Kyiv 2001.

Otroshchenko 2003 V. V. Otroshchenko: K istorii plemen srubnoj obshchnosti. *Arheologiya vostochnoevropejskoj lesostepi* 17, 2003, 68–96.

Otroshchenko 2007 V. V. Otroshchenko: Znakova systema plemen zrubnoi spilnoty (XVII–XII st. do n. e.). In: L. Bakalarska (red.): *Wspólnota dziedzictwa archeologicznego ziem Ukrainy i Polski*. Warszawa 2007, 197–212.

Otroshchenko 2019 V. V. Otroshchenko: Znaky na keramitsi doby piznoi bronzy. *Arkheolohichna keramolohiia* 1, 2019, 53–77.

Otroshchenko/Boltrick 1982 V. V. Otroshchenko/Yu. V. Boltrik: Kul'turno-hronologicheskoe i territorial'noe raspredelenie mogil'nikov Dnepro-Molochanskoj stepnoj oblasti. In: D. Ya Telegin (red.): *Materialy po hronologii arheologicheskih pamyatnikov Ukrainy*. Kyiv 1982, 38–46.

Parusimov 2005 I. N. Parusimov: Raskopki kurganov mogil'nika Polyakov. *Arheologicheskie zapiski* 4, 2005, 185–210.

Pavúk 1964 J. Pavúk: Grab des Želiezovce–Typus in Dvory nad Žitavou. *Slovenská archeológia* 12, 1964, 5–68.

Pleshivenko 1993 A. G. Pleshivenko: Mogil'nik kurgana Babakova Mogila iz Severnogo Priazov'ya. *Drevnosti stepnogo Prichernomor›ya i Kryma* 4, 1993, 128–156.

Pleshivenko 1995 A. G. Pleshivenko: Kurgannyj mogil'nik u s. Konskie razdory. *Drevnosti stepnogo Prichernomor›ya i Kryma* 5, 1995, 143–159.

Pletneva 1973 S. A. Pletneva: *Drevnosti chernyh klobukov*. Svod arheologicheskih istochnikov. Moscow 1973.

Pletneva 1981 S. A. Pletneva: Pechenegi, torki, polovcy. In: S. A. Pletneva (red.): *Stepi Evrazii v epohu srednevekov'ya*. Moscow 1981, 213–222.

Polidovych/Velychko/Bilan 2019 Yu. B. Polidovych/Ye. O. Velychko/Yu. O. Bilan: Vyroby zoomorfnoho mystetstva skifskoho chasu u kolektsii muzeiu istorychnykh koshtovnostei Ukrainy: zahalnyi ohliad. In: V. P. Chabai (red.): *Vseukrainskyi arkheolohichnyi zizd: materialy roboty*. Kyiv 2019, 361–370.

Posrednikov/Kravets 1992 V. A. Posrednikov/D. P. Kravets: K voprosu ob obryade kremacii u srubnyh plemen Donbassa. *Doneckij arheologicheskij sbornik* 1, 1992, 47–56.

Posrednikov/Kravets/Tkachev 1994 V. A. Posrednikov/D. P. Kravets/N. I. Tkachev: Iz dnevnikov raskopok kurganov u s. Velikoe Orekhovo (Doneckij kryazh, srubnoe i pozdnepoloveckoe vremya). *Doneckij arheologicheskij sbornik* 5, 1994, 141–168.

Posrednikov/Zarayska 1993 V. A. Posrednikov/N. P. Zarayska: Materialy kurganov u s. Ogorodnoe (Severnoe Priazov'e). *Doneckij arheologicheskij sbornik* 4, 1993, 82–178.

Potapov 2013 V. V. Potapov: Kurgany Zapadnogo Manycha. *Arheologicheskie zapiski* 5, 2007, 115–143.

Preucel 2010 R. W. Preucel: *Archaeological semiotics*. Malden – Oxford – Carlton 2010.

Privalova 1999 O. Ya. Privalova: Srubnye pogrebeniya Nikolaevskogo mogil'nika v bassejne Kal'miusa. In: *Drevnosti Severo-Vostochnogo Priazov'ya*. Donetsk 1999, 88–97.

Privalova/Privalov 1988 O. YA. Privalova/A. I. Privalov: *Spisok pamyatnikov arheologii Ukrainy. Doneckaya oblast*. Kyiv 1988.

Puholovok 2018 Yu. Puholovok: History of Ukrainian Archaeological Ceramology (1991–2016). *Ceramological Studies* 17, 2018, 272.

Pyatyh 1984 G. G. Pyatyh: O proiskhozhdenii derevyannoj posudy srubnoj kul'tury Povolzh'ya. *Sovetskaya arheologiya* 2, 1984, 146–154.

Riabova 1991 V. O. Riabova: Kultovi posudyny Skifii. In: P. P. Tolochko/V. Yu. Murzin (red.): *Gold der Steppe Archäologie der Ukraine*. Kyiv–Shlezvih 1991, 153–156.

Rigveda 1999 — T. Ya. Elizarenkova (transl.): *Rigveda. Mandaly I—IV.* Moscow 1999.

Rig Veda online — Ralph T. H. Griffith (transl.): Rig Veda. In: *Four Vedas. Rik, Yajus, Sama & Altharva. English Translation*. Available at: http://hinduonline.co/DigitalLibrary/SmallBooks/FourVedasEng.pdf [10. 3. 2023]

Russell 2012 — N. Russell: *Social zooarchaeology: humans and animals in prehistory*. Cambridge – New York 2012.

Safonov 1996 — I. Ye. Safonov: Osobennosti khozyaystvennogo kalendarya srubnoy kultury dono-donetskogo regiona. In: *Dono-donetskiy region v sisteme drevnostey epokhi bronzy vostochnoevropeyskoy stepi i lesostepi* 2. Voronezh 1996, 66–70.

Shalobudov 2012 — V. N. Shalobudov: Neopublikovannye kochevnicheskie pogrebeniya, otkrytye novostroechnymi ekspediciyami DGU v 1972–1999 gg. In: I. F. Kovaleva (red.): *Problemy arkheolohii Podniprovia*. Dnipropetrovsk 2012, 86–106.

Sanzharov 2010 — S. N. Sanzharov: *Vostochnaya Ukraina na rubezhe epoh srednej – pozdnej bronzy*. Lugansk 2010.

Savva 1988 — E. N. Savva: Issledovanie kurgana u g. Tiraspolya. In: G. F. Chebotarenko (red.): *Arheologicheskie issledovaniya v Moldavii v 1983 goda*. Moscow 1988, 44–59.

Sharafutdynova 1982 — I. N. Sharafutdynova: *Stepnoe Podneprov'e v pozdnem bronzovom veke*. Kyiv 1982.

Shvecov 1974 — M. L. Shvecov: Bahate kochivnytske pokhovannia z Donbasu. *Arkheolohiia* 13, 1974, 93–98.

Shvecov 1979 — M. L. Shvecov: Poloveckie svyatilishcha. *Sovetskaya arheologiya* 1, 1979, 199–209.

Shvecov 1980 — M. L. Shvecov: Kotly iz pogrebenij srednevekovyh kochevnikov. *Sovetskaya arheologiya* 2, 1980, 192–202.

Shylov 1995 — Yu. A. Shylov: *Prarodyna aryev*. Kyiv 1995.

Smirnov 1960 — K. F. Smirnov: Bykovskie kurgany. *Materialy i issledovaniya po arheologii SSSR* 78, 1960, 169–268.

Subbotin/Toshchev 2002 — L. V. Subbotin/G. N. Toshchev: *Arheologicheskie drevnosti Budzhaka. Kurgannaya gruppa u s. Liman*. Zaporozh'e 2002.

Suprunenko 1999 — O. B. Suprunenko: Horshchyk z kalendarnym ornamentom u zrubnomu kompleksi v Poorilli. In: I. F. Kovaleva (red.): *Etnichna istoriia ta kultura naselennia Stepu ta Lisostepu YevraziI (vid kamianoho viku po rannie serednovichchia*. Dnipropetrovsk 1999, 88–91.

Suprunenko/Skoryi/Sydorenko 2012 — O. B. Suprunenko/S. A. Skoryi/O. V. Sydorenko: Slidy stiibyshcha skifskoi doby u zaplavi Suly bilia Luben. *Arkheolohichni doslidzhennia v Ukraini 2011 rr.*, 2012, 384–386.

Symonovich/Tihomirov 1985 — E. A. Symonovich/N. A. Tihomirov: Rabota Chernyahovskoj ekspedicii. *Arheologicheskie otkrytiya 1983 goda*, 1985, 358–359.

Telehin 1991 — D. Ya. Telehin: *Vartovi tysiacholit*. Kyiv 1991.

Terenozhkin 1976 — A. I. Terenozhkin: *Kimmerijcy*. Kyiv 1976.

Toločko/Murzin 1991 — P. Toločko/V. Murzin: *Gold der Steppe Archäologie der Ukraine*. Kyiv – Shlezvih 1991.

Toporov 1994 — V. N. Toporov: Zmej. In: S. A. Tokarev (red.): *Mify narodov mira: enciklopediya v 2 tomah* 1. Moscow 1994, 470.

Treasury 2023 — *Treasury of the National Museum of History of Ukraine*. Available at: https://m.facebook.com/story.php?story_fbid=pfbid0KAVLq7YbVozVrTJSwYxGAGBJ29Kb3MU5DCdUijhb7eXjWz6MzN3aQzojso4cKWL9l&id=100063550514496&eav=Afbn59A3Z0nwsK3UX9biO1iTiJvuG2EWO6LZYjeX4G10cH4F7Fz4PFqj8Hlairy7qyI&m_entstream_source=timeline&paipv=0 [10. 12. 2023]

Tsymidanov 1996 — V. V. Tsymidanov: Myasnaya pishcha v pogrebeniyah srubnoj obshchnosti kak proyavlenie differenciacii kul'tury (po materialam Ukrainy). In: *Drevnie kul'tury Vostochnoj Ukrainy*. Lugansk 1996, 198–213.

Tsymidanov 2001 V. Tsymidanov: Astragaly v pogrebeniyah stepnyh kul'tur Vostochnoj Evropy epohi pozdnej bronzy i rannego zheleza. *Arheologicheskij al'manah* 10, 2001, 215–248.

Tsymidanov 2004 V. V. Tsymidanov: *Social'naya struktura srubnogo obshchestva*. Donetsk 2004.

Tsymidanov 2007 V. V. Tsymidanov: Nartovskij epos osetin i srubnaya kul›tura: poisk skhozhdenij. *Izvestiya SOIGSI* 1, 2007, 17–36.

Tsymidanov 2016 V. V. Tsymidanov: Sosudy – „pochtovye yashchiki" v obryadah srubnoj kul›tury. *Teoriya i praktika arheologicheskih issledovanij* 13, 2016, 57–77.

Tuallagov 2017 A. A. Tuallagov: Alanskaya derevyannaya posuda (po materialam Dargavsskogo mogil'nika). In: *ALANICA*. Vladikavkaz 2017, 123–162.

Ul'yanov 2004 I. V. Ul'yanov: Problemy rekonstrukcii religioznogo mirovozzreniya rannih kochevnikov Yuzhnogo Urala. In: V. I. Matyushchenko (red.): *Shestye istoricheskie chteniya pamyati M. P. Gryaznova*. Omsk 2004, 125–127.

Umerenkova 2011 O. V. Umerenkova: K probleme izucheniya mirovozzreniya drevnih obshchestv (na primere ukrashenij epohi bronzy Zapadnoj Sibiri). *Vestnik arheologii, antropologii i etnografii* 2, 2011, 89–97.

Usachuk 1991 A. N. Usachuk: Issledovanie kurganov srubnogo vremeni (po materialam arhiva i fondov Doneckogo kraevedcheskogo muzeya). In: N. P. Olenkovskij (red.): *100-richchia Poltavskoho kraieznavchoho muzeiu* 2. Poltava 1991, 46–48

Usachuk et al. 2004 A. N. Usachuk/Yu. B. Polidovych/V. V. Tsymidanov/R. A. Lytvynenko: Svod dannyh ob issledovaniyah kurganov na territorii Doneckoj oblasti v XX veke. *Arheologicheskij al'manah* 14, 2004, 56–109.

Usachuk et al. 2007 A. N. Usachuk/V. V. Tsymidanov/V. A. Podobid/R. O. Lytvynenko: Rozkopky kurhanu na okolytsi m. Mariupolia (Pivnichno-Skhidne Pryazovia). *Arkheolohichni doslidzhennia v Ukraini v 2005–2007 rr.*, 2007, 388–395.

Usachuk/Polidovych/Kolesnyk 2004 A. N. Usachuk/Yu. B. Polidovych/A. V. Kolesnik: Kurgany Donbassa v narodnom vospriyatii i nauchnoj praktike (do nachala XX veka): mify i real'nost'. *Arheologicheskij al'manah* 14, 2004, 13–55.

Vertiienko 2021 H. V. Vertiienko: Avestiiska chasha-tašta v iranskii tradytsii: vytoky ta reministsentsii. *Doislamskyi-Blyzkyi-Skhid-istoriia-relihiia-kultura* 2, 2021, 33–46.

Viazmitina et al. 1960 M. I. Viazmitina/V. A. Illinska/Ye. F. Pokrovska/O. I. Terenozhkin/H. T. Kovpanenk: Kurhany bilia s. Novo-Pylypivka i radhospu „Akkermen". *Arkheolohichni pamiatky URSR* 8, 1960, 22–140.

Zabavin 2010 V. Zabavin: Pogrebeniya srubnoj kul'tury dlinnogo kurgana u sela Orlovskoe (iz raskopok V. K. Kulbaki). *Donetskyi arheolohichnyi zbirnyk* 13/14, 2010, 174–184.

Zabavin 2012 V. Zabavin: Topographical and landscape location of Timber-Grave culture barrows in the North Azov-Sea region. *Donetskyi arkheolohichnyi zbirnyk* 16, 2012, 100–107.

Zabavin 2013 V. Zabavin: Characteristics of grave structures of Timber-Grave culture of the North Azov-Sea region. *Donetskyi arkheolohichnyi zbirnyk* 17, 2013, 56–78.

Zabavin 2018 V. Zabavin: Reshtky nebizhchykiv v pokhovanniakh zrubnoi kultury Pivnichnoho Pryazovia. In: K. V. Balabanov (red.): *Zbirnyk materialiv XX pidsumkovoi naukovo-praktychnoi konferentsii vykladachiv.* Mariupol 2018, 105–107.

Zabavin 2019b V. Zabavin: Funerary ceramic complex of Zrubna culture of Northern Azov. *Donetskyi arkheolohichnyi zbirnyk* 22, 2019, 90–101.

Zabavin 2022 V. Zabavin: Metal artefacts of Zrubna/Timber-grave culture of the North Azov Area as chronological indicators. *Slovenská archeológia* 70, 2022, 257–273. DOI: https://doi.org/10.31577/slovarch.2022.70.12

Zabavin/Bulyk 2020 V. Zabavin/M. Bulyk: Cultural Genesis and the final of Zrubna/Timber-grave culture of the North Azov Area (the Late Bronze Age). *Slovenská archeológia* 68, 2020, 23–36. DOI: https://doi.org/10.31577/slovarch.2020.68.2

Zabavin/Bulyk/Nebrat 2022 V. Zabavin/M. Bulyk/S. Nebrat: To the archaeological map of the Northern Azov sea region (based on materials of MSU expedition in 2021). *Bulletin of Mariupol State University. Series History. Political Studies* 33–34, 2022, 16–30.

Zabavin/Nebrat 2023a V. Zabavin/S. H. Nebrat: Serednovichni kazany iz kurhaniv Pivnichno-skhidnoho Pryazovia. In: Yu. T. Temirov (red.): *Travnevi studii: istoriia, mizhnarodni vidnosyny* 8. Vinnytsia 2023, 252–255.

Zabavin/Nebrat 2023b V. Zabavin/S. Nebrat: Regional peculiarities of the Zrubna/Timber-grave culture tribes' calendar system. *SKHID* 5, 2023, 51–59.

Zabavin/Nebrat/Bulyk 2021 V. Zabavin/S. H. Nebrat/M. V. Bulyk: *Kurhanna hrupa Mohyla Babakova.* Seriia Arkheolohiia Pivnichnoho Pryazovia 2. Kyiv 2021.

Zaharova 2000 E. Yu. Zaharova: *Sosudy so znakami srubnoj obshchnosti epohi pozdnej bronzy*. Voronezh 2000.

Zhurnal 1908 *Zhurnal raskopok N. E. Brandenburga 1888–1902 gg*. Sankt-Peterburg 1908.

Unpublished sources

Boltryk/Havryliuk/Fyalko 1985 Yu. V. Boltryk/N. A. Havryliuk/E. E. Fyalko: *Otchet o rabote Priazovskoj arheologicheskoj ekspedicii v 1985 g.* Scientific archive of the Institute of Archeology of the NASU. Case 1985/215. Kyiv 1985.

Bratchenko et al. 1977 S. N. Bratchenko/A. A. Krotova/M. L. Shvecov/Ya. P. Gershkovich/L. F. Konstantinesku/A. M. Smirnov/V. G. Samojlenko/A. S. Shkarban: *Otchet o issledovaniyah Doneckoj ekspedicii v 1977 g. (kurgany u s. Kremenevka i Volonterovka u g. Zhdanova i u s. N. Baranikovka Belovodskogo r-na Voroshilovgradskoj obl.).* Scientific archive of the Institute of Archeology of the NASU. Case1977/12. Kyiv 1977.

Cherednichenko 1977 N. N. Cherednichenko: *O social›noj strukture srubnogo obshchestva. Doklad na otdele arheologii medi-bronzy IA AN URSR, 20 iyulya 1977 g.* Scientific archive of the Institute of Archeology of the NASU. Kyiv 1977.

Evseev 1941 V. M. Evseev: *Otchet o poezdke po marshrutu Melekino – Yalta – Mangush. 16 avgusta 1941 g.* Scientific archive of the Mariupol Museum of Local Lore. Case 6250-D. Mariupol 1941.

Gorbov/Kabanova 2004 V. N. Gorbov/E. V. Kabanova: *Zvit pro doslidzhennia Pryazovskoi arkheolohichnoi ekspedytsii u 2004 r.* Scientific archive of the Institute of Archeology of the NASU. Case 2004/93. Kyiv 2004.

Gorbov/Kabanova 2005 V. N. Gorbov/E. V. Kabanova: *Zvit pro doslidzhennia Pryazovskoi arkheolohichnoi ekspedytsii u 2005 r.* Scientific archive of the Institute of Archeology of the NASU. Case 2005/24. Kyiv 2005.

Gorbov/Usachuk 1993 V. N. Gorbov/A. N. Usachuk: *Otchet o polevyh issledovaniyah Novoazovskoj arheologicheskoj ekspedicii v 1993 g.* Scientific archive of the Institute of Archeology of the NASU. Case 1993/136. Kyiv 1993.

Gorbov/Usachuk/Grib 1989 V. N. Gorbov/A. N. Usachuk/V. K. Grib: *Otchet o polevyh issledovaniyah Novoazovskoj ekspedicii v 1989 g.* Scientific archive of the Institute of Archeology of the NASU. Case 1989/75. Kyiv 1989.

Gorbov/Usachuk/Grib 1990 V. N. Gorbov/A. N. Usachuk/V. K. Grib: *Otchet o polevyh issledovaniyah Novoazovskoj ekspedicii v 1990 g.* Scientific archive of the Institute of Archeology of the NASU. Case 1990/218. Kyiv 1990.

Grakov 1950 B. N. Grakov: *Otchet Skifskoj stepnoj ekspedicii IIMK AN SSSR za 1950 g.* Scientific archive of the Institute of Archeology of the NASU. Case 1950/15. Kyiv 1950.

Kravchenko et al. 2009 E. E. Kravchenko/V. A. Pidobid/Yu. B. Polidovych/A. M. Usachuk/V. V. Tsymidanov/V. I. Kuzin/O. V. Kolesnyk: *Zvit pro provedennia arkheolohichnykh robit (rozvidok) na terytorii Donetskoi oblasti u 2009 rotsi.* Scientific archive of the Institute of Archeology of the NASU. Case 2009/180. Kyiv 2009.

Kuchuhura 2001 — L. I. Kuchuhura: *Nauchnaya spravka na temu: Istoriya arheologicheskoj kollekcii Mariupol›skogo kraevedcheskogo muzeya. Sobirateli. Issledovateli (s dopolneniyami 2006 g. i 2013 g.).* Scientific archive of the Mariupol Museum of Local Lore. Case I-15/2001. Mariupol 2001.

Kulbaka/Gnatko 1989 — V. K. Kulbaka/I. I. Gnatko: *Otchet ob issledovaniyah kurganov v zonah novostroek: u s. Kalinovka Novoazovskogo r-na, u s. Razdol›noe Starobeshevskogo r-na, u s. Kamyshevatoe Pershotravnevogo r-na, u s. Kondrat›evka Konstantinovskogo r-na i g. Mariupolya Doneckoj obl. v 1989 g.* Scientific archive of the Institute of Archeology of the NASU. Case 1989/87. Kyiv 1989.

Lytvynenko 1994 — R. A. Lytvynenko: *Srubnaya kultura basseyna Severskogo Dontsa (po materialam pogrebalnyih pamyatnikov).* Dissertation thesis. Scientific archive of the Institute of Archeology of the NASU. Kyiv 1994.

Makhortykh 2008 — S. V. Makhortykh: *Kul›tura i istoriya kimmerijcev Severnogo Prichernomor›ya.* Dissertation thesis. Scientific archive of the Institute of Archeology of the NASU. Kyiv 2008.

Mihlin 1971 — B. Yu. Mihlin: *Otchet o rabote Azovskoj arheologicheskoj ekspedicii Doneckogo oblastnogo Obshchestva ohrany pamyatnikov istorii i kul›tury i Zhdanovskogo kraevedcheskogo muzeya v 1971 g.* Scientific archive of the Institute of Archeology of the NASU. Case 1971/77. Kyiv 1971.

Moruzhenko et al. 1979 — A. A. Moruzhenko/V. A. Posrednikov/N. P. Zarayska/A. I. Privalov: *Raskopki kurganov v zonah novostroek Doneckoj obl., provedennye ekspediciej Doneckogo universiteta v 1979 g.* Scientific archive of the Institute of Archeology of the NASU. Case 1979/89. Kyiv 1979.

Moruzhenko et al. 1989 — A. A. Moruzhenko/N. P. Zarajskaya/D. P. Kravets/R. A. Lytvynenko/A. V. Evglevsky/L. G. Shepko: *Otchet ob arheologicheskih issledovaniyah kurganov v Doneckoj obl. v 1989 g.* Scientific archive of the Institute of Archeology of the NASU. Case 1989/52. Kyiv 1989.

Otroshchenko 1981 — V. V. Otroshchenko: *Srubnaya kul›tura Stepnogo Podneprov›ya (po materialam pogrebal›nyh pamyatnikov).* Dissertation thesis. Scientific archive of the Institute of Archeology of the NASU. Kyiv 1981.

Pinevych 1928 — P. M. Pinevych: *Arheologicheskie obsledovaniya na Mariupolshchine i arheologicheskie raskopki 1928 g.* Scientific archive of the Institute of Archeology of the NASU. Fund of the All-Ukrainian Archaeological Commission. Case 202/26. Kyiv 1928.

Privalov/Andrienko/Moruzhenko 1978 — A. I. Privalov/V. P. Andrienko/A. A. Moruzhenko: *Otchet novostroechnoj ekspedicii Doneckogo gosuniversiteta za 1978 g.* Scientific archive of the Institute of Archeology of the NASU. Case 1978/73. Kyiv 1978.

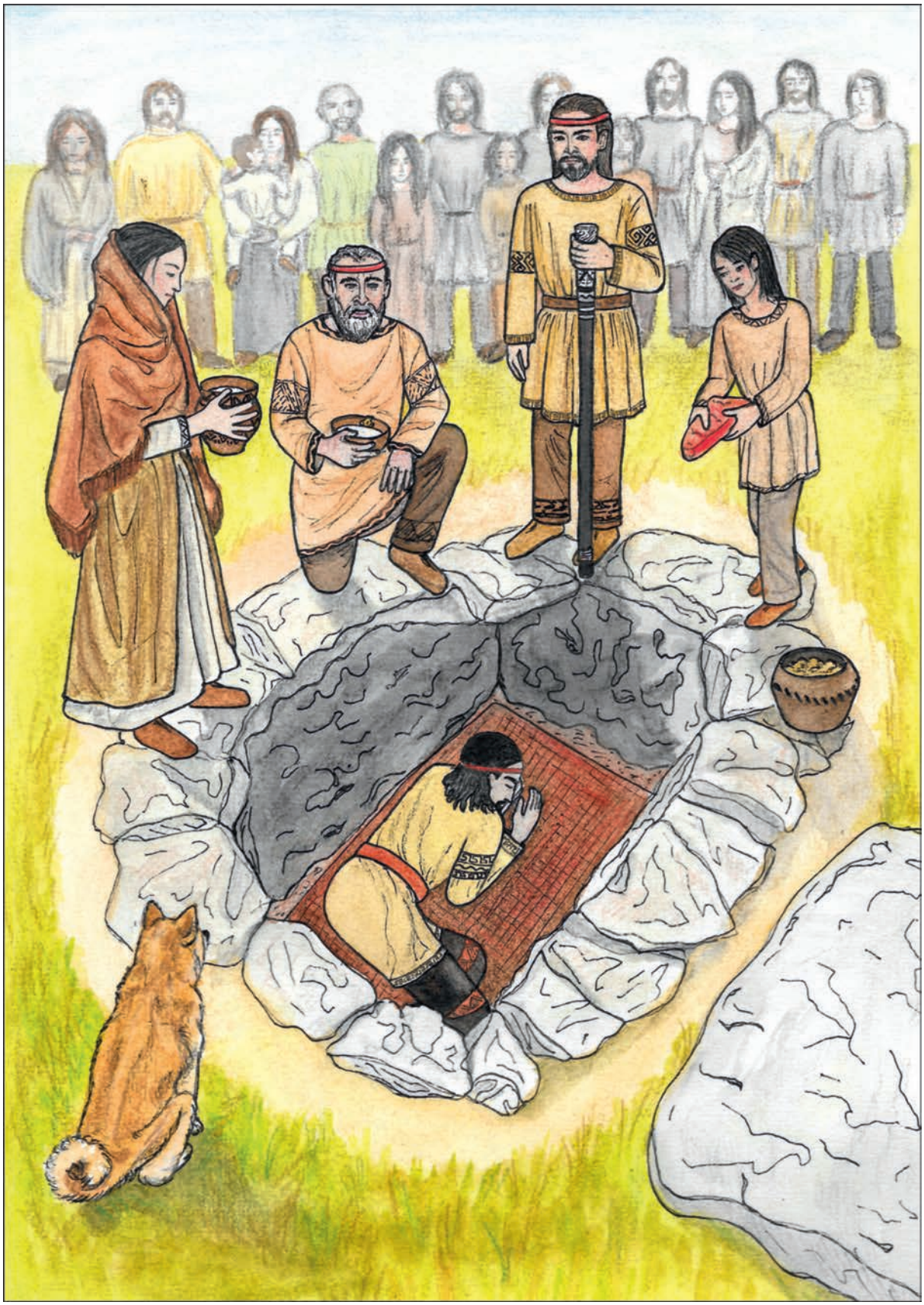
Shvecov/Kravchenko 1988 — M. L. Shvecov/E. E. Kravchenko: *Otchet ob arheologicheskih issledovaniyah ekspedicii v 1988 g.* Scientific archive of the Institute of Archeology of the NASU. Case 1988/165. Kyiv 1988.

Zabavin 2019a — V. Zabavin: *Zrubna kultura Pivnichnoho Pryazovia (za materialamy pokhovalnykh pamiatok).* Dissertation thesis. Scientific archive of the Institute of Archeology of the NASU. Kyiv 2019.

Zabavin et al. 2019 — V. Zabavin/M. V. Bulyk/Yu. B. Polidovych/O. P. Tsyba: *Zvit pro rozvidky na terytorii pivdnia Donetskoi oblasti u 2019 rotsi.* Scientific archive of the Institute of Archeology of the NASU. Case 2019/. Kyiv 2019.

Zabavin et al. 2020 — V. Zabavin/M. V. Bulyk/S. H. Nebrat/Yu. B. Polidovych: *Zvit pro rozvidky na terytorii pivdnia Donetskoi oblasti u 2020 rotsi.* Scientific archive of the Institute of Archeology of the NASU. Case 2020/. Kyiv 2020.

Zabavin et al. 2021 — V. Zabavin/M. V. Bulyk/S. H. Nebrat/Yu. B. Polidovych: *Zvit pro rozvidky na pivdni Donetskoi oblasti u 2021 rotsi.* Scientific archive of the Institute of Archeology of the NASU. Case 2021/. Kyiv 2021.

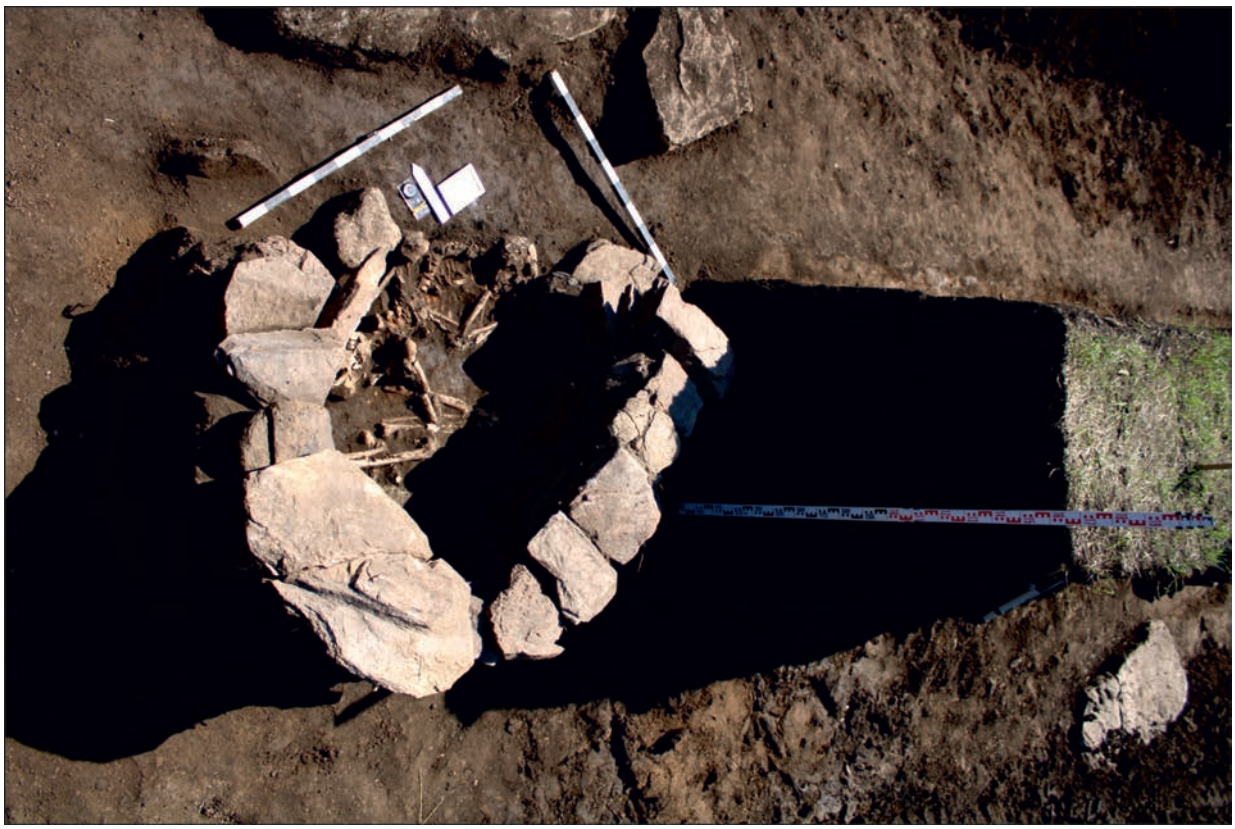


CA 1. Komyshuvate, burial 2 of barrow 4. Reconstruction of the funerary rite (picture by Oleksandra Sablina).

CA 2. Komyshuvate, barrow 4. 1 – top view of the western sector; 2 – burial 1 in the western profile; 3 – burial 1 at the time of discovery; 4 – ceramic vessel on the top of burial 1.

CA 3. Komyshuvate, barrow 4. 1 – top layer of the roof of tomb 1; 2 – combined masonry of the southern wall of tomb 1; 3 – stone slab of the roof of tomb 2; 4 – masonry of the western wall of tomb 2.

CA 4. Komyshuvate, barrow 4. I West profile, West side. Burial 1. View from the northeast.



CA 5. Komyshuvate, barrow 4. Burial 1. View from the west.

CA 6. Komyshuvate, barrow 4, burial 1. View from the east.

CA 7. Komyshuvate, barrow 4. Western corner of the masonry of burial 1. View from the east.

CA 8. Komyshuvate, barrow 4. 1 – burial 2 at the time of discovery; 2 – burial 2, upper level; 3 – I West profile, East side. Stones of the burial 2 cover on the line of the ancient horizon; 4 – I West profile, West side, buried black soil.

CA 9. Komyshuvate, barrow 4. Covering of the burial 2. View from the southeast.

CA 10. Komyshuvate, barrow 4, excavation of burial 2.

CA 11. Komyshuvate, barrow 4, stone structure of burial 2. View from the northeast.

CA 12. Komyshuvate, barrow 4, burial 2. View from the southeast.

CA 13. Komyshuvate, barrow 4, burial 2. 1 – eastern wall of the masonry; 2 – ceramic vessel 2; 3 – sacrum bones of an animal; 4 – bronze overlay.

CA 14. Komyshuvate, barrow 4. Upper layer of complex 1. View from the south.

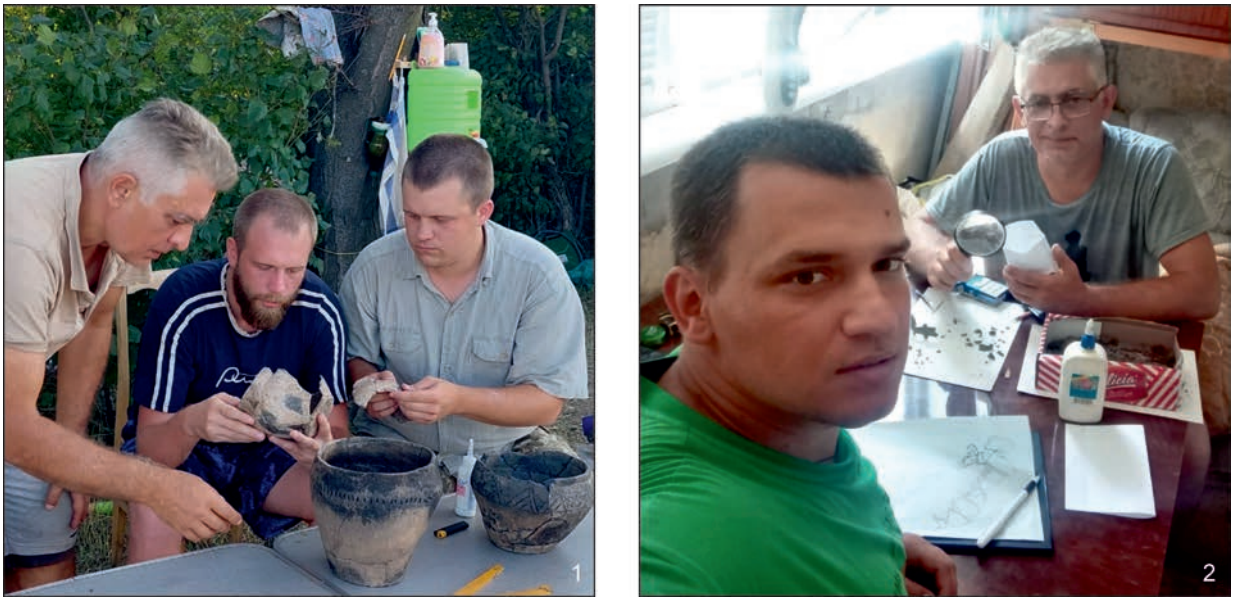
CA 15. Komyshuvate, barrow 4. Lower layer of complex 1. View from the south.

CA 16. Komyshuvate, barrow 5. 1 – beginning of work on the barrow; 2 – Central profile, view from the west; 3 – Eastern profile, view from the west; 4 – burial 1, view from the east.

CA 17. Komyshuvate, barrow 4. 1 – burial 1, vessel 2; 2 – burial 2, vessel.

CA 18. The application-decorated wooden bowl. 1 – photo and reconstruction by Mgr. Viliam Mezey; 2 – bronze overlay (photo by the authors); 3 – "herringbone" ornament made with a punch; 4 – steppe viper (*Vipera renardi*).

CA 19. Wooden bowls with golden overlays from the Scythian mound First Zavadska Mohyla. 1–3 – golden overlays from the mound (*Ilinskaya/Terenozhkin 1983*); 4 – reconstruction of a bowl decorated with three plates with images of deer (*Treasury 2023*); 5 – reconstruction of a bowl decorated with seven plates in the form of heads of birds of prey (*Gulyaev 2017*).



CA 20. Archaeological expedition of Mariupol State University. Komyshuvate, field chamber laboratory (photo 2021).

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