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CONTENTS

STUDIES

ANCIENT HISTORY

Stanislav GRIGORIEV

METAL NAMES AND THE INDO-EUROPEAN HOMELAND 5

Mesut KINACI

PHARNACES I OF PONTUS AND THE EXPANSIONIST POLICY
ON THE BLACK SEA: *DYNASTIC AMBITION, MARITIME
STRATEGY, AND HELLENISTIC POWER POLITICS
IN THE SECOND CENTURY BC* 26

Dan DEAC

THE *PROCURATORES PRAESIDIALES* OF DACIA
POROLISSENSIS UNDER ANTONINUS PIUS
AND THE QUEST FOR THE *PRAETORIUM PROCURATORIS*
AT POROLISSUM 34

Fateme EBRAHIMPOUR

TRACING THE ROOTS OF A STRATEGIC MISTAKE
IN SASANIAN TRADE POLICY; A COMPARATIVE STUDY
OF THE APPROACHES OF SHAPUR I AND BAHRAM I
TOWARD PALMYRA 44

ARCHAEOLOGY

Oleksandr SYMONENKO, Olena DZNELADZE, Denys SIKOZA

LATE SCYTHIAN ARCHAEOLOGICAL CULTURE:
A THREATENED PART OF UKRAINIAN
CULTURAL HERITAGE 50

Vasile IARMULSCHI, Sergiu MATVEEV, Dieter QUAST

TEST EXCAVATIONS AT THE ROMAN-AGE NECROPOLIS
OF CAȘUNCA (FLOREȘTI DISTRICT,
REPUBLIC OF MOLDOVA) 71

ARCHAEOLOGICAL MATERIAL

Mihai DUNCA

GROUND STONE TOOLS FROM MOȘNIȚA NOUĂ –
OBJECTIVE 4 SITE 81

Cristian Ioan POPA

THE BRONZE ARTEFACT FROM THE WIETENBERG
CEMETERY IN SIBIȘENI 98

Monica MĂRGĂRIT, Gruia FAZECAȘ, Florin GOGĂLTAN

BRONZE AGE DEER ANTLER PROCESSING WORKSHOP AT
SÂNTION – DEALUL MĂNĂSTIRII
(BIHOR COUNTY, ROMANIA) 106

Lidia GONZÁLEZ ESTRADA

PROTECTIVE AMULETS FOR CHILDREN:
VULNERABILITY AND CARE IN ROMAN HISPANIA 125

Erdal ÜNAL - Vildan CAN - H. Ertuğ ERGÜNER

A HOLY RIDER AMULET FROM SYEDRA 159

Sara RADOVIĆ

AN INSCRIBED EARLY BYZANTINE FIBULA FROM SERBIA:
SOME REMARKS ON THE CULT OF SAINT MENAS
IN THE BALKANS 166

ARCHAEOLOGICAL MATERIAL AND REPORTS

Manuela MĂIȚĂ MAXIM

EARLY ROMAN POTTERY (2ND –3RD CENTURIES AD)
DISCOVERED IN A BUILDING WITHIN A RURAL
SETTLEMENT IN THE TERRITORY OF TOMIS 178

EPIGRAPHY AND PAPYROLOGY

Antonio AGUILERA MARTÍN, Juan Manuel BERMÚDEZ LORENZO

TITULI PICTI BETA ON DRESSSEL 20 AMPHORAE
FROM THE COLLECTION OF EMILIO RODRÍGUEZ ALMEIDA
FROM MONTE TESTACCIO (ROME) 206

NUMISMATICS

Abdullah Yavuz AKINCI

AGONISTIC DEPICTIONS AND SPORTS CULTURE ON COINS
FROM THE CITIES OF PISIDIA DURING THE ROMAN
IMPERIAL PERIOD 214

HISTORIOGRAPHY

Gligor M. SAMARDŽIĆ, Lazar D. AKSENTIJEVIĆ

SERBIAN JOURNALS OF THE SECOND HALF OF THE 19TH
AND THE BEGINNING OF THE 20TH CENTURY ON THE
POSITION OF CHRISTIANS IN THE ROMAN EMPIRE 221

IN MEMORIAM

Mihaela GLIGOR

THE ARCHAEOLOGY OF SOLITUDE:
IUDITA WINKLER (1925-1985) 229

REVIEWS

Vitalie BÂRCĂ

Denis Topal, Griffin Daggers of the Issyk Type and the Akinakai of Eastern Eurasia. [In Russian], Almaty: NITSIA Begazy-Tasmola, 2024, 224 p. ISBN 978-601-7106-96-6 250

Vitalie BÂRCĂ

Alin Henț, Rethinking the Late Iron Age Dacians. A Historiographical and Archaeological Perspective on Status Identities, Cluj-Napoca, Mega Publishing House, 2025, 259 p. ISBN 978-606-020-997-3 256

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ARCHAEOLOGY

LATE SCYTHIAN ARCHAEOLOGICAL CULTURE: A THREATENED PART OF UKRAINIAN CULTURAL HERITAGE

Abstract: The paper contains the description and research of Late Scythian hillforts and burial grounds of the Lower Dnieper basin of the 2nd century BC – 3rd century AD, located along the right (12 hillforts and 3 burial grounds) and left (5 hillforts, separate burials) banks of the Dnieper River. The text includes the brief history of the study of sites with the author's version of the origin of the Late Scythian culture of the region; the general characteristics of the Late Scythian culture of the Lower Dnieper; a description of topography of the hillforts of two types, features of their fortification; characteristics of three known burial grounds with classification of the burial constructions with analysis of funeral rites and grave goods etc. The text is accompanied by maps, plans and aerial photographs of the sites, satellite images, archival and modern photographs. Particular attention is paid to the destructive consequences of Russian invasion and the subsequent fate of the Lower Dnieper Late Scythian sites, which found themselves in the epicenter of hostilities.

Key words: *Lower Dnieper, Late Scythian culture, hillforts, burial grounds, fortification, Russian invasion, protection of cultural heritage.*

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1. INTRODUCTION

The rapid occupation of southern Ukraine by Russian forces represents one of the most devastating chapters of the current war, particularly with regard to the protection of cultural heritage. In its efforts to suppress Ukrainian cultural and ethnic identity, Russian invaders systematically target the historical legacy of Ukraine, and archaeological sites are among the most vulnerable and severely affected.

Active hostilities are currently taking place in southern Ukraine, precisely in the area where the people provisionally labeled by archaeologists as the "Late Scythians" lived during the Roman period, from the 2nd century BC to the 4th century AD. The Greek author Strabo provides information about them, referring to their country as *Scythia Minor* (Μικρὰ Σκυθία). The Late Scythian archaeological culture reflects cultural and commercial links with Rome and its provinces.

The brief review of the historiography and hypotheses of genesis of the Lower Dnieper Late Scythian enclave has been recently published.¹ Its content is the following. The first researchers of the Lower Dnieper sites, Arsenii Chirkov and Viktor Goshkevich, considered the hillforts of the Lower

¹ SYMONENKO 2016, 476-483; SYMONENKO 2022, 27-32.

Dnieper to be Greek² or founded by emigrants from Olbia in the Hellenistic period.³ Mikhail Rostovtsev consider the Lower Dnieper hillforts agricultural and trading settlements with a mixed Greek and Scythian population.⁴ The soviet researchers of Late Scythian sites concluded that this culture was genetically connected to the earlier Scythian culture of the 4th–3rd centuries BC.⁵

However, this interpretation has not gone unchallenged. Yuri Zajtsev argued that the Late Scythian culture in Crimea was formed by the Iranian-speaking eastern tribe (the Satharcheos-Tocharians-Taphrians) who, together with the Sarmatians, invaded the Northern Pontic region in the 2nd century BC and contributed to the formation of a new population of the Crimea.⁶ Nadija Gavrilyuk and Valentyna Krapivina proposed their own hypothesis. They believe that in the building of the Lower Dnieper hillforts inhabitants of Olbia and its Chora was participating.⁷ According to our version the Late Scythian hillforts and burial grounds were established by the people of Scythian subculture of the Dniester region known as the “Tiraspol barrows” or “Tiraspol group” migrated to the Lower Dnieper region probably in the middle 2nd century BC.⁸

It appears that in the second half of the 2nd century BC, the Tiraspol Scythians under the political pressure of the Bastarnae and Getae moved eastward and reached the Dnieper River, where they settled in the locations familiar to and inhabited by their ancestors. The Lower Dnieper Late Scythian culture thus incorporates numerous aspects from neighboring cultures – above all, La Tène (Bastarnae) and Thracian (Getae) – which are reflected in its material cultural complex.

The Late Scythian sites of the Lower Dnieper region are represented by fortified settlements (the hillforts) and moundless burial grounds.

2. THE HILLFORTS

Apart from a few works by ancient authors, the most informative sources for the history of the Late Scythians are their archaeological sites – the fortified settlements (hillforts) and burial grounds. To date, seventeen fortified settlements have been recorded on both banks of the Dnieper River (twelve on the right bank and five on the left). However, only a few of these (Zolota Balka, Havrylivka, Hannivka, Kairy, Velyka Lepetykha, Beryslav, Mykolaivka-Kozatske, Liubymivka) have been partially excavated along with three Late Scythian necropolies (Zolota Balka, Mykolaivka-Kozatske and Chervony Mayak).

These sites are under serious threat from both natural and human factors. Almost all of them now lie within the zone of military hostilities. The right bank of the Dnieper is currently exposed to constant artillery shelling from the occupied left

bank. It can be stated with certainty that these unique sites are lost to systematic archaeological research for many years to come – if indeed they are not lost completely. Given the ongoing military hostilities, the potential destruction of the sites, and the uncertain timeframe for future access due to security concerns and demining operations, it remains unclear whether further fieldwork at these invaluable sites will ever be possible. Therefore, the systematic study of the already excavated material is of urgent scientific importance.

Seventeen hillforts have been recorded on the banks of the Lower Dnieper (Fig. 1): twelve on the right bank (Zolota Balka, Havrylivka, Hannivka, Sablukivka, Konsulivka, Chervony Mayak, Zmiivka, Beryslav, Mykolaivka-Kozatske, Lvove, Tiahynka, Poniativka) and five on the left (Znamianka, Velyka Lepetykha, Hornostaivka, Kairy, Liubymivka). In their immediate vicinity are unfortified settlements or suburbs. About two-thirds of the Zolota Balka hillfort⁹ was flooded by the Kakhovka reservoir, while the small Kairy hillfort was completely inundated. The rest of hillforts were continually destroying, losing portions of their cultural layers each year.¹⁰

The hillforts were founded in strategic positions on the high banks of the Dnieper or its tributaries, the Pidpilna and the Konka, which towered between 11 (Havrylivka) and 48 m (Konsulivka) above the water's edge. Exceptions include the Znamianka hillfort, which is partially located on a riverside meadow, and the Tiahynka hillfort, situated on an island; here the height above the water's edge amounts to about 2 m. It is important to note that almost all hillforts were located within visual range of one another: a smoke signals or light from any one of the hillforts could be seen from the neighboring sites (Fig. 2). One side of the hillforts faced the river, whereas on the lateral sides they were protected by ravines. The side facing inland was most vulnerable and was therefore protected by artificial fortification. The size of the hillforts ranged between 1 and 35 hectares.

According to the topography and layout of the fortifications, two types of hillforts can be distinguished:¹¹ cape hillforts (located on a headland of the original shoreline, formed by ravines) and riverside hillforts (located on a rectangular or square section of the original shoreline). Similar types are also characteristic of the Late Scythian culture of the Crimea, where they are referred to as *cape* and *rectangular* hillforts.¹² The defensive structures of the cape hillforts were built either across the cape, separating the acropolis and the outskirts (Mykolaivka-Kozatske,

⁹ In the literature Zolota Balka hillfort is sometimes called a settlement (GAVRILYUK/KRAPIVINA 2005, 67; GAVRILYUK 2005-2009, 117 ff.) due to the lack of fortification around the entire territory, and this is considered a characteristic feature of the site (GAVRILYUK 2005-2009, 138). Meanwhile, Maria Viazmitina called Zolota Balka either a settlement (VIAZMITINA 1962, 23 onwards) or a hillfort (VIAZMITINA 1962, 24; 1972, 216 onwards). It seems that she used the term “settlement” as a general definition of the place of ancient people residence, and did not mean especially the absence of fortification, which, by the way, surrounded the southern part of the Zolota Balka hillfort (VIAZMITINA 1962, 23).

¹⁰ On June 6, 2023, after blew up the Kakhovka dam by Russian aggressors, the reservoir ceased to exist, and now the hillforts are in approximately the same geographical and geological conditions as in the antiquity.

¹¹ DZNELADZE/SIKOZA 2020, 191.

¹² KOLTUKHOV 1999, 8-9.

² CHIRKOV 1867, 549.

³ GOSHKEVICH 1913, 30-31.

⁴ ROSTOVTSSEV 1918, 82.

⁵ ARTAMONOV 1948, 58.

⁶ ZAJTSEV 1999, 142-144, 147.

⁷ GAVRILYUK/KRAPIVINA 2005, 68-69.

⁸ SYMONENKO/SIKOZA/DZNELADZE 2015, 8-9.



Fig. 1. Late Scythian sites of the Lower Dnieper.

1, 1a – Zolota Balka; 2 – Havrylivka; 3 – Hannivka; 4 – Sablukivka; 5 – Konsulivka; 6, 6a – Chervony Mayak; 7 – Zmiivka; 8 – Beryslav; 9, 9a – Mykolaivka-Kozatske; 10 – Lvove; 11 – Tiahynka; 12 – Poniativka; 13 – Znamianka; 14 – Velyka Lepetykha; 15 – Hornostaivka; 16 – Kairy; 17 – Liubymivka.

Lvove), or along the contour the cape (Poniativka, Chervony Mayak). By contrast, the ramparts and moats of the riverside hillforts are arranged in a U-shape along the open sides of the plain and are bounded by ravines. Cape hillforts include Chervony Mayak, Mykolaivka-Kozatske, Lvove, Poniativka, Velyka Lepetykha, and Kairy (Fig. 3), while riverside hillforts include Zolota Balka, Havrylivka, Hannivka, Sablukivka, Konsulivka, Zmiivka, Tiahynka, Znamianka, Hornostaivka and Liubymivka (Fig. 4).

Almost all hillforts were fortified according to a standard scheme consisting of two lines of defense (Fig. 5).¹³ The outer

line comprised a rampart with a moat in front of it. The area enclosed by this outer line of defense amounted up to 35 hectares.

Inside the outer line of defense was a second rampart (Fig. 6) which formed an acropolis that was either square in plan (riverside hillforts) or triangular (cape hillforts). The ends of the acropolis rampart ran close to the river cliff. A stone wall ran along the crest of the rampart, with a moat in front of it. The area of the acropolis ranged from 0,5 (Kairy) to 5,04 (Havrylivka) hectares. The walls were constructed from quarry stone in the *opus incertum* technique, filled with small stones and rubble set in clay mortar (Fig. 7/1). The walls' thickness ranges from 1 m (Mykolaivka) to 5,4 m (Kairy) and the reconstructed height between 3 and 5 m.

Excavations at the Lvove and Konsulivka hillforts in recent years have shown that the core of the earthen ramparts at these sites consisted of an *opus incertum* wall built from large limestone blocks, generally arranged irregularly but showing signs of some regular masonry (Fig. 7/2). The space

¹³ An exception is the Havrylivka hillfort having been three lines of defense (Fig. 5/1,2). Nadezhda Pogrebova considered that Viktor Goshkevich assumed to be outer defensive line the natural hills (POGREBOVA 1958, 175-176). However, on the cross section (POGREBOVA 1958, 169, fig. 26: 2) the low ridge of the rampart and the profile of the moat dug in the loess loam are clearly visible. At the same time, the rampart was erected just from the ejecta of the moat, so it did not differ by stratigraphy (Fig. 5/3). The small height of the fortification at the time of excavation was caused by more than a century of plowing. It is possible that the Hannivka hillfort also had three lines of defense.



Fig. 2. Communications of the Late Scythian hillforts.

1 – visual connected hillforts; 2 – view Hornostaivka hillfort from Chervony Mayak one (photo of 1950s); 3 – view Liubymivka hillfort from Zmiivka one, 7 km straight line (photo 2014 of authors).

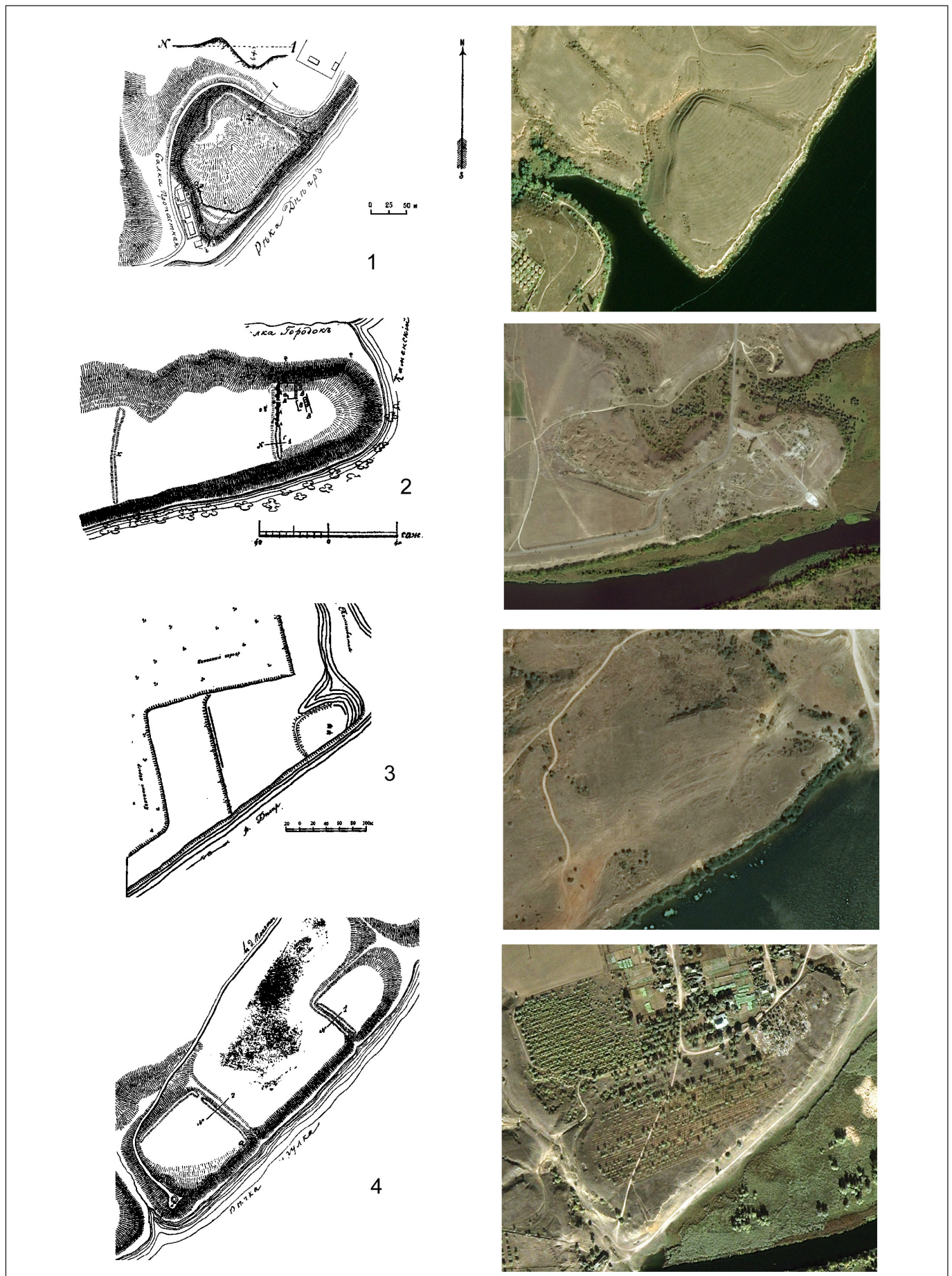


Fig. 3. Hillforts of cape type.
1 – Chervony Mayak; 2 – Mykolaivka-Kozatske; 3 – Lvove; 4 – Poniativka (drawings after GOSHEVICH 1913; photo by authors).

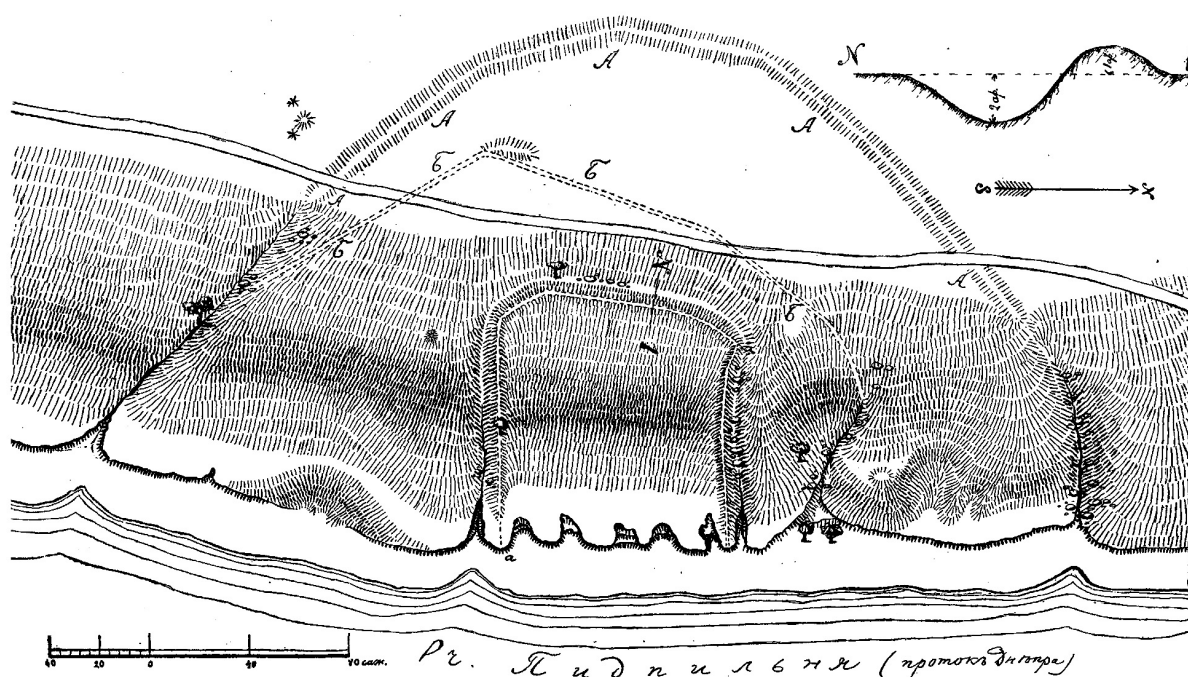


Fig. 4. Hillforts of riverside type.

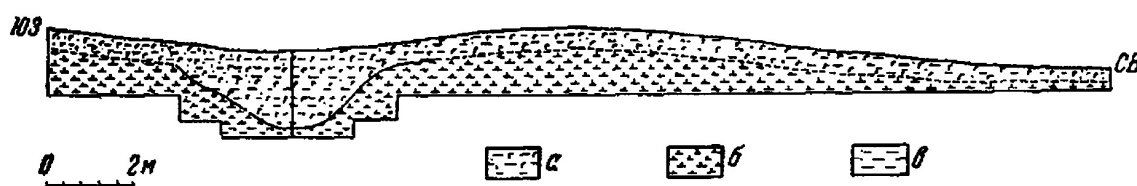
1 – Hannivka; 2 – Konsulivka; 3 – Zmiivka; 4 – Liubymivka (drawings after GOSHEVICH 1913; photo by authors).



1



2



3

Fig. 5. Havrylivka hillfort.

1 – current view (photo 2020 by authors); 2 – defence lines (after GOSHKEVICH 1913). 3 – cross section of fortification (after POGREBOVA 1958).



Fig. 6. Zmievka hillfort, acropolis rampart (photo by authors).

between the wall faces was filled with clay and small stones. A wall of the same design was previously discovered by Viktor Goshkevich at the Mykolaivka hillfort.

The moats were on the average 0.8–4.5 m deep and 2.8–11 m wide. At the Hannivka hillfort, the moat was cut into the rock to a depth of 2 m (Fig. 8). Its width was 11.5 m at the top and 6.5 m at the bottom. In the riverside hillforts, the ends of the U-shaped moats were connected with natural ravines that flowed into the river.

The residential areas of the hillforts have been explored only sporadically and remain far from fully investigated. They are characterized by multi-chambered residential and utility buildings with adobe walls on stone plinths of irregular masonry (Lvove, Zolota Balka, Havrylivka). The rooms were heated by open hearths. A characteristic feature of Late Scythian settlements is the presence of deep (up to 3 m) storage pits for grain and fish (Fig. 9). The large number of such pits in a single settlement indicates the prevalence of commercial agriculture – indeed, Goshkevich called the Late Scythian sites “Olbian feeding points” for good reason.

The material culture of the Late Scythian sites is represented by intact and fragmented late Hellenistic and early Roman light-clay and red-clay amphorae from Sinope, Cos, Heraclea and Rhodes, often with double-barrelled handles, as well as numerous fragments and complete examples of red-glazed and red-clay fine wares and Late Scythian hand-made ceramics (Fig. 10). Metal artifacts include bronze brooches, bracelets, and fragments of

household utensils. Fragments of Roman glassware are quite rare.

2.1. THE CHRONOLOGY OF HILLFORTS

Layers dating to the 3rd century BC have thus far not been identified at any Late Scythian hillfort. The view that Late Scythian hillforts represent a continuation of the Scythian settlements of the 4th–3rd centuries BC was based on materials of Kamianka hillfort. Near this site (but not on it) arose in the 2nd century BC the Znamianka hillfort. Misleading was also the material from Bilozirka settlement which turned out to be older than initially assumed.¹⁴ This interpretation was subsequently extrapolated to other Late Scythian sites, so to speak, by “logical” way, relying on single finds of Hellenistic coins and amphorae fragments while ignoring the absence of integral cultural layers of the 3rd century BC.

Nadija Gavryliuk provides information about such finds at several sites. According to her data, 22% of the amphorae from the Hannivka hillfort date to the Hellenistic period; amphorae fragments from the 4th–3rd centuries BC are present among the materials from Zolota Balka¹⁵; and the remains of hearths and several household pits of the

¹⁴ BYLKOVA 2007, 21.

¹⁵ It should be noted that the dating of amphorae from Late Scythian sites, having been done 50 or more years ago, requires the verification according to modern literature since a lot of it changed both towards older date and vice versa.



1



2

Fig. 7. Llove hillfort.
1 – ruins of the rampart wall; 2 – the stone core of rampart (photo by authors).



Fig. 8. Hannivka hillfort. The moat (photo 2014 by authors).

Hellenistic period have been identified at the Havrylivka and Znamianka hillforts. Based on these data, Gavryliuk argues that *“there is no need to speak of the complete disappearance of sites representing a settled way of life in the 3rd century BC; a small part of the Scythian steppe population continued to live on the right bank of the Dnieper even during the crisis”*.¹⁶ Without disputing this statement in any way, it is nevertheless worth considering the connection between these “unfortified sites” at the turn of the 3rd–2nd centuries BC and the Late Scythian hillforts whose cultural layers and earliest graves date no earlier than the mid-2nd century BC. It seems unlikely that the small population occupying *“a small number of sites of the settled people ... continued to control the waterway along the Dnieper”*¹⁷ – they simply would not have had the strength and resources to do so.

At the hillfort sites excavated to date the earliest fortifications are dated to the 2nd–1st centuries BC¹⁸. Consequently, the view that the hillforts of the Lower Dnieper were founded in the early Hellenistic period is not borne out by archaeological evidence. Of course, the precise date of foundation for each site can be established only through careful excavations. All in all, based on the currently

available evidence, it is nonetheless reasonable to suggest that the Late Scythian hillforts of the Lower Dnieper arose no earlier than the 2nd century BC.

The *terminus ante quem* for the Lower Dnieper Late Scythian sites varies widely. It should be noted that since no hillfort or burial ground has been fully excavated, researchers’ dates are based not only on excavated material but also on general considerations and scholarly interpretations, and must therefore remain provisional. Proposed dates range from the turn of the 1st–2nd centuries to the 2nd century and even the mid-3rd century AD. In one of her works, Maria Viazmitina dated the end of occupation in the Znamianka and Kairy hillforts to the turn of the common era, at Zolota Balka, Havrylivka, and Liubymivka to the 2nd century AD, and at Chervony Mayak and Mykolaivka to the 4th century AD.¹⁹ Valeria Bylkova dated the end of occupation at the Lower Dnieper settlements to the 2nd–3rd centuries AD,²⁰ although in another chapter of the same book she provides the different dates for separate sites. According to Mark Shchukin, life at the hillforts ceased in the late 1st–early 2nd century AD.²¹ Some activity at the Chervony Mayak hillfort in the 4th century AD is suggested by finds of coins of

¹⁶ GAVRILYUK 2013, 152.

¹⁷ GAVRILYUK 2013, 153

¹⁸ c.f. VIAZMITINA 1969, 122.

¹⁹ VIAZMITINA 1972, 216.

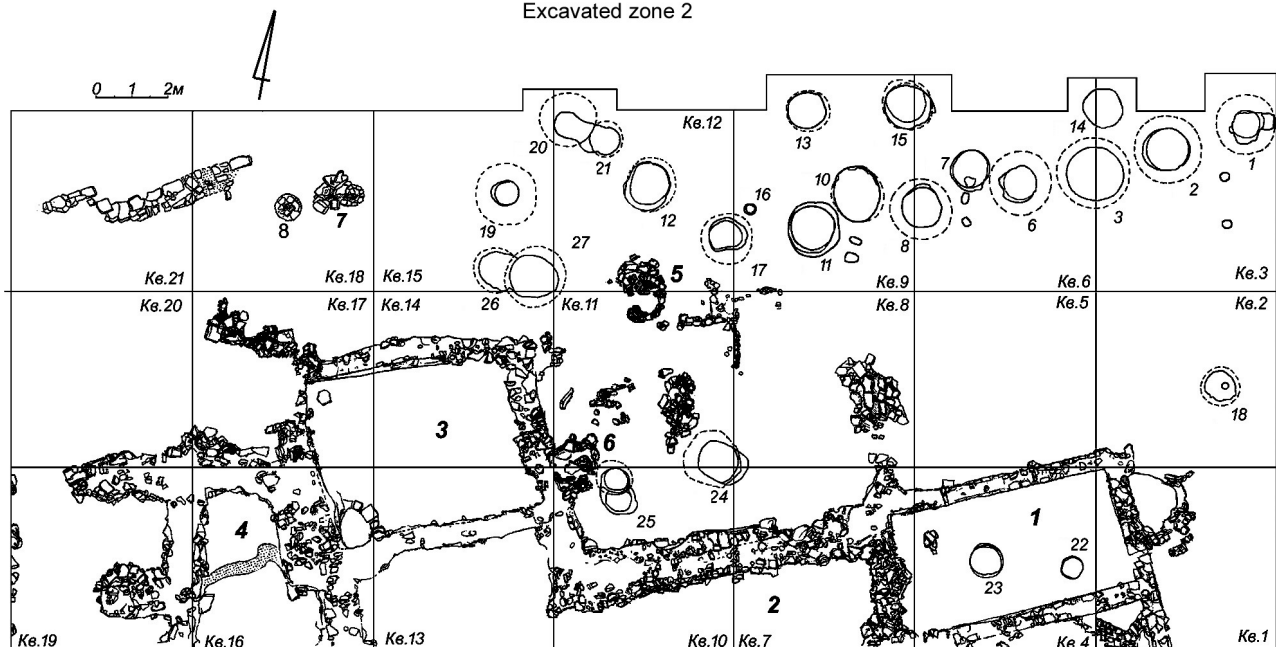
²⁰ BYLKOVA 2007, 128.

²¹ SHCHUKIN 1979, 73.



1

Excavated zone 2



1 - room 1; 2 - room 2; 3 - room 3; 4 - room 4; 5-8 - fireplaces.

2

Fig. 9. Llove hillfort, residential area.

1 – view in 2015 (photo by authors); 2 – plan of the area (drawings by authors).

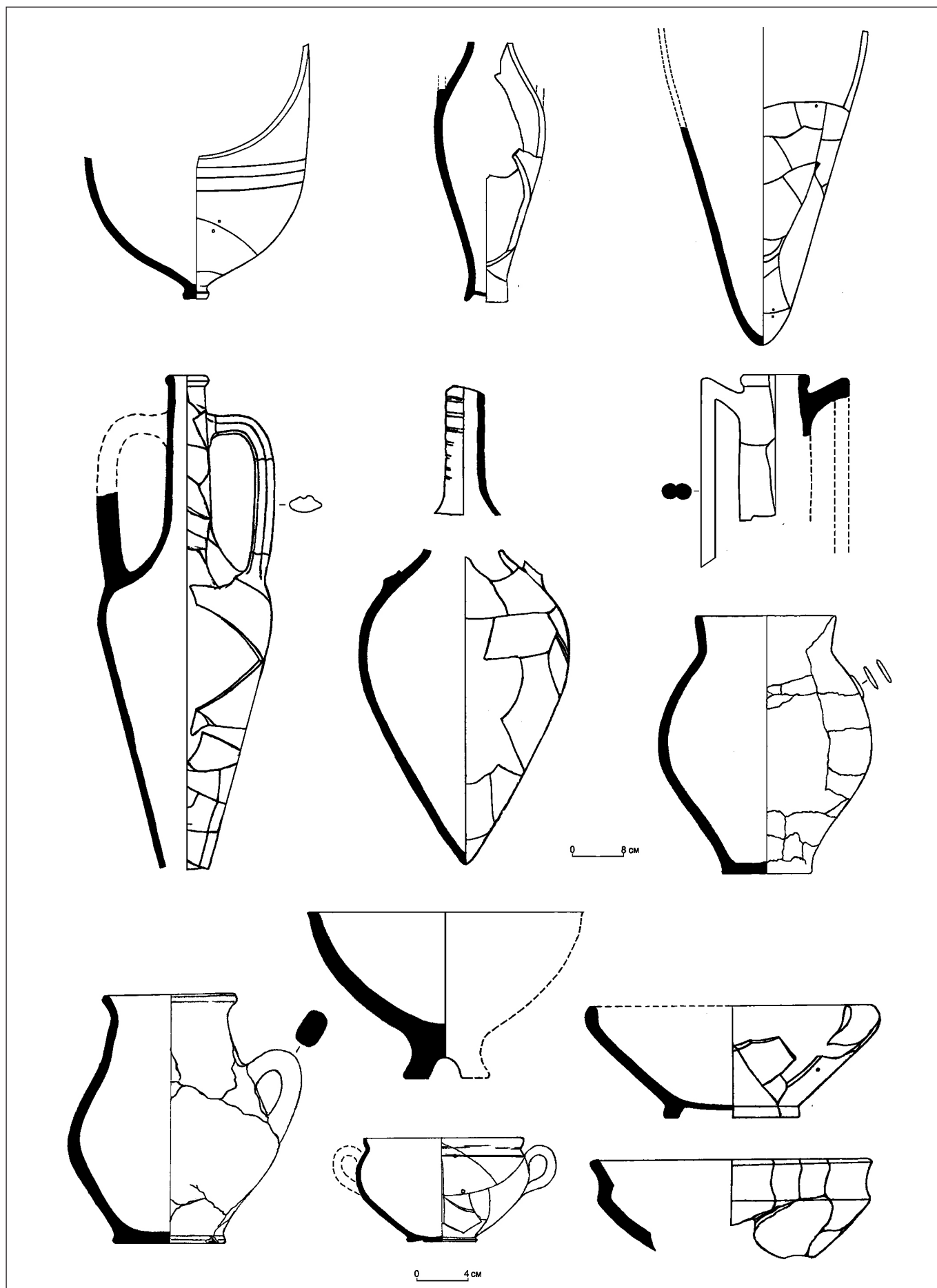


Fig. 10. Pottery from Llove hillfort (drawings by authors).



Fig. 11. Chervony Mayak necropolis (photo 2014 by authors).

Theodosius I and Valentinian I. At the Liubymivka hillfort, coins of Rhescuporides V, minted between 318 and 337 AD and of Theodosius II, minted in Constantinople, have also been recorded²².

The historical fate of the Late Scythian hillforts is as uncertain as their *terminus ante quem*. Traditionally, the end of these sites has been described, rather vaguely, as their “demolition”. However, there are no real archaeological traces of such a catastrophe, as the excavated sites show no fire layers or other traces of violence. Be that as it may, large-scale excavations would be required to ascertain the causes of abandonment at each of these sites. Unfortunately, Russian aggression has made this task impossible in the near future.

3. THE BURIAL GROUNDS (NECROPOLEIS)

A necropolis ought to be located near each hillfort, where its inhabitants were buried. So far, however, only three necropoleis are known: at Zolota Balka, Chervony Mayak (Fig. 11), and Mykolaivka-Kozatske. All of them are located in the steppe, on a plateau outside the residential area and are separated from the hillforts by ravines. The burial grounds are flat, without markers of graves on the surface.

It is possible that the necropolis of Sablukivka hillfort has recently been identified: several disturbed burials were discovered to the west of the hillfort, on a steppe plateau separated from it by a ravine. In recent years, several burials of the Hornostaivka and Liubymivka cemeteries have been discovered as a result of unauthorized building activity. The land of these burial grounds are now largely covered by residential and public construction and are therefore practically inaccessible for systematic study.

The discovered burial grounds share several common features. All are moundless, although the relative position of the graves indicates that some type of marker was placed on them in antiquity (stone slabs, piles of stones, or wooden posts).

The most common type of burial structure is the subterranean earth crypt, or catacomb (Fig. 12/1; 13). Such burial structures account for more than half of the graves in each burial ground (63.28% in Chervony Mayak, 72.11% in Mykolaivka-Kozatske, 75.58% in Zolota Balka). The crypts are arranged in irregular rows (Fig. 12/2) mainly oriented from the north-west to the south-east (in Zolota Balka, from the east to west). One can recognize a certain standardization in the design of the tombs. The entrance pits are generally rectangular or trapezoidal in plan and are oriented mainly from north-west to south-east. The entrance to the burial chamber is, as a rule, located in the northern wall of the entrance pit and was almost always blocked with quarry stone or a single large slab. The crypt chambers are located perpendicular to the axis of the entrance pit, sometimes asymmetrically (forming an L-shape) or at an obtuse angle to it. The chambers are generally oval in plan, less often rectangular or square. The average depth of the entrance pits from the ancient surface is 1.5-2 m, while the floors of the chambers usually lie at a depth of 2.5-2.8 m.

The skeletons were almost always laid supine, with extended arms and legs. The orientation of the heads is consistent, with the majority directed towards the north-western sector, some towards the north-eastern sector, less often towards the southern sector. A latitudinal (western) direction predominates in the Zolota Balka burial ground, whereas a north-western orientation is more common in the Mykolaivka-Kozatske and Chervony Mayak burial grounds.

²² SYMONENKO/DZNELADZE/SIKOZA 2024, 169.

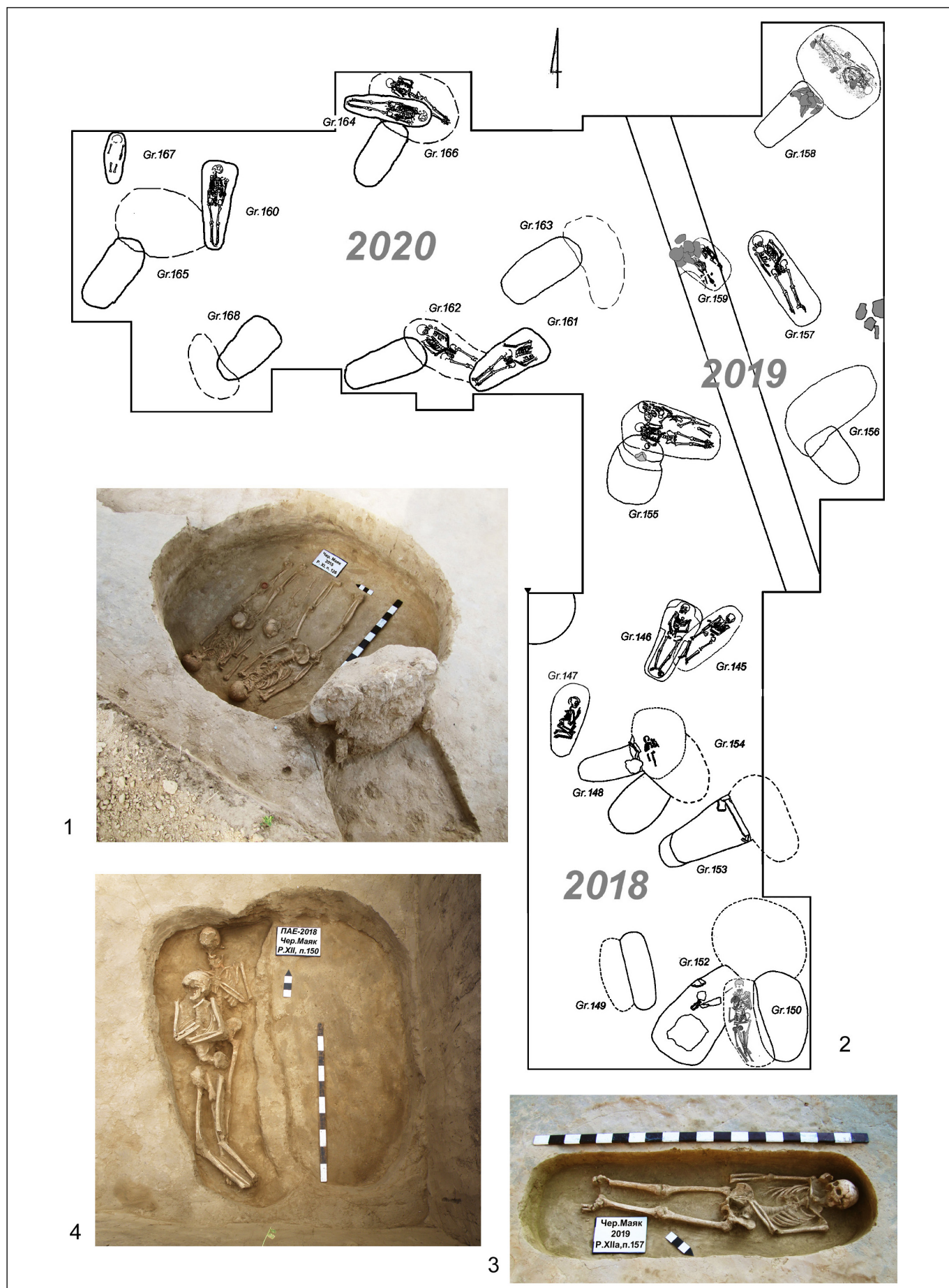


Fig. 12. Chervony Mayak necropolis.

1 – soil crypt; 2 – excavated zone of 2018-2020; 3 – regular pit; 4 – niche grave (photo and drawings by authors).

It has been recorded that the dead were placed on wooden boards or shields, the corners and sometimes the sides of which were supported by flat stones that raised the platform thus formed above the floor of the grave. In some instances, large fragments of handmade vessels covered with soot – interpreted as incense burners – have been found in the entrance pits. It was also customary to place a bowl containing funerary food within the crypt.

Almost every second crypt contained collective burials (up to six individuals), suggesting that the structures were family tombs. Most commonly, these consist of burials of two adults and one or two children, but some crypts revealed several skeletons of adults (Fig. 13). Thus, the necropoleis seem to represent a fairly complete demographic spectrum, including men, women, teenagers, children and infants.

The second most common type of burial in the necropoleis consists of pits (21.47% in Chervony Mayak, 15.26% in Mykolaivka, 16.28% in Zolota Balka). These pits generally have rectangular outlines, less often trapezoidal ones, sometimes with rounded corners and short sides (Fig. 12/3). Their average dimensions are up to 2 m in length and 0.5-0.7 m in width. The bottom of the pit, as a rule, lies at the level of the virgin soil or slightly below it. Given that this level in burial grounds of the Lower Dnieper is usually at a depth of 1-1.2 m below the modern surface, the original depth of the pits can be reconstructed approximately to 1-1.5 m.

The pits are distributed unevenly across the entire area of the burial ground, sometimes concentrated close to one another in small clusters other. Occasionally a stone covering was recorded that had subsided to the level of the skeleton. No special construction of the burial space was recorded.

The orientation of the deceased is mainly towards the northern sector, with some variations; orientation towards the southern sector is rare. The burials are individual and consist mainly of adults, while children's burials are relatively rare.

The third most common type is the niche grave (Chervony Mayak – 15.25%, Mykolaivka – 12.63%, Zolota Balka – 5.81%). Like the regular pits, the niche graves are scattered irregularly across the burial grounds and, in some cases, form small groups of identical and, most likely, contemporary graves. The entrance pits are elongated oval or rectangular in plan and are dug down to the level of the loam or slightly deeper into the virgin soil. Such consistency suggests the existence of certain standards and rules governing the construction of burial structures and may indicate the presence of specialized gravediggers who were acquainted with the properties of the soil and worked according to established techniques.

The entrance pits are oriented along the meridional axis, with few deviations. The niche is cut into the long wall of the entrance pit, most often the western one. The entrance to the niche is closed off with stone slabs of various sizes. The vault has not been preserved, making it impossible to determine its original height, although it is reconstructed as comparatively low. Except for the stone barrier, no interior design features have been recorded in the burial space.

Burials in the niche graves are usually individual, although the bones of several skeletons have sometimes been recorded (Fig. 12/4). The burial rite is fairly consistent: the deceased were laid supine with the head directed towards the northern sector (less frequently towards the southern sector). Ritual features such as crossed legs or hands placed on the pelvis are sometimes observed in these graves as well as in the simple pits. A characteristic feature of niche graves, as well as burials in regular pits, is the general scarcity of grave goods, which are typically limited to a necklace and occasionally a vessel or fragments thereof.

Several burials in cists were discovered in the southwestern part of the Zolota Balka necropolis. No skeletal remains were found there; by the time of excavation the floor slabs “had already been removed”,²³ and the cists were filled with small stones. The grave goods found in the cists (fragments of double-barreled handles of light-colored clay amphorae and horse bits with wheel-shaped check-pieces) are synchronous with the inventory of other graves. Valentyna Mordvintseva raises the possibility that ritual exhumation or deliberate destruction of skeletal remains took place at these graves.²⁴

In 1978, during excavations conducted by the Kherson Archaeological Expedition, similar stone cists were found in a barrow located 5 km from Zolota Balka village. They contained cremated remains, red slip ware and iron three-bladed tanged arrowheads. The researchers compared these cists with similar finds from the Zolota Balka necropolis, identifying them as cremation burials.²⁵ However, the burial rite with mound construction does not exclude the possibility that these graves belonged to the Sarmatians. Isolated finds of Sarmatian burials in stone cists support this interpretation, even though the rarity of this rite within the Late Scythian milieu calls for more detailed study.

Earth crypts, which make up the vast majority of burials in all cemeteries of the Lower Dnieper, are traditionally regarded as one of the ethnic and cultural markers of the Late Scythians. In addition to general considerations (such as the structural affinity between Late Scythian crypts and the steppe catacombs of the 4th–3rd centuries BCE, the uniformity of crypt construction in all burial grounds, and the distinctive character of the material culture, etc.), this hypothesis is also confirmed by anthropological evidence.²⁶ According to most morphological characteristics of the human remains, the Lower Dnieper catacombs and those of Crimea (see, for example, the eastern necropolis of Scythian Neapolis at Bilias) were created by the same population, known in archaeological terminology as the “Late Scythians”.²⁷ However, it should be noted that on the materials of Zolota Balka Maria Viazmitina concluded that the type of burial structure is not related to the anthropological type of the dead.²⁸

²³ VIAZMITINA 1972, 99.

²⁴ MORDVINTSEVA 2015, 120.

²⁵ ZUBAR/KUBYSHEV 1987, 248-253; BYLKOVA 2007, 125.

²⁶ Complete data are available for the Zolota Balka and Mykolaivka-Kozatske burial grounds. The anthropological study of the third Lower Dnieper necropolis – the Chervony Mayak one – is in progress.

²⁷ KONDUKTOROVA 1971, 71; KONDUKTOROVA/YEFIMOVA 2014, 97.

²⁸ VIAZMITINA 1972, 179.

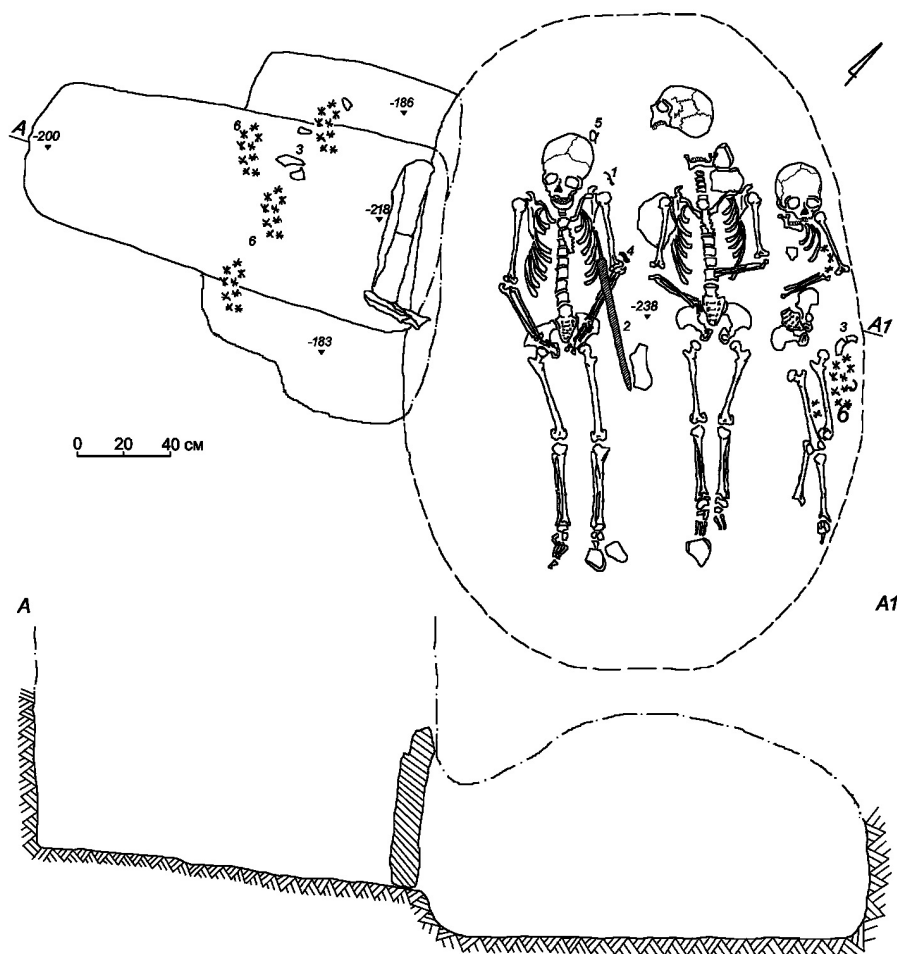


Fig. 13. Chervony Mayak necropolis, collective burial in crypt (photo and drawings by authors).

By contrast, burials in niche graves in the Late Scythian necropoleis have traditionally been associated with the Sarmatians. This type of burial structure, together with such allegedly Sarmatian features as crossed legs or hands placed on the pelvis, was accordingly interpreted as evidence of Sarmatian presence among the population of the Lower Dnieper hillforts.²⁹ However, comparison of these features with the results of craniological analysis has shown that such ritual practices are not exclusively Sarmatian but occur in the burials of people of different anthropological types and of both sexes.³⁰

In recent years, the study of anthropological material of Chervony Mayak revealed an interesting pattern: individuals buried in niche graves and simple pits with poor grave goods belonged to a socially disadvantaged group during their lifetime. Their skeletons show traces of various pathologies, indicating poor nutrition, dietary deficiencies, frequent diseases, and physical impairments caused by malnutrition and poor living conditions.³¹ The ethnicity of these people cannot be determined yet by craniological analysis, since such analysis requires well-preserved skulls, which have not yet been recovered. If these individuals do turn out to be Sarmatians, as is still suggested on the basis of their burial rite, this would represent an unexpected turn in the study of the relationship between the Sarmatians and the Late Scythians of the Lower Dnieper.

3.1. CHRONOLOGY OF THE NECROPOLEIS

The funerary materials corroborate the following dates: at the Zolota Balka necropolis there are no burials earlier than the late 1st century BC,³² while the earliest graves of Chervony Mayak contain the fibulae of mid-La Tène type from the late 2nd–1st centuries BC. Around the same time, the Mykolaivka burial ground was founded, where nine of the earliest burials are dated by late Hellenistic red-slip pottery and brooches of the mid-La Tène type.³³

The bulk of burials in all three necropoleis are dated to the 1st–2nd centuries AD by the presence of red-slip pottery of the Pontic sigillata group, early Roman and Northern Pontic fibulae, and weapons of Sarmatian types (Fig. 14).

A similarly uncertain picture concerning *the terminus ante quem* emerges from the finds of the necropoleis. While the Zolota Balka cemetery contains no burials later than the turn of the 1st–2nd centuries AD, the latest graves at Mykolaivka and Chervony Mayak date already to the late Roman period. However, these are few in number compared to the bulk of graves from the 1st and 2nd centuries AD.

Thus, a reliable chronology of the Late Scythian culture of the Lower Dnieper can be achieved only through further large-scale excavations. Unfortunately, the Russian invasion has ruled out this possibility for the foreseeable future.

4. CONCLUSIONS: ENDANGERED ARCHAEOLOGICAL SITES

Following Russia's invasion of Ukraine in 2022 and the swift occupation of southern Ukraine, the Late Scythian sites found themselves at the epicenter of hostilities. This catastrophe has further aggravated the already difficult fate of the hillforts and necropoleis of the Lower Dnieper. For centuries they served as quarries for local inhabitants: most of the villages near the hillforts were built from stone quarried from Late Scythian ruins that were visible as recently as the nineteenth century. During the Russian Empire's wars of conquest against the Ottoman Porte and the Crimean Khanate, redoubts or firing positions were set up on several hillforts. Under Soviet rule, the officials charged with the protection of local sites showed little concern for the fate of Late Scythian hillforts and burial grounds. As a result, unscheduled construction took place on the sites vegetable gardens or vineyards were laid out, and in some cases even military training grounds were established. During building works in the villages, locals frequently found Late Scythian burials and destroyed them. Occasionally conscientious citizens reported such finds to local museums and even brought them there, but these were isolated cases.

After Ukraine gained its independence, the sites of the Lower Dnieper faced a new threat: they were looted by "black diggers" who sought to supply the collections of the social "elite." The widespread impoverishment and unemployment of the local population of the Kherson region pushed many towards this illusory path of enrichment, and local power structures, often corrupted by regional elites, turned a blind eye to the damage occurring at sites that were mostly forgotten and abandoned by the local authorities.

Archaeologists and museum workers sounded the alarm,³⁴ trying to save every damaged site. Despite the scant funding allocated to "culture" – as state bureaucrats referred to the protection of cultural heritage – and the lack of necessary equipment (above all, vehicles), the determined efforts of scholars bore fruit. An example is the resumption in 2011 of excavations at the only available archaeological site, the Chervony Mayak burial ground, by the Late Scythian Archaeological Expedition of the Institute of Archaeology of the National Academy of Sciences of Ukraine (headed by Dr. Oleksandr Symonenko) in cooperation with the Kherson Regional Inspectorate for the Protection of Historical and Cultural Monuments. Although the modest funding of the excavations by the Kherson regional authorities limited the field season to 1–1.5 months, looting of the site ceased simply because of the appearance of scholars.

In 2015, the Khortytsia National Reserve, together with archaeologists from the University of Warsaw (headed by Drs. Nadiya Gavryliuk and Marcin Matera), launched research at the Konsulivka hillfort.

Since 2016, the Southern Medieval Expedition of the Institute of Archeology of the National Academy of Sciences of Ukraine and the NGO "Ukraine-Lithuania" (headed by Dr.

²⁹ KONDUCTOROVA 1979, 59; VIAZMITINA 1972, 176–179.

³⁰ KONDUKTOROVA 1979, 52; VIAZMITINA 1972, 179.

³¹ Personal information of Dr. Oleksandra Kozak who examined bone material from Chervony Mayak.

³² VIAZMITINA 1972, 175.

³³ SIKOZA/DZNELADZE 2019, 360.

³⁴ GAVRYLIUK 2009.



Fig. 14. Grave goods from Late Scythian burials.

1 – iron arrow-heads of Sarmatian type; 2 – bronze fibula; 3-6 – red slip pottery of Pontic sigillata group; 7-13 – iron, bronze and ceramics artifacts (photo by authors).



Fig. 15. Damage of the hillforts made by Russians occupiers.

1 – Liubymivka (left – before the occupation); 2 – Hornostaivka (left – before the occupation); 3 – Lvove (1 and 2 – satellite shots, 3 – photo by authors).

Svitlana Bilyaeva) has been researching the Tiahyn Fortress of the Grand Duchy of Lithuania.

Yet all this progress was interrupted on day one of the war. Archaeologists have not yet been able to access the

liberated territories on the right bank of the Dnieper, where Late Scythian hillforts and burial grounds are located. However, according to reports from local residents, the occupying forces arranged tank training grounds at several sites (Chervony Mayak, Zmiivka), which caused irreparable damage to the cultural layers.

Currently, the right bank of the Dnieper River in the Kherson region is subjected to continuous Russian shelling from the left bank. Given that the Late Scythian hillforts and necropoleis are located along the shoreline of the former Kakhovka Reservoir, they are directly exposed to missile and artillery fire. For example, it has been reported that the Konsulivka hillfort has been struck by guided bombs.

Satellite imagery indicates the presence of trenches and dugouts across extensive areas of the Liubymivka (Fig. 15/1), Hornostaivka (Fig. 15/2) and Lvove (Fig. 15/3) sites in the occupied zone, causing irreparable damage to the cultural layers.

During the withdrawal from Kherson, the Kherson Museum of Local Lore reported the removal of a substantial number of objects from its collections. These included gold and silver jewelry, Greek black-gloss and Roman red-slip pottery, amphorae, bronze artifacts (fibulae, bracelets, tools), numerous beads, numismatic finds, a collection of weapons, and Greek and Roman tombstones and sculptures from the lapidarium (Ablyalimova et al. 2024, p. 15). Among these were the best-preserved and scientifically most important finds from Late Scythian sites, in particular from the recent excavations of the Chervony Mayak burial ground.

The Russian aggression has caused irreparable damage to the Late Scythian sites of the Lower Dnieper, which had already previously suffered from the effects of time and human activity. And while it may be possible to recover the materials stolen from museums or to restore damaged structures, destroyed archaeological sites cannot be reconstructed. The main challenge for scholars, therefore, is to study and publish as quickly as possible all surviving materials of the Late Scythian sites of the Lower Dnieper.

REFERENCES

- ARTAMONOV 1948
Artamonov, M. I., Skifskoe tsarstvo v Krymu, *Vestnik Leningradskogo universiteta* 8, 58-69.
- BYLKOVA 2007
Bylkova V. P., *Severnoe Prichernomorie v antichnuju epokhu (po materialam raskopok poselenij)* (Kherson: Izd-vo KhGU).
- CHIRKOV 1867
Chirkov, A. Kratkij ocherk gorodishch, nakhodjashchikhsja po Dnepru i ego Limanu, *Zapiski Odesskogo obshhestva istorii i drevnostej*, Tom VI (Odessa), 546-550.
- DZNELADZE/SIKOZA 2020
Dzneladze, E. S./Sikoza, D. N., Oboronitelnye sooruzhenija pozdnikh skifov Nizhnego Dnepra, *Arkheolohija i davnja istorija Ukrainy* 3(36), 191-213.
- GAVRILYUK 2005-2009
Gavriljuk, N. A., Frakijtsy v Nizhnem Podneprov'e, *Stratum Plus* 4, 114-141.
- GAVRYLIUK 2009
Gavriljuk, N. A., Nizhnedneprovskie gorodishcha i opyt ikh izuchenija i sokhrannosti. In: Zin'ko V.N. (ed.), *X Bosporskie chtenija. Bospor Kimmerijskij i varvaskij mir v period antichnosti i srednevekov'ja. Aktual'nye problemy* (Kerch': Demetra), 95-101.
- GAVRILYUK 2013
Gavriljuk, N. A., *Ekonomika Stepnoj Skifii VI – III vv. do n. e.* (Kiev: Vydavets Oleg Filjuk).
- GAVRILYUK/KRAPIVINA 2005
Gavrylyuk, N.A./Krapivina, V. V., Nizhnedneprovskie gorodishcha (k probleme vzniknovenija i razvitija). In: Zinko, V. N. (ed.). *Bospor Kimmerijskij i varvaskij mir v period antichnosti i srednevekovija. Periody destabilizatsij i katastrof (Bosporskie chtenija 6)* (Kerch), 66-73.
- GOSHKEVICH 1913
Goshkevich, V., Drevnie gorodishha po beregam nizovogo Dnepra, *Izvestija imperatorskoj arheologiceskoj komissii*, Vyp. 17 (Sankt-Peterburg), 27-28.
- KOLTUKHOV 1999
Koltuhov, S. G., *Ukrepljenija Krymskoj Skifii. Materialy po arkheologii Kryma*. Simferopol': Sonat, 1999.
- KONDUKTOROVA 1971
Konduktorova, T. S., Pizni skify na Nizhniomu Dnipro (za antropologichnymi materialamy Zolotobalkivskogo mohyl'nyka). *Materialy z antropologii Ukrainy* 5, 60-71.
- KONDUKTOROVA 1979
Konduktorova, T. S., *Fizicheskij tip ljudej Nizhnego Prideprov'ja na rubezhe nashej ery (po materialam mogil'nika Nikolaevka-Kazatskoe)* (Moskva: Nauka).
- KONDUKTOROVA/YEFIMOVA 2014
Konduktorova, T. S./Efimova, S. G. Kraniologiceskaja kharakteristika naselenija Beljausa. In: *Dashevskaja O.D. Nekropol Beljausa* (Simferopol: ChP «Predprijatje Feniks»), 94-98.
- MORDVINTSEVA 2015
Mordvintseva, V. I., Sotsialnaja struktura naselenija gorodishcha u s. Zolotaja Balka, *Stratum Plus* 4, 115-142.
- POGREBOVA 1958
Pogrebova, N. N., Pozdneskifskie gorodishcha na nizhnem Dnepre (gorodishcha Znamenskoe i Gavrilovskoe), *Materialy i issledovanija po arkheologii SSSR* 64, 103-247.
- ROSTOVTSEV 1918
Rostovtsev, M. I., *Ellinstvo i iranstvo na yuge Rossii* (Petrograd: Ognj).
- SHCHUKIN 1979
Shchukin, M. B., K predystorii chernjahovskoj kultury. Trinadcat sekvencij, *Arkheologiceslij sbotnik Gosudarstvennogo Ermitazha* 20, 67-89.
- SIKOZA/DZNELADZE 2019
Sikoza, D./Dzneladze, E., Zhenskije pogrebenija Nikolaevskogo mogil'nika, *Arkheolohija i davnja istorija Ukrainy* 2(31), 355-363.
- SIMONENKO 2016, 27-32
Simonenko, A. V., O proiskhozhdenii pozdneskifskoj kultury Nizhnego Dnepra, *Starodavnye Prichernomoria XI* (Odesa: ONU im. I. I. Mechnikova), 2016, 476-483.
- SYMONENKO 2022
Symonenko, Al., Late Scythian Culture of the Lower Dnieper: the Issue of Origin, *Journal of Ancient History and*

Archaeology 9/3, 27-32. DOI: <https://doi.org/10.14795/j.v9i3.794>

SYMONENKO/DZNELADZE/SIKOZA 2024

Symonenko, O. V./Dzneladze, O. S./Sikoza, D. M., *Atlas piznioskifskikh pamijatok Nizovoho Dnipra*. (Kyiv: IA NAN Ukrainy).

SYMONENKO/SIKOZA/DZNELADZE 2015

Symonenko, O.V./Sikoza, D. M./Dzneladze, O. S., *Piznioskifski mogilnik Chervony Mayak. Doslidzhennja 2011-2015 rokiv* (Kherson: FOP "Sivak O.V.).

VIAZMITINA 1962

Vyazmitina, M. I., *Zolota Balka. Poselennja sarmatskogo chasu na Nizhniomu Dnipri* (Kyiv: Naukova dumka).

VIAZMITINA 1969

Viazmitina, M. I., Frakijskie elementy v kulture naselenija gorodishch Nizhnego Dnepra. In: *Drevnie frakijtsy v Severnom Prichernomorie* (Moskva: Nauka), 119-134.

VIAZMITINA 1972

Vyazmitina, M. I., *Zolotobalkovskij mogilnik* (Kiev: Naukova dumka).

ZAJTSEV 1999

Zajtsev, Yu. P., Skilur i ego tsarstvo (Novye otkrytija i novye problemy), *Vestnik drevnej istorii* 2, 124-147.

ZUBAR/KUBYSHEV 1987

Zubar, V. M./Kubyshev, A. I., Pogrebalnye komplekсы rubezha n. e. iz Nizhnego Podneprovia, *Sovetskaja arkheologia* 4, 248-253.