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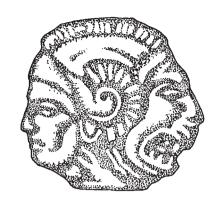
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# UPPER PALAEOLITHIC OCCUPATIONS IN THE MIDDLE DNISTER VALLEY: ZOOARCHAEOLOGICAL STUDIES IN THE DOROSHIVTSI III SITE (UKRAINE) — CAMPAIGN 2019

In 2019, new excavations were carried out at Doroshivtsi III site, dated to the Last Glacial Maximum. Ten identifiable archaeological levels belong to the Gravettian technocomplex. In the article, detailed data about the faunal remains is presented. The remains of reindeer, horses, mammoths, a wolf, a vulpine, and also a crow have been identified. According to the data, the main species for hunting were reindeer, then horses. In comparison with the sector of earlier excavations, in 2007—2010, the same species are represented on the site as well as a wolf, but the remains are less concentrated in the area, which may indicate a different purpose for the sector of 2019.

K e y w o r d s: Upper Palaeolithic, Last Glacial Maximum, Gravettian, Subsistence, Taphonomy.

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KONONENKO Olesia Mykolaivna — PhD, Research Fellow, the Institute of Archaeology of the National Academy of The archaeological site of Doroshivtsi III is a key site for understanding human occupations in the Dnister River valley during the Last Glacial Maximum. We focus here on the study of faunal remains coming from the new excavations in order to comprehend better the preservation of this sector and the human activities.

#### Introduction

During the Last Glacial Maximum (31.0 and 21.5 ka cal BP / 26.0—18.0 ka C<sup>14</sup> BP), several occupations are known in the extra-Carpathian area, in the Siret, the Prut and Dnister River basins, mainly in the south part, in Romania and in the Republic of Moldova (Черныш 1959; Borziak 1994; Păunescu 1998; Cârciumaru 1999; Hae-

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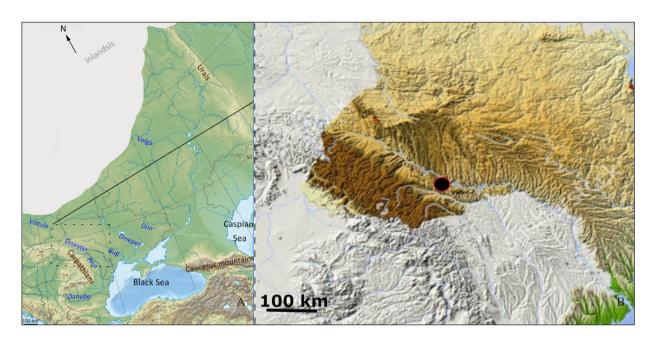


Fig. 1. The East European Plain (A) and the localisation of Doroshivtsi III in Ukraine (B)

saerts et al. 2003; Chirica, Borziak 2009; Noiret 2009; Anghelinu, Niţă, Murătoreanu 2018; Demay et al. 2021). Further to the north, in the middle Dnister area in Western Ukraine the site of Doroshivtsi III provided key results in this area about human activities during this period (Kulakovska et al. 2015). It is also during this period that the technocomplexes evolved from Gravettian to Epigravettian features.

It is evident from various works that cultural aspects in the region are quite homogeneous. These are human groups of small size, with high mobility, using local mineral resources, with hunting strategies focused on the reindeer migrations.

Lithic industries are characterised by specific tools, such as truncated elements, then large Gravettian points, and finally points with convex backs. These particularities are grouped under the same regional facies, as a late stage of the Molodovian, sometimes labelled as Molodova-Cosăuți-Cotu Miculinți cultural entity (Borziak et al. 2006) or Eastern Gravettian/Epigravettian of Ukraine (Борисковский 1953; Черныш 1954; 1973; 1985; Григорьев 1970; Otte et al. 1996; Борзияк 1998; Борзіяк, Кулаковська 1998; Djindjian 2002; Noiret 2007; Nuzhnyi 2009; Нужний 2015; Kulakovska et al. 2015). Nevertheless, we observe an intensification of bladelets and bone industry producing and the enlargement of the raw materials used (Anghelinu et al. 2019).

In this area, the main mammalian species present in archaeological sites are reindeer, horses and

bison, often associated with a few canids. The woolly mammoth remains are used as artistic support, for osseous industry, especially ivory, as well as fuel (Demay et al. 2019). Therefore, it is important to specify the role of different species as food and non-food resources in the daily life of these populations.

The new excavations carried out in 2019 in Doroshivtsi III have yielded the following data (Połtowicz-Bobak et al. 2022) (fig. 1). Here we present detailed information about faunal remains, in order to describe in detail the faunal spectrum, the anatomical representation, the taphonomic conditions and the human activities.

#### History of research

The first prospections in Doroshivtsi were made in 1951 by A. P. Chernysh (1954) and he continued later in the 1960s (Черныш 1985). He discovered three open-air archaeological sites named Doroshivtsi I, II and III. From 2006 to 2010 new works had been conducted in Doroshivtsi III under the direction of L. V. Kulakovska (Кулаковська та ін. 2008). In 2019, a new project to excavate a bigger area was led by M. Połtowicz-Bobak and L. V. Kulakovska (fig. 2).

#### Location of the site

The site is located 26 m above the river on the terrace II of the Dnister. It was excavated over an area of 22,4 m<sup>2</sup>.



Fig. 2. Localisation of the excavations of 2006—2010 and 2019 of Doroshivtsi III

#### Stratigraphic data and dating

In the first excavations made on around 50 m², seven archaeological layers were discovered in clay-sandy loess. The main layers (3, 6) were dated between around 20.6 and 22.4 ka C¹⁴ BP by charcoals (Кулаковська та ін. 2011; Kulakovska et al. 2015; Haesaerts et al. 2020). In 2019, ten layers with artefacts were identified (fig. 3).

The fieldwork reassumed in 2019 covered an area immediately to the east of the zone studied earlier. The topographic surface of the explored section is located at 157.86 m a.s.l., i.e. 1 m lower than the previously investigated profile (Kyлаковская, Усик, Эзартс 2012). A detailed description of the Doroshivtsi III's section was prepared down to the depth ca. 7.15 m according to palaeopedological criteria (Guidelines for soil description, 2006), and a preliminary examination down to 8.3 m. In the studied sequence six (I—VI) main lithological units have been distinguished, plus — tentatively — unit VII. Layers with artefacts from A- to 4 are within the limits of litho-pedological subunits 4, 5, and 6 of unit V and in unit VI, while layers with artefacts 5, 5a, and 6 are located in the tri-segmented unit VII (fig. 3).

The upper, archaeologically sterile, part of the Doroshivtsi sequence of calcareous, layered sandy-clay sediments can be identified as aeolian loess (unit II) and colluvial-solifluction loess (units III—IV). The main layer of carbonate debris (unit III) is a record of a single, albeit visibly repeated, cycle of more intensive activity of solifluction processes. The OSL ages between 20.1 and 21.9 ka (but with inversions) of sediments within units II—IV suggest that they were formed over a relatively short period. The lack of younger deposits than 20 ka and thus corresponding to the main phase of loess sedimentation in the Dnister valley (Łanczont et al. 2021) may be a consequence of the significant activation of slope processes at the end of the Last Glacial period (Starkel et al. 2015).

The unit V illustrates a dynamic periglacial slope environment on terrace II in a period of rapid palaeoclimate changes (chiefly an increase in humidity), including — probably short — episodes of weakening of aeolian-slope processes and stabilisation of its surface, occurring between 25.5-23.7 ka BP. Such episodes of landscape stabilisation are evidenced by thin soils developed as weak humus or vegetation horizons with variable — yet always thin — thickness, and ultimately fading away. The lateral disappearance of soil horizons should be assigned to the post-pedogenic activity of destructive slope processes, spreading the soil material across the slope. The unit VI, formed ca. 27 ka ago, represents a period with relatively cool and wet climate conditions, as evidenced by small cryoturbation structures and gley signs. The preliminary explored soil ho-

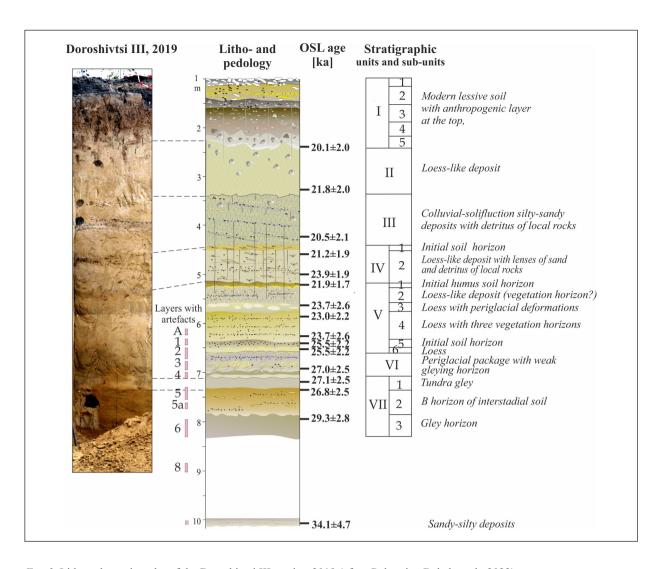


Fig. 3. Lithopedostratigraphy of the Doroshivtsi III section-2019 (after: Połtowicz-Bobak et al., 2022)

rizons forming unit VII in the lower part of the section are dated OSL to ca. 27—29 ka; they are continuous, relatively well developed, and testify to the existence of palaeoclimatic conditions more conducive to pedogenesis. However, the gleysol, which is the lowest horizon of unit VII, had developed in a rather cold climate.

The set of initial soils at the Doroshivtsi III site with OSL ages of ca. 27—21 ka (fig. 3) is likely to be an environmental response determined by the local lithology and relief in the site (including exposure and inclination etc.) to the hydroclimate variability of MIS 2. For these reasons, the soil horizons distinguished during the different excavation seasons at the site are difficult to correlate despite the generally small area surveyed. The differences are smaller in the lower part of the sequence. There is an interstadial cambisol (Poltowicz-Bobak et al. 2022), found also in all the previous studies of the site (Кулаковська

Ta ih. 2011; Kulakovska et al. 2015; Haesaerts et al. 2020). It is a horizon probably of stratigraphic marker importance, representing the younger part of MIS 3.

#### Environmental data

In the previous excavations, typical species of the glacial period were present, such as *Mammuthus primigenius* (woolly mammoth) and *Rangifer tarandus* (reindeer) (Demay, Patou-Mathis, Kulakovska 2015). They are also present in the new excavations. Moreover, small mammals were studied in the new excavations coming from the units V, VI and VII. The most represented taxa are *Lasiopodomys anglicus* (European narrow-headed vole) and *Ochotona pusilla* (steppe pika). Then are present *Alexandromys oeconomus* (tundra vole), *Dicrostonyx torquatus* (Arctic lemming) and *Sicista* sp. (birch mouse). These species are typical for

the steppe-tundra community, living in treeless and bushy environments with a mosaic of grassy vegetation, quite wet (Połtowicz-Bobak et al. 2022).

During the previous excavations, the results were obtained on the malacofauna (Popiuk 2014). The species Succinea oblonga elongata and Succinea putris were present. They are eurythermal and can live in very cold environment, although they are hygrophilous; therefore, these species lived near a stream. Freshwater species, including Anisus spirorbis and Lymnaea palustris, are numerous and testify to the proximity of a calm and constant aqueous environment. A few amphibious species have also been identified. Terrestrial species are mainly represented by cryophilic species (Pupilla loessica, Columella columella, Vallonia tenuilabris). Pseudotrichia rubiginosa is typical for the Pleistocene tundra and Columella columella gredleri of the loess of the Carpathian region. Finally, the presence of *Trichia* hispida testifies to short periods of warming (see: Alexandrowicz et al. 2014).

According to the palynological studies from the preceding excavations (Кулаковська та ін. 2011), the indications are similar. Indeed, the vegetation is of the steppe-tundra type with herbaceous plants, shrubs and bushes adapted to the cold environment, but denoting a certain humidity. During the formation of humus soils, the vegetation is denser, with the presence of trees (birch, alder, willow, pine, oak), which testifies to an increase in temperature and humidity. The archaeological levels of Doroshivtsi III are characterised by a steppe-tundra environmental type with the presence of forest corridors and hygrophilous species.

#### Faunal data

During the previous excavations we identified a restricted faunal spectrum with few individuals in each layer, mainly dominated by *Rangifer tarandus* (reindeer), associated with *Equus* sp. (horse), *Mammuthus primigenius* (woolly mammoth) and *Vulpes vulpes* and *lagopus* (fox) (Demay, Patou-Mathis, Kulakovska 2015).

#### Lithic industry data

During the prior excavations, a total of 27920 pieces were counted (Кулаковская, Усик, Эзартс 2012). Layers 1 and 7 yielded very few pieces and layers 2 and 5 only a few tools, especially burins. Layers 3 and 4, rich in lithic artefacts, were the subject of a

techno-typological analysis. Longitudinal and parallel longitudinal debitages, by hard and soft percussion, were used. The tools are diversified: scrapers, retouched blades, bladelets, backed microblades and burins. Layer 6 is the richest in lithic pieces. Longitudinal and parallel longitudinal debitages, by hard percussion, were used. End scrapers, blades, bladelets, retouched and backed microblades and shouldered points have been identified.

In the excavations of 2019, a total of 67 pieces were discovered, including 62 flint and five stone artefacts. A total of 25 pieces were observed in the layer 2 and between 2 and 15 pieces in the other layers. Surprisingly, we observed an almost complete lack of retouched tools and chips. The lithic industry uses local raw material and most of the finds were fragmented (Połtowicz-Bobak et al. 2022).

#### Osseous industry data

During the excavations of 2006—2010, layer 6 yielded five pieces of osseous industry (Piдуш 2008; Кулаковська, Усик, Эзартс 2012; Kulakovska et al. 2015; Demay, Patou-Mathis, Kulakovska 2015). There is an ivory point (116 × 7.9 mm) with an oval cross-section and presenting a series of fine transverse striations in the proximal part. Two pointed ivory fragments with deep transverse cutmarks were also found. Two points, probably awls, were made on reindeer metapodials. The first one  $(120 \times 41 \times 5.19 \text{ mm})$  has been polished and the second one (104.9 × 6.87 mm) has an oval section, more triangular at the base. In addition, a mammoth tusk was decorated with engraved patterns. It is 150 mm long and 50-20 mm in diameter. The surface was decorated with meanders and zoomorphic images made by very fine incisions.

#### Structure data

During the excavations of 2006—2010, layers 6 and 4 yielded undelineated ash deposits and layer 3 a constructed hearth. In 2019 no structures were identified.

#### Human behaviour data

In the previous results, small human groups came at different seasons, used local flint and mainly exploited reindeer for soft tissue, as well as horses and foxes. Bones were used as fuel, also as mammoth ivory as artistic media and to make tools.

It is difficult to characterise the status of the woolly mammoth within the levels of Doroshivtsi III. Indeed, mammoth bones are present in all layers, but, no butchering marks were found on the bones. Moreover, these are too scattered to proceed with interpretations based on skeletal preservation. These findings are to be related to the large dimensions of this animal. Indeed, a mammoth is characterised by a large mass of fat and meat which, during cutting, generates little or no butchery marks on the bones. Similarly, as a result of the large size of the bones, it is possible that the meat would be cut, without human groups bringing the bones to the site. It is therefore possible that mammoth was consumed in Doroshivtsi III. It could be the acquisition of meat by scavenging on fresh carcasses, or only the collection of dry bones. The presence of young adults and juveniles suggests that these individuals came from a matriarchal herd. The low number of individuals makes it impossible to identify population profiles. We can note that it is relatively rare for young adults to be the most represented in the catastrophic or attritional mortality profiles, they could be individuals hunted by human groups. However, we cannot be certain about the status of this taxon in terms of acquisition and diet.

### Occupation interpretation and technocomplexes

In the previous results, layers 7 and 1 were too poor in artefacts to allow cultural attribution. Layers 5, 4, 3 and 2 have been attributed to the Gravettian. With regard to layer 6, there are few burins, a frequent tool in the Gravettian, and a predominance of bladelets and microbladelets with a backed edge. This is the third site with Zamostje (Борисковский 1953; Kozłowski 1998; Noiret 2009) and Molodova V/7 (Kozłowski 1998; Noiret 2009; Кулаковська та ін. 2011) and Molodova 8 (Черныш 1987; Borziac 1998) having delivered shouldered points. However, those of Doroshivtsi III differ from those known in the Molodovian culture. If this industry has some similarities with those of the Epigravettian sites of Mezyn, Amvrosiivka, Borshchevo 1 and Kostyonki 21/III, the presence of a bone industry and an engraved defence, in particular meanders, makes it a singular site. It is currently difficult to define with certainty which culture belongs to layer 6 of the Doroshivtsi III/6 site. It would be Gravettian with very ancient Epigravettian features. In the excavations of 2019, the first nine layers are referred to the Gravettian. The last one cannot be clearly identified.

#### Methods and materials

The faunal remains of Doroshivtsi III of 2019 are stored in the Archaeological Museum in Kyiv. We conducted zooarchaeological research on this material.

The current study includes palaeontological analyses, the biology and ethology of the species, by means of actual comparisons. In addition, the description and quantitative analysis of the anatomical elements associated with taphonomy (climate and edaphic factors and non-human biological agents) will make it possible to identify the conditions that make up the fossil assemblage. The combination of these analyses in relation to the stigmas that may have been left by humans would lead to a better understanding of the anthropogenic impact on this assemblage (Poplin 1976; Behrensmeyer 1978; 1990; Binford 1979; Lyman 1994; Denys, Patou-Mathis (dir.), 2014; Fernández-Jalvo, Andrews (eds.) 2016). Taxonomic references and systematics are based on the zoological nomenclature code (ICZN 1999). The vernacular anatomical terms are used according to the criteria of Barone (1976) taking into account the current nomenclatures. Here we adopt the quantification units defined by Poplin (1976) and Lyman (2008). The skull (cranium and face) is considered as an element. The frontal appendages can also be regarded as a separate element. The hemi-mandible is counted as an element, except for the mammoth whose mandible is a complete element. A tooth, whether isolated or in place, is counted as an element. To estimate the Minimal Number of Individuals (MNI) we proceeded to reassembling, pairing, associations, according to the criteria of age and

Quantitative measures followed by Poplin (1976) and Lyman (2008), where:

Qsp: specific coefficient, obtained from the frequency of occurrence of an element in the anatomy of species;

MAU: Minimum Animal Unit, specifying the degree of preservation of different anatomical elements of species, where MAU = MNE/Qsp, and MAU frequency (%) = MAU × 100/MAUmax;

Ps: percent survivorship, involving observation on three levels: each element; each anatom-

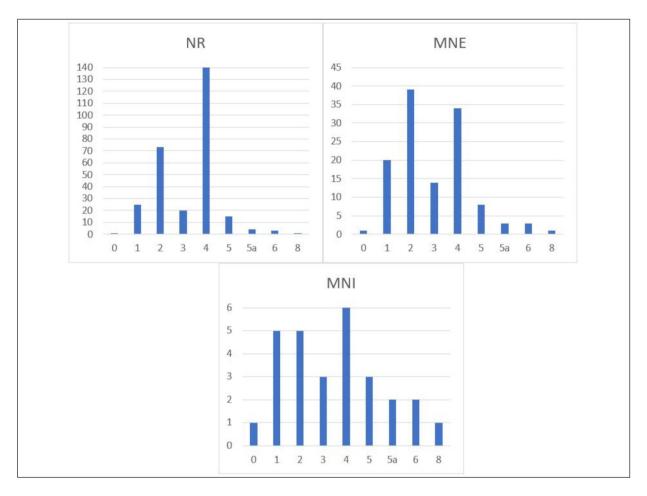


Fig. 4. Graphic representation of faunal remains from Doroshivtsi III-2019 in number of remains (NR), minimal number of elements (MNE) and minimal number of individuals (MNI)

ical region; and the overall deficit (total) of the species. It is calculated by elements. It takes into account the MAU which is based on the Minimum Number of Individuals evaluated by the cMNI. Ps = MNE  $\times$  100/Qsp  $\times$  MNImax = MAU  $\times$  100/MNI max.

The rate of determination is: (specifically determined remains/total number of remains)\*100 The index of fragmentation is: NR/MNE.

For the splinters we determined different size classes: class I (<2 cm), class II (2—5 cm), class III (5—10 cm), class IV (10—20 cm) and class V (20—40 cm).

We distinguish different mammal size classes: large-sized mammals (>200 kg, ex: *M. primigenius*, *Equus* sp.), medium-sized (> 20 kg—200 kg, ex: *R. tarandus*, *C. lupus*) and small-sized (< 20 kg, ex: *Vulpinae*).

Osteometric measurements follow the procedures of von den Driesch (1976), and concerning mammoth, of Agenbroad (1994), Lister (1996) and Göhlish (1998).

We identified the age of horses (*Equus* sp.) (Barone 1966), reindeer (*Rangifer tarandus*) (Bouchud 1954; 1966; Miller 1972; 1974; Hufthammer 1995; Enloe 1997) and a wolf (*Canis lupus*) (Barone 1976). For mammoths (*Mammuthus primigenius*), age and sex determination are based on epiphyseal stages of long bones and eruption and *eruption/wear* sequence of the *cheek teeth* (Osborn 1942; Vaufrey 1955; Coppens 1965; Laws 1966; Haynes 1991) and the morphometry of bones (Haynes 1991; Averianov 1996; Shoshani, Tassy (eds.) 1996; Lister 1999).

Concerning a mammoth, the references for osteometric comparisons are based on well-known specimens from Eurasia (Воллосович 1909; Felix 1912; Toepfer 1957; Siegfried 1959; Koenigswald 1989; Ziegler 1994; 2001; Lister 2009; Kirillova, Shidlovskiy, Titov 2012).

Concerning age classes, they are determined as: a juvenile, a young adult, an intermediate adult, a mature adult and an old adult. Patterns in the age at death (mortality profiles) of animals are used to in-

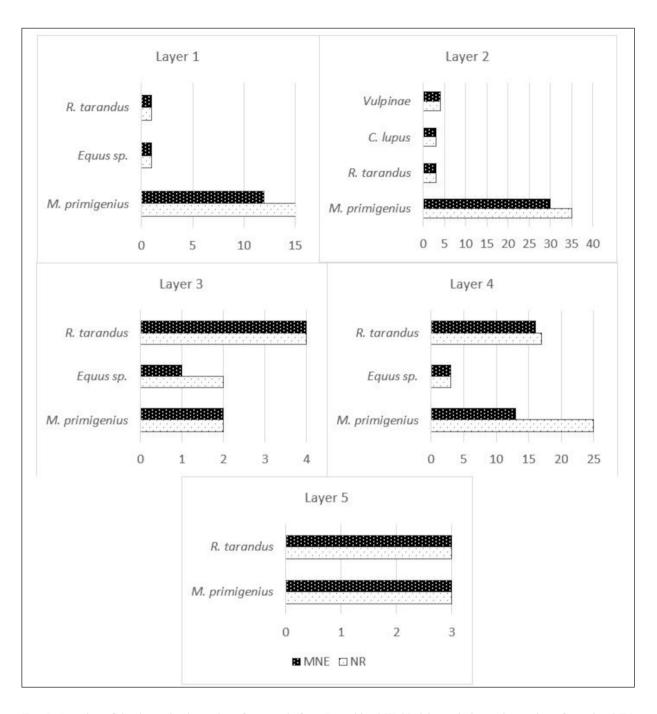


Fig. 5. Counting of the determined remains of mammals from Doroshivtsi III-2019 by main layers in number of remains (NR) and minimal number of elements (MNE)

fer the origins of assemblages (Klein, Cruz-Uribe 1984; Haynes 1987; Stiner 1990).

The skeletal preservation on %MAU by anatomical segments related with bones density (from Lam et al. 1998; Lam, Pearson, 2003) are used for reindeer to determine the origin of the assemblage according to the bone dispersion. The correlation testing is used to assess an association of dependence or independence between two variables. The correlation coefficient can be calculated using different methods. The Pearson correlation coefficient

r makes it possible to analyse the linear relationships between two continuous quantitative characters.

if r is close to 0, there is no linear relationship between X and Y,

if r is close to -1, there is a strong negative correlation between X and Y,

if *r* is close to 1, there is a strong linear positive correlation between X and Y.

The nutritional strategies can be estimated (Binford 1978; 1987; Metcalfe, Jones 1988; Lyman 1994; Faith, Gordon 2007).

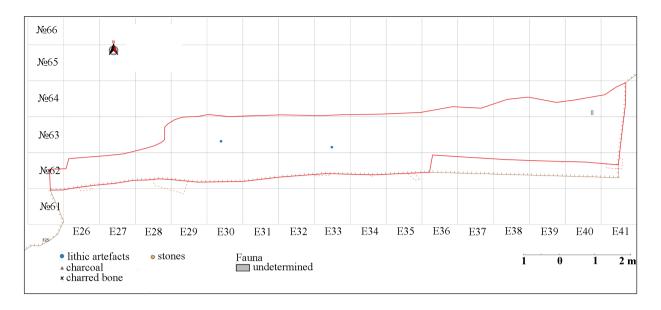


Fig. 6. Spatial distribution of the archaeological remains from Doroshivtsi III-2019/0

#### Results

Global analysis. We recorded a total of 283 remains corresponding to at least 134 elements belonging to at least 30 individuals. We identified remains of reindeer, horses, mammoths, a wolf and a vulpine (table 1), as well as a crow.

Layers 2 and 4 are the richest in terms of number of remains, of elements and of individuals, then layers 1, 3 and 5. The layers 0, 5a, 6 and 8 furnished few remains (fig. 4).

All the main layers are characterised by the presence of reindeer and mammoths. Horses are present in the layers 1, 3 and 4. A vulpine and a wolf are present in the layer 2. Remains are a bit fragmented, more for mammoths (fig. 5).

#### Analysis by layers.

**Layer 0.** The layer 0 furnished a fragment (class II) of an epiphysis of a relatively young large- or medium-sized mammal. This bone had been affected by weathering and bears deposits of manganese. It is associated with two lithic artefacts (fig. 6).

**Layer 1.** The layer 1 contained 25 remains corresponding to at least 20 elements belonging to 5 individuals, three mammoths, a horse and a reindeer (table 2).

The rate of determination is 80%. Bones are relatively lightly fragmented (fracturing index: 1.25). We observed longitudinal, diagonal, step and helicoidal fracturing.

Concerning the taphonomic conditions (fig. 7; fig. 8; fig. 9) more than half of the remains are affected by weathering, mainly stages 4 and 5 for all species. Remains of the reindeer are a little bit less affected (stage 3). All remains bear deposits of iron and mainly manganese in large quantity due to percolation water. Remains of the reindeer and the horse bear few dissolution alterations due to run off water. Some bones of mammoths bear plant root marks. The fragments are mainly of size classes IV and V (fig. 10). So, the remains of the layer 1 had stayed in open air for a relatively long time, and were covered not so deep and then were affected by post-depositional percolation water. The fracturing shows fragmentations of dry and fresh bones.

Concerning **mammoths**, we identified 18 remains which correspond to at least 15 elements: cranial elements, ribs, girdle bones and a humerus. Except short bones, all the other anatomical parts are represented (fig. 11; fig. 12). We identified three individuals, a juvenile, a young adult and a mature adult (table 3).

Concerning the mandible, the left cheek teeth are characterised by an abnormal shape (fig. 13). Indeed, the teeth can develop malformed due to an unbalanced diet or a lack of fodder (Fowler, Mikota 2006). A **horse** adult s.l. is represented by a vestigial metapodial. Moreover, a bone fragment of a large-sized mammal was found.

A **reindeer** adult s.l. is represented by a left talus. Furthermore, two fragments of a diaphysis of two different long bones were discovered, belonging to a medium-sized mammal, which

could be a reindeer. Another fragment of bone of a medium or small-sized mammal was found, also as undetermined fragments of bone. Bones are more or less scattered with lithic artefacts between both both small bone concentrations (fig. 14).

**Layer 2.** The layer 2 furnished 73 remains corresponding to at least 39 elements belonging to 5 individuals, 2 mammoths, a reindeer, a wolf and a fox (table 4).

We determined at least specifically 62 % of bone remains. The fragmentation index is 1.9. We observed longitudinal, perpendicular, diagonal, step and helicoidal fracturing.

Concerning the taphonomic conditions (fig. 15; fig. 16; fig. 17), almost all the bones were affected by weathering of different stages and percolation

water. Mammoths remains were altered by plant root marks. The fragments are mainly of size classes II, III and IV (fig. 18). So, the remains of layer 2 had stayed in open air for a relatively long time and were covered not so deep and then were affected by post-depositional percolation water. The fracturing shows fragmentations of dry and fresh bones.

Concerning **mammoths**, they are represented by 35 remains which correspond to at least 27 elements belonging to 2 individuals. All the anatomical parts are represented, especially the axial skeleton, except the girdles (fig. 19). We identified at least 2 mammoths (table 5), a juvenile (fig. 20) and a young adult (figs. 21, 22, 23, 24).

A mammoth rib also has a pathology (fig. 25). Looking at the skeletal preservation in percentage

Table 1. Counting of faunal remains from Doroshivtsi III-2019 in number of remains (NR), minimal number of elements (MNE) and minimal number of individuals (MNI)

	Species	M. primigenius	Equus sp.	Rangifer tarandus	C. lupus	Vulpinae	large-sized mammal	large- or medium- sized mammal	medium-sized mammal	medium-sized mammal ( <i>R.</i> <i>tarandus</i> ?)	medium- or small- sized mammal	small-sized mammal	Aves (Corvus corax)	undetermined	TOTAL
0	NR							1							1
	MNE							1							1
	MNI							1							1
1	NR	18	1	1			1			2	1			1	25
	MNE	15	1	1			1			2					20
	MNI	3	1	1											5
2	NR	35		3	3	4	11	8	3					6	73
	MNE	27		3	3	4	1	1							39
	MNI	2		1	2	1	2								5
3	NR	2	2	4			1	3	2	2				3	20
	MNE	2	1	4				2	2	2					14
	MNI	2	1	1											4
4	NR	25	3	17			22	30	24	9	1	1	1	10	142
	MNE	13	3	16			1	3	4	3	1	1	1		45
	MNI	1	1	3							1	1	1		7
5	NR	3		3			1	1	4					2	14
	MNE	3		3				1	1						8
	MNI	1		2											3
5a	NR	1		1			1	1							4
	MNE	1		1			1								3
	MNI	1		1											2
6	NR	1						1	1						3
	MNE	1						1	1						3

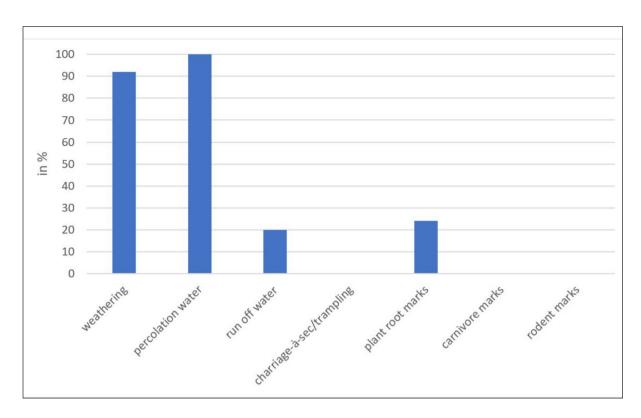
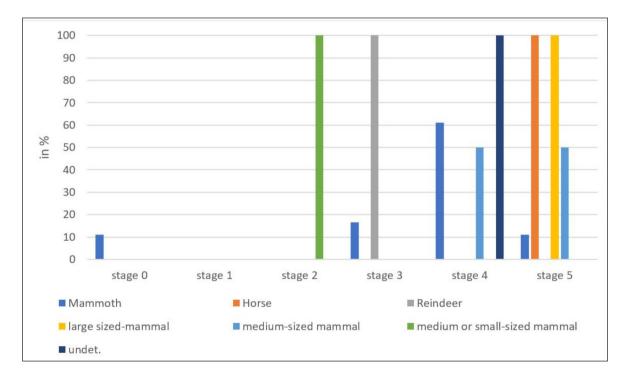


Fig. 7. Alterations due to climate-edaphic and non-human biological agents in percentage of number of remains from Doroshivtsi III-2019/1



 $Fig. \ 8$ . Alterations due to weathering according to the different stages by species and categories of remains from Doroshivtsi III-2019/1

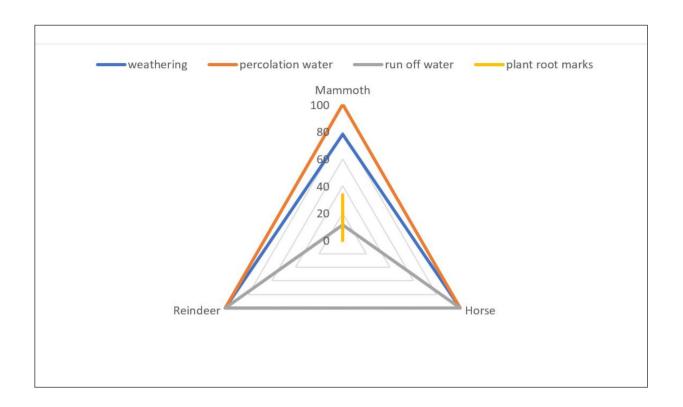


Fig. 9. Alterations due to climate-edaphic and non-human biological agents in percentage of the number of remains by species from Doroshivtsi III-2019/1

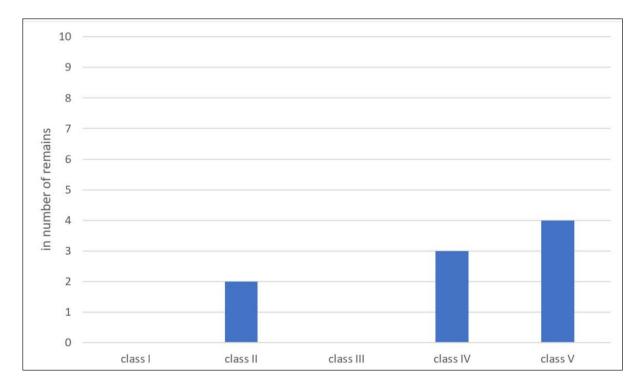


Fig. 10. Splinters by size classes from Doroshivtsi III-2019/1

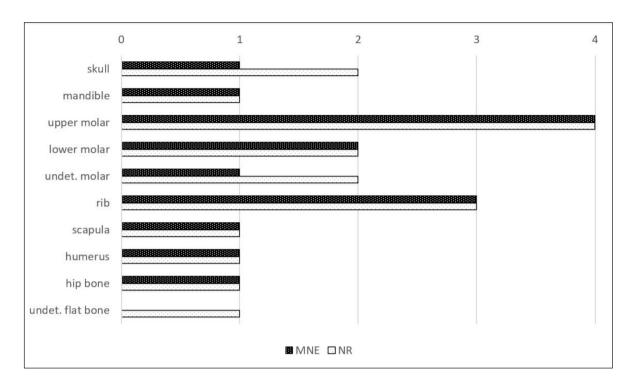


Fig. 11. Counting of mammoth bones in number of remains and in minimum number of elements from Doroshivtsi III-2019/1

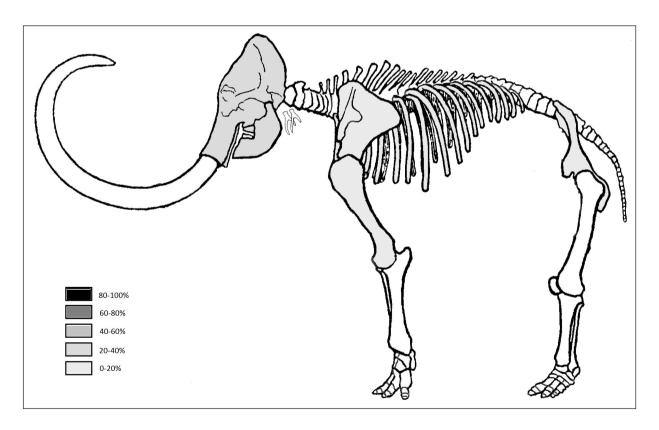


Fig. 12. Skeletal preservation by elements in percentage survival (Ps%) of mammoths (MNI: 3) from Doroshivtsi III-2019/1



Fig. 13. Mandible of a mammoth with left cheek teeth with abnormal shape from Doroshivtsi III-2019/1

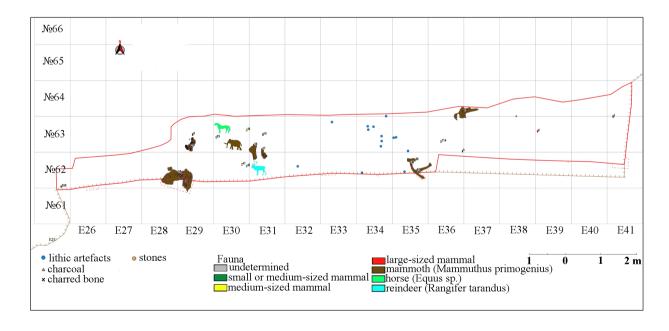


Fig. 14. Spatial distribution of the archaeological remains from Doroshivtsi III-2019/1

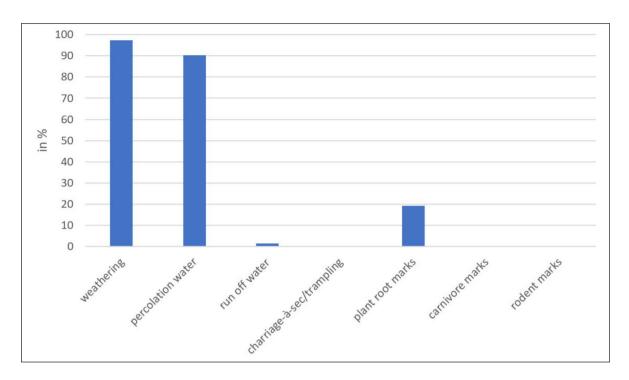


Fig. 15. Alterations due to climate-edaphic and non-human biological agents in percentage of number of remains from Doroshivtsi III-2019/2

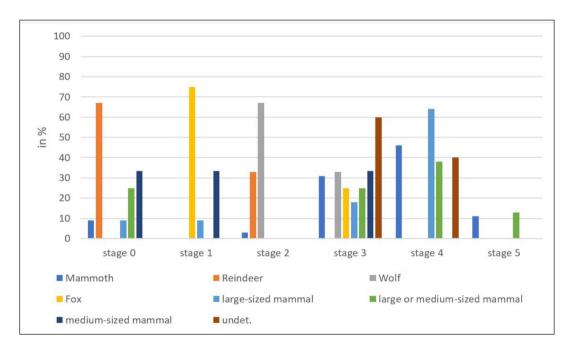


Fig. 16. Alterations due to weathering according to the different stages by species and categories of remains from Doroshivtsi III-2019/2

survival, cranial elements are the most represented, then limb bones, followed by vertebra, ribs and short bones (fig. 26).

Concerning a **reindeer**, there is a quite complete thoracic vertebra of an adult s.l. and a right radius with a fragment of ulna. The distal end is fused (>38—48 months old), so it is an adult s.l. (> young adult).

Concerning a **wolf**, there are right humerus (fig. 27), ulna and radius which can be paired. The radius and ulna were still in anatomical connection. This individual was 8—9 months old, so it was a juvenile (table 6).

Concerning a **fo**x, there are a right hip bone quite complete, a left femur, a right humerus and an I3 very worn of an adult s.l.

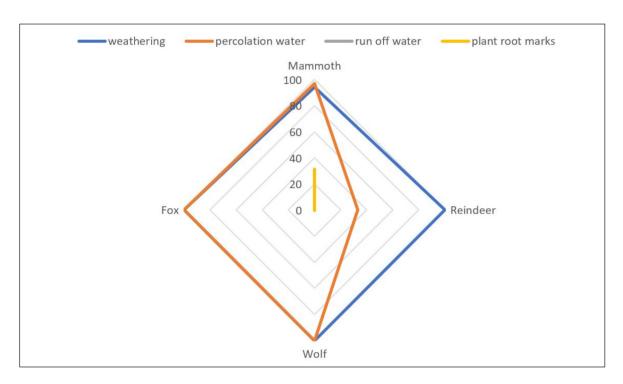


Fig. 17. Alterations due to climate-edaphic and non-human biological agents in percentage of the number of remains by species from Doroshivtsi III-2019/2

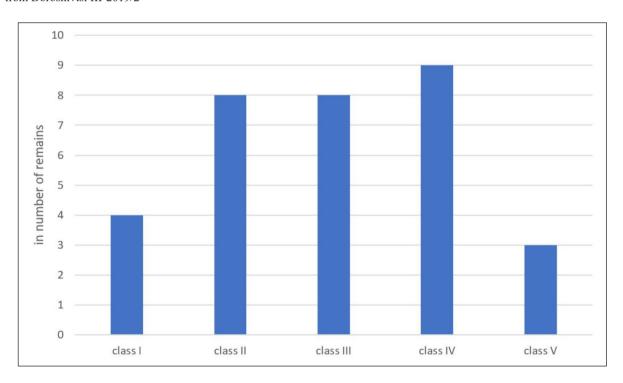


Fig. 18. Splinters by size classes from Doroshivtsi III-2019/2

We also identified a sesamoid of a large-sized mammal, as well as a long bone diaphysis (tibia?) of a large or medium-sized mammal. A fragment of a large-sized mammal rib bears cutmarks of deflashing and impacts which could be due to human activities (fig. 28). Bones are associated with lithic

artefacts and stones. They are scattered. Mammoth bones are more concentrated in two areas (fig. 29).

**Layer 3**. The layer 3 contained 20 remains corresponding to at least 14 elements belonging to 4 individuals, 2 mammoths, a horse and a reindeer (table 7).

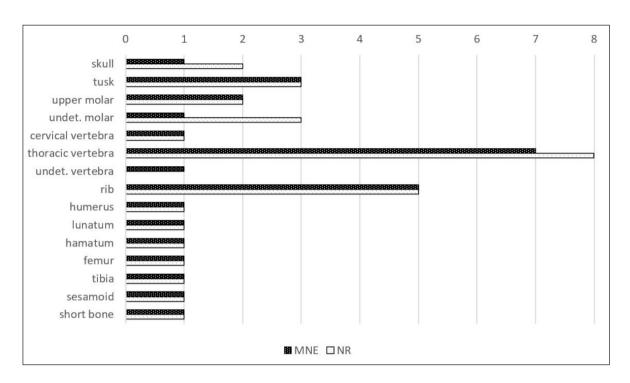


Fig. 19. Counting of mammoth bones in number of remains and in minimum number of elements from Doroshivtsi III-2019/2



Fig. 20. Skull of a juvenile mammoth from Doroshivtsi III-2019/2

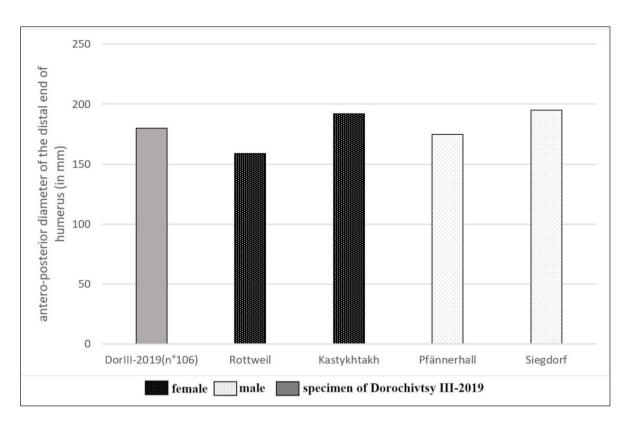


Fig. 21. Osteometry of humerus of mammoths from Doroshivtsi III-2019/2 and specimens of references

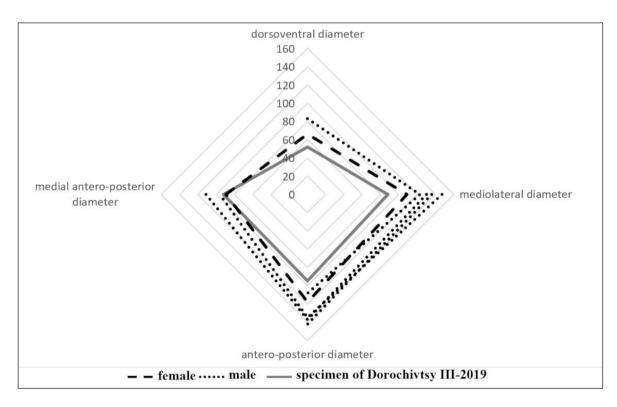


Fig. 22. Osteometry of lunatums of mammoths from Doroshivtsi III-2019/2 and reference specimens

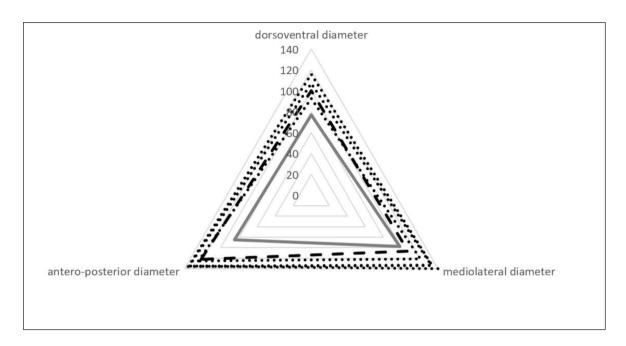


Fig. 23. Osteometry of hamatums of mammoths from Doroshivtsi III-2019/2 and specimens of references

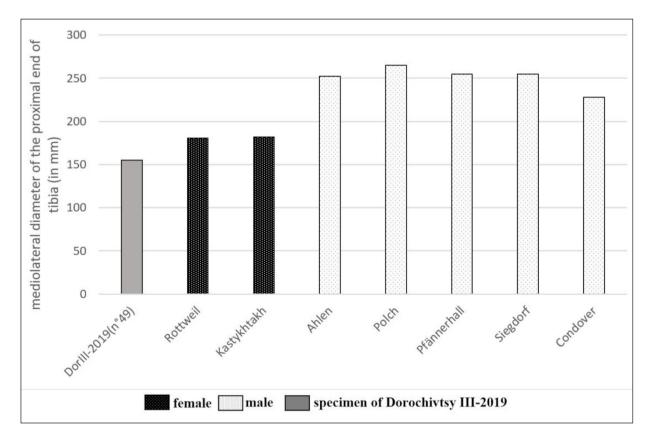


Fig. 24. Osteometry of tibias of mammoths from Doroshivtsi III-2019/2 and specimens of references

We determined at least specifically 40 % of the bone remains. The fragmentation index is 1.4. We observed longitudinal, perpendicular, diagonal, step and helicoidal fracturing.

Concerning the taphonomic conditions, all bones (100 %) were affected by weathering (stages 1, 2 and 3) and percolation water (fig. 30). So, the remains of the layer 3 had stayed in open air for a relatively short time and were affected by post-depositional percolation water. The fracturing shows fragmentations of dry and fresh bones.

Concerning **mammoths**, we identified 2 remains which correspond to 2 elements (table 8), a fragment of tusk which would correspond to an adult male and a quite complete left scapula that would correlate with a young adult (fig. 31; fig. 32).

A **horse** (adult s.l.) is represented by two fragments of a diaphysis of a left humerus. A **reindeer** is represented by 4 elements, a left metatarsal, a left radius with a fragment of ulna and a quite complete lumbar vertebra. From the epiphysation stages, this individual was more than 38—48 months old, so an adult s.l. The measurements of the distal end of the radius (46 mm × 29 mm) shows that it was a quite robust individual. Moreover, a cervical vertebra and a fragment of a long bone diaphysis were found, belonging to a medium-sized mammal, which could be a reindeer. A fragment of an epiphysis and a rib head belong to a large-sized mammal. A fragment of a skull and a fragment of a long bone diaphysis

Table 2. Counting of faunal remains from Doroshivtsi III-2019/1 by number of remains (NR), minimal number of elements (MNE) and minimal number of individuals (MNI)

Species	NR	MNE	MNI
M. primigenius	18	15	3
Equus sp.	1	1	1
Rangifer tarandus	1	1	1
large-sized mammal	1	1	
medium-sized mammal (R. tarandus ?)	2	2	
medium- or small-sized mammal	1		
undetermined	1		
TOTAL	25	20	5

Table 3. Bones of mammoths and determination of growth stages and age classes from Doroshivtsi III-2019/1

Number (labels)	Bone	Lateralisation	Stage/ age	Age classes	Sex
21		d left and right d left and right	VIII / 6-8 y.o.	juve- nile	/
58	mandib right M	le and left and	X I V - XV / 40-50 y.o.	matu- re adult	/
9	undet. molar ≥ M1)	/	> IX	adult s.l.	/
3	rib	right	/	adult s.l.	/
90	rib	right	/	adult s.l.	/
68	rib	right	/	adult s.l.	/
1	sca- pula	right	/	adult s.l.	/
36	hume- rus (PE unfus)	left	<xvia / &lt;18- 26 y.o.</xvia 	young adult	/
69	hip bone	right	/	adult s.l.	/

Table 4. Counting of faunal remains from Doroshivtsi III-2019/2 in number of remains (NR), minimal number of elements (MNE) and minimal number of individuals (MNI)

Species	NR	MNE	MNI
M. primigenius	35	27	2
Rangifer tarandus	3	3	1
C. lupus	3	3	1
Vulpinae	4	4	1
large-sized mammal	11	1	
large- or medium-sized mammal	8	1	
medium-sized mammal	3		
undetermined	6		
TOTAL	73	39	5



 $\it Fig.~25$ . Mammoth rib with pathology from Doroshivtsi III-2019/2



Fig. 26. Skeletal preservation by elements in percentage survival (Ps%) of mammoths (MNI: 2) from Doroshivtsi III-2019/2

Table 5. Bones of mammoths and determination of growth stages and age classes of Doroshivtsi III-2019/2

Number	Bone	Lateralisation	Stage/age	Age	Sex
(labels)				classes	
108	skull with two tusks and left and right dP3		III / 1 y.o.	juvenile	/
30	molar	/	adult s.l.		/
106	humerus (DE unfused)	/	< XVIa si F ou M	young adult	undet.
45	lunatum	right		~young adult	undet.
28	hamatum	right		~young adult	undet.
44	femur (PE and DE fused)	left	> XVIa-XVIII si F; > XVIII-XX si M	adult s.l.	undet.
49	tibia (PE unfused)	right	< XVIa-XVII si F; < XVIIIa-XX si M	~young adult	undet.

which belong to a large- or medium-sized mammal were also discovered. A rib and a long bone or a metapodial belong to a medium-sized mammal.

Concerning anthropogenic modifications, a diaphysis of humerus of the horse bears impacts of fracturation. Furthermore, two remains of a large-or medium-sized mammal were burned, almost totally calcined. Bones are very scattered. They are associated with lithic artefacts and charcoals (fig. 33).

**Layer 4.** The layer 4 furnished 142 remains corresponding to at least 45 elements belonging to 7 individuals, a mammoth, a horse, three reindeer, a small-sized mammal and a crow (table 9).

Table 6. Bones of a wolf and determination of growth stage and age classes of Doroshivtsi III-2019/2

Number (labels)	Bone	Lateralisation	Stage/ age	Age classes
33	humerus (DE fused; PE in fusion)	right	<12-15 months; >7-8 months	juvenile
34	ulna (PE fused)	right	>7-8 months	juvenile
34	radius (PE unfused)	right	<9-10 months	juvenile

We determined at least specifically 32 % of bone remains. The fragmentation index is 3.4. We observed longitudinal, perpendicular, step and helicoidal fracturing.

Concerning the taphonomic conditions (figs. 34—36), almost all the bones were affected by weathering of different stages (mainly stages 1, 2 and 3) and percolation water. The horse remains were altered by run-off water. The fragments are mainly of size classes II, III and IV (fig. 37). So, the remains of the layer 4 had stayed in open air for a relatively short time and were affected by post-

Table 7. Counting of faunal remains from Doroshivtsi III-2019/3 in number of remains (NR), minimal number of elements (MNE) and minimal number of individuals (MNI)

Species	NR	MNE	MNI
M. primigenius	2	2	2
Equus sp.	2	1	1
Rangifer tarandus	4	4	1
large-sized mammal	2	1	
large- or medium- sized mammal	3	2	
medium-sized mammal	2	2	
medium-sized mammal (R. tarandus ?)	2	2	
undetermined	3		
TOTAL	20	14	4

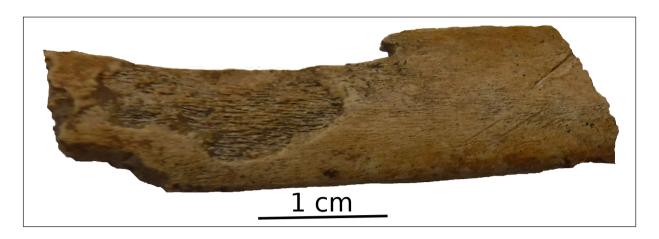


Fig. 27. Right humerus of C. lupus from Doroshivtsi III-2019/2

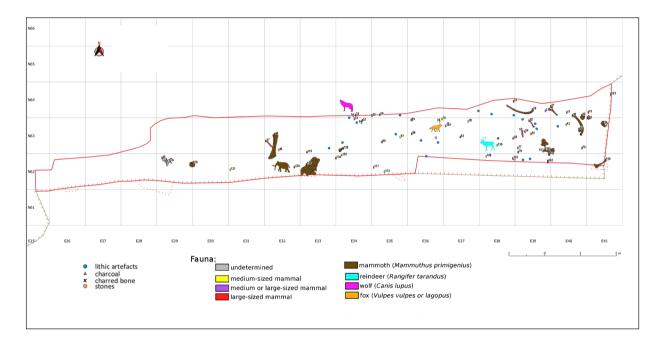


Fig. 28. Large-sized mammal rib with cutmarks from Doroshivtsi III-2019/2

depositional percolation water. The fracturing show fragmentations of dry and fresh bones.

Concerning a **mammoth**, it is represented by 25 remains corresponding to at least 13 elements belonging to 1 individual. All the anatomical parts

Table 8. Bones of mammoths and determination of growth stage and age classes from Doroshivtsi III-2019/3

Number (labels)	Bone	Laterali- sation	Stage/ age	Age classes	Sex
122	tusk	/	/	adult s.l.	male
129	scapula	left	/	young adult	/

are represented, especially the axial skeleton, except the girdles (fig. 38). We identified at least one mammoth, probably an adult male not totally mature (table 10; figs. 39 and 40).

Concerning a **horse**, it is represented by 3 remains corresponding to at least 3 elements belonging to 1 individual. There is a fragment of a diaphysis of a left humerus of a young individual. There is also a diaphysis of a right radius with an unfused proximal extremity which means this individual was less than 15—18 months old, so it was a juvenile. There is a vestigial metacarpal of a young individual.

Concerning **reindeer**, they are represented by 17 remains corresponding to at least 16 elements belonging to 3 individuals. Almost all the

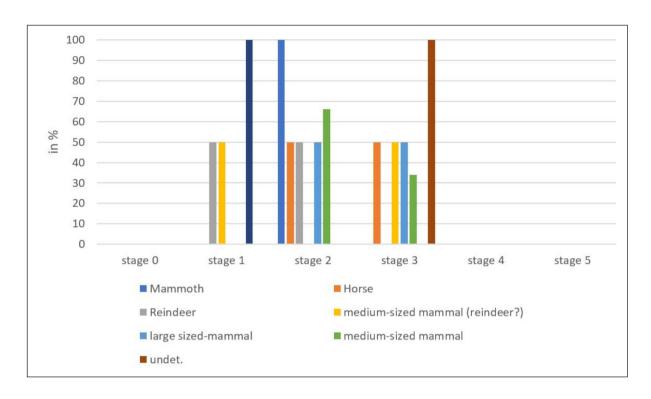


Fig. 29. Spatial distribution of the archaeological remains from Doroshivtsi III-2019/2

anatomical parts are represented, particularly cranial remains, except girdles (figs. 41 and 42). We identified a juvenile, a young adult and a more mature adult (table 11).

According to the index of density (r = 0.22) there is no correlation between X and Y, we cannot obtain significant statistic interpretation.

Table 9. Counting of faunal remains from Doroshivtsi III-2019/4 in number of remains (NR), minimal number of elements (MNE) and minimal number of individuals (MNI)

Species	NR	MNE	MNI
M. primigenius	25	13	1
Equus sp.	3	3	1
Rangifer tarandus	17	16	3
large-sized mammal	22	1	
large- or medium-sized mammal	30	3	
medium-sized mammal	24	4	
medium-sized mammal (R. tarandus?)	9	3	
small-sized mammal	1	1	1
Aves (Corvus corax)	1	1	1
undetermined	10		
TOTAL	142	45	7

Concerning the nutritive strategies, we have few remains to obtain a significant model. However, the general curve (fig. 43) is relatively close to a reverse 'bulk' strategy, which means that nutrients are least represented. Nevertheless, the richest parts in meat (sternum and femur) are present (fig. 44). Moreover, 3 ribs were found, belonging to a medium-sized mammal, which could be a reindeer. There is also a fragment of the left femur of a crow Corvus corax (fig. 45). A rib of a large-sized mammal was found. We also discovered 3 caudal vertebrae of a largeor medium-sized mammal. Fragments of a phalanx, a thoracic vertebra and 2 ribs belonging to a medium-sized mammal were discovered. A fragment of a long bone diaphysis belongs to a small-sized mammal. A fragment of ivory bears anthropogenic modifications with grooves and an edge was abrased (fig. 46) and bones of different species have traces of fracturing (fig. 47). A fragment of bone is totally calcified. Bones are very scattered. They are associated with lithic artefacts and charcoals (fig. 48).

Layer 5. The layer 5 consisted of 14 remains corresponding to at least 8 elements belonging to 3 individuals, a mammoth and reindeer (table 12).

We determined at least specifically 40 % of the bone remains. The fragmentation index is 1.75.

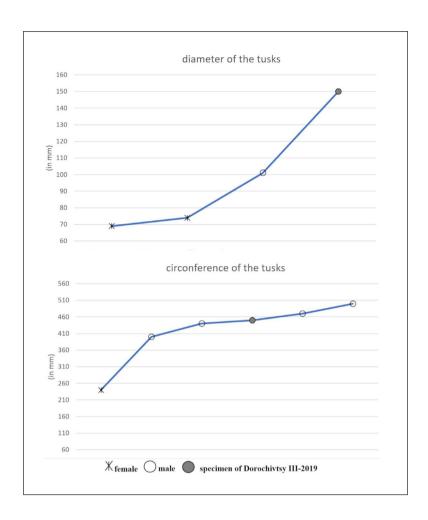


Fig. 30. Alterations due to weathering according to the different stages by species and categories of remains from Doroshivtsi III-2019/3

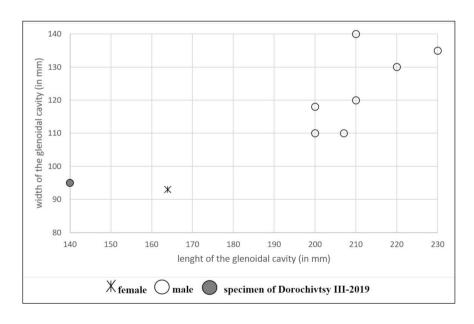


Fig. 31. Osteometry of tusks of mammoths from Doroshivtsi III-2019/3 and specimens of references

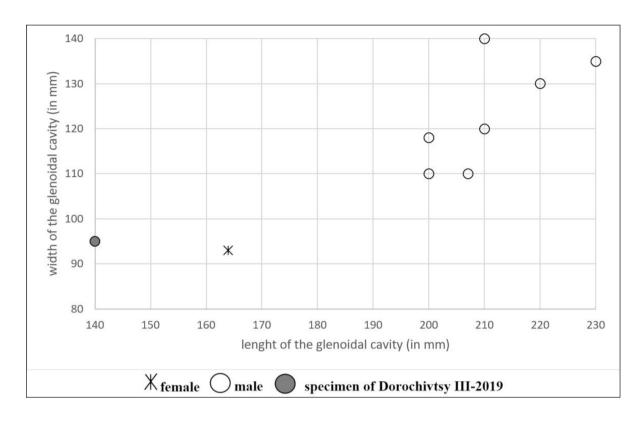


Fig. 32. Osteometry of scapulas of mammoths from Doroshivtsi III-2019/3 and specimens of references

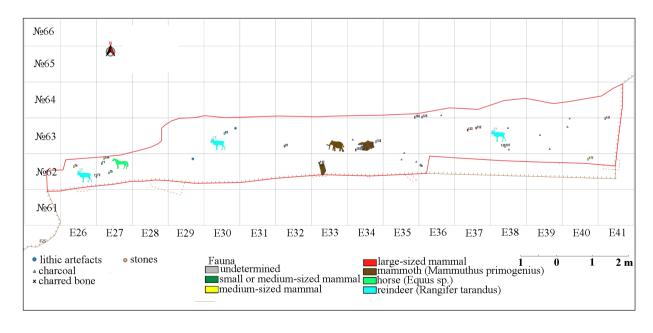


Fig. 33. Spatial distribution of the archaeological remains from Doroshivtsi III-2019/3

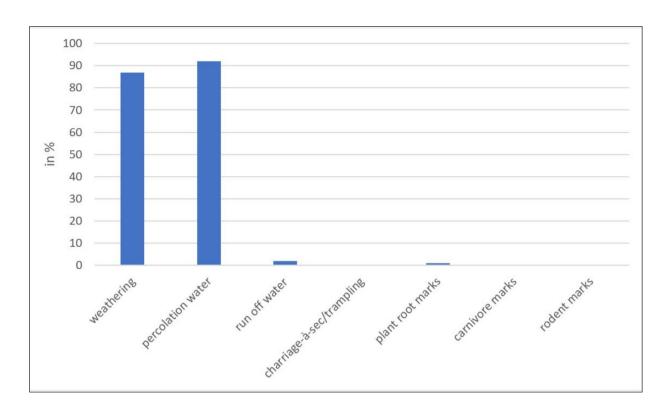


Fig. 34. Alterations due to climate-edaphic and non-human biological agents in percentage of number of remains from Doroshivtsi III-2019/4

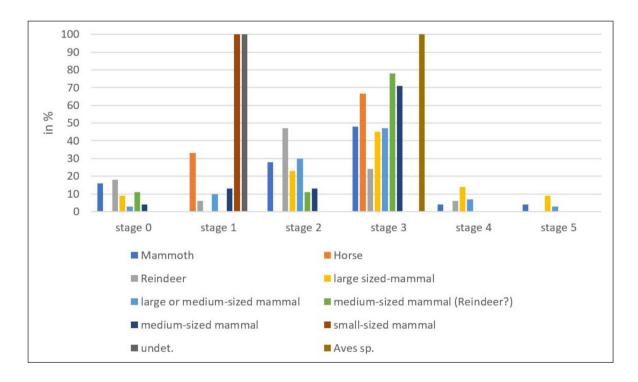


Fig. 35. Alterations due to weathering according to the different stages by species and categories of remains from Doroshivtsi III-2019/4

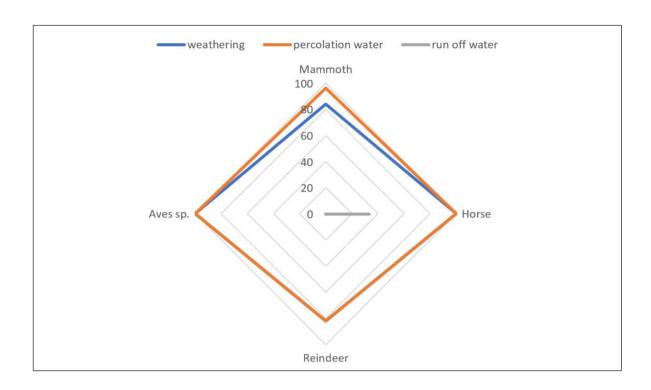


Fig.~36. Alterations due to climate-edaphic and non-human biological agents in percentage of number of remains by species from Doroshivtsi III-2019/4

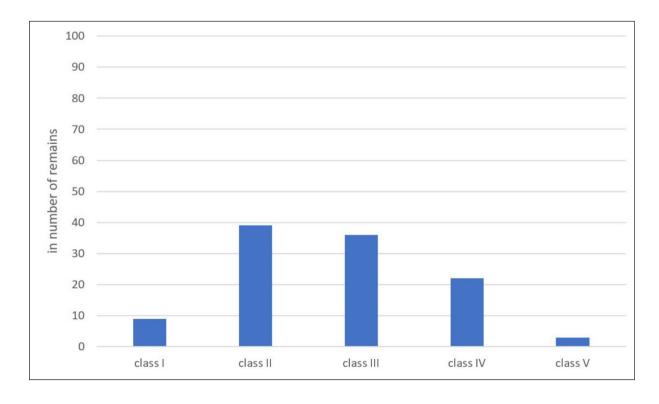


Fig. 37. Splinters by size classes from Doroshivtsi III-2019/4

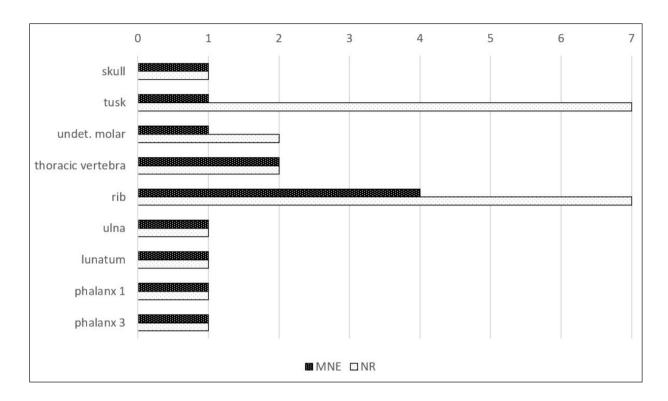


Fig. 38. Counting of mammoth bones in number of remains and in minimum number of elements from Doroshivtsi III-2019/4

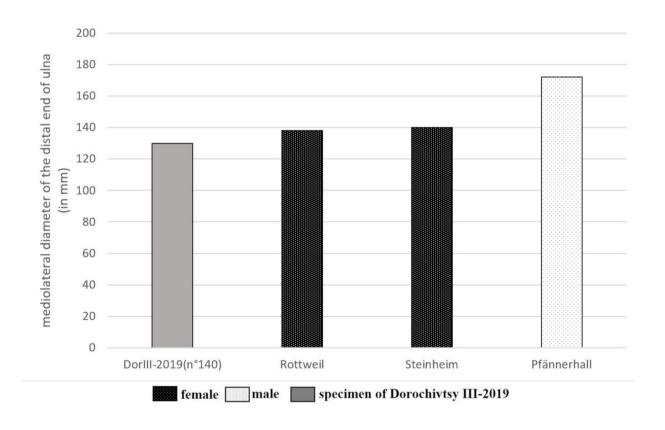


Fig. 39. Osteometry of ulnas of mammoths from Doroshivtsi III-2019/4 and specimens of references

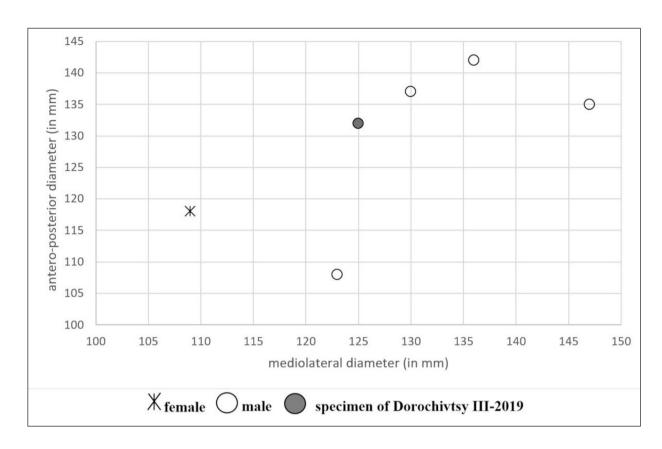


Fig. 40. Osteometry of lunatums of mammoths from Doroshivtsi III-2019/4 and specimens of references

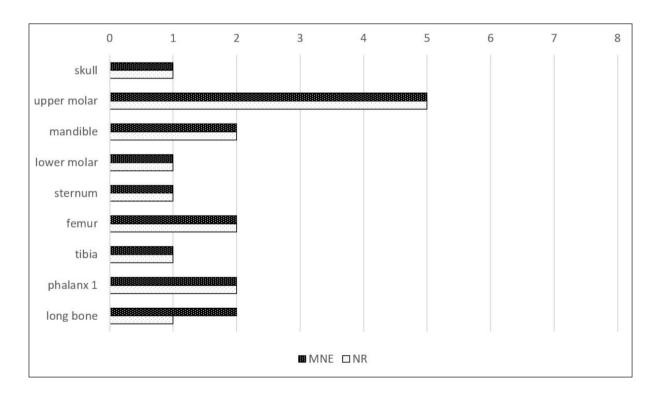


Fig. 41. Counting of reindeer bones in number of remains and in minimum number of elements from Doroshivtsi III-2019/4

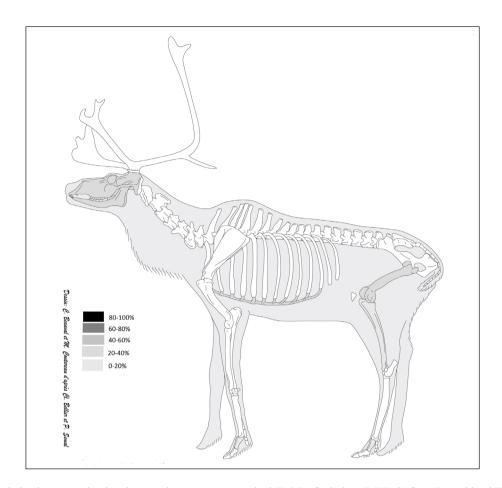


Fig. 42. Skeletal preservation by elements in percentage survival (Ps%) of reindeer (MNI: 3) from Doroshivtsi III-2019/4

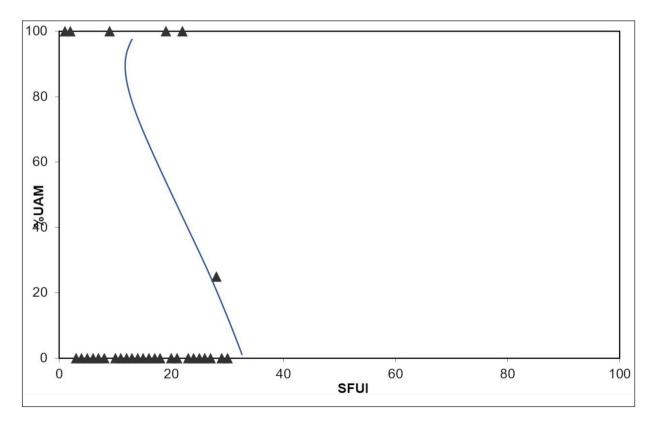


Fig. 43. Skeletal preservation of reindeer remains in relation to nutritional values from Doroshivtsi III-2019/4

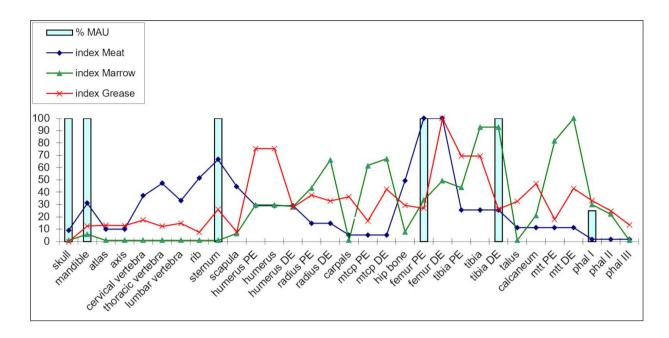


Fig. 44. Skeletal preservation of reindeer bones in percentage of minimum animal unit (%MAU) by anatomical parts, according to indexes "grease", "meat" and "marrow" from Doroshivtsi III-2019/4

We observed longitudinal, step and helicoidal fracturing.

Concerning the taphonomic conditions (figs. 49 and 50), an important part of the bones was affected by weathering of different stages (mainly stages 1, 2 and 3) and percolation water. The fragments are mainly of size classes III (fig. 51). So, the remains of the layer 5 had stayed in open air for a relatively short time and were affected by post-depositional percolation water. The fracturing show fragmentations of dry and fresh bones.

Concerning a **mammoth** there is a fragment of a molar of an adult s.l., a fragment of ivory and another fragment of bone. **Reindeer** are

Table 10. Bones of a mammoth and determination of growth stage and age classes from Doroshivtsi III-2019/4

Number (labels)	Bone	Latera- lisation	Stage/age	Age classes	Sex
140	ulna	left	< XVIIIa- XX if female / < 30-35 y.o.;	adult s.l. maybe quite young	/
201	luna- tum	right	< XXII- XXX if male / < 36-60 y.o.	adult s.l.	male

represented by a femur, a metacarpal and a left radius. They are two individuals, an adult s.l. and a young adult (table 13).

There is also a bone of a large- or mediumsized mammal and several bone fragments. A rib of a medium-sized mammal is also present. Two remains of diaphyses of a medium-sized mammal bear anthropogenic impacts of fracturing. Bones are associated with few lithic artefacts and

Table 11. Bones of reindeer and determination of growth stages and age classes from Doroshivtsi III-2019/4

Number (labels)	Bone	Latera- lisation	Stage/age	Age classes
133	maxillar and P2 P3 P4 M1 M2	right	F / 15 months old	juvenile
249	mandible and M3	right	I/30 months old	young adult
188	femur (PE fused)	right	> 36-48 months old	adult s.l. (> young adult)
292	tibia (DE fused)		>18-30 months old	adult s.l.





Fig. 45. Left femur of C. corax from Doroshivtsi III-2019/4

 $\it Fig.~46.$  Anthropogenic modifications on an ivory fragment from Doroshivtsi III-2019/4

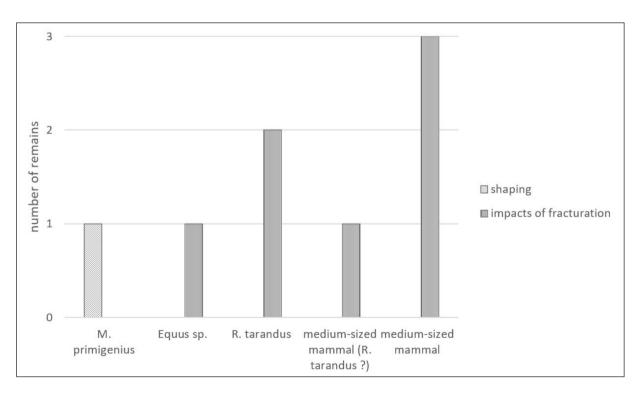


Fig. 47. Anthropogenic modifications on bones from Doroshivtsi III-2019/4

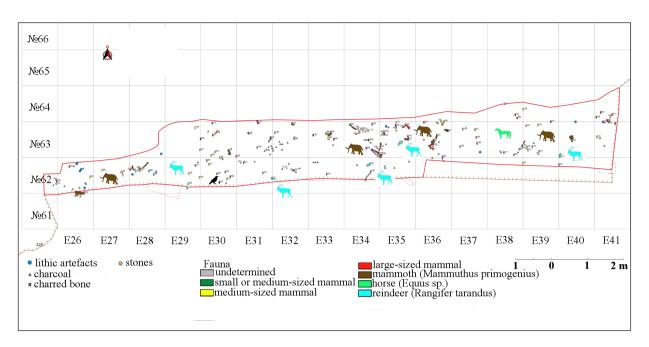


Fig. 48. Spatial distribution of the archaeological remains from Doroshivtsi III-2019/4

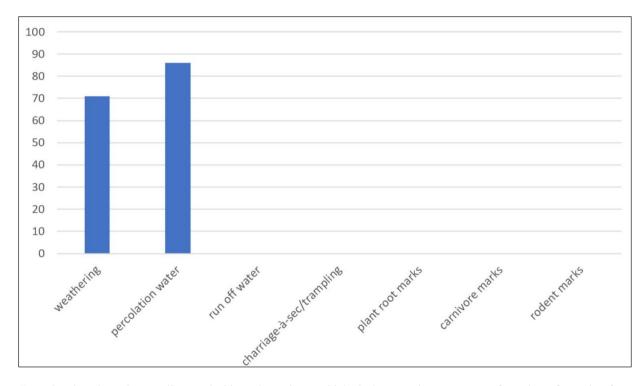


Fig. 49. Alterations due to climate-edaphic and non-human biological agents in percentage of number of remains from Doroshivtsi III-2019/5

charcoals. They are concentrated on the east part of the excavation (fig. 52).

**Layer 5a.** The layer 5a furnished 4 remains corresponding to at least 3 elements belonging to 2 individuals (table 14).

Bones were affected by weathering effects (stages 2 and 4) and iron and manganese deposits due to percolation water. There is a fragment of

a mammoth rib and a fragment of a flat bone of a large-sized mammal. There is also a left talus of an adult s.l. a reindeer  $(46.8 \times 30.0 \text{ mm})$ . Bones are concentrated on the east part of the excavation and associated with few lithic artefacts and charcoals (fig. 53).

**Layer 6.** The layer 6 included 3 remains corresponding to at least 3 elements belonging to

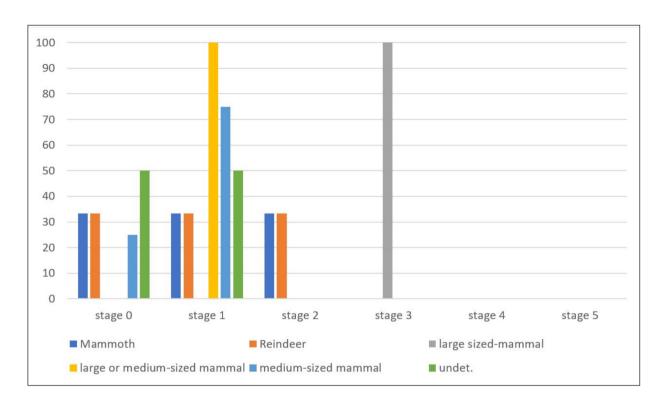


Fig. 50. Alterations due to weathering according to the different stages by species and categories of remains from Doroshivtsi III-2019/5

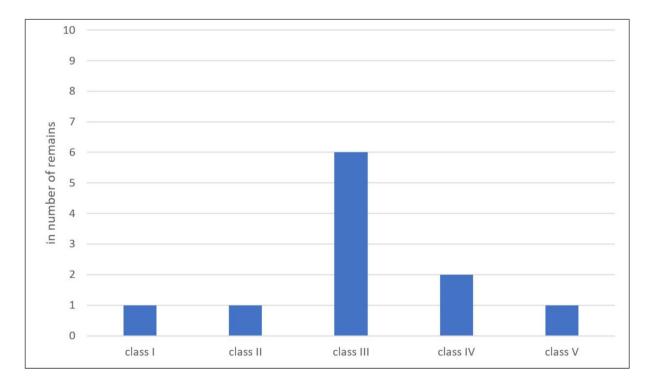


Fig. 51. Splinters by size classes from Doroshivtsi III-2019/5

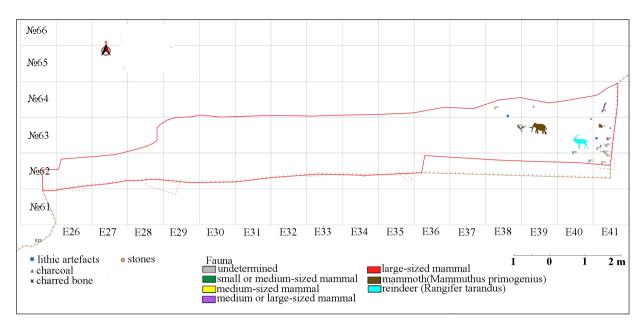


Fig. 52. Spatial distribution of the archaeological remains from Doroshivtsi III-2019/5

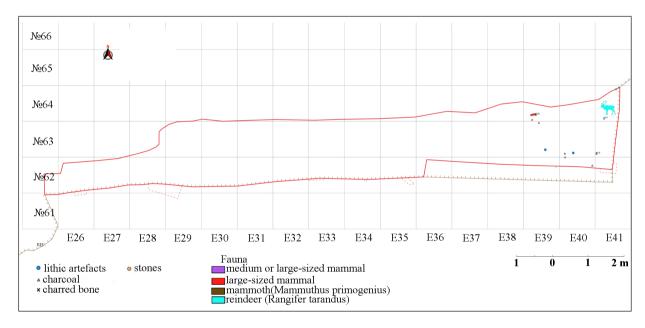


Fig. 53. Spatial distribution of the archaeological remains from Doroshivtsi III-2019/5a

2 individuals. There is a fragment of a mammoth bone, a fragment of a bone of a medium-sized mammal and a fragment of a spinal disc of a medium-sized mammal (table 15).

These remains are affected by weathering (stage 3) and percolation water (iron and manganese deposits). Bones are associated with few lithic artefacts and charcoals and concentrated on the east part of the excavation (fig. 54).

**Layer 8.** The layer 8 furnished a fragment of a bone of a large-sized mammal. The surface is

abraded, affected by weathering and deposits of iron and manganese due to percolation water.

#### Discussion

**Taphonomy.** The bones of Doroshivtsi III-2019 are generally well preserved. In all layers they are affected by post-depositional percolation water. The bones are also affected by weathering sometimes of different stages between bones and/or species which could be due to different phases of accumulation, various modalities of burying

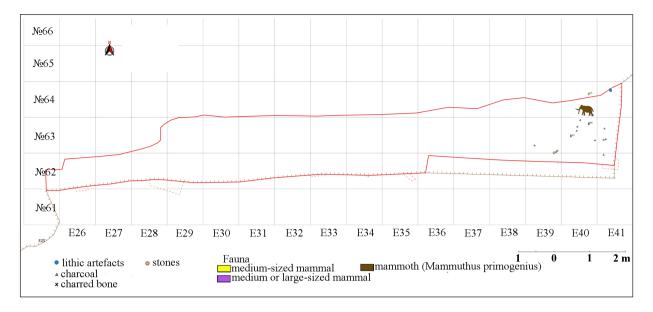


Fig. 54. Spatial distribution of the archaeological remains from Doroshivtsi III-2019/6

and due to the size of bones according to the species.

We have few data about layers 0, 5a, 6 and 8. In other layers according to the size classes of fragments and the type of fracturing we observed modification due to freeze-thaw actions. The

Table 12. Counting of faunal remains from Doroshivtsi III-2019/5 in number of remains (NR), minimal number of elements (MNE) and minimal number of individuals (MNI)

Species	NR	MNE	MNI
M. primigenius	3	3	1
Rangifer tarandus	3	3	2
large-sized mammal	1		
large- or medium-sized mammal	1	1	
medium-sized mammal	4	1	
undetermined	2		
TOTAL	14	8	3

Table 13. Bones of reindeer and determination of growth stages and age classes from Doroshivtsi III-2019/5

Number (labels)	Bone	Laterali- sation	Stage/ age	Age classes	Sex
236	tusk	/	/	adult s.l.	male
311	scapula	left	/	young adult	/

remains of the layer 1 had stayed in open air for long time, also as the layer 2, whereas the others were quite quickly buried (table 16). Some mammoths bones bear plant root marks, which could mean bones were buried in subsurface or were collected in another place.

Table 14. Counting of faunal remains from Doroshivtsi III-2019/5a in number of remains (NR), minimal number of elements (MNE) and minimal number of individuals (MNI)

Species	NR	MNE	MNI
M. primigenius	1	1	1
Rangifer tarandus	1	1	1
large-sized mammal	1	1	
large- or medium-sized mammal	1		
TOTAL	4	3	2

Table 15. Counting of faunal remains from Doroshivtsi III-2019/6 in number of remains (NR), minimal number of elements (MNE) and minimal number of individuals (MNI)

Species	NR	MNE	MNI
M. primigenius	1	1	1
large- or medium-sized mammal	1	1	
medium-sized mammal	1	1	1
TOTAL	3	3	2



Fig. 55. Radius of reindeer of layers 2 and 3 from Doroshivtsi III-2019

The layers 2 and 3 are hard to distinguish in some places. We identified two radii with different modalities of preservation, but showing exactly the same measurements and anatomical particularities. They could belong to the same individual (fig. 55).

**Faunal populations.** The main species in Doroshivtsi III-2019 are reindeer, horses and mammoths. Reindeer are mainly adults with young individuals (fig. 56). That could correspond for the layers 4 and 5 to the grouping of herds in summer. Horses are represented by adults and a juvenile (fig. 57). It could correspond to mixed herds. Mammoths are represented by adults and young individuals (fig. 58). It could correspond to different groups of mammoths, herds of females with young individuals and herds of male or solitary males.

Human behaviours. We identified impacts of fracturing on long bones of horses and reindeer

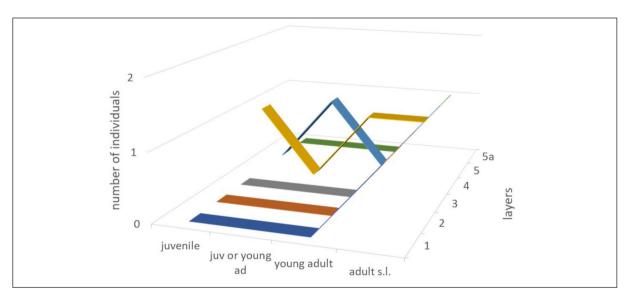


Fig. 56. Age classes of reindeer from Doroshivtsi III-2019

Table 16. Main taphonomic processes according to the layers of Doroshivtsi III-2019

Layer	Taphonomic processes	
0	few remains/no reliable data	
1	long time in open open air; freeze-thaw action	
2	relatively long time in open open air; freeze- thaw action	
3	short-time; freeze-thaw action	
4	short-time; freeze-thaw action	
5	short-time; freeze-thaw action	
5a	few remains/no reliable data	
6	few remains/no reliable data	
8	few remains/no reliable data	

linked to marrow removal. In the layer 4, a juvenile reindeer could have been slaughtered in summer. Concerning mammoths, we have few data, but the rib in the layer 2 with impacts and cutmarks could belongs to a mammoth. So, the main games are reindeer, then horses. Mammoths remains could have been collected on more or less fresh carcasses.

### Comparisons with Doroshivtsi III-2007—2010

In comparison with the sector of excavations 2007—2010 (Кулаковська та ін. 2011; Кулаковська, Усик, Эзартс 2012; Kulakovska et al. 2015; Demay, Patou-Mathis, Kulakovska 2015), we have

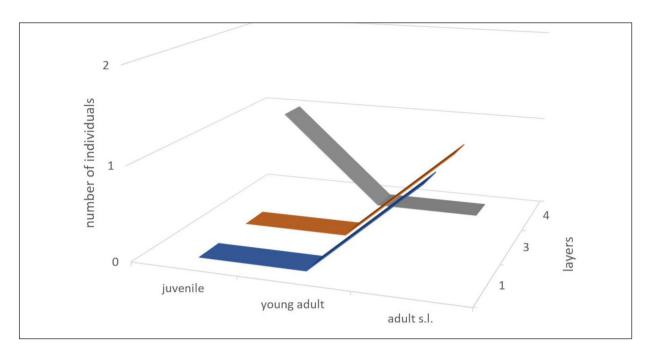


Fig. 57. Age classes of horses from Doroshivtsi III-2019

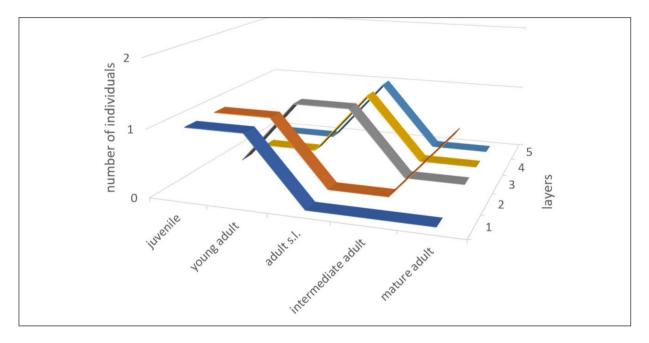


Fig. 58. Age classes of mammoths from Doroshivtsi III-2019

the same species, but the remains are less dense. We also have few remains of a fox. Moreover, we have remains of a young wolf in layer 2. And mammoths are represented more than expected with idividuals dead in situ.

### **Conclusions**

The excavations at Doroshivtsi III of 2019 furnished well preserved faunal remains (mainly reindeer, horses and mammoths) associated with

lithic remains and few charcoals and burned bones. The density of remains being less compactly arranged than at the previously excavated sector, could correspond to another functional area — the camps. The status of mammoths needs to be better understood.

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### ВЕРХНЬОПАЛЕОЛІТИЧНІ ПОСЕЛЕННЯ В ДОЛИНІ СЕРЕДНЬОГО ДНІСТРА: ЗООАРХЕОЛОГІЧНІ ДОСЛІДЖЕННЯ НА СТОЯНЦІ ДОРОШІВЦІ ІІІ (УКРАЇНА)— РОЗКОПКИ 2019 р.

У прикарпатській зоні, у південній частині басейнів Серету, Прута та Дністра, зокрема на палеолітичних пам'ятках Румунії та Республіки Молдова, засвідчено різноманітну діяльність первісної людини у час останнього льодовикового максимуму (LGM). Північніше, в районі середнього Подністров'я, на заході України, при дослідженні стоянки Дорошівці ІІІ було отримано нові результати, які підтвердили попередні дані, а також стали ключовими для відтворення людської діяльності в найбільш холодний відрізок часу.

У 2019 році поновилися дослідження верхньопалеолітичної стоянки Дорошівці III, яка існувала в часи останнього льодовикового максимуму. Зафіксовано десять археологічних шарів з артефактами граветського технокомплексу.

У статті представлено результати детального археозоологічного аналізу фауністичних решток. Загалом, можна говорити про добру збереженість кісткового матеріалу. У процесі досліджень було ідентифіковано останки північного оленя, коня, мамонта, вовка та лисиці, а також ворону. Наразі ми маємо небагато даних для шарів 0, 5а, 6 і 8. Фауністичні рештки у шарах 1 та 2 довгий час перебували просто неба. Результати аналізу фауністичних решток свідчать, що

основними видами полювання були північні олені та потім — коні. Довгі кістки коней і оленів мають сліди переломів що пов'язано з добуванням кісткового мозку. У археологічних шарах 4 і 5 північний олень був представлений переважно дорослими особинами та дитинчатами. Подібний склад типовий для літніх стад тварин. Коні представлені дорослими особинами та молоддю, що загалом характерно для змішаних табунів. Рештки мамонтів належать також дорослим і молодим особинами.

Кістки мамонтів могли бути зібрані із недавно впольованих тварин. Склад фауни тотожний матеріалам із розкопок 2007—2010 рр. (розкоп І). Також варто зауважити, що в колекції 2019 р (розкоп ІІ) вперше ідентифіковано кістки вовка. Щільність кісток у цій частині поселення менша порівняно з розкопом І. Неочікувано з'ясувалося, що у цьому секторі краще представлений мамонт. Імовірно, що тварини помирали на місці. Невелика кількість фауністичних решток та крем'яних артефактів свідчить про відмінне від сусіднього сектора призначення ділянки.

Ключові слова: верхній палеоліт, останній льодовиковий максимум, гравет, життєзабезпечення, тафономія.

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## ON THE EVE OF THE "SCYTHIAN INVASION" TO CENTRAL EUROPE: A NEW WARRIOR GRAVE IN BILSK

In the article, the results of excavations of the Barrow 1/2020 (no. 57) in Skorobir (Area "4th Field") are presented. In the burial of the beginning of the transitional period (580/570—560/550 BC), a set of handmade pottery, two iron bits, a spearhead and a quiver with arrowheads were found. The arrowhead set makes possible to synchronise it with other warrior burials of the time of the eve of nomad campaign to the Hallstatt and Lusatian lands around the middle of the 6th century BC. Complexes with similar arrowhead sets could belong to warriors, who moved to the compaign to the west after the conquering of the Eastern European forest-steppe tribes.

K e y w o r d s: Dnipro Left Bank forest-steppe, Bilsk hillfort, transitional period, HaD1, barrow, arrowheads.

### Introduction

Against the background of the modern situation, events in the past, when warlike tribes of Eastern Europe and Asia carried out military campaigns into the lands of settled tribes of Central Europe, deserve special attention. One of such episodes refers to the so-called Scythian raids in the Late Hallstatt period. An important aspect of this topic is the question of who made these raids and from where. Its resolution depends on the dating of these events.

The author has concluded that the arrowheads from the layers of destruction of fortifications in Central Europe certainly belong to the transitional period (ca. 570/560—540 BC) and it was not two raids of nomads, which were separated by a century, but a single action, which lasted for a short time (Grechko 2020, p. 23).

Accordingly, one can try to find traces of the presence of warrior burials, which contain quiver

sets similar to or slightly older than those which were found in the layers of the destruction of the settlements in Central Europe. New information regarding such complexes has been published recently (Андрух, Тощев 2022; Шрамко І., Задніков 2020 с. 9-10). The discovery of a whole arrow set in the warrior burial in the necropolis of Bilsk hillfort in 2020 (Гречко et al. 2021, с. 16-23) allows us to return to this topic.

### Burial complex and inventory

In 2020, the Bilsk archaeological expedition of the Institute of Archaeology of the National Academy of Sciences of Ukraine investigated two burial mounds in Skorobir tract (Area «4th Field») near Bilsk village, the Kotelevskyi Region, the Poltava region (fig. 1—2). In 1975 and 1979, the expedition of the Kharkiv University led by B. A. Shramko explored 16 barrows. The eastern group of barrows on the terrace of the Sukha Hrun River investigated in the same field is dated to the 5th—4th centuries BC. Barrow 1/2020 (no. 57) is located to the west, spatially closer to the group of excavated mounds of the Early Scythian period (mounds nos. 22—26) (Шрамко Б. 1994, с. 102-126).

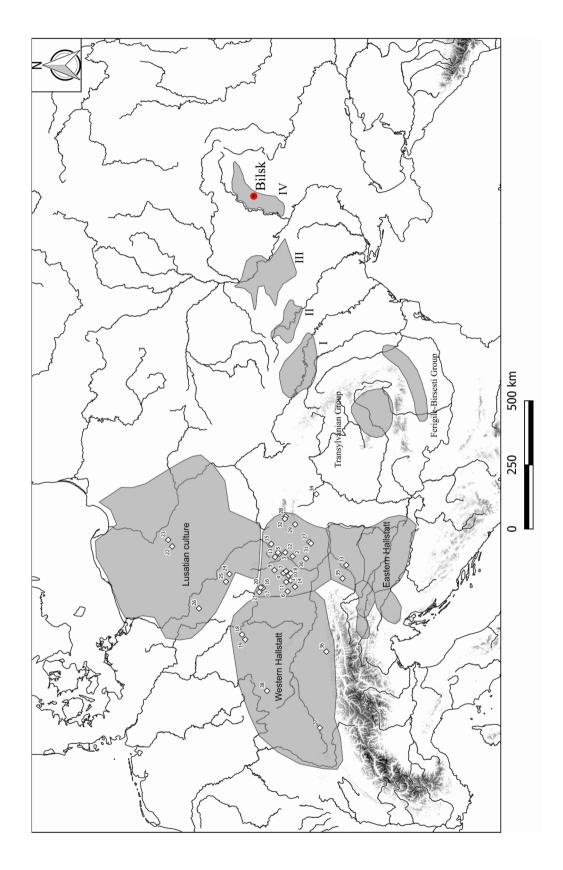
Under the Mound 1/2020 (no. 57¹) an almost rectangular-shaped burial chamber oriented along the northeast-southwest axis of a size of 4.94 × 4.60 m and a depth of 1,0—1.3 m from the level of the ancient surface was investigated (fig. 3). This burial was surrounded by a rampart made of the soil from the grave pit.

The northwestern corner of the chamber, which probably contained the remains of the deceased and the most valuable items of inventory, was completely destroyed by two robbery pits.

Above the wooden floor of the grave, the birch (?) planks of the burial coverage, which collapsed in ancient times, were clearly visible (fig. 3). At the pit bottom, two wooden logs of 3.4—3.5 m long placed

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<sup>&</sup>lt;sup>1</sup> According to the general numbering of the burial mounds of the Bilsk hillfort necropolis of Skorobir-Marchenky-Osniahy (Шапорда, Коротя 2018, с. 245, рис. 5). Further, this barrow number will be used.



8 — Krępice; 9 — Malé Hradisko; 10 — Olbramovice; 11 — Oslavany; 12 — Provodov-Ludkovice "Rysov"; 13 — Radslavice; 14 — Suchohrdly; 15 — Štramberk Kotouč; 16 — Doly Rabouň; 17 — Lhota; 18 — Měrunice; 19 — Minice; 20 — Pěšice; 21 — Topol "Na skale"; 22 — Kamienec; 23 — Kruszwica; 24 — Sobótką "Ślęża"; 25 — Strzegom; 26 — Wicina; 27 — Kostoľany pod Tribečom; 28 — Liptovská Šielnica; 29 — Prasnic; 30 — Smolenice—Molpir; 31 — Štitáre; 32 — Vyšný Kubín; 33 — Celldömölk; 34 — Dédestapolcsány; 35 — Velem; 36 — Hellbrunnerberg; 37 — Heuneburg; 38 — Kirchehrenbach (after: Grechko 2021) Vorskla group. Findings of arrowheads of the Scythian type: I — Blučina; 2 — Boršice u Blatnice; 3 — Brusné; 4 — Horákov; 5 — Chvalčov; 6 — Jaroměřice nad Řokytnou; 7 — Křenovice; Fig. 1. Bilsk hillfort and cultural groups of Central and Eastern Europe of the Ha D1 period. I — Western Podillian group; II — Eastern Podillian group; III — Kyiv—Cherkasy group; IV

in parallel to each other at a distance of 1.8 m were identified. The logs' grooves had a depth of up to 0.1 m, and their width was ranging from 0.23 m to 0.4 m. The latter indicates that the groove was made directly to the shape of the existing wooden log. The floor was made of oak planks. The walls of the burial chamber, which was smaller than the burial pit, were also built from wooden planks. The space between the wooden walls of the chamber and the burial pit was filled with chernozem of a loamy texture.

In the unrobbed part of the grave, the inventory was recorded *in situ* on the remains of the wooden floor of the grave (fig. 3). The planks of the wooden cover collapsed and damaged the inventory, primarily handmade pottery<sup>2</sup>. In the southeastern corner of the burial chamber, a handmade polished korchaga was found. Behind it, an iron spearhead was found lying along the wooden wall and, therefore, clearly identifying the edge of the chamber. Next to the spear, an iron tasselholder was discovered. The remains of a wooden case-cover are traced around the spearhead.

In the middle of the southwestern wall of the chamber, two iron bits were found, which may have been hanging on the wall. At a distance of 0.25—0.35 m from the wall of the chamber, a handmade ladle and "korchaga-shaped" polished cup (fig. 3) were unearthed, which could have been placed at the feet of the buried person<sup>3</sup>. The location of these finds may indicate its possible western orientation with slight deviation. An iron artefact, remains of a quiver with arrows<sup>4</sup> and an ornamented horn (?) plate were found nearby.

The burial inventory is a fairly classic set of finds for the complexes of the Early Scythian time/transitional period of the Bilsk necropolis.

Ceramic vessels are represented by a handmade korchaga, a ladle and a cup.

The deep ladle has a biconical profile (fig. 4: 1) (Type 3 according to Пеляшенко, 2020, c. 52). It has a high cylindrical neck that passes into conical shoulders and a rib decorated with oblique

impressions in the lower part of the body. The looped handle of the dipper is oval in cross-section and attached to the rim and to the rib on the body. The diameter of the rim is 8.6 cm, the base — 6.5 cm, and the height is 11 cm.

The closest analogies to the ladle were found in the neighbouring barrows nos. 8 and 22 in the Skorobir tract (Шрамко Б. 1994, с. 106, рис. 4: 3—4; с. 124, рис. 13: 4) and in the synchronous assemblage of Barrow 4, Burial 1 near Hladkivshchyna (Григорьев, Скорый 2012, с. 454, рис. 13: 1, 3).

"Korchaga-shaped" polished cup (fig. 4: 2) (Туре 5 according to Пеляшенко 2020, p. 55) has high conical shoulders, a slightly thickened profiled rim, and a rib at the place of the widest part of the body. The height is 9.4 cm, the diameter of the rim is 8.5 cm, and the diameter of the base is 4.8 cm. The largest diameter is 10.5 cm. Similar vessels are well known in the burials of Vorskla basin area of the Early Scythian period (Machukhy, burial no. 19) (Ковпаненко 1970, c. 160-161, рис. 5: 1), Кирієчакha, burial no. 20, burial no. 4 (Бойко, Берестнев 2001, с. 42, 131, рис. 44: 3), Malyi Trostianets, burial no. 3 (Гейко 2001, с. 94, рис. 6: 3).

Korchaga has a biconical body, a rib in the lower part of the body and a funnel-shaped rim (fig. 4: 3) (Type 2 according to Пеляшенко 2020, c. 42-43). The diameter of the rim is 22.3 cm, the base is 11.0—11.6 cm, and the height is 38.7 cm. The body diameter is 32.4 cm. Such vessels are well known among the synchronous burials of the Bilsk necropoleis (Marchenky, 8th Field, Burial 1) (Черненко, и др. 2005, рис. 41), Skorobir, Burial 22 (Шрамко Б. 1994, рис. 13: 1), Pereshchepyne, Ваггоw 10 (Мурзин, и др. 1997, рис. 2: 2) and the Sula River basin area (Oksiutyntsi, Burial 2) (Пеляшенко 2020, рис. 159: 4).

Two finds of unknown purpose were also discovered: an iron object (workpiece?) (fig. 5: 2) and a horn (?) plate with an ornament, which could not be preserved.

The details of the horse bridle are represented by two iron looped bits (fig. 5: 4—5). Similar items are widely known during the Early Scythian period (Могилов 2008, с. 19).

Weapons and military ammunition are represented by the remains of a quiver with arrows and an iron spearhead.

An iron spearhead with a laurel-shaped blade and a rib (fig. 5: 1) is a classic example of Early Scythian time weapons and does not have a narrow dating. The total length of the spearhead is 28 cm (blade — 16.2 cm; sleeve — 11.8 cm), the largest

<sup>&</sup>lt;sup>2</sup> Restoration of the pottery vessels has been made by the restorer of the Bilsk Historic and Cultural Reserve, Anatolii Shtanko.

<sup>&</sup>lt;sup>3</sup> A similar location of the pottery is typical for synchronous burials of the Dnipro Left Bank forest-steppe (Пеляшенко 2020, с. 131-157, табл. 63).

The restoration and conservation of the quiver and arrows was carried out with the comprehensive support of I. I. Korost, the Director of the Bilsk Historical and Cultural Reserve, by the Senior Restorer of the National Research Restoration Center of Ukraine, Kharkiv branch, V. P. Bolotin.

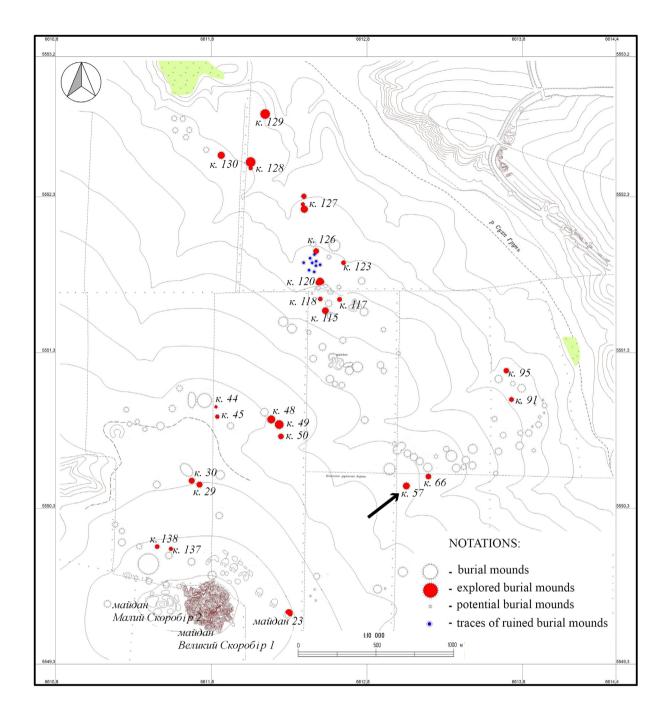


Fig. 2. Plan of the Skorobir necropolis (Шапорда, Коротя 2018)

width of the blade — 3.2 cm, the diameter of the hole — 2.3 cm.

Conical iron tassel-holder (fig. 5: 3). Similar products are known in the latest burials of the Early Scythian period — the beginning of the transitional period (Ohorodne, Perebykivtsi, Barrow 2, Novozavedennoie II, Barrow 17) (Гречко 2016, с. 48) and during the Middle Scythian period.

Let us consider the remains of a part of a leather quiver and a set of arrows found in it in detail. This is the first case of identifying leather parts of similar artefact in the forest-steppe.

Quiver<sup>5</sup>. The lower part and a bottom of the artefact, on which parts of the arrows laid, was preserved (fig. 6). It was sewn from at least three parts — outer (missing), lower and a bottom. The remains of the wood, which was fixed directly on the arrows, don't differ from the wood of the floor

<sup>5</sup> Another article dealing with the reconstruction of the quiver is planned.

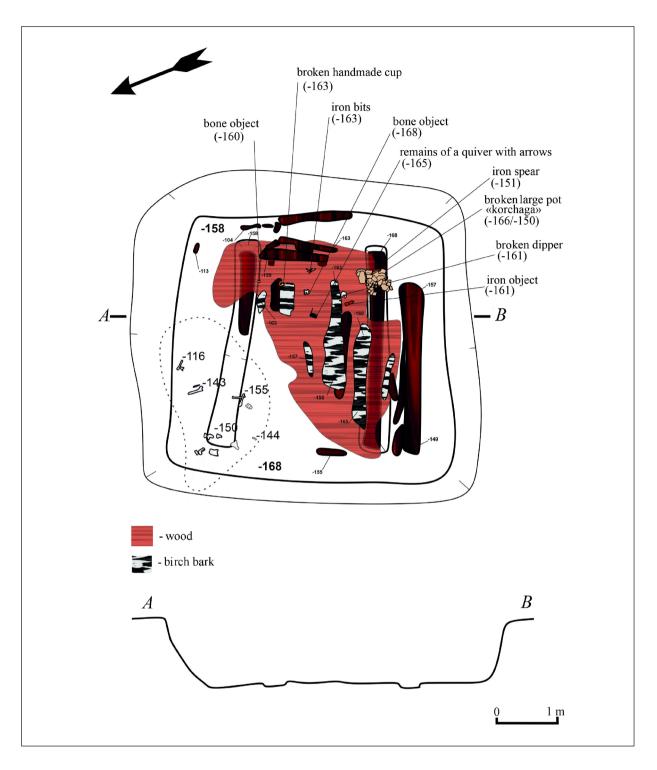


Fig. 3. Plan of the burial of the Barrow 57 of the Skorobir necropolis

slabs. There is no reason to assume that the second part of the quiver was made of birch. It can be assumed that only a part of the quiver with broken (?) arrows was specially placed in the grave.

The stack of 57 arrows was 11 cm long, which fully corresponds to the classic (small) quivers, not gorytoi, of the Scythian time (Ильинская 1968, с. 96).

The part of the quiver with arrows had dimensions of  $11.0 \times 9.5$  cm. The edges of a piece of bottom skin with a thickness of 0.2 cm were wrapped in the direction of the arrows. The lower part of the quiver was uneven, but rounded in one direction (fig. 6). Along the edge of the quiver, slightly above the arrows, laid an iron chisel-shaped object measuring  $9.8 \times 0.9$  cm, which had a wooden handle (fig. 7: 8).

It can be assumed that it was used in the repairing and manufacturing of arrows. Probably similar in purpose, a bronze four-sided rod with one end in the shape of a spade was found in a quiver in Mamai-Hora, Barrow 377, burial no. 1 (Андрух, Тощев 2022, c. 408-409, 414, рис. 6, 9).

Arrows shafts. All shafts were broken and remained at the same length — about 4.5 cm (fig. 6; 7: 7). Four samples were selected for analyses. The research established that two arrows were made of ash tree (*Fraxinus sp.*), one from a tree of diffuse vascular species (the willow family (Salicaceae)), one from a broad-leaved tree<sup>6</sup>.

**Arrowheads**. The quiver set included 51 arrows with bronze arrowheads and 6 wooden arrows.

Two-winged arrowheads were all casted in indifferent moulds.

- Leaf-shaped arrowheads with blade bases cut off at an obtuse angle to the socket, with spur (fig. 7: 1, 3) or without it (fig. 7: 2), length 3.2—4.2 cm, weight 4.6; 4.9 and 5.6 g. One arrowhead has an incised mark in the form of a broken line, which was not fully preserved due to sharpening. One dash is present on the socket (fig. 7: 1).
- Arrowhead with a tower-shaped head, tetrahedral cross-section of the edge and outer socket, length 3.9 cm, weight 3.9 g. (fig. 7: 4).
- •Arrowhead with a tower-shaped head and outer socket with a spur, length 5.1 cm, weight 9.2 g (fig. 7: 5). It has an incised mark on the blade in the form of 5 lines.
- Leaf-shaped arrowhead, one blade goes to a barb, the second is cut at an obtuse angle, short outer socket, length 4 cm, weight 5.9 g (fig. 7: 6). It has incised marks on the wing in the form of two triangles with mirrored vertices.

Three-winged arrowheads were all casted in different moulds.

- Arrowheads with a leaf-shaped head, outer socket and with (fig. 8: 5) or without a spur (fig. 8: 1—4), length 2.9—3.5 cm, weight 2.5—4 g. One arrowhead has an incised mark in the form of a broken line of seven dashes (three triangles and one dash).
- An asymmetric-rhombic (sharp leaf-shaped) arrowhead, a long outer socket, with or without a spur, length 2.9—4.2 cm, weight 2.6—4.2 g (fig. 8: 6—13). One arrowhead has relatively smaller dimensions and weight, a relatively shorter outer socket 2.9 cm and a bushing length 0.7 cm

- and a weight 2.6 g (fig. 8: 10). The two smallest arrowheads have a length of 2.3—2.5 cm with a weight of 1.8—2.0 g (fig. 8: 6—7).
- Narrow triangular-shaped arrowheads with an outer socket, length 3.2—3.5 cm, weight 2.3—2.9 g (fig. 8: 14—17).
- Arrowheads with a tower-shaped head with blades cut off at an obtuse angle to the base of the blades with an outer socket, length 2.8—3.9 cm, weight 2.7—4.9 g (the largest groups are 3.4—3.9 g (7 pcs.) and 4.2—4.9 g (5 pcs.) (fig. 9). Eleven items have the spur on the sockets, another eight do not. One arrowhead has an incised mark in the form of a cross (fig. 9: 17). These arrowheads vary in shape and do not form a series.
- Arrowheads with a tower-shaped head with blades cut off at a right angle or one/all<sup>7</sup> go to a barb, length 2.9—3.4 cm, weight 2.8—4.5 g (fig. 10: 1—7). Three arrowheads have cast marks on all sides (fig. 10, 4, 6—7). One of them also has an incised mark in the form of three lines (fig. 10: 7).

Two massive arrowheads significantly differ from the others. The first one is rather massive (length — 4.1 and weight — 5.7 g) with a short socket and two barb-blades, one barb was not cast (fig. 10: 5). The second arrowhead has a considerable length (4.4 cm), which visually gives it slender proportions, but it weighs more than two-winged specimens — 4.5 g (fig. 10: 1). The item has a cast mark on one side (fig. 11: 8).

- An arrowhead with arch-shaped head with blades cut off at an right angle, although all the blades were supposed to form the barb, but they did not come out during casting; length 3.1 cm, weight 3.5 g (fig. 10: 8). It has a cast mark similar to the tower-shaped ones (fig. 10: 1, 6, 7) and an incised mark in the form of five slanting lines on one blade (fig. 12);
- A combined type of the arrowhead (two sides are the wings and one a facet), with blade bases cut off at an obtuse angle to the socket, length 3.2 cm, weight 3.5 g (fig. 10: 9).

In addition, during the investigation of the remains of the quiver, six wooden arrows were discovered. One of them has a tip imitating a trihedral bronze arrowhead with notches at the base of the faces (fig. 10: 10). Others have the tips of simply sharpened arrows with a ball-shaped point (fig. 10: 11—

<sup>&</sup>lt;sup>6</sup> Attribution by DSc. M. S. Serheieva, the Institute of Archaeology of the National Academy of Sciences of Ukraine.

The two arrowheads had to have all three bard-blades (fig. 10: 6—7). One has one blade that should have formed a barb, but it did not work out during casting (fig. 10: 4). One way or another, all the arrows of this group, according to the caster's design, would have at least one barb. Accordingly, none of them had a spur on the socket.

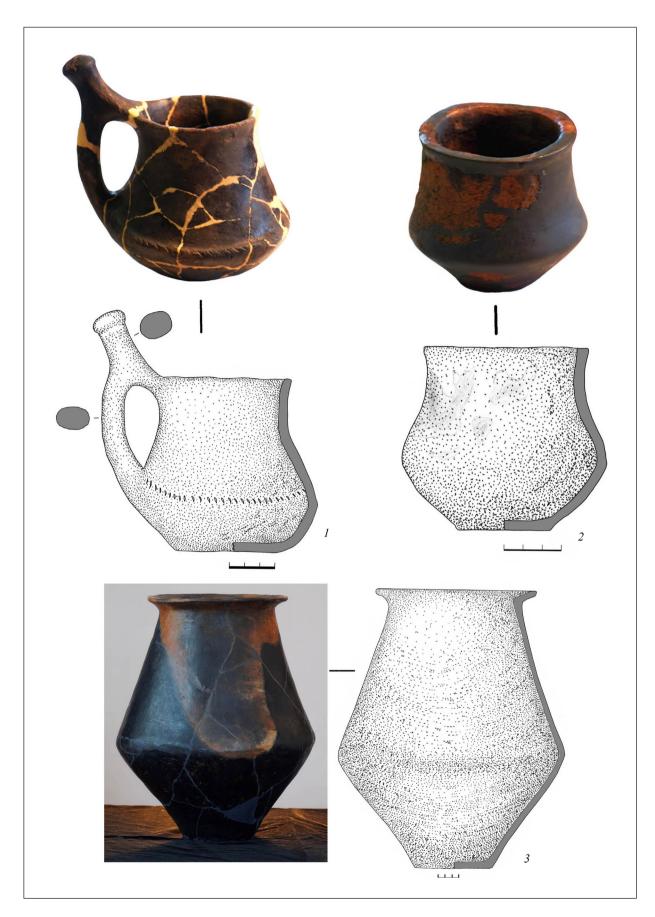


Fig. 4. Burial of the Barrow 57 of the Skorobir necropolis. The handmade ceramic vessels (photos and drawings by D. V. Karavaiko)

15). They could be blank shafts, which with the help of an iron item, if necessary, were processed to fit the existing arrowhead. Many wooden shafts or models of arrowheads were found in permafrost burials of the Pazyryk culture. Researchers believe that these arrows' imitation carved on the ends of the shafts had votive attribution (Кубарев, Шульга 2007, с. 73).

# Arrowhead set from Scorobir, Barrow 57: Between the Early Scythian period and innovations of the transitional period

Composition of the analysed quiver set combines the arrowhead types of the Early Scythian period and new forms of the transitional period.

Two-winged arrowheads with a pointed leaf-shaped head, a long socket with and without a spike, in which the blades merge into the socket at an obtuse angle, appear in the late group of the second phase of the Kelermes period (Греч-ко 2016, с. 43; Махортых 2022, с. 105-109). Similar arrowheads continued to be used during the transitional period (Grechko 2020a, p. 15-17).

The two-winged arrowheads with a tetrahedral cross-section head, blades that merge into the socket at an obtuse angle, are unique. The closest analogy is an arrowhead from the Dédestapolcsány-Verebce-bérc hillfort (Szabó, Czajlik, Reményi 2014, p. 5, fig. 8). This shape is probably related to the further development of the leaf-shaped tips of the Early Scythian period, which also have a tetrahedral cross-section<sup>8</sup> (Дараган 2016, c. 69).

A massive arrowhead with a tower-shaped head and a long socket with spurs and blades that merge into the socket at an obtuse angle has analogies in the latest complexes of the Early Scythian period (Spasivka, Burial 8) (Могилов 2020, с. 144, рис. 6, 9), Nemyriv hillfort (Смирнова, Вахтина, Кашуба 2018, с. 180, рис. 150,1) — transitional period (Novosilka Hrymailivska, Mound "S", Hlybochok) (Могилов 2020, с. 144, рис. 6, 142, 160), Smolenice-Molpir (Hellmuth 2006, taf. 1: 15-18), Dédestapolcsány-Verebce-bérc (Szabó, Czajlik, Reményi 2014, p. 5, fig. 8). This type is often represented in complexes by single items. The concentration of this type of arrows in Podillia attracts attention.

Two-winged arrowheads with a pointed leafshaped head, in which one blade turns into a socket at an obtuse angle, and the other forms a barb, were quite common during the Early Scythian period and transitional periods (Grechko 2020a, p. 14). During the transitional period, their number decreases.

Three-winged arrowheads with a leaf-shaped head, outer socket and with (fig. 8: 1—5) or without a spur and with an asymmetric-rhombic or sharp leaf-shaped arrowhead and long socketed shaft are widely represented in the complexes of the Early Scythian and transitional periods (Grechko 2020a, p. 15). Arrowheads with a long socket and blades cut at an angle to it, in which the maximum expansion occurs in the lower part of the head, are typical for the latest group of burials of the Early Scythian (Махортых 2022, c. 109) and transitional periods (Grechko 2016, p. 44).

Three-winged arrowheads with a triangular head of slender proportions without spikes are innovative for the beginning of the transitional period (II.3.D.a according to Hellmuth 2006). These are known in the layers of destruction in Central Europe (Hellmuth 2006, Taf. 12: 8—24).

Three-winged arrowheads with a tower-shaped head, a long socket, with blades that merge into the socket at an obtuse angle are also innovative for the beginning of the transitional period (Γρεч-κο 2012; 2016, c. 44; Grechko 2021, p. 17).

Some observations and assumptions can be made regarding the reasons for the appearance of new types of arrowheads with a tower-shaped head during the transitional period.

Only the upper part of the arrowheads of the Early Scythian period was sharpened, each blade on each side separately, which led to differences in the shapes of the heads (Клочко 1977; Дараган 2015, c. 150). Sometimes this led to the grinding of the socket, which became multifaceted. This is a rather complicated process, because the tip must be held at an angle to the whetstone and all surfaces must be sharpened. It is much easier to sharp the tips only on three sides. For this reason, the planes must be as flat as possible, because any non-coincidence of the surfaces lead to quite significant losses of metal. If a three-winged arrowhead with a laurel-shaped head and a long socket is placed on one side on a whetstone and sharpened, we will get an arrowhead with a close to tower-shaped head with significant metal loss on the blades and a socket. Thus, on some of the three-winged arrowheads with an archshaped head from Huliai-Horod, Barrow 38 and Zhurivka, Barrow 432 attempts to sharp them in this way are visible, which made the outline of a part

As an example, we can cite the arrowhead from Barrow 1/1983 near the village of Lykhachivka (Daragan, Didenko 2021, c. 173, puc. 16, 1).

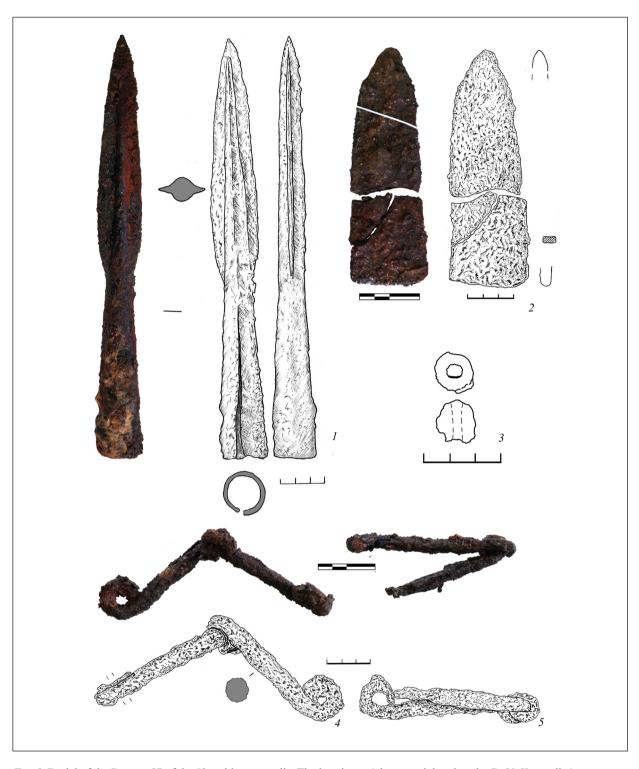


Fig. 5. Burial of the Barrow 57 of the Skorobir necropolis. The iron items (photos and drawings by D. V. Karavaiko)

of them close to a tower shape (Daragan, Didenko 2021, p. 159, fig. 4: 1, 6; fig. 5: 1, 3—5,7, 9; fig. 6: 5, 9; fig. 11: 2, 4, 11). The only one three-winged arrowhead from the Yahorlyk settlement received a tower-like shape as a result of sharpening (Daragan, Didenko 2021, p. 174, fig. 17: 15), which precisely confirms the completion of the functioning of this site at the end of the Early Scythian period (end of

the first quarter of the  $6^{th}$  century BC) (Буйских С., Буйских А. 2010, с. 30).

It can be assumed that the appearance of new types of three-winged arrowheads in the latest chronological group of the burials of the Early Scythian period (Махортых 2022, с. 109) was the first step in a path of changing the shape of their head. At first, the socket and the hook, which



Fig. 6. The quiver in restoration process (photo by V. Bolotin)

were rounded in cross-section, remained and were sharpened.

In addition, the first three-winged arrowheads with an inner socket appeared (Perebykivtsi, Barrow 2). The next step in the transitional period was to reduce the length of the socket, which was gradually hidden and did not protrude beyond the plane formed by the blades. There are types with a slightly protruding socket and even trihedral products with an inner

socket. This line of development will lead to the mass distribution of arrowheads with a tower-shaped head and an inner socket during the Vitova Mohyla horizon and a little later to the beginning of the dominance of basic arrowheads in the next period, which were much easier to sharpen with minimal loss of metal compared to the Early Scythian ones. So, the change in types of arrows at the beginning of the transitional period, in particular, the spread of items with a

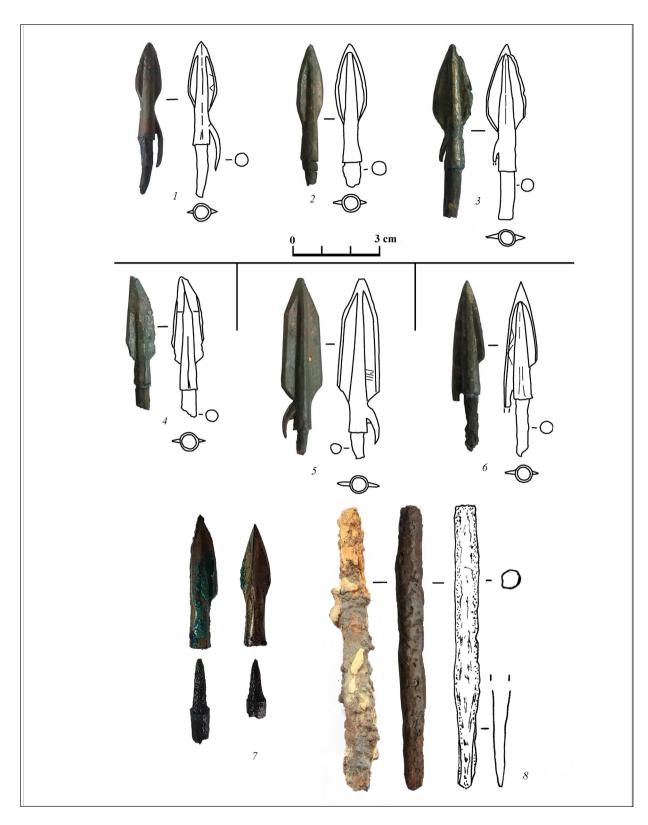


Fig. 7. Burial of the Barrow 57 of the Skorobir necropolis. Two-winged arrowheads, wooden parts of the arrows (7) and iron tool from the quiver (8) (photos and drawings by D. V. Karavaiko)

tower-shaped head, could be resulted from the convenience of the new method of sharpening and the economy of metal.

Apparently, the appearance of arrowheads with a triangular head and a short socket (fig. 8: 14—17) also belongs to the manifestation of the same

tendency. However, such arrowheads were not widely distributed in the next period.

Three-winged arrowheads with a tower-shaped head, an outer socket and blades that form spikes are known among the burials of the beginning of the transitional period (pre-invasion time) (Skorobir, Barrow 57, Perebykivtsi, Barrow 2, Novozavedennoe II. Barrows 6 and 17 (Петренко. Маслов, Канторович 2006). They have prototypes among the items of the Early Scythian period, which had an arch-shaped head and blades — bards (for example Khapry, Barrow 1/25, Likhachivka, Barrow 1/1983) (Daragan 2016, fig. 4, 28-29; Daragan, Didenko 2021, p. 173, fig. 16, 40—48). They are represented in a high frequency in the barrows of the second quarter of the 6<sup>th</sup> century in the Transcaucasia (Петренко, Маслов, Канторович 2006) and from the Don to the Southern Urals, where they were very common in complexes of the 6<sup>th</sup> century BC (Смирнов 1964, с. 297, рис. 5, 3г, 4a; с. 299, рис. 7, 3, 5, 6a, 7a, 9a, 10a, 11 and etc.).

Absolutely identical cast marks in the form of a downward angle (fig. 10: 1, 6, 8) on arrowheads similar in shape and parameters with an arch-shaped head were found in the complexes of the end of the transitional period/beginning of the Vitova Mohyla horizon (post-invasion time) — Vovkivtsi, Barrow 478 and Basivka, Barrow 482 (Daragan, Didenko 2021, p. 178, fig. 19: 7, 9, 10—11; p. 180, fig. 21: 3—5)<sup>9</sup>. M. V. Darahan argues that similar marks appear in complexes of the second half of the 5<sup>th</sup> — early 4<sup>th</sup> centuries BC<sup>10</sup>, and cast marks in general in the Northern Black Sea region appeared in high frequency after the middle of the 5<sup>th</sup> century BC. She

thinks that before that time, the marks were incised (Daragan, Didenko 2021, p. 182). The discovery of numerous arrowheads with similar cast marks in a well-documented complex from the Skorobir, Barrow 57 questions these conclusions and forces us to return again to the issue of the possibility of using the Vovkivtsi, Barrow 478 and Basivka, Barrow 482 complexes in chronological constructions. Nearby cast marks were found *en masse* in the complexes of the 6<sup>th</sup> century BC of the Volga-Don confluence and the Southern Urals (Смирнов 1964, c. 297, рис. 5, 14; с. 307 рис. 14, 1; с. 314, рис. 21, 1; 317, рис. 24, 7; с. 319, рис. 26, 3д; с. 328, рис. 35A, 4; с. 330, рис. 36, 1д and etc.).

In the burials of the beginning of the transitional period, arrowheads of the combined type were found, which have two three-winged sides and one trihedral one with blades/faces (Skorobir, Barrow 57, Perebykivtsi, Barrow 2). We can assume a significant number of experiments to find new effective forms for tips at the beginning of the transition period, which caused their significant variety.

The analysis of the quiver set content of Barrow 57 of Skorobir shows that its innovativeness in relation to the latest complexes of the Early Scythian period makes up 63%. It is worth noting that the percentage ratio of arrowheads' types is quite specific for all sets of this time and it is currently impossible to draw any conclusions on this basis.

All this makes it possible to place this complex on the scale of relative chronology immediately after the final complexes of the Early Scythian period, together with the base complex for this time of Perebykivtsi, Barrow 2.

The weight of the arrowheads of the pre-invasion period indicates that on the eve of the campaigns in Eastern Hallstatt and Lusatian lands and immediately after returning to the Eastern European forest-steppe, the types of bows of the previous period (Early Scythian period) continued to be used.

Quiver sets' changes as a basis for identifying the chronological horizons of the first half of the 6<sup>th</sup> century BC: iinnovation in war vs conservatism of daily life

Survival of any collective of people depended and depends on the constant improvement of weapons and everything that is one way or another connected with war. Great inventions had always spawned waves of conquest (chariots, cavalry, stirrups, etc.) until they became widespread and this advantage was eroded. During the Early Iron

<sup>&</sup>lt;sup>9</sup> I can agree that one arrowhead (Daragan, Didenko 2021, fig. 21: 8) from Vovkivtsi, Barrow 478 accidentally got there during the formation of the museum collection (Daragan, Didenko 2021, p. 182). However, in general, these two sets can be attributed to the end of the transitional period/beginning of the Vitova Mohyla horizon. Thanks to the high-quality publication of these materials, we have an idea about the composition of quiver sets of the period, which is extremely poorly provided by the source base. The absence of complexes in Eastern Europe during the active phase of the campaigns to the west can be explained by the presence of the horde (?) outside the region, and the first complexes that were created immediately after returning from the campaigns — by the fact that their participans died after a certain time, such as Skorobir, Barrow 1/2017 (Шрамко І., Задніков 2018, с. 7-16). Vovkivtsi, Barrow 478 and Basivka, Barrow 482 can fill this gap (conditionally 540-530 BC).

Analogies of arrowheads with cast marks of the 5<sup>th</sup> — 4<sup>th</sup> centuries BC have a different shape of the head and dimensions, which fundamentally distinguishes them from items of Posullia and Skorobir (Daragan, Didenko 2021, p. 178, fig. 19: 8, 10—11).

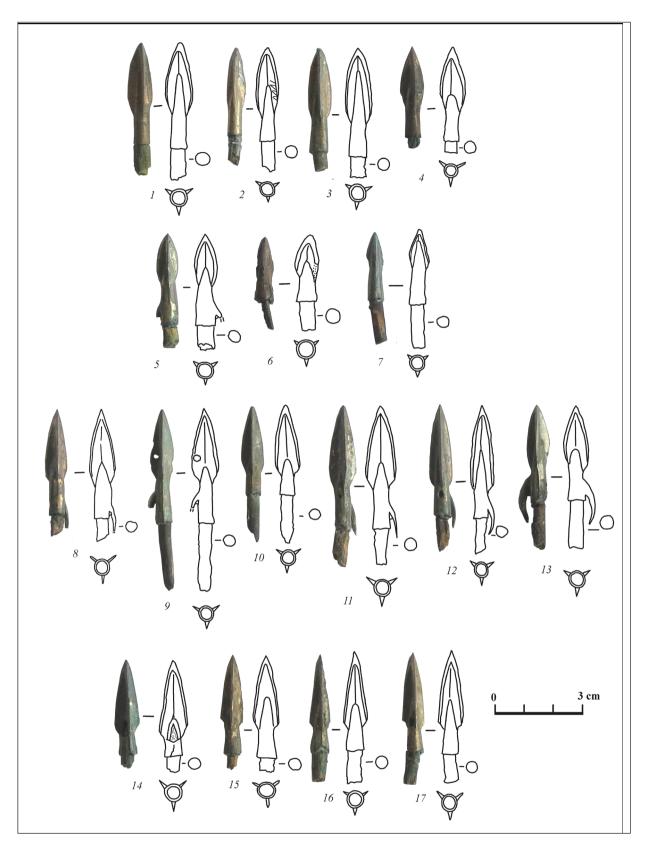


Fig. 8. Burial of the Barrow 57 of the Skorobir necropolis. Three-winged arrowheads (photos and drawings by D. V. Karavaiko)

Age in the "steppe belt" of Eurasia, together with the spread of nomadism, bows and arrows played a prominent role in the battle. The wars of nomads with various tribes made it necessary to constantly take into account new experience, the emergence of new combat tactics, armours, which led to the need

of improving the effectiveness of defeating the enemy at a distance (range, accuracy, rapid fire). The shortage of non-ferrous metals also required considering the need to save it. All this made arrowheads, which were mass-produced and expendable during the battle, the most sensitive to changes. IIncreasing intensity of conflict leads to a shorter use-life for arrowheads, and thus to an increase in their rate of production, which in turn increases variability of shapes (see: Diachenko, Sobkowiak-Tabaka 2022 and references therein). Various transmission biases related to the effectiveness, amount of material used etc. should be also considered (Boyd, Richerson 1985). Therefore, sensitivity to change is especially the case of periods of instability and migrations of various tribes. At the same time, the complexes continued to include other categories of material culture of previously widespread types (pottery, decorations, tools, etc.), which indicates that they did not change so rapidly.

Complex processes of constant renewal of material culture makes it possible to carefully distinguish chronological horizons that are interconnected by transitional periods. Increasing the number of records and clarifying the dating of complexes can gradually refine these chronological constructions. The following version represents ongoing work and reflects the current state of research on this topic. The proposed conclusions serve for a starting point of further discussion.

For the 6<sup>th</sup> century BC, the dating capabilities of synchronous arrowhead sets can be compared to antique imports. At the same time, pottery sets, tools and most of the decorations may not change so dynamically. All this complicates the dating of settlement materials and parts of burial complexes in which no antique imports or sets of arrowheadss were found<sup>11</sup>.

In the complexes of the end of the Early Scythian time/beginning of the transitional period (preinvasion time), a significant number of antique imports and whole arrowhead sets were found, which allows them to be placed sequentially on a chronological scale. Absolute dating of horizons/complexes cannot be narrowed to less than 20—25 years at the moment.

Changes took place in an evolutionary way, so the sets always contain a part of the arrowheads of previous chronological horizons. The beginning of a new era is indicated by the appearance of new types of arrowheads, changes in outlines and parameters, and a gradual increase in their number in relation to previously used shapes. The sufficiently large variability of types does not allow us to clearly fix this proportion—in all cases, the composition of the quiver sets of the transitional period was different. The presence or absence of arrowheads of the same series (cast in the same mold) is interesting, which may allow making assumptions about the nature of the set formation<sup>12</sup>.

At the between, within the end of the 7<sup>th</sup> and the beginning of the third quarter of the 6<sup>th</sup> century BC, three consecutive chronological groups of quiver sets/burials can be dis-tinguished: the second phase of the Kelermes period, the late group of burials (610/600-570 BC), the beginning of the transitional period/pre-invasion<sup>13</sup> time (570 — 560/550 BC) and the time of the invasion to the Central Europe (560/550 — 540 BC).

Second phase of the Kelermes period, late group of burials (610/600 — 570BC). The complexes and quiver sets of the end of the Early Scythian period (the first half of the 6<sup>th</sup> century BC) were clearly distinguished and analysed by S. V. Makhortykh (2022). I also paid attention to this topic (Γρεчко 2012; 2016). It is possible to establish a microchronology, primarily related to this layer of burials, taking into account new discoveries and progress in refining the dating of the 6<sup>th</sup> century BC complexes.

Considering the composition of the quiver sets of the Repiakhuvata Mohyla, Burial 2, these can be attributed as the oldest in this horizon (Ильинская, Мозолевский, Тереножкин 1980).

Then, taking into account the appearance of certain types of two-winged arrowheads, there are complexes with antique imports from Khapry, Burial 1/25; Bushuika, Burial 2/10) and barrow near in the Kytaihorod village (Беспалый, Парусимов 1991; Ильюков, Пашинян 1999; Ромашко, Скорый, Филимонов, 2014).

Complexes with ancient imports in District 7, Point 8 Novoaleksandrovka (Кореняко, Лукьяшко, 1982), Burial 7/8 on Lower Don and

Single finds of the arrowheads cannot be a reliable chronological marker. In each specific case, they can indicate only terminus post quem.

This issue requires a distinct analysis, because at the moment it cannot be argued that the absence of a series of identical arrowheads indicates the long-term participation of warriors in combats and the replenishment of the stock with what could be found on the battlefield, and not received from the smelter master.

<sup>&</sup>lt;sup>13</sup> The term is not felicitous, as it can be confused with the campaigns of the Cimmerians and Scythians to Asia Minor in 7th century BC, but for now I will use it for a sake of simplicity.

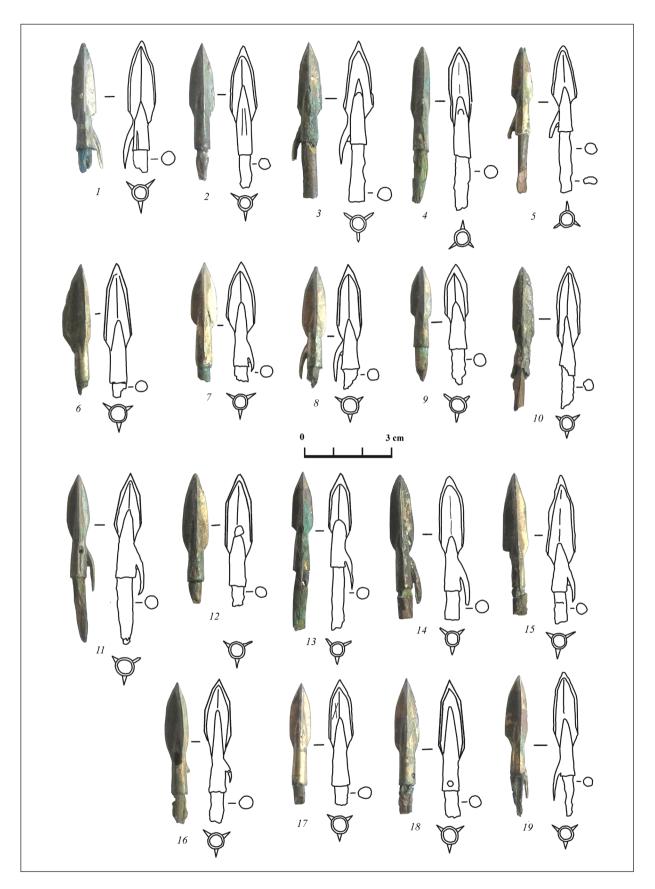


Fig. 9. Burial of the Barrow 57 of the Skorobir necropolis. Three-winged arrowheads with tower-shaped heads (photos and drawings by D. V. Karavaiko)

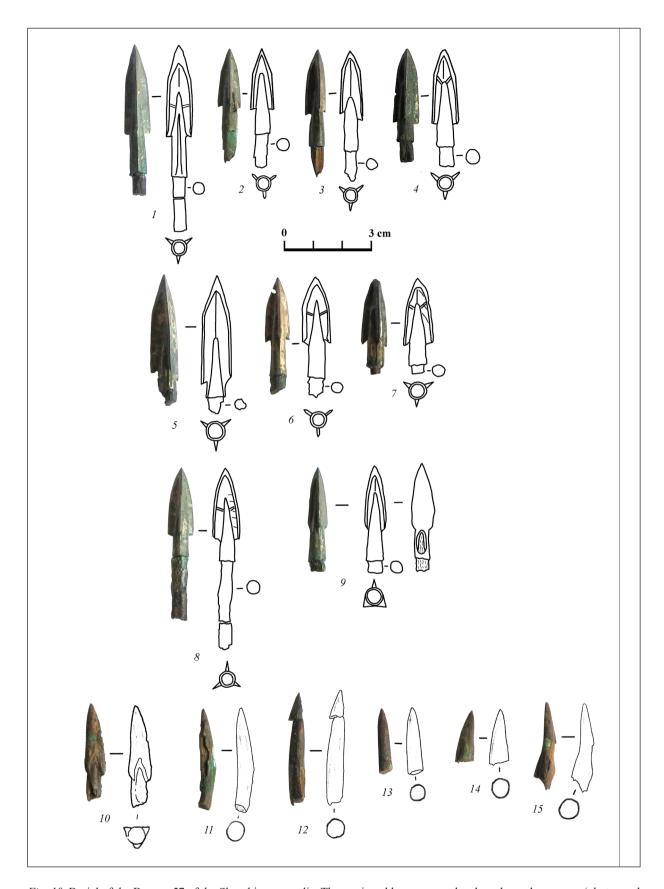


Fig. 10. Burial of the Barrow 57 of the Skorobir necropolis. Three-winged bronze arrowheads and wooden arrows (photos and drawings by D. V. Karavaiko)



Fig. 11. Burial of the Barrow 57 of the Skorobir necropolis. The marks on the arrowheads. 1 — fig. 1: 5; 2 — fig. 1: 1; 3 — fig. 7: 6; 4 — fig. 8: 2; 5 — fig. 9: 17; 6 — fig. 10: 7; 7 — fig. 10: 8; 8 — fig. 10: 1; 9 — fig. 10: 6; 10 — fig. 10: 4 (photos by D. V. Karavaiko)

Tsukur-Liman in Kuban region can be considered relatively the latest in this horizon (Копылов, Русаков 2015, с. 92, табл. 1).

In general, to this horizon can be attributed the Huliai-Horod, Barrow 38 (Ильинская 1975) and Ohorodne (Мурзин 1984) complexes. The arrowhead set from the defense structures of Trakhtemyriv hillfort also corresponds most precisely to this time (Фіалко, Болтрик 2003).

For this horizon, Serhii Mahortykh mentions the following innovations (Maxopthix 2022, c. 109). Among the two-winged arrowheads are examples with an oval head and a long socket without spikes and ones with an arched-shaped head, spikes, the greatest width of which is at the base, and the ends of the blades are obliquely cut to the socket. Among the three-winged ones are arrowheads without spikes with a tower-shaped head; arrowheads with a leaf-shaped head that has the greatest

expansion at the bottom with a long socket that is up to half the length of the arrowhead. We can agree with all these observations, except for the attribution of the Lebedi-5, Barrow 11, Burial 8 to this chronological group. A significant number of tower-shaped arrowheads indicates that it belongs to the beginning of the next, transitional period.

The beginning of the transitional period/preinvasion time (about 580/570—560/550 BC). The transitional complex to this chronological horizon is represented by Lebedi-5, Barrow 11, Burial 8. According to the dating of the repaired amphora and tower-shaped arrowheads, it can be dated to the Late Early Scythian/early transitional periods<sup>14</sup>.

<sup>14</sup> The amphora from the burial dates to the end of the 7th — the first half of the 6th BC (Sezgin 2017, p. 15), but it has traces of repair and can only determine the terminus post quem.

The composition of the quiver set of Skorobir, Barrow 57 is typologically older compared to the time of the active phase of the "Scythian invasion" to Central Europe, while it is fundamentally innovative compared to the sets of the second phase of the Kelermes period, which allows attributing this complex to this stage.

Chronologically similar complexes of Mamai-Hora, Barrow 337, Burial 1<sup>15</sup>(Андрух Тощев 2022), Perebykivtsi, Barrows 2 and 3 (Смирнова 1979, рис. 8; 9; рис. 12: 1—5), Novozavedenoye II, Burials 6 and 17 (Петренко, Маслов, Канторович 2006), Aksay-1, Barrow 3, Burial 3 (Дьяченко и др. 1999) can also be attributed to this time.

The percentage of arrowheads of the previous horizon in the set from Skorobir is quite significant and counts 37 %. Various types of two-winged and three-winged arrowheads with a tower-shaped head (fig. 9), three-winged arrowheads with a triangular head of slender proportions with a short outer socket (fig. 8: 14—17) and the first tower-shaped items with inner socket are innovative (Perebykivtsi, Barrow 2, close to II.4.V.a according to A. Hellmuth). This time is characterised by a significant variability of sets, which enables us to suppose both the experiments in search of the optimal form, and the appearance of different groups of warriors with their own traditions of making weapons.

It is interesting that, in general, all these complexes have material culture, including a horse bridle, of the Early Scythian type, and only the quiver sets clarify the dating. The change of sets of arrows obviously happened much faster than other categories of material culture, which is not surprising.

It is worth noting once again that the series of arrowheads with cast marks from the set from Skorobir, Burial 57 and the later Basivka, Barrow 482, Vovkivtsi, Barrow 478 have numerous analogies in the sets of the Volga and Don confluence and the Southern Urals (Смирнов 1964, с. 297, рис. 5, 14; с. 307 рис. 14, 1; с. 314, рис. 21, 1; 317, рис. 24, 7; с. 319, рис. 26, 3д; 328, рис. 35A, 4; с. 330, рис. 36, 1д and etc.). Part of the categories of material culture and new fine arts traditions (Гречко 2016, с. 46—55) and their absence in the North Caucasus in the 6<sup>th</sup> century BC do not allow us to reject the option of the arrival of some nomads from the East to the East European forest-steppe. Unfortunately, the small number of clear chronoindicators, first

of all antique ceramics, prevent the complete synchronisation of the «Scythian», «Sauromatian» and «Sakian» chronologies. It is possible that the complexes to the east of the Don may be suppressed and then the origins of new types of things will become more obvious. The "Hallstatt Plateau" complicates the involvement of radiocarbon dating into solving this issue.

Time of invasion to Central Europe (560/550— **540 BC).** The sets of this time can be characterised mainly by finds in the layers of destruction in Central Europe, because burials in the Northern Black Sea region are not known. At this time, arrowheads of early Scythian types and those that appeared at the beginning of the transitional period were still used. Among the innovations, we can note the appearance of three-winged tower-shaped arrowheads of types II.E, F according to A. Hellmuth, products with a short outer socket of slender proportions (II.3.C.b according to A. Hellmuth, which will be common in the subsequent period). At this time, three-winged arrowheads with an arch-shaped head and pointed ends of the faces disappear, and III.3.a with faces that go to the socket at a right angle, with a short outer or with an inner socket, appear. As single archaisms from the Early Scythian period can be considered III.3\* IVBz, I.I\*, III.2\*.

The Vitova Mohyla horizon (540/530—520 BC) corresponds to the time of the return of nomads from their campaigns to the forest-steppe (Гречко, Котенко, Крютченко 2020, с. 54-64) and referred to a post-invasion time. Very similar tower-shaped arrowheads with an inner socket and a cast mark at Hellbrunnerberg (Moosleitner 1979) and in the Basivka, Barrow 482<sup>16</sup> are notable.

### On the eve of the invasion to the Eastern Hallstattian and Lusatian lands: From the Transcaucasia to the Carpathian passes

The current state of the records allows arguing that as of the middle of the 6th century BC several regions of Eurasia did not have a permanent population: the steppes of the Northern Black Sea and the Azov region, the Volga-Don watershed and the Southern Urals, that is, in fact, the entire steppe from the Danube to the Urals. This was probably due to the climatic conditions in this region at that time. In the east, the potential source areas of migration to the West could be Southern Trans-

A gray clay amphora was discovered in the burial, to which the dating of the Lesbos amphoras should not be transferred (Андрух, Тощев 2022, с. 415). This find does not have a narrow dating and cannot specify the dating of the complex.

<sup>&</sup>lt;sup>16</sup> Such an observation became possible thanks to the high-quality publication of images of arrowheads from this complex (Daragan, Didenko 2021, p. 178, fig 19: 6).

Urals, Northern and Central Kazakhstan (Tasmola tribes), Eastern Kazakhstan, Altai, Tuva, Southern Siberia and the Aral Sea (Γρεчκο 2016, c. 36). The initial territory of new nomads' migration is difficult to determine. During migration, the tribes, through whose lands the migration had taken place, were often involved in the movement. All this makes the process of reconstruction of population migrations in the absence of data in written sources more complicated.

Analysis of changes in the burial rites and material culture of the new complexes of the transitional period show that, apart from relatively small groups of nomads from Central Asia, people from the Northern Caucasus and Kuban region prevailed among the warriors (Гречко 2016, с. 55-56). This is consistent with the view of some researchers about the returning of a part of the Scythians from Asia Minor to the Northern Black Sea region after staying in the Northern Caucasus after the bloody feast of Cyaxares in 585 BC (Мозолевський 1990, с. 27, 28). These new groups of nomads were the "culprits" of the beginning of the transition period and large-scale changes in the ethno-cultural map of Central and Eastern Europe.

One of the oldest complexes with a cross-shaped plate, a remarkable innovation of the transitional period, is the burial of a teenager in the Aksay 1, Barrow 3, Burial 3 in Don-Volga watershed (Дяченко та інші 1999, с. 96, 108). The most acceptable date for today is the second quarter of the 6<sup>th</sup> century BC (570/560—550 BC). The quiver set belongs to the beginning of the transitional period. This complex can mark the movement of nomads to the Northern Black Sea region from the East directly or via the Northern Caucasus and Kuban region.

Traces of fire and destruction were recently identified in Panticapaeum. Arrowheads from the destruction layer are close to the pre-invasion time ones. V. P. Tolstikov dates the attack around the middle of the 6th century BC, while the ceramics' sets are dated to the first half of the 6th century BC (Толстиков 2017). It is important that antique ceramics (Northern Ionia), which were found in the layers of the destruction, allow to some extent the synchronization of this event with the burial in Aksay and the assault on the Trakhtemyriv hillfort at the end of the first third of the 6th century BC (580's — middle of the 6th century BC). It should be noted that no other traces of the movement of new groups of nomads to the Northern Black Sea coast via the Crimea have been recorded.

The mapping of the nomadic burials of the transitional period indicates the path of the new no-

mads to the Northern Black Sea region through the Lower Don. A convenient crossing of the Lower Don is located near Dugino village. Then the path ran through the watershed of the rivers of the Dnipro basin and the Sea of Azov.

The appearence of new groups of nomads in the Northern Black Sea region is marked by the discovering of the early transitional period warrior graves on the convenient roads to the Dnipro ferries, in which stone sculptures were found (Sholokhove, Barrow 13, Velykomykhailivka, Gladkoe, Roblena Mohyla). Such complexes were absent in the Northern Black Sea in the Early Scythian time (Гречко 2016, с. 41). The tradition of placing anthropomorphic sculptures in a grave is known in the early Scythian barrows in the Northern Caucasus (Nartan, Barrows 11, 16, 17, 20 etc.) (Бессонова 2009, с. 25-26).

Interesting burials were investigated near the village Hladkivshchyna on the steppe territory along the left bank of the Dnipro. These complexes represent a chronologically monolithic group. The arrowheads set from Barrow 4 belongs to the beginning of the transitional period<sup>17</sup>. The Ionian kylix (Type B2 according to Villard-Vallet or Type 9 according to Schlotzhauer) was found in the Burial 499 (Галанина 1977). It can be dated to 590/580—540 BC.

At the end of the Early Scythian period, the forest-steppe regions of Eastern Europe had a large settled and semi-nomadic population. A few more complexes of the Left Bank Dnipro, which can be dated to the end of the Early Scythian time — beginning of the transitional period, were found in Bilsk necropolis in Skorobir tract, *i.e.* Barrows 57 and 2/2019 (Шрам-ко I., Задніков 2020, с. 9-10). Early Scythian period hillforts were not found in Left Bank Dnipro forest-steppe (Гречко 2016, с. 56), and perhaps because of this no traces of assaults were found. It cannot be ruled out that the local population recognised the power of the new nomads without armed resistance. Some of the warriors from this region could have joined the march (Grechko 2021).

Traces of warfare at the end of the Early Scythian period/beginning of the transitional period were discovered in the Eastern Bank of the Dnipro forest-steppe. Trakhtemyriv hillfort is located on the Eastern Bank of the Dnipro near Zarubskyi ford (Фіалко, Болтрик 2003, c. 84). Arrowheads, which were found in the rampart and moat, belong to the end of the Early Scythian pe-

<sup>&</sup>lt;sup>17</sup> Publication of photos of arrows from the Burial 4/1 made by M. M. Darahan fundamentally influenced the characteristics of the typological set of this quiver (Дараган 2016).

riod. It is important that in the moat, together with the arrowheads, an oenochoe was found. It belongs to the group Wild Goat Style "B" (mixed style) and is dated by experts around 80s of the 6th century BC. At the territory of the citadel of the settlement, the remains of killed locals were found. Trakhtemyriv hillfort stopped functioning after the assault (Фіалко, Болтрик 2003). Accordingly, groups of nomads could cross the Dnipro not earlier than the 580s BC. Taking into account that we have only the *terminus post quem* dates, the fording of the river could happen later.

Traces of the assault were recently discovered at the Khotiv hillfort near Kyiv. The small collection of arrowheads from this excavation belongs to the Early Scythian period (Шелехань 2017, с. 66, рис. 64, 13). The authors of the excavation date the assault of the settlement to the end of the 7<sup>th</sup> century BC (Кравченко 2017, с. 119-120). It can be assumed that this assault could have happened simultaneously with Trakhtemyriv's.

Further on, the path of nomads could turn to the south and pass along the Black Shliakh. O. Ye. Fialko and Yu. V. Boltryk argue that after the assault of Trakhtemyriv, the Scythians on this route went to Central Europe, which led to the destruction of the settlements in Central Europe (Фіалко, Болтрик 2003, c. 86-87). Jan Chochorovski thinks that for such a route the nomads had no "background" (Chochorowski 2014, p. 32).

It is possible to associate the abandonment of the Nemyriv and Severynivka hillforts in the South Buh basin (East Podillian group) with the advancement of the nomads along the Black Shliakh. Materials which can be dated to the beginning of the Middle Scythian period (second half of the 6<sup>th</sup> century BC) were not found at the Severynivka hillfort (Shelekhan, Lifantii 2016, p. 244). Antique ceramics from its fortifications are dated no later than by the second quarter — middle of the 6th century BC, but earlier dating of the oenochoe with a "striped" ornament is not excluded. Researchers date the abandonment of the hillfort to the first third of the 6<sup>th</sup> century BC (Кашуба, Вахтина 2017, с. 219, 220, рис. 8: 225). Despite of this dating of the end of the settlement's functioning, among the arrowheads from the Nemyriv hillfort, the types characterising the transitional period are known (Смирнова, Вахтина, Кашуба 2018, с. 180, рис. 150, 1, 10— 12). It is worth noting that two bronze three-winged arrowheads with an inner socket, the edges of which form spikes, are typical for Sauromatian complexes of the Don-Volga watershed and further to the east

(Смирнов 1964, с. 297, рис. 5: 4a; с. 299, рис. 7: 5, 7a, 11). Unfortunately, all the arrowheads do not have a certain context (Смирнова, Вахтина, Кашуба 2018, с. 181) and it is impossible to claim that they are related to the causes for the cessation of the settlement functioning.

The time of functioning of the Western Podillian group was determined by G. I. Smirnova around the middle of the 7<sup>th</sup> — beginning of the 5<sup>th</sup> centuries BC. The upper (late) date was based only on one complex — Verkhni Panivtsi (Смирнова 2006). O. D. Mohylov argued that this complex was redated to the first half — middle of the 6<sup>th</sup> century BC (Могилов 2010, c. 124). M. S. Bandrivskyi dates the latest sites of the Western Podillian group (Stage IIIb) to first quarter of the 6th century BC (Бандрівський 2014, c. 308). Perebykivtsi, Barrow 2 may be considered for the one of the latest sites of this group (fig. 8: 2) (Смирнова 1993, с. 115-116; Мелюкова 2006, c. 28). The quiver set no. 2 finds direct correspondences with burials of the beginning of the transitional period like Skorobir, Barrow 57.

The Kotsiubynchyky 2 burial complex included a horse harness, a fragment of a bronze mirror, and a set of bimetallic tops of the funeral carts and bronze bells. The author of the excavation found the closest analogy to the whole set in Volkivtsi, Burial 477 at the Sula River (Бандривский 2009, с. 37), which is dated to the end of the Early Scythian period — the beginning of the transitional period (Гречко 2016, с. 43-44). The hypothesis of M. S. Bandrivskyi about the connection of these burials with complexes with tops of funeral carts and bells in the Carpathian basin is interesting (Бандривский 2009, с. 37-38).

Finds of the East-Hallstatt origin in the tombs of the Western Podillian group indicate that the nomads of this region knew well how to pass the Carpathians and whom they would meet there.

At the end of the first third of the 6<sup>th</sup> century BC this group ceases its operation, judging by the materials available today, and the westernmost outpost of the forest-steppe tribes becomes the Chotyniec agglomeration (Grechko 2020b, p. 597-598). S. Czopek assumes the participation of its population in the raids of nomads to the west (Czopek 2021, p. 384). The arrowheads of the ash-hill of the Chotyniec hillfort do not belong to the time of the destruction of hillforts in the Lusatian and Eastern Hallstatt lands, but correspond instead to the earlier Kelermes period (Γρeчκο 2013, c. 133-154; Grechko 2020a, p. 12-19). The lack of later arrowheads in the collection, even those of the transition period, as in the settlements and hillforts of the Western Podil-

lian group, once again indicates that these groups did not experience nomadic raids to the west. It is very likely that the end of the Chotyniec agglomeration and both Podillian groups is precisely connected with this global destabilisation of the military-political situation around the middle of the 6<sup>th</sup> century BC in the broad areas of Eurasia.

I can agree with the researchers that the nomads of the Middle Dnister joined the march through the Carpathians to Central Europe 18 (Transylvanian and Western Podillian nomadic aggression (Xoxopobски 2013, c. 67)). I. V. Bruiako thinks that the region was their last stop before moving to the Hungarian Plain (Бруяко 2005, с. 291). It can be assumed that the nomads passed through Chotyniec and turned to the south in the area of modern Rzeszów in the direction of Kosice (Chochorowski 1985, taf. 5). This corresponds to the direction of roads in the Middle Ages. A significant number of complexes with eastern materials in North-Eastern Hungary (Dédestapolcsány, Győngyős, Miskolc, Diósgyőr, Sajószentpéter, etc.) confirms this assumption regarding the route along which the participants of the western passage crossed the Carpathians.

### Concluding remarks

The Skorobir, Barrow 57 can be attributed to the beginning of the transitional period / preinvasion time (580/570—560/550 BC).

This chronological horizon follows the latest group of Early Scythian burials and precedes the time of the destruction of the fortifications in Central Europe. It was characterised by the emergence of new groups of nomads from the Transcaucasia and more eastern regions of Eurasia and their establishment of control over the tribes of the Eastern European forest-steppe, and continued while the new rulers of the region were preparing (?) for a campaign to the west.

It can be assumed that after the conquest of the tribes of the Eastern European forest-steppe and probably the plundering (?) of the European Bosporus by the Greek colonists, the new rulers of the region probably stopped for a certain time to restore their strength and replenish their army with representatives of the newly conquered tribes. It is complicated to identify archaeologically how long this period lasted, but it was not long. This is indicated by certain changes in the composition of the quiver sets with which fortifications in Eastern Hallstattian and Lusatian lands were assaulted. That is, the chronological horizon with arrowheads from Central Europe (ca. 560/550—540 BC) immediately follows the previous one (580/570—560/550 BC, Skorobir, Barrow 57, Perebykivtsi, Barrow 2). Burials with sets of arrowheads that would clearly correspond to the finds in the destroyed fortifications of Central Europe are unknown to me in the East European forest-steppe. This may be due to the absence of the main mass of warriors in the region who went on a campaign to the west.

Specifying the picture of large-scale destabilisation of the military-political situation in Central and Eastern Europe around the middle of the 6th century BC, we can argue about the scale of events that had significant consequences for the tribes of Central and Eastern Europe. These events were not reflected in written sources, in contrast to the early Middle Ages, therefore, about the real scale of the tribes, movement during the 6th century BC we can only guess. It is interesting that the nomadic campaigns impacted the development of the economics and material culture of the East Hallstattian and Lusatian tribes at the final stage of the HaD1 phase<sup>19</sup> (Grechko 2020b, p. 597-599). This largely indicates the synchronicity of global changes in Eastern and Central Europe. The period of prosperity (Early Scythian period for the foreststeppe and HaD1 for Hallstatt) was interrupted and the time of significant changes and military-political instability (transitional period/early Middle Scythian time and HaD2-3) had begun. This tumultuous period resulted in the isolation of these two regions in the 5<sup>th</sup> — 4<sup>th</sup> centuries BC, when two powerful forces entered the historical arena: the Northern Black Sea Scythians and the Celts. This balance of power and stabilisation of the situation again leads to the flourishing of these two worlds.

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<sup>&</sup>lt;sup>18</sup> The disappearance of the Western-Podillian group, the researcher rightly links with the migration of its people to the Carpathian Hollow (Хохоровски 2013, с. 67).

<sup>&</sup>lt;sup>19</sup> This topic needs more comprehensive analyses and special research.

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#### НАПЕРЕДОДНІ «СКІФСЬКОГО ВТОРГНЕННЯ» В ЦЕНТРАЛЬНУ ЄВРОПУ: НОВЕ ПОХОВАННЯ ВОЇНА У БІЛЬСЬКУ

Під курганом №1/2020 (№57) в ур. Скоробір (ділянка «4-е поле») було виявлено поховання початку перехідного періоду (580/570—560/550 рр. до н.е). Поховальний інвентар складався з набору ліпленого посуду, залізних вудил та наконечника списа. Особливу увагу привертає перший випадок у східноєвропейському Лісостепу виявлення частини шкіряного сагайдака зі стрілами. Сагайдачний набір складався з 51 стріли з бронзовими наконечниками та 6 дерев'яних стріл. Склад сагайдачного набору поєднує типи наконечників ранньоскіфського часу та нові форми перехідного періоду. Це дозволяє поставити цей комплекс на шкалі відносної хронології відразу після фінальних комплексів ранньоскіфського часу (610/600—570 рр. до н.е.) серед комплексів початку перехідного періоду / передпохідного часу (умовно, 580/570—560/550 рр. до н.е.). Цікаво що в цілому всі ці комплекси мають матеріальну культуру, включаючи вузду, ранньоскіфського типу і лише сагайдачні набори уточнюють датування. Зміна наборів стріл, очевидно, відбувалась набагато швидше, ніж інших категорій матеріальної культури, що й не дивно.

Можна припускати, що після підкорення племен східноєвропейського Лісостепу нові володарі регіону на певний час зупинились для відновлення сил та створення нового війська з новопідкорених племен. Поховання з наборами стріл, які б чітко відповідали знахідкам у знищених фортифікаціях Центральної Європи, у східноєвропейському Лісостепу мені невідомі. Це може бути пов'язано з відсутністю основної маси воїнів у регіоні, які пішли у похід на захід.

Деталізація картини масштабної дестабілізації військово-політичної обстановки у Центральній та Східній Європі близько середини VI ст. до н. е. може говорити про масштабність подій, які мали визначні наслідки для племен Центральної та Східної Європи. Період розквіту (ранньоскіфський час для Лісостепу та HaD1 для Гальштату) було перервано та розпочався час кардинальних змін і військово-політичної нестабільності (перехідний період / початок середньоскіфського часу та HaD2-3).

Ключові слова: Дніпровське лісостепове Лівобережжя, Більське городище, перехідний період, HaD1, курган, на-конечники стріл.

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# Публікації археологічних матеріалів

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#### BONE ARTEFACTS FROM THE EXPOSITION OF THE NATIONAL HISTORICAL AND ARCHAEOLOGICAL RESERVE "OLBIA" MUSEUM

In the article, a collection of bone and antler artefacts that had been displayed at the National Historical and Archaeological Reserve "Olbia" Museum until 2022 are discussed. The collection includes materials excavated from the territory of Olbia starting from 1946 and encompasses a diverse range of artefacts categories, such as spindle whorls, handles for metal tools, musical instruments, jewellery and components of horse harness, etc.

K e y w o r d s: Olbia Pontica, National Historical and Archaeological Reserve "Olbia", bone craft, antler craft.

#### Introduction

The National Historical and Archaeological Reserve "Olbia" stands as the custodian of the largest collection of artefacts discovered during archaeological excavations in Olbia and its vicinity. The majority of these items are safely stored within the reserve's repository, while a few are exhibited in two small museums. The first museum primarily showcases a lapidarium collection, while the second encompasses all other categories of discoveries, including artefacts crafted from from bone, horn, and antler. In total, there were 18 bone and antler artefacts on permanent exhibition, with an additional 16 featured in temporary displays. Currently, both exhibitions have been disassembled and relocated to a secure site due to the full-scale military invasion by the Russian Federation, mak

ing their publication more pertinent than ever. Nevertheless, we remain hopeful that this collection will not suffer from the war.

The formation of the described collection likely took place after the end of World War II, with the earliest and most numerous artefacts in the permanent exhibition dating back to the years immediately after the war. Out of the 18 units, 9 are related to excavations from 1946—1947, while 7 only have museum catalogue numbers or lack provenance at all.

Over the course of many years of research, a significant number of artefacts, primarily of exhibition value, were transferred to larger museums. Initially, this was due to the absence of storage facilities, and later due to the limited exhibition space of the museum (Шевченко 2017, с. 266-267). Nevertheless, the museum's collection includes a wide variety of items, encompassing the principal categories of bone artefacts found in Olbia. Some of the artefacts, originating from specific sites, are dated contextually. Analogies from contemporaneous sites were used to determine the age of others. The latter dating method often presents challenges, because some artefacts did not undergo significant changes in form over an extended period.

#### Artefact description

Amulets are artefacts with a rich history and widespread use across various cultures. Traditionally, amulets were believed to bring good fortune and protect against potential negative influences, such as the "evil eye" and misfortune (MacGregor 1985, p. 105). The earliest amulets were crafted from natural materials like shells, animal claws, and bird talons, and typically underwent minimal modification, usually involving the addition of a suspension hole. The practice of creating and us-

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ing such amulets dates to the Palaeolithic era and continued to be relevant during later periods, including the Greek-Roman era.

Within the museum's collection, two such artefacts are preserved, but unfortunately, the origins of both remain unknown. The first one (fig. 1: 1) is a  $5.5 \times 1.0$  cm canine with a 0.4 cm diameter hole, identified by Yevheniia Yanish<sup>2</sup> as the canine of a young leopard. According to her assessment, the second amulet (fig. 1: 2) was crafted from the talon of a raptor, possibly a golden eagle or a white-tailed eagle. It also features a circular hole with a diameter of 0.3 cm, and the talon itself measures  $4.0 \times 1.1$  cm.

In addition, bone-carved **pendants** were used as amulets, including the ribbed artefact (fig. 1:3) from the museum's collection. The item is a 6.2 cm long cylindrical rod with a diameter of 1 cm. On one side, it has a 0.4 cm diameter suspension hole, and on the opposite side, three bands of molding. The surface near the hole is damaged and there are signs of being worn-out, likely from the attachment of a cord. This artefact was discovered in sector "A", unit no. 125. While we have not identified direct parallels, we posit that the item can be categorised as a rod pendant, or so-called 'truncheon pendants' discovered at archaeological sites in Greece, such as the Heraion sanctuary on the Perachora Peninsula (Stubbings 1940, p. 443), which is dated to the 7th—6th centuries BC. Or significantly later in time, but similar in morphology, such pendants are known as the "Heracles club" (Bíró et al. 2012, p. 78) common during Roman times. These artefacts typically featured ribbed sections near the hole, although variations exist. For instance, a ribbed pendant preserved in the British Museum  $(no.1864,1007.627)^3$  can be traced back to the 6th century BC and originates from the acropolis of Kamiros on Rhodes. Like the Olbian example, these artefacts can be grouped as rod pendants due to their similar form and functional purpose.

Among the exhibits, there are various **inlay fragments and decorative plaques**, which likely adorned furniture such as beds or chairs, as well as chests and boxes. This includes a fragment of a figured plaque, broken on both sides, with inv. no. 97 (fig. 1: 4), in the form of a repetitive wave pat-

tern. The preserved length of the artefact is 3 cm, the height is 1.4 cm, and the thickness is 0.3 cm. Its surface is polished on one side, and there are numerous small scratches visible on it. A similar inlay fragment from Olbia is stored in the National Museum of the History of Ukraine (Мезенцева 2001, с. 87), and analogies to it are known at other sites in the Northern Black Sea region, such as Nikonion (Сєкерська, Шевченко 2021, с. 31), as well as at the territory of Greece, for example, in Delos (Bruneau 1970, p. 232).

Here, we can include a heavily damaged flat plaque (fig.1: 5) made of horn, measuring 4.6 × 3.5 cm, with the greatest thickness of 0.5 cm. Its surface is porous and unpolished, possibly indicating that it was broken during the semi-finished stage. The discovery location is section "E", premise "E." While exact analogies are unknown to us, similar plaques of various shapes have been found on the territory of Olbia, both in the city with dated to the 4<sup>th</sup>—3<sup>rd</sup> centuries BC (Наливкина 1940, с. 189) and on the necropolis (Папанова 2006, с. 177).

Resembling these artefacts in appearance, there is also a flat spiral plaque with a perforation (fig. 1:6). It measures  $3.7 \times 3.1$  cm with a thickness of 0.4 cm. Its surface is smoothed, though not meticulously polished, exhibiting a somewhat porous texture. Notably, no distinct abrasions are observable on the surface, prompting speculation that this plaque may have functioned as a pendant rather than an inlay fragment. The artefact was recovered from sector "A", precisely within units nos. 122—123, located inside the premises.

A fragment of a semi-cylindrical artefact adorned with a meander-like motif (fig. 1: 7) measures 2.2 cm in length, 1.4 cm in width, and 1.1 cm in height. This fragment originates from sector "E", unit no. 80, situated within the confines of premise "D." Analogous specimens have been discovered in a Scythian burial mound known as Blyzniuk 2, dated to the 5<sup>th</sup> century BC (Ромашко, Скорий 2009, c. 58).

Within this group, we can also include an ornamented plaque of antler (fig.1: 8) originating from sector R-25 during the excavation of floor level no. 925 in a building dated from the end of the 5<sup>th</sup> to the end of the 4<sup>th</sup> centuries BC (Крапивина, Буйських 1999, с. 65). This is a slightly curved rectangular plaque, broken on one side, with dimensions of 10.2 cm in length, 1.8 cm in width and 0.3 cm in thickness. There is a slightly damaged hole, approximately 0.5 cm in diam-

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https://www.britishmuseum.org/collection/ object/G\_1864-1007-627 Date of access: November 9, 2023.



Fig. 1. Bone products. I-2 — amulets; 3 — pendant-rod (inv. no. O-47/1255); 4 — inlays and decorative plaques (inv. no. 97); 5 — inv. no. O-99/T-3/307; 6 — inv. no. O-47/5329; 7 — inv. no. O-47/3560; 8 — inv. no. O-47/874; 9 — inv. no. O-98/R-25/1956



Fig. 2. Bone products. I-2 — spindles; bobbins: 3-4 (inv. no. O-93/R-25/1872 and inv. no. O-2004/R-25/1020); 5 — processed epiphysis (inv. no. O-49/46)

eter, presented at the preserved end, possibly for attachment purposes. The front side of the plaque has a polished surface adorned with a meander pattern, whereas the reverse side remains unpolished, but one can discern a few incised lines. Similar lines are often found on one side of inlayed plaques, suggesting that they were likely applied to the reverse side of the artefact to enhance its adhesion to the surface, possibly using some adhesive substance. Another plausible functional purpose for this plaque could have been personal adornment, like a bracelet, as implied by its curved shape, with the round hole at the end possibly serving to fasten both ends of the ornament. Undoubtedly, such an artefact

would have been an elegant yet delicate piece of adornment. However, its use as an inlay for furniture seems more likely. Nevertheless, until compelling evidence is found, making any definitive claims regarding its purpose remains uncertain.

The attention is also drawn to a fragment, turned on a lathe and fashioned from tubular bone material (fig. 1: 9). Presumably, it constituted a part of the decorative ensemble. This piece is distinguished by its remarkable craftsmanship in the execution of the ornamentation, which is decorated with repeating facets and moulding decorated with parallel incised lines. This artefact was unearthed on the sector T-4, basement no. 4 of a Hellenis-

tic-era structure, albeit the material found in this context had undergone partial mixing (Назарчук 1999).

In the museum's collection, there are also two spindles, unfortunately lacking provenance. The first one (fig. 2: 1) is a broken spindle stem measuring 12 cm in length with a maximum diameter of 0.5 cm. At the surviving end, there is a flattened hemisphere that is affixed to a baluster, and below this point, there is a cylindrical shaft with a slight widening towards the broken edge. Near the beginning of the shaft, two parallel incised lines serve as ornamentation, although they do not encircle it completely. The entire artefact's surface has been polished to a high sheen. This spindle closely resembles the upper portion of a complex of whorls from Olbia, dated to the 4th century BC (Петерс 1986, c. 58). Nevertheless, similar items are also found in Roman contexts, where they are attributed to the 1st and 2nd centuries AD (Béal, 1983, p. 152).

The second specimen also belongs to a composite spindle, preserving two probable structural elements (fig. 2: 2), although they currently appear as a monolithic object, likely a result of restoration. It measures a total length of 15 cm. The artefact consists of a damaged and partially broken spindle shaft on one end, which connects to a larger, convex shaft with a diameter of 1.1 cm. The surface of the latter is adorned with three groups of incised lines: one on each side of the shaft and one down the centre. Each group comprises six double lines. At the end opposite to the broken part, the shaft terminates in a drop-shaped finial, also damaged. Overall, the entire surface of the artefact shows significant damage.

Within the territory of Olbia and its chora, various plaques of diverse configurations have been found, which are commonly regarded as **bobbins** used for winding threads. The first bobbin (fig. 2: 3) is a trapezoid-shaped plaque, measuring 4.0 × 3.2 cm, with a thickness of 0.4 cm. Its two opposite edges are crafted with a smooth curve featuring a central indentation. Its surface has been polished, though not entirely, leaving traces of bone structure on one side, confirming it was crafted from tubular bone material. The surface also displays numerous scratches. It was discovered on sector R-25, within a pit no. 707 dating to the last quarter of the 5<sup>th</sup> century BC (Крапивина, Буйських 1994, с. 72).

The second bobbin (fig. 2: 4) resembles the previous one, but has a simpler trapezoid shape, mea-

suring  $4.0 \times 3.6$  cm with a thickness of 0.5 cm. The edges of the plaque are rounded, and there is a recess in the centre between two opposite edges made with triangular incisions. The circumstances of its discovery (sector R-25, pit no. 1294) do not provide sufficient context for dating based on associated materials. However, its resemblance to the previously described object and other similar finds (Ko3yố 1974, c. 115) allow the dating within the  $5^{th}$ — $4^{th}$  centuries BC.

Processed head of a cow's femur (epiphysis) (fig. 2: 5) with a diameter of 4.1 cm and a height of 1.6 cm, with a drilled hole in the centre with a diameter of 0.5 cm. The surface of the head is decorated with an incised ring and dot motif, totaling 19 circles with a diameter of 0.4 cm. Some of them are executed carelessly, so the outer circle is barely outlined. This is a random find. Its purpose is not entirely clear, perhaps it is a spindle whorl, similar to the interpretation of an artefact from Nikonion dated to the last quarter of the 5th century BC (Секерська, Шевченко 2021, с. 19).

Handles. In the museum's exhibition, handles constitute the largest group of bone artefacts. Most often, they are identified as knife handles, but in most cases, the blades are not preserved, so this cannot be stated definitively. The handles themselves vary in terms of craftsmanship, size, the method of attaching the working tool, and construction. Based on the last criterion, two types are distinguished: solid handles, made from a single piece of material, and complex handles, constructed from two parts.

Among the solid handles, there is a fragment of a rectangular-shaped handle made of tubular bone (fig. 3: 1). The knife blade or other working tool is entirely lost, and the point of attachment to the handle is partially damaged. However, from the preserved fragment, we can understand that the working tool was attached to the handle using a groove cut into the handle, and the partially preserved round hole indicates additional attachment with metal rivets. The handle's length is 12.6 cm, width 1.7 cm, thickness 0.8 cm; the surface is polished. It was found on sector "I", unit no. 321.

Another fragment of a handle (fig. 3: 2) with a rectangular shape and remnants of iron at the side where the working tool was attached is present in the collection. The blade was likely attached to the handle using a groove. The preserved length of the handle is 7 cm, width 1.5 cm and thickness 1.3 cm. The surface of the artefact is polished and covered



Fig. 3. Bone and antler products. Handles: I—6 (inv. no. O-1947/1603, inv. no. O-87/NGS-S/688, inv. no. O-2000/NGS/1174, inv. no. O-57/2417, inv. no. O-46/1036 and inv. no. O-94/R-25/1699); antler item: 7 (inv. no. O-46/3368); astragali: 8—10 (inv. no. O-94/R-25/1861, inv. no. O-86/NGS/195 and inv. no. O-94/NGS/648)



Fig. 4. Bone and antler products. Bridle buckle: 1-2 (inv. no. O-1956/64 and inv. no. O/1954/1); bone ring: 3 (inv. no. O-46/1478); bone disc: 4 (inv. no. 107); aulos: 5 (inv. no. O-99/T-3/19); pin: 6 (inv. no. 120); pyxis body: 7 (inv. no. 98); pixis lid: 8 (inv. no. O-61/?); spoon: 9 (inv. no. O-2011/R-25/349); production defect: 10 (inv. no. O-47/42)

with scratches, and on one of the sides, closer to the end, there is a scratched triangle. It was found on sector "HTC-C", unit no. 379, premise no. 119.

Handles like these are often further adorned with the circle and dot motif. For example, a solid and partially damaged trapezoidal-shaped handle (fig. 3: 3) with a length of 9.8 cm, a maximum width of 1.8 cm and a maximum thickness of 0.9 cm. The handle's surface is well-polished and decorated on one side with two rows of 16 circles, each with a diameter ranging from 0.4 to 0.5 cm. On the side where there is no decoration, the internal bone structure is visible. The working tool was likely attached using a groove and two round holes with a diameter of 0.3 cm. It was found on "HΓC" sector, unit no. 262.

Another type of handle (see fig. 3: 4) features a different construction compared to the previous ones. It consists of two parts that clamp the working tool between them, fastened to it with five rivets. Two of these rivets have a green colour, while three have a brown colour, indicating oxidised iron, and the handle itself is heavily soiled with these oxides. Its length is 8.5 cm, width 1.5 cm and thickness 1.2 cm.

Within this group, there is also a component of a complex handle (fig. 3: 5) made of tubular bone. It has a length of  $10.1~\rm cm$  and a width of  $2.3~\rm cm$ . This piece is significantly wider and thicker than other specimens in the collection, and it is coarser in craftsmanship. It is secured with four holes with a diameter of  $0.5~\rm cm$ , and the external surface is polished, but shows numerous scratches. It was found on "HF" sector, unit no. 64-east.

The interpretation of the handle (fig. 3: 6) can also be extended to a fragment from sector R-25. It is made of tubular bone, as indicated by the remnants of the medullary canal. Unfortunately, the preserved fragment, measuring 9.5 cm in length, with a maximum width of 1.6 cm and a thickness of 0.5 cm, does not allow the reconstruction of the artefact's shape and construction. Most of the piece is covered with spiralling grooves, and part of the edge of the piece is partially preserved and decorated with two rollers.

Antler artefact (fig. 2: 7) is an elongated, slightly curved object, measuring 15.4 cm in length and a maximum width of 2.3 cm. One side of it is polished, likely the exterior, while the other side remains unprocessed. One end is decorated as a sleeve with a thickness of 2 cm, and the other part of the object is flattened and has a maximum thickness of 1.4 cm. There is a small trans-

verse depression of 2 cm from the opposite end, at the centre of which there is a hole. At a distance of 2.7 cm, another hole is located, with a preserved metal rivet (?) extending 5 mm beyond the surface of the item. Another hole with a rivet is located 2 cm further, and the third — at the same interval. There is no exact answer to what this object is, but it is likely a tool, with the working part attached on the sleeve. It was found on sector "H $\Gamma$ ", unit no. 65-east.

Astragali are common finds at Classical archaeological sites, often used for games and possibly associated with magical significance. In the museum's collection, there are several specimens with inscriptions on them. The first one (fig. 2: 8) is a processed talus bone of a sheep, where the processing involved minimal trimming of two anatomical sides and a scratched inscription of six Greek letters: "HPC AIA." It was found on sector "HIC", unit no. 78. The second astragalus (fig. 2: 9) is also made of a sheep's talus bone, with slight processing on one side, and an inscription of four Greek letters: "HP $\Omega$ C." It was found on the R-25 sector area. The third astragalus (fig. 2: 10) has been processed on both sides to a flat state and is made of the talus bone of a cow. On one side, there is a scratched drawing on which the Greek letter "E" can be identified. It was found on the "HTC" sector area, premise no. 410, and is dated by the Hellenistic period, no later than the 2<sup>nd</sup> century BC (Лейпунская, Самойлова 1995).

Among the exhibits, there is a typical detail of horse equipment typical for the Scythian culture, which is a **bridle buckle** (see fig. 4: 1) from the sector "E-3", pit no. 70. This is a small object, measuring 2 cm in height, in the shape of a cube with two perpendicular holes and a round shield with a diameter of 3.6 cm. One of the holes is partially damaged, possibly from usage, as similar artefacts were used to secure the intersection of reins. Findings of such items have already been recorded in Olbia, including a late Archaic buckle-pin from the sector "E" (Капошина 1958, c. 111, табл. IV); more analogies are known from Scythian sites where they are dated to the late Scythian period (Могилов 2008, c. 71).

Clearly, the next artefact (fig. 4: 2) also belongs to this functional group, as indicated by the presence of two perpendicular holes and a relatively similar shape and size, with the height of 2.5 cm and a diameter of 3.3 cm. However, compared to the roughly made previous item, this one was crafted using a lathe, and the shield is adorned with

raised and incised concentric circles. In the centre, there is a prominent protrusion in the shape of a truncated cone with a central depression. This method of execution visually resembles the decoration of pyxides' lids. Unfortunately, being a chance find and lacking analogies, it does not allow even approximate dating.

The **bone ring** (fig. 4: 3) is a circular object with a diameter of 2.5 cm and a large hole with a diameter of 1.2 cm. One side is flattened and polished, while the other is slightly rounded and has traces of shaping on the surface that were not smoothed out. The artefact itself was also somewhat roughly made, with uneven edges and an irregular shape. Similar objects are quite common in Olbia, primarily known from inventory records and some separate publications (Наливкина 1940, с. 196; Кузьмищев 2014, с. 541). Similar artefacts have been found at other sites as well, for example, in Nikonion, dated from the late 5th to the early 4th centuries BC (Сєкерська, Шевченко 2021, с. 31). They are also known from materials in other Greek cities and sanctuaries, including the Heraion on the Perachora peninsula (Stubbings, 1940, p. 441), in Corinth, dated from the 5th to the 2nd centuries BC (Davidson, 1952, p. 296), in the Athenian Agora, dated to the 5th century BC (Thompson1960, p. 237) and to the 6<sup>th</sup>—3<sup>rd</sup> centuries BC (Rotroff 2013, p. 137). Regarding their purpose, there are several opinions. Some have suggested that they might be spindle whorls (Наливкина 1940, c. 196), buttons for clothing (Davidson 1952, p. 296), or eyelets for footwear (Thompson 1960, p. 237).

In the collection, there is also a flat **bone disc** (fig. 4: 4) with a diameter of 3 cm and a hole in the centre measuring 0.6 cm in diameter and a width of 0.3 cm. The surface is smooth and undamaged. Its functional purpose has not been determined so far.

The next artefact is a wind musical instrument that consisted of several bone tubes called **aulos**. These instruments were incredibly popular in ancient Greece, as demonstrated by numerous depictions in vase painting (Backe-Dahmen 2010, p. 60) and archaeological findings (Stubbings 1940, p. 448). They also gained popularity in Roman times (Bíró 1994, p. 60). Our item (fig. 4:5) comes from the sector T-3, premise no. 4 of the Hellenistic period (Hasapuyk 1999). It has survived partially and was assembled from several fragments. It consists of two structural elements joined together. The first is the mouthpiece, which looks like a

tube with varying diameters. The narrowest part has a diameter of 1.2 cm and gradually widens to a maximum diameter of 1.9 cm, then tapers again towards the broken end. A small hole with a diameter of 0.3 cm is located on this part. The other side of the mouthpiece also slightly widens towards the end, and it is connected to another segment — a tube with a diameter of 1.4 cm, which connected the mouthpiece to the other parts of the aulos that have not survived.

The hairpin. The simplest bone pin without any decoration, with no preserved origin, is a smooth, well-polished object that gradually tapers to a sharp end (fig. 4: 6). It is 10.7 cm in length with a maximum diameter of 5 mm. Similar pins were very popular in Roman times (Bíró 1994, p. 30).

In the Greek-Roman world, various containers for storage were quite popular, including a specific type known as **pyxides**. These are round vessels with a removable lid made of various materials. In the 1st—2nd centuries AD, small bone pyxides made of tubular bones of large domestic animals became widespread. In the museum's exhibition, this category of artefacts is represented by the pyxis body fragment (fig. 4: 7), and we were unable to find any information about its origin. Its height is 6.7 cm; it is composed of three fragments, part of which is lost. The body itself has the shape of a truncated cone, with the bottom diameter measuring 3.6 cm and the top diameter — 2.8 cm. On the outer surface, at the upper edge of its base, there is a special protrusion or step for lid fixation, and on the inner side, at the lower edge, there is a notch for base fixation. The surface of the body is polished and decorated with three small ridges at the bottom edge. Furthermore, the surface had been damaged during the time spent in the ground. Such artefacts are examples of standardised Roman production and were commonly found wherever Roman cultural influence reached. On the territory of Ukraine, bone pyxides have been found not only in Olbia and other cities of the Northern Black Sea region (Петерс 1986, c. 68-70), but also at sites of barbarian populations who eagerly imported Roman goods (Bârcă 2020).

This round lid is likely from a pyxis (fig. 4: 8). It is crafted using a lathe method from bone or antler. Currently, it is difficult to determine its because the lid itself is in poor condition: it is assembled from several fragments, part of them are lost, and its surface is damaged and dirty. The lid has a diameter of 4.5 cm, with a handle and a step

measuring 1.2 cm in thickness. The handle's height is 0.3 cm, and the step or protrusion's thickness is 0.3 cm. The step is a round projection on the back of the lid with a diameter of 3 cm, which was used to secure the lid to the pyxis. This artefact illustrates a different method of attachment from the previous type, where the step was only on the body of the pyxis. On the external side, the lid is decorated with incised circular depressions, and in the centre, there is a broken remnant of a decorative (?) handle.

Another example of standardised production were spoons, among which artefacts commonly identified in scientific literature as "cochlearia" are known from written ancient Roman sources (Marquardt 1879, c. 306). One such item is represented by a spoon (fig. 4: 9) found in situ on the sector R-25 during the excavation of the floor levels of a building of the 1st-2nd centuries AD (Крапивина, Буйських 2012, с. 39). This spoon is 12.2 cm long with a round bowl having a diameter of 2.6 cm, which is decorated on the inner side with two irregularly incised circles around a slightly recessed point in the centre. The upper edge is flattened, forming a distinct ridge. On the back of the bowl, a V-shaped projection connects the bowl to the handle. The handle is round in cross-section with pronounced edges, tapering and sharpening towards the end. Traces of shaping with a tool, such as a file, are noticeable on the surface. The condition is good, but the surface is somewhat damaged due to the time spent in the ground. This shape was quite common in Olbia (Наливкина 1940, с. 194-195).

The next exhibit, although not a finished product, is extremely interesting in the context of researching the development of bone processing in Olbia. It is essentially a production defect, specifically a bone blank that split during the turning process (fig. 4: 10). The size of the preserved fragment is  $4.6 \times 2.4$  cm, with a width of 0.7 cm. Presumably, an ancient craftsman intended to carve a round disc, perhaps to make a lid for a pyxis, for example. Discoveries like this one allow for a more confident assertion about local production, not only of the simplest handmade tools, but also of

Капошина, С. І. 1958 Пам'ятки скіфського звіриного стилю, знайдені в Ольвії. *Археологічні пам'ятки УРСР*, VII. с. 98-111.

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more complex specialised crafts. This is especially significant considering that, although a large number of products and manufacturing waste have been found on the territory of Olbia, the identification of a specialised workshop has not been successful so far. The only exception is a localised production area in the Western Temenos of Olbia, which clearly served the needs of the sanctuary (Semenova 2021).

#### Conclusion

The collection of bone and horn artefacts exhibited in the Museum of the National Historical and Archaeological Reserve "Olbia" of the NAS of Ukraine, despite its small size, serves as a significant source for studying various aspects of life among the population of Olbia during different periods of its existence. Among the exhibits are tools, accessories, musical instruments, jewellery, etc.

Analogies beyond the Northern Black Sea region indicate that despite the geographical distance, the population of Olbia had extensive connections with the Greek and later Roman worlds. This is particularly evident in the spread of mass-produced items typical for Roman craftsmanship, such as bone spoons, pyxides and pins. At the same time, it is worth noting the presence of a distinct local character in the collection, associated with interactions with non-Greek neighbours of Olbia.

Diverse in terms of both the level of craftsmanship and the techniques used, these artefacts demonstrate a range of professional skills. Some artefacts underwent minimal modification, preserving their natural morphology; for instance, pendants made of canine and talon. Some items did not require special skills, such as horn tools and handles for metal tools. The other part of the artefacts was crafted by artisans who possessed various advanced techniques. They employed more sophisticated tools in their work, such as a lathe.

Another noteworthy feature of the collection is the presence of a broken workpiece of a turned object, which was found in Olbia and may indirectly indicate the existence of a more complex specialised craft.

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## КІСТЯНІ АРТЕФАКТИ З ЕКСПОЗИЦІЇ МУЗЕЮ НАЦІОНАЛЬНОГО ІСТОРИКО-АРХЕОЛОГІЧНОГО ЗАПОВІДНИКА «ОЛЬВІЯ»

У статті представлено аналіз збірки виробів з кістки та рогу, яка до 2022 року експонувалася в музеї Національного історико-археологічного заповідника «Ольвія». Загалом в постійний експозиції налічувалось 18 артефактів виготовлених з кістки та рогу, ще 16 експонувалися в межах тимчасової виставки. Зараз обидві ці експозиції розібрані та евакуйовані в безпечне місце у зв'язку з повномасштабним військовим вторгненням Російської Федерації, що робить їх публікацію як ніколи актуальною.

Формування аналізованої збірки відбувалось, ймовірно, по завершенню Другої світової війни; найбільш ранніми в експозиції і водночає найчисельнішими в постійній експозиції є артефакти віднайдені в роки перших повоєнних сезонів (1946—1947 рр.) Постійна експозиція доповнювалась кілька разів, тому як і тимчасова виставка складається з матеріалів різних років розкопок.

Протягом багатолітніх досліджень велика кількість артефактів, пізніше переважно експозиційної цінності, передавалися в більші музеї. Спочатку це було пов'язано з відсутністю фондосховища, а згодом невеликою експозиційною площею музею. Незважаючи на це, колекція музею демонструє широкий асортимент, до якого входять основні категорії кістяних виробів, знайдених в Ольвії: веретена, накладки-інкрустації, прикраси, музичні інструменти, елементи спорядження коня тощо. Різноманітні вони також за рівнем професійності майстра і застосованими техніками. Є вироби, що майже не модифікувалися і зберігали свою природну морфологію: наприклад, підвіски з ікла та кігтя. Частина виробів не потребувала специфічних навичок, як то знаряддя з рогу та ручки для металевих знарядь, інша частина була виготовлена людьми, які майстерно володіли прийомами різьблення, використовували токарський верстат. У цьому контексті особливо важливою є заготовка точеного виробу, яка опосередковано свідчить про високий рівень майстрів, що працювали в Ольвії.

К л ю ч о в і с л о в а: Ольвія Понтійська, Національний історико-археологічний заповідник «Ольвія», обробка кістки, обробка рогу.

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#### СКЛЯНІ КУБКИ З ПОХОВАНЬ МОГИЛЬНИКА ЛІСОВІ ГРИНІВЦІ В ПІВДЕННОМУ ПОБУЖЖІ

Статтю присвячено публікації скляних посудин із поховань 7, 13 і 18 черняхівського могильника Лісові Гринівці 3а, дослідженого під час проведення рятівних робіт на будівництві автодороги Хмельницький-Шепетівка у 2010—2011 роках.

Ключові слова: Східна Європа, пізньоримський час, доба Великого переселення народів, скляний посуд, черняхівська культура.

Могильник Лісові Гринівці За у 2010 р. відкрив С. Ю. Демидко під час огляду місця проведення несанкціонованих земляних робіт нівелювання території під будівництво. Непорушеною від нього залишилась лише смуга 150 × 4—7 м у центральній частині ділянки, витягнута з північного сходу на південний захід. У бортах останця в північно-східній частині під час обстеження виявлено плями заповнень поруйнованих могил. Пам'ятка розташована приблизно за 1,4 км на південний схід від с. Лісові Гринівці та за 1,0 км на північний схід від межі м. Хмельницький із західного боку автодороги Хмельницький-Шепетівка (рис. 1). Поряд із могильником розташовані поселення Лісові Гринівці 3, 4 (рис. 1: В), відкриті С. Ю. Демидком у 1980-х роках (Демидко 2019, с. 212).

На збереженій частині могильника у 2010 та 2011 роках проведено рятівні розкопки. Вдалося дослідити 21 поховання (Строцень, Демидко 2010; Строцень Б., Демидко, Строцень М.

2011). У трьох із них (7, 13 і 18) виявлено скляні кубки.

#### Контекст знахідок та його датування

Поховання 7 (рис. 2), зорієнтоване по осі південний захід — північний схід, ритуально порушене в давнину. Контури могили виявлено в материку на глибині 0,8 м. Довгі сторони ями майже паралельні, північно-східна — заокруглена, а південно-західна зруйнована земляними роботами, стінки майже вертикальні. Довжина збереженої частини — 1,1 м, ширина — 0,7 м, глибина — 1,3 м від сучасної поверхні (рис. 2: А, В). На дні, біля північно-східного краю ями виявлено одноручний кружальний лискований глечик (каталог, № 3; рис. 2: 3), а за 0,5 м на захід — циліндричний скляний кубок (каталог, № 1; рис. 2: 2), ще західніше — невелику бронзову пряжку (каталог, № 2; рис. 2: 1). Від кістяка, скоріше за все жінки віком 20—35 років (Рудич 2014, с. 80), збереглися два фрагменти черепа в заповненні та ключиця дитини на дні в центральній частині ями.

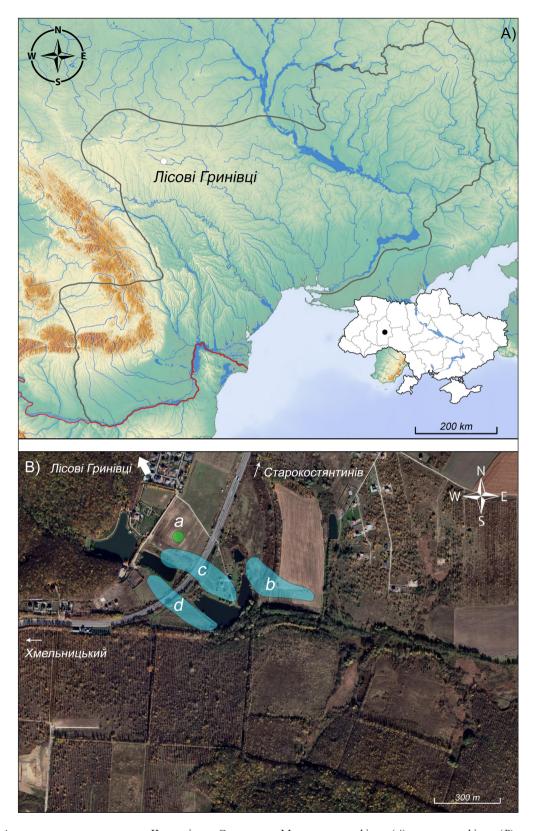
Маленькі (довжиною / діаметром до 2 см) круглі пряжки, подібні на знайдену в похованні 7 Лісових Гринівців, Є Л. Гороховський виокремлює у серію 3 (Гороховский 1988, с. 42). За спостереженнями дослідника, такі вироби існують протягом «Журавської» фази хронології черняхівських могильників лісостепової України, яку він пов'язує із останньою чвертю IV — першою третиною V ст. (Гороховский 1988, с. 45). Висновки €. Л. Гороховського підтверджують дослідження інших авторів (Petrauskas 2003, S. 278, Тур 8; Любичев 2019, с. 97, 99, ХИ 25)

Поховання 13 (рис. 3) західної орієнтації з невеликим відхиленням на північ. Яма дещо звужена до сходу і розширена до заходу, заповнення по всій площі однакове — чорнозем перемішаний із материковою глиною та сірим передматериковим грунтом. Розміри: довжина — 2,3 м, ширина (по західному краю) — 1,3 м, по східному — 0,9 м, пляму зафіксовано на

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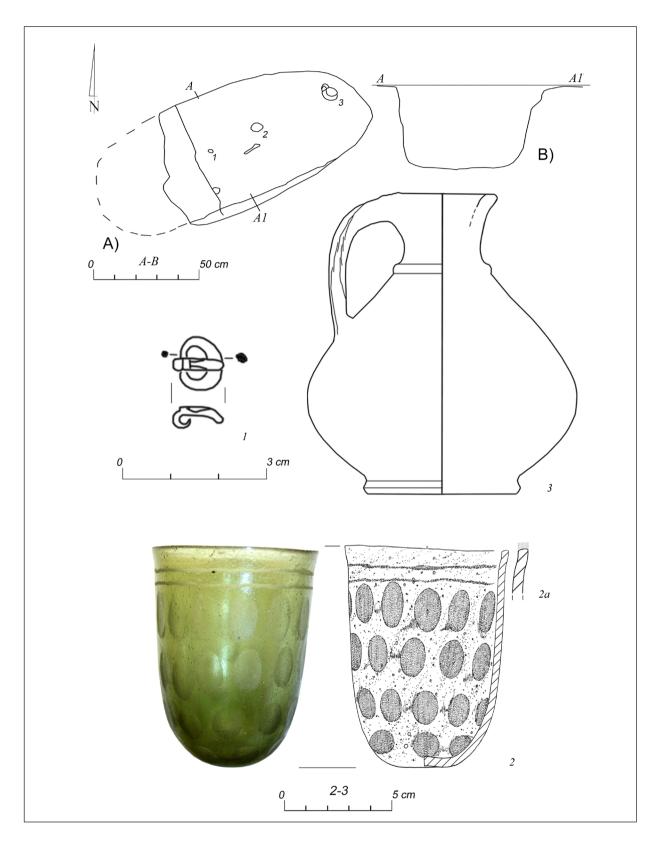
СТРОЦЕНЬ Богдан Степанович — кандидат історичних наук, науковий співробітник відділу археології Державного підприємства Науково-дослідний центр «Охоронна археологічна служба України», Інститут археології НАН України; викладач кафедри історії України, археології та спеціальних галузей історичних наук, Тернопільський національний педагогічний університет ім. В. Гнатюка, ORCID 0000-0002-3802-4652, cherleniv@gmail.com

ЩЕПАЧЕНКО Владислав Ігорович — аспірант історичного факультету, Харківський національний університет імені В. Н. Каразіна, ORCID: 0000-0001-9137-235X, kartergovard@gmail.com



 $Puc.\ 1.$  Ареал поширення культури Черняхів — Синтана-де-Муреш, географічне (A) та топографічне (B) положення могильника Лісові Гринівці: a — могильник Лісові Гринівці 3; b — поселення Лісові Гринівці 2; c — поселення Лісові Гринівці 3; d — поселення Лісові Гринівці 4. Чорною смугою позначений ареал культури Черняхів — Синтана-де-Муреш, червоною — римський лімес

Fig. 1. The distribution area of the Cherniakhiv — Sântana de Mureş culture, geographical (A) and topographical (B) positions of the Lisovi Hrynivtsi burial ground: a — Lisovi Hrynivtsi 3a burial ground; b — Lisovi Hrynivtsi 2 settlement; c — Lisovi Hrynivtsi 3 settlement; d — Lisovi Hrynivtsi 4 settlement. The black stripe marks the Cherniakhiv — Sântana de Mureş area, the red one — the Roman Limes



*Puc. 2.* Поховання 7 могильника Лісові Гринівці та супровідний інвентар: *1* — бронза; *2* — скло; *3* — кераміка *Fig. 2.* Burial no. 7 of the Lisovi Hrynivtsi burial ground and accompanying funeral material: *1* — bronze; *2* — glass; *3* — ceramics

глибині 0,85 м, дно — 1,55—1,57 м. Стінки ями звужуються донизу, і на рівні 1,15—1,25 м від сучасної поверхні зафіксовано заплічики (рис. 3: A, B).

Похована жінка віком 20—25 років (Рудич 2014, с. 81) лежала випростано на спині, руки витягнуті вздовж тулуба, а кисті рук — на суглобах стегнових кісток. Біля лівого колінного суглоба, з внутрішньої сторони знайдено кістяний футляр для голок (каталог, № 8; рис. 3: 5), на куприку — срібну пряжку (каталог, № 7; рис. 3: 4), на правій лопатці, біля хребта — срібну двопластинчасту фібулу (каталог, № 5; рис. 3: 2). Ще одну таку фібулу зафіксовано в кротовині під шийними хребцями (каталог, № 6; рис. 3: 3). Позаду черепа, з його правої сторони виявлено циліндричний скляний кубок (каталог, № 4; рис. 3: 1).

За формою рамки та язичка пряжка із поховання 13 нагадує вироби серій В або Д за €. Л. Гороховським (Гороховский 1988б с. 42). Час існування таких артефактів у черняхівській<sup>1</sup> культурі дослідник обмежує другою третиною IV — першою третиною V ст. (Косанівська, Маслівська та Журавська фази; Гороховский 1988, с. 44-45), однак період найбільшої їх популярності, очевидно, припадає на другу половину IV ст. (Petrauskas 2003, S. 278, Typ 7; Любичев 2019, с. 96-97, 99, ХИ 22-23). Цю думку підтверджують і спостереження І. О. Гавритуxіна, який зауважує, що така морфологічна ознака пряжок, як розташування гачка, що з'єднує язичок із рамкою «нижче, або навіть трохи попереду тильного зрізу язичка», може вказувати на їхню пізнішу хронологічну позицію, у межах фіналу черняхівської культури (Гавритухин 2007, с. 22). Двопластинчасті фібули, подібні до знайденої серед супровідного інвентаря в похованні, А. Коковський відносить до варіанту 1 групи А, а їх існування пов'язує із ступенем С, або другоютретьою чвертю IV ст. (Kokowski 1996, s. 155, 158). Схожі застібки І. О. Гавритухін виокремив у варіацію «Odobesku / Одобеску» та визначив їх датування ступенем С, (Gavritukhin 2002, р. 118-119). Ідентичної думки щодо датування фібул із поховання 13 Лісових Гринівців дотримується О. В. Петраускас (Петраускас 2016, с. 97).

Поховання 18 (рис. 4). Контури могильної ями  $(2,2 \times 1,4 \text{ м})$ , зорієнтованої по лінії північний захід — південний схід, простежено на глибині

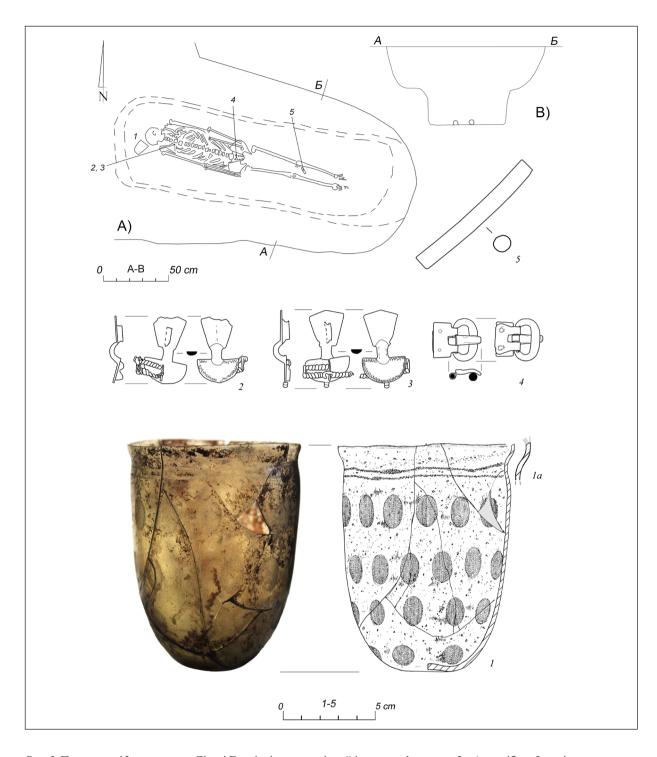
0,76—0,85 м. Яма із заплічиками звужується донизу, глибина — 1,58—1,60 м. Поховання порушене в давнину, значна частина кісток відсутня (рис. 4: А, В). Роздушений череп виявлено в західній частині ями, а під ним — конічний скляний кубок (каталог, № 9; рис. 4: 1), також роздушений. На схід від черепа лежала частина ребер, фрагменти верхніх кінцівок, а між ребрами — велика бурштинова намистина (каталог, № 12; рис. 4: 2) та срібна ромбоподібна підвіска (каталог, № 13; рис. 4: 3). У середній частині ями виявлено фрагменти тазових кісток та дві срібні пряжки (каталог, № 10—11; рис. 4: 4, 5). У східній частині могили — фрагмент гомілки правої ноги й ліпний темно-сірий лискований глечик (каталог, № 14; рис. 4: 6). Скелет належить дитині віком 1,0—1,5 року (Рудич 2014, с. 81).

Маленькі овальні пряжки з поховання 18 Лісових Гринівців подібні до виробів, виокремлених Є. Л. Гороховським у серію Ж (Гороховский 1988, с. 42). Датування таких деталей поясної гарнітури зазвичай пов'язують із фіналом черняхівської культури, тобто останньою чвертю IV — першою третиною V ст. (Гороховский 1988, с. 45; Любичев 2019, с. 97, 99, ХИ 25; Петраускас 2021, с. 21)

#### Скляні кубки

Посудини з поховань 7 та 13 Лісових Гринівців (каталог, № 1, 4; рис. 2: 2, 3: 1) являють собою циліндричні кубки, виготовлені шляхом видування із зеленого прозорого скла з численними включеннями бульбашок різних розмірів, ЩО утворюють повітря скупчення, витягнуті по вертикалі або спіралі за годинниковою стрілкою. Вінця виробів вигнуті, їх край відбитий від склодувної трубки і згодом шліфований. Як наслідок, у першому випадку він має округлену (рис. 2: 2а), а в другому сильно скошену всередину горизонтальну площину (рис. 3: 1а). Дно кругле, дещо увігнуте по центру. Поверхня посудин оздоблена чотирма горизонтальними рядами вертикальних овальних заглиблених шліфованих неполірованих фасеток. Над ними на переході від корпусу до вінець розташовані дві горизонтальні нерівні вузькі (шириною 0,10— 0,25 см) шліфовані смуги. Декор виконаний неохайно. Смуги нерівні й уривчасті, а за межами фасеток спостерігаються численні паралельні подряпини, що, ймовірно, залишилися внаслідок необережного використання абразивного

<sup>&</sup>lt;sup>1</sup> Тут ідеться про культуру Черняхів — Синтана-де-Муреш у межах усього її ареалу.



*Puc. 3.* Поховання 13 могильника Лісові Гринівці та супровідний інвентар: *1* — скло; *2*—*4* — срібло; *5* — кістка *Fig. 3.* Burial no. 13 of the Lisovi Hrynivtsi burial ground and accompanying funeral material: *1* — glass; *2*—*4* — silver; *5* — bone

інструменту. Реконструкція його можливого діаметра в обох посудин демонструє майже ідентичні показники — близько 7—8 см.

Кубки із поховань 7 та 13 Лісових Гринівців належать до типу Eggers 230 або Ковалк / Kowalk, за визначенням Г. Рау (Rau 1972), чи типу І, за класифікацією Е. Штрауме (Straume 1987). Детальніший їх поділ свого часу запро-

понувала Е. Штрауме (Straume 1987, S. 28-29). Зважаючи на товщину стінок посудин та якість або спосіб виконання декору, норвезька дослідниця виокремила дві серії кубків цього типу. Перша (серія А) поєднує посудини з товщиною стінок 0,2—0,4 см та майже незаглибленим неполірованим та неохайно виконаним декором, а друга (серія В) — вироби з товщиною стінок

0,3—0,6 см, оздоблені рівними заглибленими шліфованими смугами та рядами заглиблених шліфованих полірованих фасеток. Ще одну схему класифікації таких посудин нещодавно запропонував О. В. Петраускас (Петраускас 2016). Дослідник помітив, що кубки цього типу мають певну тенденцію до поділу залежно від своїх метричних характеристик. До того ж виявилося, що засвідчена ним диференціація певною мірою збігається із запропонованою раніше Е. Штрауме. Так, великі посудини групи І типологічної схеми О. В. Петраускаса, із висотою — 13 см і діаметром вінець — 9 см, переважно мають морфологічні риси серії А, а кубки менших розмірів (група II), із висотою — 10,5 см і діаметром вінець — 7 см, найчастіше поєднують ознаки, характерні для серії В за класифікацією норвезької дослідниці (Петраускає 2016, с. 96).

За своїми розмірами (висота — 12,6 см, діаметр вінець — 10,5 см) і способом виконання декору посудина з поховання 13 Лісових Гринівців нагадує вироби групи І відповідно до класифікації кубків типу Eggers 230, запропонованої О. В. Петраускасом або серії А за поділом Е. Штрауме. Особливий інтерес становить посудина з поховання 7, яка, ймовірно, є перехідною формою між двома групами / серіями кубків типу Eggers 230. Її пропорції (висота — 10,2, діаметр вінець — 7,6 см) відповідають метричним характеристикам виробів групи ІІ, тоді як композиція декору й спосіб його нанесення нагадують кубки серії А.

Скляні посудини типу Eggers 230 набули значного поширення в різних регіонах європейського Барбарикуму (рис. 5: А), у тому числі і в черняхівській культурі. Період їх найбільшого поширення тут, як вважають, припадає на другу-третю чверть IV ст. (Гороховский 1988, c. 44; Tejral 1992, S. 235, Abb. 5; Gavritukhin 2011, р. 43, 45; Петраускас 2016, с. 91, 97-98). Хоча деякі вироби трапляються і в закритих комплексах кінця IV — початку V ст. За спостереженнями О. В. Петраускаса, кубки його групи II мають пізнішу хронологічну позицію і з'являються в черняхівській культурі не раніше середини IV ст. (Петраускас 2016, с. 97-98). Однак жодних підстав припускати можливість існування тут кубків типу Eggers 230 раніше другої чверті IV ст., на думку дослідників, наразі немає (Gavritukhin 2011, p. 43, 45; Петраускас 2016, c. 91, 97-98).

Свого часу ідея римського походження кубків типу Eggers 230 домінувала в науковому

середовищі. Місцем їх виготовлення вва-жали як південно-східні регіони імперії — Причорномор'я (Eggers 1951, S. 62) або Східне Середземномор'я (Ekholm 1956, 1963, 1965), так і північно-західні провінції (Fremersdorf 1967). Про можливість виготовлення таких кубків у Барбарикумі вперше заговорили лише в 70ті рр. минулого століття (Rau 1972, S. 170; 1974). Поява такого припущення пов'язана головно з характером поширення цих посудин, знахідки яких, за винятком поодиноких екземплярів, невідомі на території Римської імперії (Näsman 1984, S. 144; Straume 1987, S. 61; Lund Hansen 1987, S. 157-161; Росохацкий 1987, с. 145; Gomolka-Fuchs 1999, S. 137). Сьогодні це припущення, мабуть, стало найпопулярнішим (Gavritukhin 2011, p. 42), хоч існують й інші думки (Stawiarska 2014, р. 95). Деякі дослідники вважають південно-східні регіони Європи, а саме ареал черняхівської культури, місцем локалізації центрів виробництва таких посудин (Näsman 1984, S. 144; Lund Hansen 1987, S. 157-161; Gomolka-Fuchs 1999, S. 137; Stjernquist 2004, р. 121), не виключаючи при цьому майстерню в Комарові (Rau 1972, S. 170; 1975; Straume 1987, S. 61, Петраускас 2016, c. 92). Однак, навіть попри значний обсяг виявлених тут уламків посуду, оздобленого шліфованими фасетками, однозначно стверджувати про можливість виготовлення в Комарові кубків типу Едgers 230 поки що складно (Румянцева 2014, c. 413; Rumiantseva, Belikov 2017, p. 262).

скляну посудину серед супровідного інвентаря в похованні 18 могильника Лісові Гринівці (каталог, № 9; рис. 4: 1). Це конічний кубок, видутий із безбарвної, прозорої скляної маси із зелено-блакитним відтінком та поодинокими включеннями бульбашок повітря. Вінця посудини вигнуті, край вінець відбитий від склодувної трубки і шліфований та, як наслідок, має дещо скошену всередину округлену горизонтальну площину (рис. 4: 1а). Дно кругле, потовщене, має незначну сплощену площадку. Декоративну композицію створюють вісім горизонтальних рівних заглиблених шліфованих смуг: чотири — шириною 0,15—0,20 см і чотири — завширшки 0,4 см. Під краєм вінець із зовнішнього боку стінок посудини нанесено горизонтальну рівну широку (шириною 0,4 см) незаглиблену шліфовану смугу (рис. 4: 1а). Така сама технологічна деталь простежується і з внутрішнього боку стінок виробу.

За своїми метричними та морфологічним ознаками посудина з поховання 18 Лісових Гринівців нагадує кубки типу Синтана-де-Муреш<sup>2</sup> в інтерпретації М. Б. Щукіна та Т. А. Щербакової (Щукин, Щербакова 1986, с. 193-194). Знахідки таких виробів у Барбарикумі поки що відомі тільки в ареалі черняхівської культури. Дещо більша їх концентрація тут спостерігається на південний захід від Дністра. (рис. 5: В). Період їх побутування здебільшого пов'язують із фінальним етапом існування черняхівської культури, що її визначають кінцем IV — першою половиною V ст. (Rau 1975, S. 481; Tejral 1997, S. 331-334; Gavritukhin 2017, р. 95, 101; Петраускас 2021, с. 21)<sup>3</sup>. Хоч окремі знахідки таких кубків виявлено і в більш ранньому контексті, як наприклад, посудина з поховання 1(4) Hariphe 2 (Gudkova, Schultze 2017, S. 189-190, Taf. 2: 6), що її за супровідними знахідками О. О. Васильєв датував третьою чвертю IV ст. (Vasilev 2017, S. 130, Tab. 14: 1). Варто зазначити, що кубок із Нагірного 2 за своєю декоративною композицією нагадує посудину з Лісових Гринівців. Ще один виріб, який має схожу орнаментальну схему, походить із поховання 61 могильника Біленьке (Gavritukhin 2017, fig. 9: 9). Дату цього комплексу за комбінацією знайдених тут хроноіндикаторів І. О. Гавритухін визначає в межах кінця IV — першої половини V ст. (Gavritukhin 2017, p. 95, 101).

Такі посудини добре відомі на території імперії як кубки типів AR 69 (Rütti 1991), Trier 54 (Goethert-Polaschek 1977) або 47f за Л. Баркочі (Barkóczi 1988), на що неодноразово звертали свою увагу дослідники черняхівських старожитностей, припускаючи римське походження кубків типу Синтана-де-Муреш (Сымонович 1952, с. 68; 1977, с. 183; Kasanski, Legoux 1988, р. 28; Gomol-

ка-Fuchs 1999, S. 135, 137; Stawiarska 2014, р. 65, 97). Знахідки таких виробів траплялися в різних регіонах імперії переважно в останній чверті IV — на початку V ст. (Barkóczi 1988, S. 85; Lazar 2003, р. 198). У північно-західних провінціях вони, ймовірно, з'явились дещо раніше, вже у другій половині IV ст. (Fünfschilling 2015, S. 348). Деякі дослідники розглядають майстерні нижньодунайського чи балканського регіонів імперії як імовірне місце виробництва цих кубків, у тому числі й артефактів, що побутували в черняхівському середовищі (Stawiarska 2014, р. 65, 97; Barkóczi 1988, S. 85).

Утім, сьогодні існують й інші припущення ïx походження. наприклад, ЩОДО Так, І. О. Гавритухін указав на деякі морфологічні відмінності провінційно-римських і черняхівських знахідок та припустив, що останні могли бути виготовлені в «иентрах, де римські ремісники виробляли скляний посуд спеціально для експорту в ареал черняхівської культури». Місце локалізації таких центрів поки що невідоме (Gavritukhin 2017, p. 95, 101). Уламки такого посуду, виявленого в Комарові, О. В. Петраускас відносить до групи виробів «черняхівського типу», які, на думку дослідника, могли виготовлятися в місцевій майстерні (Петраускас 2014, с. 179-180). Як вважає О. С. Рум'янцева, високі форми конічних кубків (висота — 15— 20 см та діаметр вінець -8,0-12,5 см)<sup>4</sup>, ймовірно, могли бути серед комарівської продукції (Румянцева 2020, с. 175-177). Знахідки уламків подібних виробів відомі серед опублікованих матеріалів дослідження Комарівської майстерні (Смішко 1964, табл. III: 4; Румянцева 2014, с. 425-426, рис. 8: 106-107; Petrauskas, Avramenko 2019, fig. 7: 1). З огляду на представлені аргументи, місцеве походження цих посудин видається нам цілком імовірним, хоч і виключати можливість імпорту таких виробів із території Римської імперії наразі неможливо.

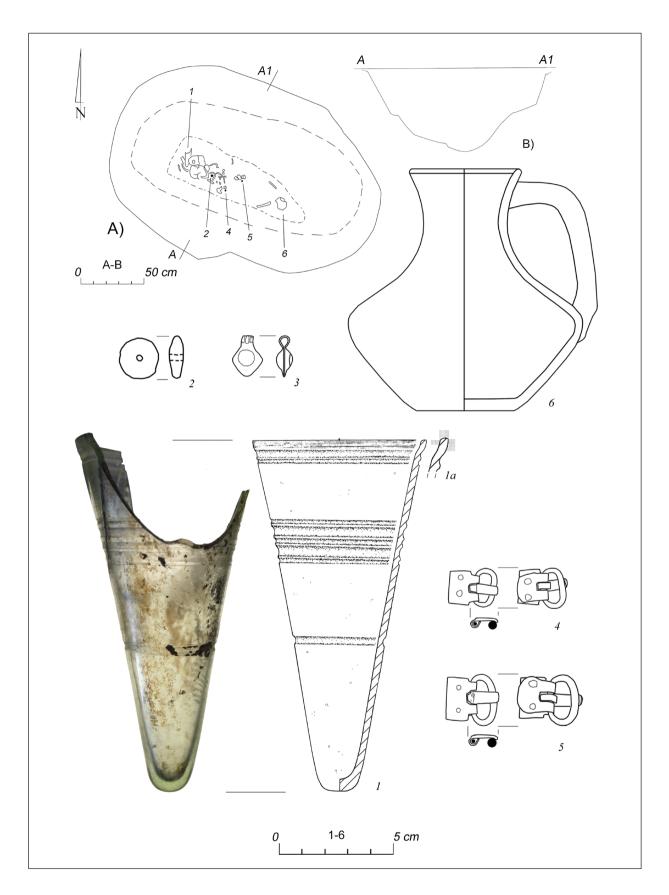
#### Висновки

Кубки з Лісових Гринівців є цінним поповненням джерельної бази скляних посудин у черняхівській культурі. Артефакти виявлено в закритих комплексах, що дає змогу верифікувати сучасні уявлення про хронологію існування окремих типів черняхівського скляного посуду, насамперед кубків, відомих

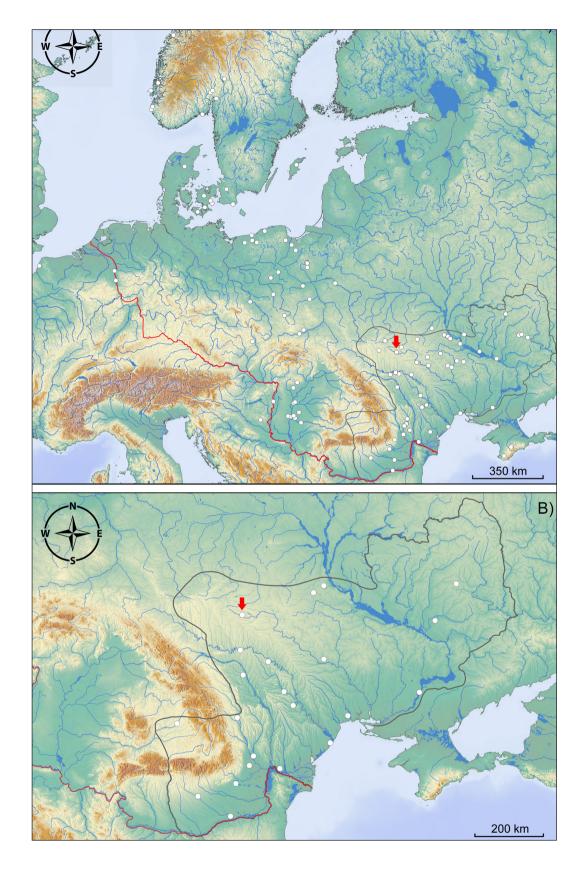
<sup>&</sup>lt;sup>2</sup> Також відомі як кубки групи Гаврилівка 35 / Синтанаде-Муреш за Г. Рау (Rau 1972, Fig. 52; Rau 1975, S. 481-482), посудини групи VIII за класифікацією Е. О. Симоновича (Сымонович 1977, с. 182-183), конічні кубки, прикрашені горизонтальними канелюрами, в термінології М. Казанського та Р. Легу (Каzanski, Legoux 1988, p. 28), або кубки серії Синтана-де-Муреш та кубки з округлим або гострим дном, декоровані горизонтальними врізними смугами, за визначенням І. О. Гавритухіна (Gavritukhin 2017, p. 95, 101).

<sup>&</sup>lt;sup>3</sup> Деякі дослідники також пропонують більш ранню дату існування (третя чверть IV ст.) таких кубків (Kazanski, Legoux 1988, р. 28; Гей, Бажан 1997, с. 154), що, однак, не зовсім узгоджується із сучасними уявленнями про датування закритих комплексів, які містять такі знахідки (див. вище).

<sup>4</sup> А серед них і посудини типу Синтана-де-Муреш.



*Puc. 4.* Поховання 18 могильника Лісові Гринівці та супровідний інвентар: *1* — скло; *2* — бурштин; *3*—5 — срібло *Fig. 4.* Burial no. 18 of the Lisovi Hrynivtsi burial ground and accompanying funeral material: *1* — glass; *2* — amber; *3*—5 — silver



*Рис. 5.* Ареали поширення кубків типів Eggers 230 (A) та Синтана де Муреш (B): A) – за: Quast 2021 із власними доповненнями. Чорною смугою позначений ареал культури Черняхів – Синтана-де-Муреш, червоною – римський лімес, червона стрілка маркує могильник Лісові Гринівці

Fig. 5. Distribution areas of the Eggers 230 (A) and Sântana de Mureş (B) beakers: A) – after: Quast 2021 with author's additions. The black stripe indicate the Cherniakhiv – Sântana de Mureş area, the red stripe – the Roman Limes, red arrow marks the Lisovi Hrynivtsi burial ground

під визначенням Eggers 230 та Синтана-де-Муреш. За комбінацією хроноіндикаторів набір речей із поховання 13 можна датувати третьою чвертю IV ст., а комплекси знахідок із поховань 7 та 18 — останньою чвертю IV — першою третиною V ст.

Уci посудини походять з інгумацій, зорієнтованих головою на захід. У могильній ямі кубки розміщувалися переважно поряд із черепом похованого. Водночас посудини досить добре збереглися, що дозволяє проаналізувати деякі технологічні аспекти процесу виготовлення й декорування таких виробів. Так, наприклад, артефакти з поховань 7 та 13 Лісових Гринівців засвідчують використання абразивних діаметра ідентичного інструментів для оздоблення виробів одного типу (Eggers 230)<sup>5</sup>.

На особливу увагу артефакти заслуговують з огляду на сучасні типологічні схеми класифікації скляного посуду, виявленого в Барбарикумі. Кубок із поховання 7 Лісових Гринівців є цікавим прикладом еволюції посудин типу Eggers 230, що демонструє поступовий розвиток технологічних рішень склоробів і стилістичних вподобань варварського населення.

Відмінності в географії поширення скляних кубків, виявлених у Лісових Гринівцях, на нашу думку, можуть указувати на різне походження цих типів посуду. Виходячи із цього припущення, можна висунути гіпотезу про існування щонайменше двох векторів постачання скляних посудин до місцевої спільноти носіїв черняхівської культури, один із яких, найімовірніше, не пов'язаний із Римською імперією.

Каталог 1. Каталог знахідок із поховань могильника Лісові Гринівці Appendix 1. Catalogue of finds from the burials of the Lisovi Hrynivtsi burial ground

#### Поховання 7 (рис. 2)

1. Скляна посудина (рис. 2: 2) — циліндричний кубок, цілий, поверхня рівна, гладка, блискуча. Скляна маса містить численні включення бульбашок, що іноді утворюють скупчення, витягнуті вертикально. Аномально велика бульбашка спостерігається на дні виробу. Колір зелений, прозорий. Вінця вигнуті. Край відбитий від склодувної трубки, нерівний, згодом шліфований та має скошену всередину дещо округлену горизонтальну площину. Дно округле, дещо увігнуте по центру, потовщене. Декор – дві горизонтальні нерівні незаглиблені шліфовані смуги шириною 0,1-0,25 см оперізують посудину під вінцями, чотири горизонтальні ряди вертикальних овальних заглиблених шліфованих неполірованих фасеток (перший ряд — 14, другий — 13, третій — 11, четвертий — 8) вкривають корпус посудини, параметри: висота — 10,0-10,2 см, діаметр вінець — 7,65 cм, товщина (вінця / дно)— 0,35–0,5 cм. Тип: Eggers 230 (Eggers 1951), Kowalk (Rau 1972), Straume I (Straume 1987).

2. Бронзова пряжка (рис. 2: 1) — ціла, рамка кругла, у перетині — овал, передня частина дещо потовщена. Язичок прямий, прямокутний у плані із округлим кінцем, фацетований, у перетині — сегмент, трапеція. Кінець язичка майже не заведений за рамку, кріпиться до рамки за допомогою гачка, гачок розміщений нижче тильного зрізу язичка. Параметри: розмір рамки —  $1,2 \times 0,9$  см, товщина рамки — 0,15-0,35 см, довжина язичка — 1,1 см, ширина язичка — 0,3 см. Тип: серія Е варіант 2 різновид а (Гороховский 1988).

3. Керамічний одноручний глек (рис. 2: 3) — цілий, кружальний. Поверхня лискована. Колір чорний. Вінця вигнуті назовні. Дно має плитчастий піддон. Декор — на плечі розміщується горизонтальний наліпний валик, що оперізує корпус виробу, параметри: висота — 14 см, діаметр вінець — 5 см, максимальний діаметр —12,5 см, діаметр дна — 7,4 см, товщина — 0,7 см.

#### Поховання 13 (рис. 3)

4. Скляна посудина (рис. 3: 1) — циліндричний кубок, цілий. Поверхня рівна, гладка, блискуча, вкрита коричневою патиною іризації. Скляна маса містить численні включення бульбашок повітря різних розмірів, що іноді утворюють скупчення, витягнуті по спіралі, за годинниковою стрілкою. Колір жовто-зелений, прозорий. Вінця вигнуті. Край відбитий від склодувної трубки, нерівний, згодом шліфований та має скошену всередину горизонтальну площину. Дно округле,

<sup>&</sup>lt;sup>5</sup> На відміну від спостережень у Війтенках, де зафіксовано декілька випадків викостання абразивних інструментів різного діаметра для оздоблення кубків типу Eggers 230 (Щепаченко 2022, с. 137).

дещо увігнуте по центру. Декор — дві горизонтальні нерівні незаглиблені шліфовані смуги шириною 0,15—0,20 см оперізують посудину під вінцями, чотири горизонтальні ряди вертикальних овальних заглиблених шліфованих неполірованих фасеток (перший ряд — 14, другий — 13, третій — 11, четвертий — 7) вкривають корпус посудини. Параметри: висота — 12,6 см, діаметр вінець — 9,5 см, товщина — 0,15—0,40 см. Тип: Eggers 230 (Eggers 1951), Kowalk (Rau 1972), Straume I (Straume 1987).

- 5. Срібна фібула (рис. 3: 2) двочленна двопластинчаста. Ціла, відсутня частина пружинного апарату, верхня пластина надломлена. Корпус литий. Спинка дугоподібна, перетин спинки сегмент. Пружинний апарат подвійний, на одному з кінців верхньої пружини спостерігається кнопка-фіксатор. Форма нижньої пластини півколо, по периметру оздоблена врізним хвилястим візерунком, форма верхньої ромб, приймач відтягнутий від середини, параметри: довжина 3,7 см, розміри нижньої пластини 1,3 × 2,3 см, розміри верхньої пластини 1,8 × 1,8 см, ширина спинки 0,6 см. Тип: варіант 1 групи A (Kokowski 1996), варіація Одобеску підгрупи I (Gavritukhin, 2002)
- 6. Срібна фібула (рис. 3: 3) двочленна двохпластинчаста. Ціла, відсутня частина пружинного апарату. Корпус литий, спинка дугоподібна, перетин спинки — сегмент. Пружинний апарат — подвійний, нижня пружина основна, тятива — одинарна, нижня, форма нижньої пластини- півколо. По периметру оздоблена врізним хвилястим візерунком, на її нижньому краї розміщується декоративна кнопка. Форма верхньої — ромб, приймач — відтягнутий від середини, параметри: довжина — 4,3 см, розміри нижньої пластини — 1,3 × 2,4 см, розміри верхньої пластини –  $2,0 \times 1,9$  см, ширина спинки — 0,6 см. Тип: варіант 1 групи А (Kokowski 1996), варіація Одобеску підгрупи I (Gavritukhin, 2002)
- 7. Срібна пряжка (рис. 3: 4) ціла, рамка овальна, у перетині — коло, передня частина потовщена, виразний перехід до місця кріплення обойми. Язичок прямий, трапецієподібний у плані з округлим кінцем, фацетований, має прямокутний майданчик в основі, у перетині — прямокутник, трапеція. Кінець язичка дещо заведений за рамку, кріпиться до рамки за допомогою гачка, гачок розміщений нижче тильного зрізу язичка. Обойма прямокутна, виготовлена з пластини зігнутої вдвоє, має дві заклепки, па-

раметри: розмір рамки —  $2.5 \times 1.4$  см, товщина рамки — 0.20-0.45 см, довжина язичка — 1.4 см, ширина язичка — 0.4-0.5 см, розміри обойми —  $2.0 \times 1.4$  см. Тип: серія В або Д варіант 1 різновид а (Гороховский 1988).

8. Кістяний футляр для голок (рис. 3: 5) — цілий, циліндричний, у перетині — кільце. Параметри: довжина — 8 см, діаметр — 1 см, товщина — 0.03 см.

#### Поховання 18 (рис. 4)

- 9. Скляна посудина (рис. 4: 1) конічний кубок, археологічно цілий, фрагментований. Поверхня рівна, гладка, блискуча, внутрішня місцями вкрита молочно-білою та коричневою патиною іризації. Скляна маса містить включення поодиноких дрібних бульбашок повітря. Колір безбарвний із зелено-блакитнуватим відтінком, прозорий. Вінця вигнуті, край відбитий від склодувної трубки, згодом шліфований та має округлену горизонтальну площину. Із зовнішньої сторони стінок під краєм вінець спостерігається горизонтальна рівна незаглиблена шліфована смуга, шириною 0,4 см, ідентична смуга, шириною 0,2-0,3 см, розміщується з внутрішньої сторони стінок. Дно округле, потовщене, має сплощену площадку діаметром 0,8 см. Декор — вісім горизонтальних рівних заглиблених шліфованих смуг, шириною 0,15-0,20 та 0,4 см (перша — 0,4 см, друга — 0,2 см, третя — 0,2 см, четверта — 0,4 см, п'ята — 0,2 см, шоста — 0,4 см, сьома — 0,15 см, восьма — 0,4 см) оперізують виріб під вінцями (дві), у верхній (п'ять) та придонній (одна) частині. Параметри: висота — 15 cм, діаметр вінець — 7,5 см, товщина — 0,3-0,5 см. Тип: Синтана-де-Муреш (Щукин, Щербакова 1986), Гаврилівка 35 (Rau 1972), група VIII (Сымонович 1977).
- 10. Срібна пряжка (рис. 4: 4) ціла, рамка овальна, у перетині коло. Язичок прямий, прямокутний у плані, у перетині сегмент. Кінець язичка майже не заведений за рамку, кріпиться до рамки за допомогою гачка. Гачок розміщений нижче тильного зрізу язичка. Обойма прямокутна, виготовлена з пластини зігнутої вдвоє, має дві заклепки. Параметри: розмір рамки  $1.8 \times 1.0$  см, товщина рамки 0.20-0.37 см, довжина язичка 0.9 см, ширина язичка 0.4 см, розміри обойми  $1.4 \times 1.4$  см. Тип: серія Ж варіант 2 різновид а (Гороховский 1988).
- 11. Срібна пряжка (рис. 4: 5) ціла, рамка овальна, у перетині коло. Язичок прямий, пря-

мокутний у плані, у перетині — сегмент. Кінець язичка майже не заведений за рамку, кріпиться до рамки за допомогою гачка, гачок розміщений нижче тильного зрізу язичка. Обойма прямокутна, виготовлена з пластини зігнутої вдвоє, має дві заклепки. Параметри: розмір рамки —  $2.3 \times 1.1$  см, товщина рамки — 0.15-0.40 см, довжина язичка — 1.2 см, ширина язичка — 0.5 см, розміри обойми —  $2.0 \times 1.5$  см. Тип: серія Ж варіант 2 різновид а (Гороховский 1988).

12. Бурштинова намистина (рис. 4: 2) — ціла, кругла у плані, дископодібна, у перетині — овал, параметри: діаметр — 1,7 см, діаметр

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13. Срібна підвіска (рис. 4: 3) — ціла, закрита ємність із вушком, ромбоподібна у плані, в перетині — овал, параметри: висота — 1,9 см, ширина — 1,4 см, товщина — 0,7 см.

14. Керамічний одноручний глек (рис. 4: 6) — цілий, ліпний. Поверхня лискована, колір темно-сірий, вінця вигнуті назовні, дно сплощене. Параметри: висота — 10,7 см, діаметр вінець — 5 см, максимальний діаметр — 10,3 см, діаметр дна — 4,3 см, товщина — 0,4—0,6 см.

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### GLASS BEAKERS FROM THE BURIALS OF THE LISOVI HRYNIVTSI BURIAL GROUND IN THE SOUTH OF THE BUH RIVER BASIN

In the article, the publication of glass vessels from the burials of the Cherniakhiv burial ground Lisovi Hrynivtsi 3a is presented. The site was discovered by Serhii Demydko in 2010 during the construction of the Khmelnytskyi-Shepetivka road. Rescue excavations

of the preserved part of the burial site in 2010–2011 revealed 21 burials, three of which (burials nos. 7, 13 and 18) contained glass beakers among the accompanying funeral material.

Two of the vessels can be attributed to the Eggers type 230, which widely circulated in different regions of the European Barbaricum mainly in the second and third quarters of the 4th century. Another one belongs to the Sântana de Mureş type. Similar artefacts are also recognised in the Roman provinces as beakers of the AR 69, Trier 54, or 47f types according to L. Barkoczi. The finds of such vessels outside the Limes are concentrated exclusively within the Cherniakhiv culture area and are mainly associated with the final stage of its existence, i.e. the last quarter of the 4th — first third of the 5th centuries.

The glass vessels come from inhumations oriented to the west. In the grave pit, the goblets were placed mainly next to the skull of the buried person. The combination of chronological markers suggests that the set of items from the burial no. 13 can be dated to the third quarter of the 4<sup>th</sup> century, and the assemblages from burials nos. 7 and 18 to the last quarter of the 4<sup>th</sup> to the first third of the 5<sup>th</sup> centuries.

Certain differences in the geographical distribution of glass vessels found in Lisovi Hrynivtsi, in our opinion, may indicate different origins of these glassware types. Based on this assumption, we can suggest the existence of at least two vectors of supply of glass vessels to the local community of the Cherniakhiv culture, one of which is probably not associated with the Roman Empire.

K e y w o r d s: Eastern Europe, late Roman period, early Migration period, glassware, Cherniakhiv culture.

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# Історія науки

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# ARCHAEOLOGY AND SPECIAL HISTORICAL DISCIPLINES AT LVIV UNIVERSITY: OBVIOUS AND LESS OBVIOUSPARALLELS AND INTERSECTIONS

In the article, the history of the development of Archaeology and Special (Auxiliary) Historical Disciplines at the Lviv University (the Ivan Franko National University of Lviv) is traced. The close relationship is emphasised between the teaching and learning of these sciences from the time of the creation of the classical university in Lviv to the present day, as well as the corresponding educational activities, and scientific achievements.

K e y w o r d s: special (auxiliary) historical disciplines, numismatics, archaeology, Lviv University.

#### Statement of the problem

In one of our publications, we noted the need for the study of interdisciplinary connections between Special (Auxiliary) Historical Disciplines and Archaeology (Білас, Целуйко 2014). In it, we emphasised the importance of further studying the history of the development of such disciplines in Ukrainian lands and pointed out that one of the aspects of such studies should be the emergence of complex research that would contain information on the mentioned sciences' tools development, their interaction, and complementarity. In our opinion, the analysis of such interdisciplinary connections will help not only to better understand the historiographical processes in our lands, and will allow studying the methods and techniques used by scholars, but will also point out possible ways of developing the tools

#### Historiography of the issue

In recent years, the number of studies devoted to the scientific and educational activities of Lviv University historians has been growing exponentially both in Ukraine and abroad, primarily in Poland. Without elaborating on the causes of this phenomenon in detail, let us point out that its visible results have become a number of prepared dissertation studies (R. V. Lavretskyi, N. M. Bilas, P. S. Yureiko, S. O. Kozlovskyi, etc.), several individual and collective monographs (eds. Вінниченко, Целуйко 2000; eds. Zaszkilniak, Sierżęga 2015; Maternicki, Pisulińska, Zaszkilniak (red.) 2016; Тарнавський 2016), articles in the Encyclopedia of the Lviv University (ENCYCLOPEDIA 2011—2014), etc. On the pages of monographs and scientific collections describing the entire the Lviv historical corporation, the predominant place is given to the activity of historians of Lviv University (Ситник 2012; Булик 2014; Maternicki (red.) 2007; Pisulińska 2012; Maternicki, Sierżęga, Zaszkilniak (red.) 2014). Thanks to the publications of N. M. Bilas, N. M. Bulyk, O. S. Sytnyk, O. P. Tseluiko, S J. Ciara, R. M. Shust, and other authors, our knowledge about the place and role of Archaeology and Special (Auxiliary) Historical Disciplines in the training of

of the mentioned disciplines today, outline certain aspects of further development of the historiographical discourse, etc. Analysis of the history of certain structural units of higher education institutions operating in Ukrainian lands should become a part of the aforementioned research. In this regard, the experience of the Lviv University is rather interesting, in which the oldest Departments of Auxiliary Historical Disciplines (1784) and Archaeology (1905) were established in Ukraine, and the development and teaching of those disciplines were closely interconnected.

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Fig. 1. The building of the Lviv University, in which was located the Department of Classical Archaeology and Prehistory at the beginning of the 20th century

students at this higher educational institution, the activities of the certain structural units, their leadership, and employees has significantly increased.

However, despite these improvements, it is worth emphasising some aspects that require further elaboration. They include, among other things, studying the experience of interdisciplinary cooperation of researchers of various branches of historical science, tracing the path of their formation and development, institutionalisation of scientific and educational activities, etc. This study will try to fill one of these gaps, related to the development and formation of Archaeology and Special (Auxiliary) Historical Disciplines at Lviv University.

#### Presentation of the material

Although the official date of establishment of the Lviv University is considered to be 1661, the classical secular European higher educational institution was established in the city only after the coming of the Austrians in 1784. At that time, the so-called Emperor Joseph University in Lviv (the Josephinian University) began its work, which, according to the tradition of the time, consisted of four faculties: Law, Medicine, Theology and Philosophy. The latter included a number of both natural and exact sciences, as well as humanitarian departments; during their first years, the aforementioned faculty pre-

pared students of other faculties for studying at the university. In the early 1780s, Gottfried van Swieten, a Councilor of the State of Emperor Joseph II, drew up a curriculum for the faculties of Philosophy of the Habsburg state universities. The curriculum stipulated that, in addition to one ordinary Department of General History, universities should have two more extraordinary Departments of History<sup>1</sup>. One of them (Heraldry and Diplomacy) would traditionally focus on the study of the history of the document and the contemporary practice of using coat of arms images, while the other — Antiquities Study (in the terminology of the time — Altertumskunde, Archaeology) and the Department of Numismatics — paid attention to material items, associated with the study of the past (Szymański 1991, p. 318).

Such a combination of these disciplines within the framework of the activities of one department should not be surprising, because archaeological studies then had the character of numismatic-heraldic, and church-historical documentary studies, and archaeology itself was closely related to the environment of classical-linguistic studies. However, at the Lviv University (as well as at the Prague University), instead of two, there was only one Depart-

<sup>&</sup>lt;sup>1</sup> The division into ordinary and extraordinary departments outlined the list of mandatory (ordinary) and auxiliary (extraordinary) sciences.

ment of Extraordinary History, where Diplomacy, Heraldry, and Numismatics were taught. It is not known whether the head of that department, Professor Gottfried Uhlich (1743—1794), gave any information on archaeology in his lectures. Archaeology was not mentioned in the official titles of that scholar and his successors (L. Zehnmark (1753—1814), F. Vuchych (1784—1818)) in the position of the head of the department. We emphasise this because, at the Prague (Charles) University, where a similar department had been operating since 1784, its head F. Steinsky (1752—1816) was titled a Professor of "Diplomatiky, Numismatiky, Heraldiky a Starožitností" ("Diplomatics, Numismatics, Heraldry and Archaeology") (Katedra... 2022).

The Emperor Joseph University in Lviv, due to a number of political circumstances, did not exist for long and ceased its activities in 1805. For some time, a Lyceum operated in the city, based on which the so-called Franciscan University was founded in 1817. Before that, there was a discussion about the structure of the new higher educational institution, what faculties and departments would be established in it. In 1816, the Senate and the assembly of professors of the Department of Philosophy of the Lviv Lyceum prepared documents that made provisions for the establishment of general and a number of extraordinary departments at the university, including the Departments of Archaeology and Numismatics, Old Slavic Diplomacy and Sphragistics. The need to teach Archaeology and Heraldry at the University was referred to in another similar document, the author of which was local government official (uriadnyk) F. K. von Hochfelden (Finkel, Starzyński 1894, pp. 198, 202). However, none of the mentioned plans were implemented, and the constitutive documents of the Franciscan University did not stipulate the establishment of such departments.

An attempt to establish the Department of Auxiliary Historical Disciplines in 1821 was unsuccessful: the competitive tender announced at that time was recognised as not having taken place and the case itself was shelved. In 1826, the faculty of Philosophy submitted a memorandum to the Halychyna Regional Governorate about the need to teach archaeology at Lviv University, but despite the obvious relevance of the problem, it did not receive a positive decision either then or in the following years. Under those conditions, the teaching of auxiliary historical disciplines was entrusted to the head of the Department of General History, J. Mauss (1778—1856), who delivered them on a regular basis until his retirement

at the end of 1848. It should be noted that Numismatics was sporadically among those disciplines, the lectures of which were combined with archaeology, which at that time was traditionally understood as the science of ancient sites and objects (Ilkiv-Swydnycki, Kaczmar 2016, p. 78).

A significant restructuring of scientific and educational activities at the Lviv University is dated to the second half of the 19th — the beginning of the 20th centuries. That was because of the transition from universities with scholastic lectures, aimed at acquiring the necessary knowledge, to research-type universities (called Humboldt model universities). Since, then universities turned into research institutions where science was inextricably combined with the reformed educational process. It was assumed that such changes would contribute to the intellectual development of the individual, the growth of the cultural level, etc. (Кришко 2014). This model stipulated a certain freedom in teaching and learning, which allowed it to depart from the strict requirements of the previous standards. Those changes had a positive effect on the development of Special (Auxiliary) Historical Disciplines and Archaeology at the Lviv University. It did not always lead to rapid institutional changes. Thus, the Department of Classical Archaeology and Prehistory emerged at this university only in 1905, but the establishment of a separate Department of Auxiliary Historical Sciences, despite certain attempts, never happened. However, it did not mean that that these disciplines and sciences were on the margins of historical studies and lectures in the specified period. On the contrary, researchers confidently point out that a new tradition of teaching auxiliary historical sciences was initiated by a number of Polish and Ukrainian professors at that time. It was mainly about theoretical courses and practical classes in Diplomacy and Paleography delivered by the professors of the Department of History of Poland (K. F. Liske (1838-1891), T. Wojciechowski (1838—1919), S. Zakrzewski (1873—1936)) and the Department of History of Ukraine (officially — the Department of World History with a Special Overview of the History of Eastern Europe, M. S. Hrushevskyi (1866—1934)). The necessity for such studies was explained by their importance in training future historians, forming their professional tools, which would enable independent source studies, participation in archaeographic projects, etc. However, other disciplines were not forgotten as well. The aforementioned K. F. Liske, as the students remembered, was ready to give the necessary explanations to their requests regarding Sphragistics (Sigillography), Archaeology, or History of Arts, help with the relevant literature (Sawczyński 1891, p. 522), and in 1873 his work *Archaeological Models* was published (Liske 1873).

In parallel, courses in Historical Geography at the Lviv University were delivered by I. Szaraniewicz (1829—1901), a Professor of the Department of History of Austria, whose activity, according to the famous Ukrainian archaeologist Ya. I. Pasternak, "...as a practical researcher and populariser of native antiquities, as well as his work as a propagator of respect for them, assured him the honorable place of a pioneer among all archaeologists of Eastern Halychyna..."2 (Пастернак 1929). А certain part of the materials gained by I. Szaraniewicz during archaeological surveys and excavations enriched the source base of Special (Auxiliary) Historical Disciplines, and the scholar himself widely used both the results of his own archaeological research and genealogical research in his historical studies (Szaraniewicz 1886, p. 40).

It is known that Professor M. S. Hrushevskyi also contributed to the development of Archaeology and Special (Auxiliary) Historical Disciplines (Бандрівський 1994, р. 43-44; Целуйко 2022, p. 163). K. Hadaczek (1873—1914), the first Professor of Classical Archaeology and Prehistory at the Lviv University, while studying at the Vienna University (1897—1900), specialised not only in the aforementioned disciplines, but also in numismatics, collected antiquities during his vacations, and independently conducted archaeological surveys. In 1901, a collection of antique numismatic and archaeological materials, which K. Hadaczek managed to collect in the lands of Eastern Halychyna, was published (Hadaczek 1901). A collection of Roman coins formed by him evidenced his not accidental interest in Numismatics. In 1918, a few years after the tragic death of the professor, at the "Auction of Archaeological Collections Dedicated to the Holy Memory of Professor K. Hadaczek", which were in court deposit, the price of the numismatic collection increased so much that representatives of Lviv public museums recognised it as too high compared to the real value (although the collection included coins from a trove found in 1908 in a ravine near Kasperivtsi village in Chortkiv region, Ternopil Oblast) (Білас 2017, p. 420). Such a broad interdisciplinary nature of scientific interests and areas of expertise of contemporary historians was not something surprising for the scientific environment and showed both the universality of the scientific methods used and the level of mastery of the relevant methodological apparatus. However, it should be remembered that the reverse side of that was often the absence of highly specialised historical departments, as well as the obstacles to their establishment. After all, let's not forget that a number of sciences, including archaeology and a complex of special (auxiliary) historical disciplines in the 19th century, were just passing the stage of their academic formation.

Over the interwar period both Archaeology and Special (Auxiliary) Historical Disciplines got further development at Lviv higher educational institutions. At that time, there were several institutions that taught History in the city, due to the Polonisation of the Lviv University (at that time it was named after King Jan II Kazimierz) and the establishment by Ukrainians of their own institutions — the Ukrainian Secret University (functioned in 1921—1925) and the Lviv Theological Academy. As for the Jan Kazimierz University, it did not come to the establishment of a separate Department of Auxiliary Historical Disciplines again, although the teaching of such disciplines was not interrupted. Courses in Diplomacy, Paleography and Numismatics, practical classes in those disciplines, and Sphragistics were delivered by professors and employees (associate professors, assistant professors) of the Department of General History of the Middle Ages. Its head also managed the Institution (Institute) of Auxiliary Historical Sciences, a special educational and scientific institution, aimed to become a base for students to master relevant skills and abilities, established in the early 1920s.

The first head of the Department of General History of the Middle Ages, Professor J. Ptaśnik (1876—1930), used to study archaeology at the German Archaeological Institute under the supervision of C. Hülsen (1858—1935). Certain special (auxiliary) historical disciplines were also taught in other departments. In 1920, the Department of Ancient History was established, and in November 1921, it was headed by Professor K. Chyliński (1881—1939). It is known that he was fond of archaeology and numismatics, and owned a rather respectable collection of coins. His research paper Związek miast greckich Azji Mniejszej w końcu V-go wieku published in Krakow in 1922 testified, among other things, to the scholar's good command of ancient numismatics and relevant literature (Wichnera 2019, p. 96). Obviously, the knowledge of that Special (Auxiliary) His-

<sup>&</sup>lt;sup>2</sup> Hereinafter translated from the Ukrainian by O. P. Tseulko and N. M. Bilas.

torical Discipline and Archaeology helped Professor K. Chyliński in preparing a course in Historical Geography of Ancient World, which he delivered sporadically in the late 1920s and 1930s.

The members of the Department of Classical Archaeology, the only educational and scientific unit of the same-name specialisation, were engaged in research and teaching of the history of the material and spiritual culture of the Mediterranean civilisations of the Hellenistic era; special attention was paid to the advanced study of antique art. The head of the Department, Professor E. Bulanda (1882—1951) delivered compulsory courses in Classical Archaeology and History of Acient Art and supervised the work of archaeological seminars. In the 1930/1931 academic year Latin Epigraphy was included in the curriculum of that major, and in the amount of two hours per week during the 1st\_\_\_\_ 3<sup>rd</sup> trimesters it was delivered by the aforementioned professor. In the following years, the name of the subject was changed ("Outline of Latin Epigraphy", "Main Problems of Latin Epigraphy", "Selected Excerpts of Latin Epigraphy"), but it remained in the curriculum until 1939. For the 1939/1940 academic year, another course in Special (Auxiliary) Historical Disciplines was planned for students of Classical Archaeology. It was named "Measures, Weights and Coins in the Roman Province of Syria", and it had to be delivered by private-docent Atanazy Urban Fic (1901-1943), one hour per week during the third trimester (Білас 2012, p. 372-375). The outbreak of the World War II and the incorporation of Western Ukraine into the Ukrainian SSR prevented the implementation of the academic year program which was supposed to be started on October 3, 1939.

There was a long-standing tradition of delivering another discipline — Biblical Archaeology for students who majored in Theology at the Lviv University. Theologians, first of all, were interested in those archaeological studies dealing with biblical history and that could confirm the claims expounded in the Bible using material objects of the past. According to documentary evidence, the first to deliver Biblical Archaeology at Lviv University was Rev. J. Kuharski (1806—1874), who headed the Department of Old Testament, Bible and Oriental Languages in 1836. The 1890s were particularly successful for the development of Archaeology in the Faculty of Theology when three experts with appropriate knowledge and skills worked there — Rev. K. Sarnicki (1832— 1909), Rev. J. Bilczewski (1860-1923) and



Fig. 2. Didactic material from the Archives of the Department of Classical Archaeology of prof. E. Bulanda

Rev. E. Skrochowski (1834—1895). During the interwar 20 years, archaeological issues in the Faculty of Theology were dealt to a certain extent by the Department of History of Ecclesiastical Art through a special review of Christian Archaeology (established in 1919), the Department of Biblical Studies of the New Testament, and the Department of Biblical Studies of the Old Testament (Professors W. Żyła (1877—1925), P. Stach (1886—1961), A. Klawek (1890—1969), Associate Professors J. Poplicha (1888—?) and A. U. Fic) (Білас 2007, p. 80-87). It is interesting that in 1925—1939, the head of the Department of Classical Archaeology, Professor E. Bulanda, taught in the Faculty of Theology at Lviv University, and in 1930 he was appointed deputy head of the Institute of Christian Archaeology and History of Ecclesiastical Art. As a regular professor of the Department of Ecclesiastical Art, Church Music and Hygiene, he delivered courses in Christian Archaeology (three hours per week in the 1st-3rd trimesters), History of Ecclesiastical Art and Artistic Objects Conservation (Білас 2012, р. 359, 376-377).

The formation of a sufficient basis for the development of Classical Archaeology at the Lviv University was also facilitated by the quite

fruitful development of such a Special (Auxiliary) Historical Discipline as Papyrology during the interwar period. S. Witkowski (1866—1950), R. Gansiniec (1888—1958), J. Manteuffel-Szoege (1900—1954) and F. K. Smolka (1882—1942) contributed to that, as they delivered theoretical and practical courses and prepared the first Polishlanguage textbook on this discipline (Smolka, Manteuffel 1933). In addition, the aforementioned lecturers conducted classes in Greek and Latin Paleography, which gave their students the opportunity to acquire the necessary knowledge for working with antiquities.

Lviv University lecturers took an active part in a number of scientific societies' activities during the Austrian and interwar periods that contributed to the development of Archaeology and Special (Auxiliary) Historical Disciplines. One of them was the Numismatic and Archaeological Society in Krakow, which had been functioning since the end of the 19th century. It is known that the Institution of Classical Archaeology of the Jagiellonian University was quite hospitable to that society, but Lviv archaeologists cooperated with the society as well. As mentioned above, far back in 1901, a research paper by the future head of the Classical Archaeology Department of the Lviv University, K. Hadaczek, appeared on the pages of its print periodical. During the interwar period, among the Society's members, subscribers (prenumerants) to its print periodical were Professor E. Bulanda and two structural units of the Lviv University — the Institute of Classical Archaeology and the Institution (Institute) of Auxiliary Historical Sciences<sup>3</sup>.

Several courses in Special (Auxiliary) Historical Disciplines, in particular Paleography and Diplomacy (Professor B. O. Barvinskyi (1880—1958), I. S. Svientsitskyi (1876—1956)) were delivered to students at the Ukrainian Secret University. A certain place was given to such disciplines in the lectures at the Lviv Theological Academy. Within its walls, unlike the Secret University, Archaeology courses were delivered. There were several reasons for that. The Academy, which was established in 1928 on the initiative

and support of Metropolitan A. Sheptytskyi (1865—1944), was supposed to become the Ukrainian Catholic University with a number of faculties. Theology originated first, and after a few years, Philosophy was established. Ukrainian professors, including experts in Special (Auxiliary) Historical Disciplines and Archaeology, primarily ecclesiastical, were invited to work at the Academy. Interest in this science was not accidental. Just before the World War I, in 1909, the teaching of a short course in Church Archaeology was introduced in the Greek Catholic Theological Seminary in Lviv by J. Bocian (1879—1926), its future rector (1910—1914), and later bishop. At the same time, the Ukrainian National Museum became the base for the training of a number of educatees of the Seminary. On the initiative of the Seminary rectorate and with the assistance of the museum directorate (I. S. Svientsitskyi), a two-month course in Local History and Church Archaeology was organised for those seminarians ("the chosen group") who were preparing for the planned expedition ("systematic tour") over Halychyna (Свєнціцький 1927; 1930). During the interwar period, I. S. Svientsitsky delivered the course in Church Archaeology at the Theological Academy along with History of Ecclesiastical Art.

Fundamental changes in the work of Lviv higher educational institutions took place after the annexation of the Western Ukrainian lands by the USSR. The Sovietisation of the Lviv University (since 1940 it was called the Ivan Franko Lviv State University) was accompanied not only by the inculcation of ideological dictates and new forms of relations, but also by a significant restructuring of the educational and scientific processes, reorganisation of structural units, and changes in teaching staff. The attempt to organise a separate Department of Auxiliary Historical Sciences at that time was unsuccessful again: it existed for several months (from December 1939 to February 1940), after which it was liquidated, and its head T. Modelski (1881—1967), who in the interwar period, replaced J. Ptaśnik in the position of head of the Department of General History of Middle Ages and the Institution (Institute) of Auxiliary Historical Sciences, continued to work as a professor in the Department of History of Middle Ages.

In November 1939, the Department of Archaeology was headed by Professor Ya. I. Pasternak (1892—1969). This famous Ukrainian archaeologist also contributed to the development of Special (Auxiliary) Historical Disciplines

<sup>&</sup>lt;sup>3</sup> Spis członków Tow. Numizmat. w Krakowie w r. 1936. Wiadomości Numizmatyczno-Archeologiczne, t. XIX. Kraków, 1938, s. 152-153. It is noteworthy that one of the copies of this print periodical stored in the Scientific Library of the Ivan Franko National University of Lviv, comes from the collection of books of the Institution (Institute) of Classical Archaeology.

in Halychyna. While being the director of the Cultural and Historical Museum of the Shevchenko Scientific Society, he was responsible for its collections, including coins, banknotes, seals, orders, and medals, and introduced into scientific circulation the information about some of those items. Ya. I. Pasternak prepared and delivered a report about the seal with the inscription "Dneslovo" ('Днъслово') from Belz and a series of studies about the antique coins at the meetings of the Shevchenko Scientific Society. In one of the studies (Newly Discovered Roman Antiquities from Halychyna and Volyn), a list of Roman coin troves from Ukraine known to the author, with the location of finds on a map, was presented. Taking that into account, it is not surprising that Ya. I. Pasternak planned to engage experts on Special (Auxiliary) Historical Disciplines in training future archaeologists. In the training plan of Roman Tymchuk, the postgraduate student of the Department of Archaeology, in the fourth semester there was a special course in Numismatics and Epigraphy (20 hours), which would have been delivered by the famous Lviv Museum expert Rudolph Menkitskyi (1887— 1942)4. He, despite the lack of a completed, in our usual understanding, higher education, enjoyed a well-deserved reputation as one of the best experts in Numismatics and other special (auxiliary) historical disciplines in the city, and that is why he was invited to deliver the course in Heraldry and Paleography ("Heraldyka i Historja Pisma")<sup>5</sup> to the students in the All-technical Faculty of the Lviv Polytechnic in the 1930s. In addition, in 1940— 1941, R. I. Menkitskyi was the head of the Section of numismatics in the newly established Lviv State Historical Museum, which work was headed by the aforementioned Ya. I. Pasternak.

Back in 1920, the famous Polish historian F. Bujak (1875—1953) began teaching at the Lviv University. He was one of the founders of the School of Economic History in Poland and a teacher of a whole galaxy of talented students. Given the scope of F. Bujak's research interests and the general subject matter of the work of the department he headed, it is understandable that the scholar showed interest in a number of special (auxiliary) historical

disciplines, in particular in Numismatics and Historical Geography, and he even delivered several courses in the latter in the interwar period. After the advent of Soviet rule, he had continued to work in the Faculty of History and prepared a study on the expansion of the Eastern Slavic tribes of Vyatychi and Radymychi. This study is especially interesting given the author's use of the methods of some special (auxiliary) historical disciplines (in particular, Historical Geography, Historical Toponymy), and Philology (Eponymy). However, F. Bujak did not forget about Archaeology either. As the author wrote, "If we are talking about the study of migration in the ancient past, for which the written sources are very few or do not exist at all, we must, out of necessity, turn to the comparison of the traces of material culture, which the prehistoric Archaeology of both countries can provide."6 It is not surprising that F. Bujak referred in his work to the books of archaeologists who studied the Eastern Slavic tribes, in particular when outlining the territory and borders of their habitation.

The transformation of the Lviv University continued in the post-war period. This involved changes in the teaching staff, some of whom, like the mentioned T. Modelskyi or Ya. I. Pasternak, left the city, the introduction of standardised curriculums and plans for student training, the increasing of ideological control over research and educational work, etc. Both Archaeology and Special (Auxiliary) Historical Disciplines had become targets to the further restructuring of the Faculty of History with the merging of its departments. However, Archaeology was mentioned in the name of one of the departments that emerged in 1944—1949 — the Department of Ancient History and Archaeology — until it was merged with the Department of History of Middle Ages (the new name was the Department of Ancient History and Middle Ages). Archaeology was delivered in that department throughout the Soviet period, with the exception of the second half of the 1960s, when V. D. Baran (1927—2019), a part-time lecturer in the Department of History of the Ukrainian SSR, taught the discipline. The teaching of Special (Auxiliary) Historical Disciplines was not the prerogative of a single department and depended on the place where the professors and associate professors who delivered those courses worked.

The common thing was that in the first postwar years, the main burden of delivering courses

<sup>&</sup>lt;sup>4</sup> The State Archives of Lviv Oblast (hereinafter – SALO), found P-119, list 1, file no. 2023, p. 3.

<sup>&</sup>lt;sup>5</sup> Program Politechniki Lwowskiej na rok akademicki 1930/31. Lwów, 1930, s. 205; Program Politechniki Lwowskiej na rok akademicki 1931/32. Lwów, 1931, s. 202; Program Politechniki Lwowskiej na rok akademicki 1933/34. Lwów, 1933, s. 201.

<sup>&</sup>lt;sup>6</sup> SALO, found P-119, list 3, file no. 104, p. 220.



Fig. 3. I.-Yu. Shpytkovskyi with students at the Museum of Sphragistics and Numismatics (1950s)

in Archaeology and the mentioned disciplines fell on the shoulders of a number of older or younger local Ukrainians, whose minds and characters had been completely set in earlier times. Archaeologists M. Yu. Smishko (1900-1981) and I. D. Starchuk (1894—1950), lecturers of Paleography Ye. A. Yatskevych (1899—1961) and Ya. P. Kis (1918— 1986) and I.-Yu. V. Shpytkovskyi (1880—1969), an expert in Sphragistics and Heraldry studied in those old, Austrian or Polish gymnasiums and universities, had a good command of foreign (classical and new) languages, and felt familiar in foreign literature. Quite often, they worked at the intersection of sciences, which allowed them to apply interdisciplinary methods. It was not surprising that archaeologist I. D. Starchuk in the 1949/1950 academic year delivered the course in Latin Epigraphy for a small group of students (only four people) of the third year<sup>7</sup>, and Professor Ya. P. Kis at a certain stage of his scientific activity was interested in the ethnogenesis of the Slavs.

In parallel, since the late 1940s, work on the creation of two educational and methodologi-

cal units in the Faculty of History — Museums (Rooms) of Archaeology and Auxiliary Historical Disciplines — was carried out. They aimed to take care of the relevant collections stored at the Lviv University, to become a base for conducting practical classes with students, and the centres of their scientific activities. However, the process of their establishment was rather difficult. There are already publications in historiography describing how much effort I.-Yu. V. Shpytkovskyi and the leadership of the Faculty had to make to initiate the departmental Museum of Sphragistics and Numismatics. The situation was the same with the Room (Museum) of Archaeology. In the educational documentation of the late 1940s and 1950s, it was sometimes mentioned as already established, or only as being in the process of formation. After all, it did not come to its actual establishment then. Obstacles on the path, as in the case of the aforementioned Museum of Sphragistics and Numismatics, were the sluggishness of the Soviet educational bureaucratic machine, excessive centralisation and unification of higher school management, and, often, a lack of understanding of the need for experts of the appropriate level: in the 1950s, in Archaeology at the Faculty of Histo-

<sup>&</sup>lt;sup>7</sup> SALO, found P-119, list 17, file no. 150, p. 10-16; file no. 151, p. 2rev.; file no. 152, p. 2.

ry were delivered by an expert in folk culture of the peasantry of the 17<sup>th</sup> century L. V. Svystunovych (1923—1989).

The official opening in 1959 of the all-faculty Room of Auxiliary Historical Disciplines gave the opportunities for the establishment of the Archaeological Museum in the future. Almost immediately after the aforementioned Room was opened, plans were made for its enlarging and the opening of new sections, including the Section of Archaeology8, and already in the 1960s, the leadership of the Faculty thought of the Room as a base for the new Archaeological Museum9. In the end, it happened, and the Room of Auxiliary Historical Disciplines was transformed into the Museum of Archaeology and Numismatics, which officially opened its doors in 1967<sup>10</sup>. It is noteworthy that V. V. Zvarych (1919-1998), the previous head of the Room of Auxiliary Historical Disciplines, was appointed the first curator of the Museum, and only later he was replaced in that position by archaeologist R. M. Chaika (1943— 2005). V. V. Zvarych is known to be an expert in numismatics, the author of some relevant research papers, and one of the greatest historical bookbestsellers of that time — the "Numismatic Dictionary", which was reissued several times in Ukrainian and Russian languages. V. V. Zvarych delivered a number of lecture courses in special (auxiliary) historical discipline, including the special course "Monetary Systems of the Peoples of the Eastern Mediterranean and Europe", which was designed for students-archaeologists majoring in the Department of Ancient History and Middle Ages.

As for the Museum of Archaeology and Numismatics, since its establishment, it had successfully combined both the newly formed archaeological exposition and stands with coins and seals. The Museum was one of the hallmarks of the Lviv University, a place where distinguis-hed guests were brought. Appropriate museum accounting and scientific activities were carried out in the Museum, and practical classes in Numismatics were also conducted. It was there that under the supervision of V. Baran the student scientific Archaeological class was established and started its activities, among the

members of which was the future famous scholar D. N. Kozak (1944—2014)<sup>11</sup>.

After V. V. Zvarych (he moved to a teaching position in one of the Faculty's departments), in November 1972, the Museum was headed by R. M. Chaika, a researcher of Slavic and ancient Rus antiquities. At that time, the work of that institution was mainly associated with archaeology, although the name Museum of Archaeology and Numismatics was preserved in the future, and starting from 1975, another, broader name was sometimes used — the Museum of Archaeology and Auxiliary Historical Disciplines<sup>12</sup>. In December 1974, in order to intensify expositional and scientific activities, a Museum Council was established in it, which included both archaeologists and experts in special (auxiliary) historical disciplines: Professor Ya. P. Kis (chairman), R. M. Chaika (secretary), V. V. Zvarych, Professor Yu. M. Grossman (1919— 2003), Associate Professors M. H. Krykun (1932— 2023), M. A. Peleshchyshyn (1933-1999) and Assistant Professor I. A. Lisovyi (born 1944)<sup>13</sup>. The preserved documentation of the meetings of that Council allows mentioning that it was supposed to promote scientific work both in the field of archaeology and in auxiliary historical disciplines. At the same time, the idea of issuing a museum scientific collection totaling 10-12 printed pages was cherished<sup>14</sup>. The issue of re-organising the student research class on Archaeology and Auxiliary Historical Disciplines, supposedly to improve educational work in the Faculty, was raised. Such a combination of archaeology and the other disciplines mentioned above in the work of the Museum was also observed in the future: in the 1980s — early 1990s, until the time when the first modernisation of the Museum was carried out (it did not affect the numismatic and sphragistics expositions) and a separate Room of Special (Auxiliary) Historical Disciplines was established in 1996.

<sup>&</sup>lt;sup>8</sup> SALO, found P-119, list 17, file no. 373, p. 3.

<sup>&</sup>lt;sup>9</sup> SALO, found P-119, list 17, file no. 571, p. 13.

<sup>&</sup>lt;sup>10</sup> See its history in: Погоральський 2007.

<sup>&</sup>lt;sup>11</sup> SALO, found P-119, list 17, file no. 614, p. 14.

See for example: Archives of the Archaeological Museum of the Ivan Franko National University of Lviv (hereinafter the AM LNU Archives). The work plan of the Museum of Archaeology and Auxiliary Historical Disciplines for the 2<sup>nd</sup> semester of 1975, p. 1.

<sup>&</sup>lt;sup>13</sup> The AM LNU Archives. Report on the work of the Museum of Archaeology and Numismatics for 1974, p. 3; Report on the work of the Museum of Archaeology and Auxiliary Historical Disciplines for 1975, p. 1.

<sup>&</sup>lt;sup>14</sup> The AM LNU Archives. Protocol no. 4 of the meeting of the Museum Council of the Museum of Archaeology and Auxiliary Historical Disciplines of October 15, 1975, p. 1–2.

In the second half of the 20th century, the Department of Ancient and Medieval History traditionally, along with Archaeology, provided teaching of several courses in Special (Auxiliary) Historical Disciplines. At the end of the 1970s, the course "Epigraphy: Archaeological Written Finds. Their Language and Decoding" for students of the major was conducted by I. A. Lisovyi, Associate Professor of the Department, and expert in Ancient History. From time to time, in the aforementioned Department, a major in Archaeology had taken place, and even an attempt was made to organise a major in which, along with Archaeology, an important place would have been given to the mentioned disciplines. In the repository of the Archive of the Ivan Franko National University of Lviv, there are several documents prepared by the Department aiming to establish the "Archaeology and Auxiliary Historical Disciplines" specialisation in the 1970s. A preliminary list of disciplines that were planned to be delivered to students has been preserved, with a short explanatory note in which the establishment of such specialisation was justified by the need to train archaeologists, museum workers, teachers (the latter should be able to manage local history activities), and experts with proper mastery of auxiliary historical disciplines. A preliminary list of specialisation disciplines included the following courses: "Methodology of Archaeological Excavations" (be delivered by M. A. Peleshchyshyn); "Archaeology of Antiquity, Cities of the Northern Black Sea Region. Epigraphy" (I. A. Lisovyi), "Archival Studies" (Yu. M. Grossman), "Museology and Basics of Local History Activities" (H. Yu. Herbilskyi (1904—1991), M. A. Peleshchyshyn), "Methodology of Scientific Research and Basics of Archaeology" (Yu. Grossman, Ya. P. Kis), "Sphragistics, Heraldry, Emblematics, Genealogy" (V. V. Zvarych), "Chronology, Metrology, Latin Paleography" (Ya. Kis), "Historical Geography of Foreign Countries" (A. O. Lozinskyi), "Historical Bibliography" (A. O. Lozinskyi and librarian V. N. Kutyk (1930-2003)), "Latin Language" (I. A. Lisovyi), "Art Studies", "Source Studies of History of Foreign Countries" (I. A. Lisovyi, A. O. Lozinskyi, H. M. Kyparenko (born 1936), M. H. Krykun), "Documentation and Basics of Records Management. Unified State Records Management System" (unnamed employee of the Archive Department of the Lviv Regional Executive Committee)15.

The Archives of Ivan Franko National University of Lviv (hereinafter – the LNU Archives), found P-119, list 17, file no. [185], p. 5-6.

The establishment of such a specialisation did not happen then; however, Special (Auxiliary) Historical Disciplines found their place in other specialisations that were established in the Department for full-time or part-time students. As part of one of them, it was planned to conduct a special seminar "Auxiliary Historical Disciplines and Their Importance for the Professional Activities of a Historian", and to deliver courses in Ancient Epigraphy, Historical Geography, Numismatics, etc. It is noteworthy that courses in Historical Chronology and Metrology should be conducted by archaeologist M. A. Peleshchyshyn<sup>16</sup>. In 1984/1985, the Department established the specialisation "General History of Antiquity and the Middle Ages" for extramural students of the third year of study, the curriculum of which in the fourth year of study included a special seminar (30 hours of practical classes) on Auxiliary Historical Disciplines, namely Historical Geography, Chronology, Metrology, Archival Studies, and Archeography. Yu. Grossman, Volodymyr Kryvonos and M. A. Peleshchyshyn were supposed to conduct that special seminar<sup>17</sup>.

Since the mid-1970s, the Department of Ancient and Medieval History had been taking steps to prepare a textbook on Auxiliary Historical Disciplines. Work in that direction was sporadically resumed later, and the 11-printed-page textbook was to be published in 1982. One of the disciplines to be represented in it was supposed to be Epigraphy, which, as the authors predicted, would discuss the significance of archaeological written sources. The aforementioned textbook, the degree of readiness of which in the early 1980s was estimated by the authors at 50%, was not published, repeating the fate of many other educational publications that were planned, but never prepared or published in the Faculty of History, including the textbook on archaeology, which was undertaken to be prepared by V. D. Baran in 1967<sup>18</sup>.

The further search for the role and place of archaeology and special (auxiliary) historical disciplines in teaching History at the Lviv University continued after the restoration of Ukraine's independence. That was reflected in structural changes in the Faculty. Back in the 1990s, the Department of Ancient History of Ukraine and Special Historical Disciplines was established (subsequently—the Department of Ancient History of Ukraine

<sup>&</sup>lt;sup>16</sup> The LNU Archives, found P-119, list 17, file no. 205, p. 97-98.

<sup>&</sup>lt;sup>17</sup> The LNU Archives, found P-119, list 17, file no. 206, p. 66.

<sup>&</sup>lt;sup>18</sup> SALO, found P-119, list 17, file no. 601, p. 20.

and Archival Studies, since the summer of 2023 — the Department of Ancient History of Ukraine and Special Historical Studies); a separate Department of Archaeology was established (after 1994 - the Department of Archaeology, Antiquity and Middle Ages, since 2004 — the Department of Archaeology and Ancient History, since 2010 — the Department of Archaeology and Special Historical Studies, since the summer of 2023 — the Department of Archaeology and History of Ancient Civilisations). In 1999, the Institute of Archaeology of Ivan Franko National University of Lviv was established, and the issuing of two specialised scientific print periodicals Lviv University Archaeology Studies" and "Proceeding of the Institute of Archaeology Lviv University was launched. Important educational units of the Faculty are the Museum of Archaeology, which recently completely renovated the exposition, and the Room of Special Historical Disciplines, a significant part of which can be very useful for the researchers studying the Early Iron Age and the ancient Rus state.

### **Conclusions**

The interdisciplinary connections between Special (Auxiliary) Historical Disciplines and Archaeology can be traced back to the early 1780s, when according to the curriculums in the Faculties of Philosophy of the universities of the Habsburg State there should be the extraordinary Departments of Antiquities and Numismatics and up to the present day. It is not known for sure how and to what extent the heads of the single extraordinary Department of Diplomacy, Heraldry and Numismatics at the Lviv University dealt with Archaeology. After its liquidation at the beginning of the 19th century, the work of the Department had never been resumed. Under such circumstances, several auxiliary historical sciences, including archaeology, which at that time was traditionally understood as the science of ancient objects, were sporadically taught by professors of other departments, for example, of General History as was J. Mauss.

Restructuring of scientific and educational activities at the Lviv University in the second half of the 19<sup>th</sup> — early 20<sup>th</sup> centuries had a positive effect on the development of both Special (Auxiliary) Historical Disciplines and Archaeology which were just then undergoing the stage of their academic formation at the Lviv University. However, while the Department of Classical Archaeology and

Prehistory was established in 1905, the separate Department of Auxiliary Historical Sciences had never been established, although it was then that a new tradition of teaching both Auxiliary Historical Sciences and Archaeology was initiated at the Lviv University by a number of Polish and Ukrainian professors. K. Hadaczek, the first Professor of Classical Archaeology and Prehistory at the Lviv University, also specialised in numismatics. Such an interdisciplinary nature of the scientific interests and areas of expertise of the historians of that time demonstrated both the universality of the scientific methods used by them and the level of mastery of the relevant methodological apparatus.

A similar situation was observed in the interwar period, when the activity of a separate Department of Auxiliary Historical Sciences was not institutionalised, and the teaching of some disciplines of the complex was conducted by professors and employees of the Department of General History of Middle Ages and the Departments of Ancient History. The heads of those departments Professors J. Ptaśnik and K. Chyliński were also interested in archaeology. Numismatics and historical geography were among the professional interests of one of the founders of the School of Economic History in Poland, Prof. F. Bujak. The head of the Department of Classical Archaeology, Professor E. Bulanda, taught a course in Latin Epigraphy. The evolvement of Classical Archaeology at the Lviv University at that time was facilitated by the development of such a special (auxiliary) historical discipline as Papyrology. A certain place was given to Special (Auxiliary) Historical Disciplines and Archaeology course in the lectures of the Lviv Theological Academy, which at that time was gradually turning into a full-fledged Ukrainian university.

The Sovietisation of the Lviv University made significant adjustments to the teaching of both Archaeology and Special (Auxiliary) Historical Disciplines. A significant restructuring of the departments of History was carried out, and the teaching staff was changed. Both Archaeology and Special (Auxiliary) Historical Disciplines became targets to the further merging of the departments of the Faculty of History. Established in 1944, the Department of Ancient History and Archaeology was merged with the Department of History of Middle Ages in 1949, although Archaeology was taught in the Department of

Ancient History and Middle Ages throughout the Soviet period. Delivering courses in special (auxiliary) historical disciplines was not the prerogative of a single department. In the first post-war years, courses in archaeology and the specified disciplines were conducted by experts whose minds and characters had been completely set in earlier times. They quite often worked at the intersection of sciences, which allowed them to apply interdisciplinary methods. We are talking about archaeologists M. Yu. Smishko and I. D. Starchuk, lecturers of Paleography Ye. Yatskevych and Ya. P. Kis, an expert in Sphragistics and Heraldry I-Yu. Shpytkovskyi.

The connection between Archaeology and Special (Auxiliary) Historical Disciplines since the end of the 1940s was illustrated by the activities on the creation of two educational and methodological units at the Faculty of History — museums (rooms) of Archaeology and Auxiliary Historical Disciplines. The

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opening of the Room of Auxiliary Historical Disciplines in 1959 gave the opportunities for the establishment of the Archaeological Museum in the future; established in 1967, the Museum of Archaeology and Numismatics was headed by a numismatist V. V. Zvarych, and later by an archaeologist R. M. Chaika. Since the 1970s, the Department of Ancient and Medieval History, along with Archaeology, taught a number of a number of courses in special (auxiliary) historical disciplines, planned the establishment of the "Archaeology and Auxiliary Historical Disciplines" specialisation, prepared textbooks on those disciplines.

The further search for the role and place of Archaeology and Special (Auxiliary) Historical Disciplines at the Lviv University continued after the restoration of Ukraine's independence and continues to this day, and the issue of correlation in the study and teaching of these disciplines requires further study.

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### АРХЕОЛОГІЯ ТА СПЕЦІАЛЬНІ ІСТОРИЧНІ ДИСЦИПЛІНИ У ЛЬВІВСЬКОМУ УНІ-ВЕРСИТЕТІ: НЕОЧЕВИДНІ Й ОЧЕВИДНІ ПАРАЛЕЛІ І ВЗАЄМОЗВ'ЯЗКИ

У статті простежено історію розвитку археології та спеціальних (допоміжних) історичних дисциплін у Львівському університеті. Наголошено на тісному зв'язку у викладанні й вивченні цих дисциплін від часу створення у Львові класичного університету, на науковій та освітній діяльності на цій ниві, відповідному доробку польських та українських учених. Вказано, що, попри давні традиції викладання цих наук у Львівському університеті, їх інституалізація різнилася. Якщо викладання археології забезпечували професори та доценти спеціалізованих кафедр, то спеціальні (допоміжні) історичні дисципліни читали викладачі різних кафедр, у тому числі й археологічних. Частково це пояснювалося міждисциплінарністю наукових інтересів тогочасних істориків, універсальністю застосовуваних ними наукових методик, рівнем оволодіння методологічним апаратом. Викладачі Львівського університету брали активну участь в австрійський та міжвоєнний періоди у діяльності низки наукових товариств, що сприяли розвитку як археології, так і спеціальних (допоміжних) історичних дисциплін.

У перші роки радянізація історичного факультету Львівського університету супроводжувалася істотною перебудовою навчального та наукового процесу, реорганізацією структурних одиниць, змінами у персональному складі. Утім, викладання археології та спеціальних (допоміжних) історичних дисциплін надалі провадили українські фахівці, що сформувалися як дослідники ще до 1939 р. Вони продовжили традиції міждисциплінарних студій, заклали основи їх становлення у подальшому.

Прикладом співпраці археологів та фахівців зі спеціальних (допоміжних) історичних дисциплін стала діяльність створеного у 1967 р. Музею археології та нумізматики. На чолі цієї інституції почергово стояли фахівці із згаданих наук, провадилася робота зі збереження, збільшення та вивчення нумізматичної та археологічної колекцій, планувалося видання відповідного наукового збірника. Паралельно готувалося відкриття єдиної спеціалізації з археології і допоміжних історичних дисциплін, укладався навчальний посібник зі спеціальних (допоміжних) історичних дисциплін, низку розділів якого повинні були підготувати фахівці з археології.

K л ю ч о в i с л о в a: спеціальні (допоміжні) історичні дисципліни, нумізматика, археологія, Львівський університет.

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## ARCHAEOLOGICAL CHRONICLES OF VIKTOR HOSHKEVYCH (1860—1928)

In the article an attempt to comprehensively cover the chronology of the archaeological activity of the well-known local historian, archaeologist and founder of the first museum in Kherson, Viktor Ivanovych Hoshkevych (1860—1928) is presented. His scientific path from a student of the Faculty of History of the Kyiv University to an archaeologist is traced. It is proposed to divide the intellectual biography of the scientist into several nominal stages for a more systematic presentation of the material. Special attention was paid to his scientific and publishing activities and participation in scientific societies. This article is an English-language and updated version of one of the chapters of the monograph by A. V. Shevchenko (Шевченко 2023).

Keywords: V. I. Hoshkevych, archaeology, Southern Ukraine, Archaeological Museum of the Kherson Provincial Statistical Committee, Kherson Historical and Archaeological Museum.

The beginning of the 20th century is characterised by the prosperity of regional local history and regional archaeology within the framework of modern Southern Ukraine. In the Kherson region, this flourishing is inextricably linked with the name of V. I. Hoshkevych (1860—1928) (fig. 1), an archaeologist and the founder of the first museum in Kherson. The study on the scholar's intellectual biography has been recently published (Шевченко 2023). The current article is a further study of the topic covered in one of the chapters of this monograph. Of course, it is impossible to investigate this within the limits of one publication, therefore, in our research we aim to reproduce the chronology of Hoshkevych's archaeological activity, only partially examining his social, political and museum affairs.

The historiography of V. I. Hoshkevych's archaeological activity can be divided into three stages. The first one — "early historiography" (chronologically until 1928), is characterised by its source nature, descriptivity, factuality, because the

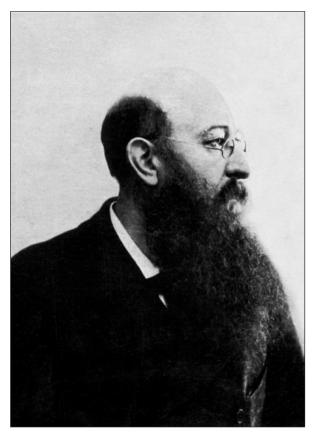


Fig. 1. Viktor Ivanovych Hoshkevych (1860—1928)

authors were his contemporaries and personally or in absentia acquainted the researcher. In particular, these are the works of archaeologist V. Z. Zavytnevych, Cambridge University professor E. Minns (Minns 1913, p. 145, 375, 376), professor of the department of Byzantine philology of the Imperial Novorossiysk University S. D. Papadimitriou (Пападимитриу 1912; 1915), etc.

The second period of research (1928—1991) can be described as reaching the level of scientific generalisations. V. I. Hoshkevych's activity is presented in fragments in the works of Soviet researchers, despite his prominent place in the history of national archaeology and museum affairs. The greatest contribution to the study of the work of V. I. Hoshkevych in view of his archaeological achievements was made by his adopted daughter

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Iryna Fabrytsius. She continued her father's work in creating an archaeological map of Kherson region, territorially expanding research to the entire Northern Black Sea coast (Фабрициус 1951). In addition, the results of V. I. Hoshkevych's research were presented in the works of archaeologists who continued to develop those areas of archaeological research initiated by the researcher in Southern Ukraine. In 1977, M. I. Abikulova and M. P. Olenkovskyi made archaeological excavations of the Tiahyn Fortress, started by V. I. Hoshkevych in 1914 (Оленковський 2007, с. 15-16). Among the diaspora scholars, V. I. Kedrovskyi, a member of the Ukrainian Central Rada and a colonel in the UPR (Ukrainian People's Republic) army (Кедровський 1966) and the other public figure of the UPR Ilko Borshchak (I. K. Barshak) (Борщак 1946) wrote about V. I. Hoshkevych.

The third, modern stage of research (since 1990s) is primarily related to the intensification of the study of V. I. Hoshkevych and his family life and work in Kherson region. In 1990, on the centenary of the founding of the Archaeological Museum of the Kherson Provincial Statistical Committee (now the Kherson Regional Local History Museum), a conference "Problems of Archaeology of the Northern Black Sea Coast" was held. The conference resulted in three collections of scientific papers published in 1990. Among them, several publications were devoted to certain aspects of archaeological activities of the museum's founder V. I. Hoshkevych, including articles by V. P. Bylkova (Былкова 1990) and I. L. Aleksieieva (Алексеева 1990).

In 1991 another collection of articles "Problems of Archaeology of the Northern Black Sea Coast" was published by V. H. Mironov (Миронов 1991) and V. A. Kraiev, where the museum activity of V. I. Hoshkevych was partially studied (Краев 1991).

In 1993, researchers of the Kherson Regional Universal Scientific Library named after Oles Honchar created the first scientific and auxiliary bibliographic index on V. I. Hoshkevych's life and work (Диба, Мокрицька 1993).

In the late 1990's — early 2000's S. H. Vodotyka (Водотика 1998) and V. B. Pyvorovych (Пиворович 2004) devoted their articles to the biography of the scientist; biographical information about the archaeologist is in the directory of M. P. Olenkovskyi "Outstanding Kherson archaeologists: a bibliographic guide" (Оленковський 2000).

Modern historians, who have continued his search, are analysing V. I. Hoshkevych's

archaeological research. Among them are the Director of the "Kamianska Sich" National Historical Park A. I. Lopushynskyi (Лопушинський 2016) and researchers of the Tiahyn Fortress D. R. Kobaliia (Кобалия 2018) and S. O. Biliaieva (Біляєва 2018). In addition, in 2023, Andrii Lopushynskyi published an article in which he explored the archaeological activities of the scientist during his student years when he still lived in Kyiv (Лопушинський 2023).

Some facts of V. I. Hoshkevych's museum activity during his work as the Secretary of the Kherson Provincial Statistical Committee (hereinafter referred to as "the KhPSC") and subordination of the museum of antiquities to the Kherson Provincial Academic Archival Commission (hereinafter reffered to as "the KhPAAC") are highlighted in I. Yu. Sinkevych's articles (Сінкевич 2000; 1999). Museologists M. I. Abikulova and A. V. Kostenko in their works (Костенко, Абікулова 2016; Костенко 2018; 2016a; 2015a; 2015b; 2015c; 2015d; 2015e; 2015g; 2014a; 2014b) investigated the stages and peculiarities of the formation of the Kherson Museum of Antiquities collection.

The first relatively thorough biography of the archaeologist was presented in the article by N. V. Karmazina "Researcher of antiquities of the South of Ukraine: V. I. Hoshkevych (1860—1928)" (Кармазіна 2013). The genealogy of the Hoshkevych family has been studied by A. V. Shevchenko (Шевченко 2016а; 2016с; 2021а; 2021b; Костенко, Шевченко 2016; 2017а; 2017b), A. V. Kostenko (Костенко 2015f; 2016а; 2018; Костенко, Шевченко 2016; 2017а; 2017b), Ye. H. Sinkevych (Сінкевич 2019).

A. Shevchenko studied the social and political activities and political views of Hoshkevych as the chief editor of the *Yug* (South — in English, hereinafter — *Yuh*) newspaper (Шевченко 2015; 2016b; Shevchenko 2015).

The figure of V. I. Hoshkevych is one of the main ones in the history of the Kherson region, his pub-lic, museum and scientific activities are mentioned in most generalising works (fig. 2). However, the data of the work indicate the discreteness of the study of Hoshkevych's activities, which makes it necessary to study it more comprehensively. Building a certain chronology of the scientist's archaeological activity should become an important step for further research.

The methodological basis of our research was the use of the "intellectual biography" model. The theoretical and methodological foundations



Fig. 2. V. I. Hoshkevych in his mother's apartment in Kherson (circa 1909)

of this area of "intellectual history" were laid by French researchers P. Nora and F. Arie. Today they have already been sufficiently implemented in Ukrainian historiography (see: Шевченко 2023, p. 23-26 with lit.).

In our study we used a well-tested methodological scheme of "intellectual biography", proposed by V. M. Andrieiev (Андреєв 2010). This allowed to present the role of V. I. Hoshkevych in the scientific circle of contemporaries, as well as the perception by historians and archaeologists of the results of his research in the scientific discourse of national archaeology.

Due to the main areas of intellectual activity of V. I. Hoshkevych and the possibility of their implementation in a particular sociocultural environment, the basis for periodisation was a set of criteria: general historical context, change of political regimes, priority areas of scientific and social activities, status in the scientific environment and official positions, geographical location and links with scientific institutions. His life path can be divided into two main periods: "Kyiv" and "Kherson." However, the most important criterion in highlighting the

periods of Viktor Ivanovych's intellectual biography during his stay in the Kherson region was his public, scientific and scientific-organisational work on the creation, and development of the Kherson Museum and filling its archaeological collection.

The first stage — "Kyiv" (1882—1890) — includes the beginnings of the formation of personality in the family, the study of V. I. Hoshkevych at the St. Vlolodymyr's Kyiv University, where the first circle of intellectual connections of the scientist with the leading historians of that time had been formed. Historians V. B. Antonovych and M. I. Petrov had a special influence on the formation of the democratic and Ukrainophile socio-political and scientific views of V. I. Hoshkevych in this period.

The second stage (1890—1928) was "Kherson", during which V. I. Hoshkevych was recognised as a scholar, an organiser of science, museum affairs and as a public figure. According to the problem-chronological principle, within this stage we distinguish several periods:

I. The beginning of scientific and social activity (1890—1905). At that time he worked as the Sec-

retary of the KPSC and had began his scientific activity in the South of Ukraine. Namely at that time the social establishment of V. I. Hoshkevych in the new region had taken place along with the expansion of his network of scientific communications, in particular, with the Odesa Society of History and Antiquities (the OSHA), which he joined in 1896. Despite the fact that the main activity of V. I. Hoshkevych was bureaucratic, having made a number of archaeological surveys and excavations of mounds, he had begun to study the ancient history of Southern Ukraine. The results of these studies are published in the work "Treasures and Antiquities" of the Kherson province. At the same time, Viktor Ivanovych conducted an active social and political activity, publishing the first private newspaper in the city Yuh (South) (1898-1907), which became the only alternative media in the Kherson region. However, the most significant achievement of the intellectual at that time was the founding in 1890 of the KhPSC — the first museum in Kherson.

II. "Shifting the emphasis in the life strategies of V. I. Hoshkevych" (1905—1909)—the curtailment of public activity in connection with the events and defeat of the First Russian Revolution and the focus on scientific and scientific-organisational work. This period is associated with the establishment of the Archaeological Museum of the KhPAAC as a scientific and educational centre of intellectual life of the Kherson region.

III. "The Peak of V. I. Hoshkevych's Intellectual Biography" (1909—1917) — being the Head of the Kherson City Museum of Antiquities and Fine Arts, it is the culmination of his scientific work. With the growth of the museum's collection and its recognition as a serious scientific institution, Viktor Ivanovych's intellectual ties expanded due to international communications. Gradually, the scientist became one of the leading archaeologists and researchers of the mounds of the southern region of Ukraine. At the same time, studying ancient, medieval and Cossack monuments, he widened his scientific interests and enriched his scientific achievements.

IV. "Soviet" stage (1917—1927), associated with the new socio-political living conditions during the establishment of the Soviet state. This was perhaps the most difficult time in the life of V. I. Hoshkevych. The aggravation of the political situation and the famine of 1921—1923 put the museum and the scientist at the edge of extinction limits. Due to his deteriorating health, the researcher could no longer continue his active scientific

activity and focused all his intellectual and vital forces on the preservation of the museum.

Despite V. I. Hoshkevych's multi-vector activity, in our article we still plan to dwell on the chronicles of his archaeological activity, only partially touching on his museum work.

### Kyiv stage: V. Hoshkevych's first scientific steps

V. I. Hoshkevych was born in Kyiv on March 9 (21), 1860. Like his brothers, he received a theological primary education. However, in clerical data of his father, priest Ivan Hoshkevych, there is information that Viktor had studied remotely: "he studies at home, but is enrolled in the Kyiv-Podil theological school" (Κπipoβi...1869, c. 91). Viktor Ivanovych began his higher education at the Kyiv Theological Seminary. After completing theological studies in 1881, he entered the Physics and Mathematics Faculty of the St. Volodymyr's University. However, at the second year of the university, he changed his specialty and transferred to the Faculty of History and Philology.

In 1881, V. I. Hoshkevych married K. O. Bakanovska (1864—?), and a year later the couple gave birth to a daughter, Kateryna. In order to provide for his young family, V. I. Hoshkevych, in parallel with his studies, worked as a calculator at the University's astronomical observatory from 1880 to 1883, and from 1882 he was a writer and out-of-staff correspondent for several Kyiv newspapers (Костенко, Шевченко 2017а, с. 65).

During his studies at the university, V. I. Hoshkevych became close to several lecturers. V. B. Antonovych (1834—1908) exerted the greatest influence on the formation of the public position of the young historian. In fact, from the beginning of his studies, V. I. Hoshkevych had entered the so-called "Kyiv School of Historians" of V. B Antonovych, where students studied the history of Ukraine in parallel with the official University course (Кедровський 1966, с. 58-59). Learning process with V. B Antonovych especially influenced his populist ideas, based on the principles of the "Ukrainian form" of European democracy.

In 1884, the University administration paid attention to V. Antonovych's student club. Most likely, this happened because of the organisation of students' protests in Kyiv that year. Students' worries, fuelled by the approval of a new

Hereinafter translated from Ukrainian and Russian by A. V. Shevchenko.

"reactionary" statute, which to a certain extent cancelled the autonomy of universities, for example allowing the appointment of teachers "from above" without a proper academic degree, erupted after the celebration of the 50th anniversary of the University on September 8, 1884. The reason for the protest actions was the ban of the University administration to choose the managing staff of the celebration by organising a student meeting, therefore they were appointed independently. As a result, students attacked the rector's apartment and sabotaged the work of the educational institution. Immediately after that, the administration decided to close the University by January 15, 1885 and expel 150 students (Бухбиндер 1930). V. I. Hoshkevych, who was expelled from the third year of the University, was among them.

Expulsion from the university did not stop the scientist, who continued to study history and archaeology in his spare time. As a result of informal meetings organised by V. B. Antonovych, V. I. Hoshkevych managed to form a circle of first intellectual contacts, which included historian and public figure M. S. Hrushevskyi, archaeologist V. H. Liaskoronskyi, professor of art history A. V. Prakhov, collector S. L. Drozdov, professor of archaeography M. I. Petrov, archaeologist Volodymyr Zavitnevych and many others.

The professor of the Kyiv Theological Academy, archaeographer, historian ethnographer M. I. Petrov (1840-1921) supported Hoshkevych's scientific potential. Perhaps M. I. Petrov brought young Viktor to the circle of his friend V. B. Antonovych. Being a graduate and then a teacher of the Kyiv Theological Academy, M I. Petrov was well acquainted with V. I. Hoshkevych's father, I. A. Hoshkevych, who taught a number of disciplines there (Костенко 2015а, c. 139). Although Mykola Petrov was not officially a teacher of V. I. Hoshkevych, informally he was his friend and mentor. It is known from the scientists' correspondence that throughout their lives Hoshkevych and M I. Petrov kept in touch and shared scientific achievements (Гошкевич 1890b; 1891).

In 1872, M. I. Petrov supported the idea of P. H. Lebedyntsev and V. B. Antonovych and was an active participant in the process of creating the Church-Archaeological Museum of the Kyiv Theological Academy. It is known from archival materials that M. I. Petrov actively involved his student, V. I. Hoshkevych, in the systematisation of the museum's collections. In the report on the

activities of the Church-Archaeological Society for 1889 there are noted some changes in the placement of museum exhibits made by M. I. Petrov and V. I. Hoshkevych. Although it is not known what kind of work was made in the museum, thus, O. V. Stavniuk, a researcher of M. I. Petrov's activities, believes that the reorganisation is connected with the systematisation and editing of the new museum guide, and as a result, a certain revision of the structure of the museum space itself (Ставнюк 2019, c. 164). V. I. Hoshkevych would successfully use the museum experience gained during several years of working with M. I. Petrov in the future by founding his own museum in Kherson region.

parallel with the museum affairs, V. I. Hoshkevych became actively interested in archaeology. V. Z. Zavitnevych (1853-1927), a lecturer at the Kyiv Theological Academy, played the most important role in the formation of the young archaeologist. Most likely, V. Z. Zavitnevych and V. I. Hoshkevych met during informal meetings at V. Antonovych's place. In 1884, V. Z. Zavitnevych began working as an assistant professor at the Department of History of the Kyiv Theological Academy, and during the same period, together with V. B. Antonovych, he made archaeological excavations of mounds in Central Ukraine. In the summer of 1888, V. I. Hoshkevych for the first time took part in an archaeological expedition headed by V. Z. Zavitnevych in the Cherkasy County of the Kyiv Province. In the note to the "Moscow Archaeological Society" that is stored in the archive of the Manuscript Institute of the V. I. Vernadsky National Library of Ukraine, regarding the compilation of an archaeological map and information about excavations and barrows in the vicinity of the village Kosochov of the Cherkasy County, among other things, there is information about V. I. Hoshkevych's participation in this expedition (Гошкевич, Завидович 1889). At that time, V. I. Hoshkevych became a member of the Kyiv Church-Archaeological Society and during the following year was engaged in archival research work in the library of the Kyiv Theological Academy. With the help of his mentor M. I. Petrov, V. I. Hoshkevych managed to research numerous documents about the land ownership of Kyiv monasteries: "Thanks to the kindness of professor Petrov, I had the opportunity to research these archival materials; although my work is far from being finished, it can already be said that the named systematic material is interesting for the local history" (Гошкевич 1890a, с. 228).

On September 18, 1889, V. I. Hoshkevych disclosed the results of his exploration in a report at a meeting of the Kyiv Church-Archaeological Society, namely the location of the Kyiv prince Semen Olelkovych's (1420—1470) castle ruins in 1454—1470 and the chronicle city Horodets: "Currently it is a pleasure to share with the society the discovery of the precise identification of the place on which, without any doubt, stood the court and a castle of Prince Symeon Olelkovych, who ruled Kyiv in the second half of the 15th century and rebuilt the cathedral church of the Kyiv-Pechersk Lavra" (Гошкевич 1890a, с. 228). As a proof of the results of his investigation, V. I. Hoshkevych quoted 16 documents of different periods, which testified to the location of the castle on the left bank of the Hnylisha River, one of the tributaries of the Chortoryi River (the modern name of the Desenka River) (opposite Kyiv) near Vyhurivshchyna village. In 1890, the results of V. I. Hoshkevych's research were published in the monthly journal Pratsi Kyyivskoi dukhovnoi akademii (Proceedings of the Kyiv Theological Academy — in English) (Гошкевич 1890a).

Archaeological exploration in the indicated area, made by V. I. Hoshkevych and V. Z. Zavitnevych, confirmed the presence of the settlement remains. Although the ruins of the castle have not been preserved, the high ramparts of the hillfort on which it stood were found. In 1891, in his speech at a meeting of the Historical Society named after Nestor the Chronicler, V. Z. Zavitnevych said: "Checking these data at the place revealed that on the left bank of the Dnipro River, opposite Kyiv, there is really an earthen trench, the topographical position of which completely coincides with the information of the written sources. Upon further study of the historical fate of this trench, it became clear that it appears already on the first pages of our chronicles under the name "Horodets" (Завитневич 1891, с. 134).

However, scientific success did not affect the scientist's personal life. A few years after the University scandal, V. I. Hoshkevych divorced K. O. Bakanovska (the daughter stayed with her). The reason for the divorce was, most likely, the family's financial problems. After all, taking into account the researcher's Ukrainophile ideas, he made concessions to his principles and even worked as a correspondent for the Ukrainophobic newspaper "Kyianyn" ("Kyiv citizen" in English). In addition, according to the memories of his daughter Kateryna, the



Fig. 3. V. I. Hoshkevych and V. A. Fabrytsius

family lived quite modestly in a cramped two-room apartment in the same building where the editorial office of *Kievlianin* was located (Фуллер 2009, с. 61). During this period, Viktor Ivanovych became close to the wife of the Kyiv scientist-astronomer V. I. Fabrytsius (1845—1895) — V. A. Fabrytsius, who already had three children: Fedir, Iryna, and Leonid. However, they met during Viktor Ivanovych's work at the astronomical observatory in 1881—1883, and it is symbolic that it was in 1882 when Varvara Amosivna's daughter Iryna was born.

However, the greatest meaning of his life was scientific work. Perhaps due to the "family scandal" in V. I. Hoshkevych's family or because of financial difficulties, in 1890 he responded to the offer of his brother M. I. Hoshkevych to move to Kherson (Костенко, Шевченко 2017а, с. 65).

In April 1890, Viktor Ivanovych received an official invitation from the provincial board to perform the duties of the secretary of the KhPSC (Кармазіна 2013, с. 62). V. A. Fabrytsius (fig. 3), who was still married, moved to Kherson together with V. I. Hoshkevych with her children.

Thus, the moving was facilitated by a complex of personal and family reasons and the search for new opportunities for self-realisation.

# The Kherson stage: the beginning of V. I. Hoshkevych's scientific and social activities in Southern Ukraine (1890—1905)

The new stage began in the scientific life of the thirty-year-old scholar in 1890, with the moving to Kherson. Nominally, his scientific activity during

this period can be divided into two directions: museum work and archaeological research. Viktor Ivanovych began to work on the first direction a few months after moving to a new city, starting the process of creating a museum. The history of the establishment of the first collection of the Kherson Museum has become almost legendary.

The head of the KhPSC, in which Viktor Ivanovych worked as a secretary, was the governor S. V. Oliva (1844—1909). In one of the letters to M. I. Petrov dated by April 19, 1891, V. I. Hoshkevych, characterising the leader, wrote that "the new governor of Kherson, "not a bookworm", instructed me to write [...] a handwritten report for the sovereign" (Гошкевич 1891, арк. 1). From the context of the letter, it is clear that the report was partly devoted to the investigation of the activities of the religious (Protestant) movement of Stundists in the province: "I had to, among other things, touch on the issue of Stundists, which is serious for the province. I have already collected and processed the materials" (Гошеквич 1891, арк. 1). Stundism was a fairly common phenomenon in the South of the Russian Empire in the 19th century, which spread as a result of the influence of German colonists on the local population. In a letter to M. I. Petrov, V. I. Hoshkevych asked, if it was possible, to send him books about the historical connection between the Germans and the local Stundists (Гошкевич 1891, арк. 1).

While carrying out similar orders of the governor, in particular, looking for materials, V. I. Hoshkevych accidentally found a broken antique amphora with the master's stamp in the attic of the office. Later, the scientist found out that such "junk" had been sent to the discretion of the provincial leadership for many years, which ordered it to be carried to the roof. From that time, V. I. Hoshkevych began to assemble his own collection, which in 1893 he officially named the "Archaeological Museum of the Kherson Provincial Statistical Committee", which included 1000 items. The exhibits were stored in the scientist's house in a chest specially purchased for this purpose. The history of the creation of the museum was described by V. I. Hoshkevych in one of his publications in the newspaper Yuh (1905), which he symbolically called "Junk" due to the accusations of detractors (Гошкевич 1905).

For a while, museum affairs, like archaeology, was just a hobby for the scientist, which he had to combine with the work of a statistician. On February 11, 1895, the governor Mykhailo Viesolkin (1842—

1897) appointed V. I. Hoshkevych as a senior official on special assignments under the Kherson governor, retaining his position as secretary of the KhPSC. The position of an official on special assignments was quite prestigious and involved reporting to the governor personally. Historian A. V. Kostenko very aptly and satirically describes the social significance of the position held by V. I. Hoshkevych with a quote by M. V. Gogol from the novel Nevsky Prospekt: "those whom a favourable fate bestowed with the blessed position of an official on special assignments" (Костенко 2015a, c. 141).

The numerical advantage in the exposition of the V. I. Hoshkevych Archaeological Museum was occupied by finds from the scientist's archaeological explorations and excavations. Having moved to the southern region, V. I. Hoshkevych immediately began actively conduct archaeological explorations, calling them "excursions along the sands of the left bank of the Dnipro River" (Гошкевич 1905). V. I. Hoshkevych received the first Archaeological Excavation Permit (no. 540) for an archaeological expedition to Oleshky and Hola Prystan towns of the Tavriia province in 1892, but for unknown reasons the excavations were not held (Императорская... 2009, с. 39). Therefore, the first expedition led by V. I. Hoshkevych took place in 1893 (Archaeological Excavation Permit no. 699) in Dymivka village. The results of the field research are stored in the repository of the Imperial Archaeological Commission of the Manuscript Department of the Scientific Archives of the Institute of History of Material Culture of the Russian Academy of Sciences: V. I. Hoshkevych's diary no. 1, drawings and photos of finds (Открытый... 1895). The archaeological commission allocated 100 rubles for these excavations. The archaeologist investigated 17 burial mounds of the Bronze Age. The main scientific result of the excavations was the studying of burial methods, most likely of the Cimmerians. From the researcher's diary no. 1, it is known that as a result of the excavations, several flint tips, pottery, a copper awl and eight human bones were found (Гошкевич 1903, с. 107-108).

From the materials presented in the repository of the Imperial Archaeological Commission, it is known that during 1895—1896 V. I. Hoshkevych was issued two Archaeological Excavation Permits to conduct excavations. The first Permit no. 551 was issued by order, in relation with the discovery of an underground mine near Novo-Petrivka village (Императорская...2009, c. 49). And the second—no. 1079 was issued for excavations in 1895—

1896 of the monuments of the Kherson and Tavriia Provinces. V. I. Hoshkevych was given 330 rubles for the organisation of the work for two years (Императорская... 2009).

As a result of the expedition of 1895, five burial mounds of the Bronze Age were investigated in Kherson region: three near Arkhanhelske village and two near the estate of M. I. Blazhkov in the of Kamianka village (Гошкевич 1903, с. 107-108).

The mound near Arkhanhelske village (on the Inhulets River) was known among local residents as the "Buzyniana mohyla" ("Elderberry grave"), it was surrounded by three smaller mounds. An underground passage led to the largest mound, which testified to the robbing of the burial by treasure hunters. As a result of research, human skeletons were found; some deceased were in a "sitting position", and there were a considerable number of remains of buried animals. There were almost no material, except for a few small jugs (Гошкевич 1903, с. 109).

As a result of excavations in the estate of M. I. Blazhkov (1859-1919), the scholar discovered the burial of two people. The materials were transferred by the landowner to the archaeological museum for studying (Гошкевич 1903, c. 86). Relations between the archaeologist V. I. Hoshkevych and M. I. Blazhkov, who held the position of Kherson mayor from 1909 to 1917, had been friendly throughout their lives. It is interesting that M. I. Blazhkov, like V. I. Hoshkevych, was expelled from the Kyiv University after the student riots of 1884. It is possible that they were acquainted even before V. I. Hoshkevych moved to Kherson. Later, M. I. Blazhkov played a crucial role in Viktor Ivanovych's Cossack studies, as a part of the former Kamianska Sich was located on the territory of M. I. Blazhkov's estate.

V. I. Hoshkevych quite often conducted excavations on the private lands of Kherson landowners. After all, the scientist could not send the results of these studies to the Imperial Archaeological Commission, but with the permission of the owner, left them in the museum. In particular, in 1899, V. I. Hoshkevych investigated three burial mounds on the territory of the estate of P. M. Trubetskyi, near Kozatske village (Γομικε-Βυτ 1903, c. 87). And in 1902, M. Vysotskyi in his father's estate in Liubomyr Volost under the guidance of V. I. Hoshkevych investigated ten mounds (Γομικεβυτ 1903, c. 88). Some of the finds from these excavations were transferred to the archaeological museum.

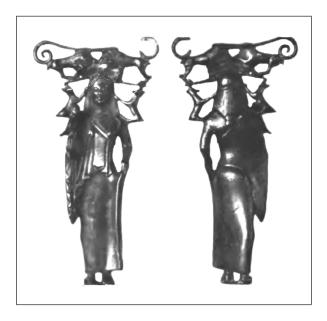


Fig. 4. A bronze handle of a mirror in the form of a statuette depicting the ancient Greek goddess Cybele (Minns 1913, p. 23)

In 1896, V. I. Hoshkevych excavated four barrows in Kherson, three of which were robbed. One of them, located between Husakov's and Chornobaiev's estates, was investigated (near modern Chornobaivka village).

In March 1896, a bronze statuette (fig. 4) from one of the robbed barrows, brought to the museum by Eduard Schults for identification, accidentally came to V. I. Hoshkevych. After sifting through the soil thrown away by treasure hunters near the mound, the scientist found the remains of skeletons, iron and bronze arrows, fragments of two clay vessels and fragments of a bronze mirror. After research, the researcher was able to determine the purpose of the statuette, which was the handle of this mirror. Modern science attributes this work to the Ionian school of art. The scholar described its appearance as follows: "The statuette is the best of all finds, depicting the goddess Cybele in a chiton and a short cloak; with her left hand she is supporting her chiton, and in her right she is holding a bird with a human face. On her head there are lions killing a bull, and two quadrupeds are fighting on her shoulders" (Гошкевич 1903, с. 44). Viktor Ivanovych sent the statuette and other finds to the Hermitage for studying.

In the same year, the caretaker of the County hospital I. Ya. Stempkovskyi, under the leadership of V. I. Hoshkevych, conducted excavations in the Tyraspol County (Гошкевич 1903, с. 86).

His official position gave V. I. Hoshkevych the opportunity to explore the region from different angles. In 1896, he was elected as a clerk during

the 1896 census of the Kherson Province, the result of which was the publication of the book List of settled places in the Kherson province: statistical data on every settlement (English translation) (Список... 1896).

In 1897, V. I. Hoshkevych was promoted "from provincial to the rank of collegial secretary", ассоrding to years of service (Херсонские губернские ведомости 1898). After that, for almost a year, the scientist was burdened with bureaucratic concerns (Костенко 2015a, c. 144).

After 1898, V. I. Hoshkevych's official work was moved into the background. Being a respected member of the community, the scholar was able to afford to devote more time to hobbies. With the expansion of V. I. Hoshkevych's archaeological activity, the number of museum exhibits also had been growing. Over the years, the Archaeological Museum turned from a personal collection of an archaeologist into a solid museum collection. The recognition of the museum by the city community contributed to this. In particular, antiquities found within the province sent for "consideration to the governor", were handed over to V. I. Hoshkevych for safekeeping. A vivid example is the history of the entry into the museum of a unique monument of Classical art of the 5th century BC — the Leoxos stele, which was described in the publication "Marble stele of the Kherson Museum from Olbia" by B. V. Farmakovskyi, the archaeologist, researcher of Olbia and contemporary of V. I. Hoshkevych. According to his testimony, in May 1895, Makar Melnyk, a peasant from Parutyne village, located near Olbia (modern Mykolaiv Oblast), dug up a marble slab from the ground at Olbian necropolis. He found no practical use in it, so he sold it to the shopkeeper Nison Livshyts, from whom the find was taken by the bailiff and handed over to the discretion of the governor. The Archaeological Commission ordered "to hand over the fragment to the Kherson Archaeological Museum" (Фармаковский 1915, c. 82-83). On one side of the slab was depicted the man Leoxos, on the other — an Amazon. Significantly, this image is one of the earliest depictions of an Amazon in the Ancient Greek world. For a long time, the "Leoxos stele" was the "pearl" of the lapidary of the Kherson Museum, but unfortunately, in November 2023, the Russian occupiers stole the stele from the Museum of Local History, along with as more than 20000 other exhibits.

The museum collection was supplemented by gifts from local residents and collectors. A

significant contribution to the enrichment of the museum collection was made by V. I. Hoshkevych's friend and associate, local landowner and archaeologist H. L. Skadovskyi (1847—1919). According to I. V. Chornoivanenko, a researcher of the Skadovskyi family, the archaeological practices of H. L. Skadovskyi were, to a certain extent, a tribute to the intellectual fashion that was prevalent in this period in the noble environment (Чорноіваненко 2015, c. 157-158). However, despite the fact that H. L. Skadovskyi was an amateur, he made an invaluable contribution to the development of South Ukrainian archaeology.

In 1898, V. I. Hoshkevych realised that his museum could no longer physically accommodate the premises of his house and the KhPSC. Therefore, he agreed to the proposal of H. L. Skadovskyi (leader of the local nobility) to move the museum collection to the premises of the newly built city library. During the construction of the library, it was planned to equip a three-room building with a fireproof floor and iron doors for the Prince Potemkin Museum. However, not having a significant number of exhibits, the library management decided to give the premises for the V. I. Hoshkevych collection. Cabinets and showcases for the museum were purchased at the expense of the city administration (Костенко 2015a, c. 144).

On the day of the exposition opening at the Provincial Archaeological Museum, on May 31, 1898, V. I. Hoshkevych in his speech told the story of the collection he had collected: "The results exceeded all expectations. A collection of monuments from the Stone Age, the Scythian era, the time of the migration of peoples and various later nomads appeared here... I did not have the opportunity to manage them, and there was not enough space to properly store all the ancient monuments collected in the museum... Transferring the museum of the scientific archival commission, I can only wish its further prosperity and development from the bottom of my heart' (Юг, 1898a). To manage the museum, the Kherson Provincial Academic Archive Commission (the KhPAAC) was created, which had been headed by H. L. Skadovskyi during 1898—1911 (Чорноіваненко 2015, с. 167). V. I. Hoshkevych became a museum keeper on a voluntary basis. Museum working hours were published in the issues of the Yuh newspaper, most often the exposition was open on Sundays from 12:00 to 2:00 p.m. Entrance for visitors was free of charge.

The head of the KhPAAC H. L. Skadovskyi, like V. I. Hoshkevych, constantly replenished

the museum's collection with antiquities from his archaeological excavations. A part of the exposition was occupied by finds from numerous expeditions carried out in Bilozerka village, on the territory of the H. L. Skadovskyi family estate. It is worth noting that, the well-known archaeologist, ethnographer and historian D. I. Yavornytskyi (1855—1940), with whom V. I. Hoshkevych also maintained contacts, joined these excavations several times. Most likely, the scientist owes this acquaintance to H. L. Skadovskyi.

The first official face-to-face meeting between V. I. Hoshkevych and D. I. Yavornytskyi took place in December 1898 during his visit to Kherson: "Yesterday, professor of the Moscow University D. Yavornytskyi visited the Kherson Archaeological Museum. He looked through all the collections very carefully and could not hide his delight at the variety of local antiquities collected according to a strict system," writes Yuh (Юг 1898c). However, there is a possibility that D. I. Yavornytskyi and V. I. Hoshkevych met a year earlier, when Dmytro Ivanovych was excavating Bronze Age barrows in the Kherson region, and a few months before that V. I. Hoshkevych led an expedition in approximately the same area. The results of these excavations are described in V. I. Hoshkevych's work Treasures and Antiquities of the Kherson Province (English translation) (Гошкевич 1903, с. 86-87).

It is known from epistolary sources that communication between the scholars did not end with one meeting. After D. I. Yavornytskyi became the Director of the Katerynoslav Historical and Archaeological Museum in 1902, from time to time he shared his thoughts with the Kherson colleague regarding the organisation of the museum's work. In a telegram dated by September 27, 1911, in which D. I. Yavornytskyi congratulated V. I. Hoshkevych on moving the museum to a separate building, the scientist wrote: "The museum is the past, its history, it is the soul, it is the heart of our ancestors, and for us it is a spacious temple where we must enter with reverence, and leave with deep respect and ardent love for everything that our fathers, grandfathers and great-grandfathers lived by and what all of us and the generations that will come after us should imitate and learn, as long as the earth stands and the sun shines [...] I regret that after a difficult treatment in Saki, I cannot personally take part in your celebration, but I am with you in soul, thoughts and heart and all yours, always loving and respecting you, D. Yavornytskyi" (Абросимова, С.

B. (уклад.). 2005, c. 47). Today, only two letters of this correspondence from 1903 and 1911 have been found in archival repository, but they are not logically connected with each other, so it is obvious that the other letters were simply lost (Абросимова, С. В. (уклад.). 2005, c. 47).

D. Yavornytsky's second visit to the Kherson Museum took place on September 28, 1915. It is known from the materials of the local press that the scientist was impressed by the significant growth of the Archaeological Museum compared to his previous visit (Родной край, 1915a). In Kherson, D. I. Yavornytskyi spent more than ten days working with materials from V. I. Hoshkevych's excavations in Kamianska Sich, and on October 8 he went back to Katerynoslav (Родной край, 1915b).

At the end of the 19th century V. I. Hoshkevych suggested H. L. Skadovskyi to change the location of the excavations, and insisted on researching Berezan Island. In the summer of 1900, H. L. Skadovskyi, at his own expense, began excavating the necropolis located in the north-western part of the island (Kaпошина 1956, с. 214). The results of the expedition exceeded all expectations. Among the finds were unique items: copper coins and ceramics, in particular "yellow Milesian vases, vases of Athenian masters of the prosperity of antique art". The pearl of the collection was the Cup of Tles, which was the first found work of the master Tles in the territory of the Northern Black Sea Region (так Херсонский археологический музей 1898—1903... 1908, Чорноіваненко 2105). H. L. Skadovskyi transferred all the finds to the archaeological museum. From the materials of the local chronicle of the Yuh newspaper, it is known that in February—March 1901, the ceremonial opening of the museum exposition of the Berezan collection took place, which became well-known among among the public (Местная... 1901). However, in 1904, the Imperial Archaeological Commission began to demand that the Berezan collection had to be transferred to the Hermitage for preservation. In an effort to leave the collection in Kherson, H. L. Skadovskyi proposed to send to the Hermitage the finds from future excavations by Professor E. von Stern. However, the commission refused the archaeologist: "It is not known what success E. Stern's expedition will have and what finds will be discovered, so the Hermitage decided to keep the items sent for the Supreme Inspection in the Hermitage premises, and then to carry out a selection, and everything that becomes unnecessary, to send back to the Kherson Museum" (Чорноіваненко 2015, с. 164). So, despite long

disputes and the desire of H. L. Skadovskyi and V. I. Hoshkevych to leave the collection in Kherson, in September 1904, all finds were transferred to St. Petersburg.

It is worth noting that this answer of the Archaeological Commission was somewhat rude, because it actually recognised the Kherson Museum as "unworthy" to store valuable exhibits. In general, at the first stages of the museum's existence, V. I. Hoshkevych was often criticised, considering his collection to be "junk". Viktor Ivanovych described the absurdity of these accusations in one of his publications: "... some people believed that I was selling finds, others that I was treating various diseases with them. Not everyone understood the scientific significance of this matter, only those who visited the museum and saw all the excavated "junk" already in systematic collections and listened to my simple explanations of such collecting" (Гошкевич 1905).

The historian actually had to fight for the museum's right to exist. In 1895, the professor of the Novorossiisk University A. M. Derevitskii came to Kherson with a proposal to transfer all exhibits collected by V. I. Hoshkevych to the Odesa Museum of Antiquities, which was under the Odesa Society of History and Antiquities. However, despite official written appeals from the Society and pressure from the authorities, V. I. Hoshkevych refused: "The desire to have my "junk" in Odesa persisted in the following year as well, and pressure was exerted on me through the late governor M. Veselkin (I was an official subordinate to the governor at that time), with great difficulty I managed to keep my "junk" in *Kherson* " (Гошкевич 1905).

After talking with V. I. Hoshkevych, the governor agreed to leave the museum in the city. However, probably, since that time, V. I. Hoshkevych's relations with the OSHA were partially damaged. In his "oral history", historian A. O. Dobroliubskyi wrote: "The Odesa Society of History and Antiquities was rich and famous, and it persecuted and despised V. Hoshkevych in his native Kherson [...] They hadn't given him the Archaeological Excavation Permit, all sorts of intrigues and tricks had begun" (Добролюбский 2009, с. 96). Despite this, on May 24, 1896, A. M. Derevitskii insisted on V. I. Hoshkevych's acceptance as a valid member of the the OSHA — the most numerous scientific community of historians in the South (Длужневская 2014, с. 132).

Despite the short stay of the Berezan collection in Kherson, it attracted the attention of leading historians and collectors to the museum. On June 16, 1901, the grandson of Emperor Nicholas I, Grand Duke Alexander Mikhailovich (Пребывание... 1901) decided to familiarise himself with the exposition of the Kherson Museum. His visit was covered in detail by Yuh in several publications (Великий... 1901). However, the historian's communication with the famous imperial collector Alexander Mikhailovich began three years before their personal meeting. About fifteen letters and telegrams of this correspondence are stored in the collections of the Kherson Local History Museum. In addition, the Grand Duke agreed to take the KhPAAC under his patronage (IOr 1898b).

The result of thirteen years of archaeological explorations and mound excavations was the published book *Treasures and Antiquities of the Kherson Province* (Гошкевич 1903) by Viktor Ivanovych, published in 1903. The work consists of three sections: "Treasures", "Antiquities", and "Annexes". The purpose of writing the book, as determined by the author himself, is to settle the archaeological case in the province, the biggest problem of which was the widespread robbering of cultural monuments here: "*Thousands of mounds are damaged in search of treasures, and instead of the desired money, treasure hunters find things they don't need and ruthlessly destroy these scientific relics*" (Гошкевич 1903).

In the first chapter, the the scholar actually explained to the grave robbers and amateur archaeologists the legislation on conducting archaeological expeditions and the results of his search "excursions", that is, the likely location of "treasures" (mounds, Greek settlements, etc.) on the territory of the Kherson Province. At the same time, V. I. Hoshkevych constantly tried to explain to the readers that the barrows are graves, not treasure houses: "stones, decayed bones and wood, coal, ashes, pots, pottery fragments, rusted iron and copper, this is what the robbers who searched for money in the barrows, usually found" (Гошкевич 1903, с. 67). The section also presented the classification and description of coins that the residents of the province could find near their settlements.

The second section, entitled "Antiquities", presented a list of official expeditions made on the territory of the province and the basic rules for conducting legal excavations. In addition, it contained information about the life and routine

of the Iranian-speaking Cimmerian tribes that inhabited the territory of the Northern Black Sea region in the  $8^{th}$  —  $7^{th}$  centuries BC.

The third part, "Annexes", contained name indexes and twenty pages with illustrations. Having analysed the work of V. I. Hoshkevych, we can conclude that it has an educational character and is written in sufficiently simple language for the general public. And the purpose of its writing was to explain to the local population the peculiarities of making archaeological work and the value of the found "junk" in the exact order in which it was left by our ancestors. The fact that the first part of the book "Treasures and Antiquities of the Kherson Province" was a free gift to every subscriber of the Yuh newspaper in 1902 was a confirmation of the educational mission of Viktor Ivanovych's book: "The printing of the first part of the book "Treasures and Antiquities of the Kherson Province" has been completed – a free bonus to Yuh's subscribers of 1902. The book will be sent by April 25" (Черникова (сост.) 2012, с. 115).

V. I. Hoshkevych had already gave the second part to the subscribers in 1903: "Subscriptions for the Yuh newspaper are open for 1903... Subscribers who paid the full subscription money for 1903 will receive the second part of the book "Treasures and Antiquitie of the Kherson Province" free of charge" (Черникова (сост.) 2012, с.108). An interesting fact is that the notice about these two gifts was on the pages of almost every issue of the newspaper during the year, and the book was originally titled "Antiquities and Treasures of the Kherson Province", for example: "Those wishing to become subscribers of the Yuh can subscribe in instalments from May 1. When all the money is deposited, they will also receive a free prize — an illustrated edition of "Antiquities and Treasures of the Kherson Province" (Юг 1902). Thus, in the numbers published after November 3, 1902 (from no. 1338), the scholar changed the name to "Treasures and Antiquities of the Kherson Province." Perhaps this change should have interested most of the "treasure hunters" whom V. I. Hoshkevych planned to "enlighten."

### Shifting the emphasis in the life strategies of V. I. Hoshkevych (1905—1909)

The growing revolutionary crisis in the empire and V. Hoshkevych's public activity led to his dismissal from the position of secretary of the KhPSC in August 1905. During this period, the

most active scientific stage in the scientist's life had started. The Kherson Museum began to be perceived as a serious scientific institution. In the summer of 1905, in order to study the collection of the V. I. Hoshkevych's museum, a member of the Imperial Archaeological Commission, prof. B. V. Farmakovskyi, and his colleagues archaeologists M. I. Repnikov and V. Malko arrived at Kherson (FOr 1905). V. I.Hoshkevych maintained scientific and friendly contacts with B. V. Farmakovskyi, who systematically excavated Olbia during 1901—1915 and 1924—1926, throughout his life.

Since 1905, the researcher's archaeological activity has also reached a new level. The Imperial Archaeological Commission in 1905—1907 offered three Archaeological Excavation permits addressed to Viktor Ivanovych, but he made most of the excavations during this period on the territory of the estates of Kherson landowners.

In 1905, V. I. Hoshkevych investigated several mounds that interfered with the construction of the Kherson-Mykolaiv railway branch (Archaeological Excavation Permit no. 1030) (Императорская... 2009). In 1907, the scientist received permission to make two research expeditions of the Imperial Archaeological Commission in Kherson Province, according to permits nos. 391 and 539. The researcher did not send reports on the results of these excavations to the Commission, or they were lost by the archival institution, even though the first expedition was even financed by the Commission: 150 rubles was given for its implementation (Императорская... 2009). At that time, in May 1907, the local newspaper Khersonskii Kurier (Kherson Courier) published an article about the start of V. I. Hoshkevych's archaeological expedition. The excavations were planned to be combined with prospecting works from Hola Prystan town along the border of the Dnipro County and from Kinburn spit to Kakhovka. The total area of the planned works was about 1000 km<sup>2</sup>. On the Kinburn spit, the scholar planned to find the remains of ancient Greek settlements (Летние...1907). Most likely, these excavations did not take place, because this year the owner of the estate A. F. Bishler, on the territory of which the Tsareva Mohyla mound was situated (the scientific value of which was described by V. I. Hoshkevych in his work Treasures and Antiquities of the Kherson Province), invited the researcher to start researching it.

In 1907—1908, V. I. Hoshkevych led the excavation of the Tsareva Mohyla mound in the estate

of A. F. Bishler in Kryvyi Rih (not to be confused with the mound of the same name in Kyiv Oblast). Before the start of the works, Viktor Ivanovych, in the pages of local press, said that this burial mound was one of the few surviving burials of a Scythian or Sarmatian king, whose power spread across the South Ukrainian steppes (Херсонский вестник 1908). The mound was located 2 km to the south of the modern Hdantsivka residential area in Kryvvi Rih city. The results of V. I. Hoshkevych's expedition were described in detail by his adopted daughter Iryna Fabrytsius in an article (Fabritus 1929, p. 126-134). As a result of excavations by V. I. Hoshkevych, ten burials with twelve graves were investigated. Although there were few archaeological materials, the collection of the Tsareva Mohyla, according to I. Fabrytsius, is sufficient for the description of the Black Sea steppes. As for the dating of the find, there were difficulties here. Studying the stele found to the west of the mound, O. I. Terenozhkin attributed it to the period of the Novocherkassk stage of the Cimmerian culture. The monument in question had the appearance of an elongated boulder, the images on the ceiling were carved: a dagger with the sharp end turned to the left is suspended on a wide belt in the form of horizontal lines, and a bow is figuratively marked on the left side.

Among the burials studied by V. I. Hoshkevych, only one can be attributed to this period; it is marked as no. 9 in the journal of the scientist's excavations. According to the testimony of I. V. Fabrytsius, V. I. Hoshkevych considered it the latest among the others. According to O. I. Terenozhkin, there can be no doubt that it belongs to the latest pre-Scythian period (750—650 BC) (Тереножкін 1978, с. 17). Part of the finds from the Tsareva Mohyla by agreement with the landowner A. F. Bishler were transferred to the Kherson Museum (Херсонский археологический музей 1904—1908…1908).

On October 5, 1909, V. I. Hoshkevych led another expedition on the territory of a private estate, the owner of which was Prince Petro Mykolaiovych Trubetskyi. As a result of research near the village of Mykolaivka, the remains of an ancient post-Scythian settlement — Kozatske hillfort — were found. At the first stage of the research, the foundations of three buildings were discovered, one of which was two-storeyed. At the second stage, the scholar managed to reconstruct schematically the street system and part of the city wall. Excavations were carried out over an area of approximately 300 m² (Херсонский...2012,

c. 178-179). V. I. Hoshkevych's assistant in this expedition was his adopted son, Fedir Fabrytsius, who took pictures of the finds and the excavation itself.

V. I. Hoshkevych was constantly distracted from conducting archaeological research by museum organisational problems. After all, since 1905, relations between the management of the city library, in the building of which the Archaeological museum was located, and the Scientific Archaeological Commission had been strained. The management of the library demanded the immediate transfer of the museum to another place, arguing that this was due to the significant growth of library collections. V. I. Hoshkevych's sarcastic publication "Junk", which was discussed earlier, is dedicated to the library management, which publicly threatened to "throw" the museum out of its building: "Talk about throwing such "junk" into the street is unacceptable in an educational institution, which we are used to consider a society's public library," V. I. Hoshkevych wrote (Гошкевич 1905).

Disputes had dragged on for several years. It was difficult to find a way out of the situation, because the KhPAAC did not have money for a new building. And in general, with the growth of the revolutionary crisis, the majority of Kherson landowners took a passive position in the public life of the city. Due to the inaction of the manager of the museum in solving the problem, in October 1907, in the City Duma (city council), the question of closing the Commission began to be raised. On May 29, 1908, the members of the KhPAAC unanimously decided to donate the Archaeological museum to Kherson, and this decision was approved by the Kherson City Council on the same day (Херсонский археологический музей 1904—1908...1908). After that, the museum received a new name — the Kherson City Museum of Antiquities and Fine Arts (1909—1923). Finally, on December 29, 1910, the newspaper Ridnyi Krai (Native Region) published an article about the transfer of the museum: "The new twostoreyed building for the museum of antiquities of the Kherson Province in the former building of the Falts-Fein night shelter has been completely renovated. Preparatory work for the transfer of the museum has begun" (Перенесение... 1910). The official opening of the museum on Howard street, in the building of the former night shelter, took place on August 1, 1911. It is known from the press materials that V. I. Hoshkevych received about 50 telegrams with congratulations, including from

D. I. Yavornytskyi, Bishop Kirion (a monk of the Kherson monastery), Bishop Oleksii (the rector of the Kazan Theological Academy, who previously worked as a lecturer of the Kherson Theological School), Professor E. von Stern (Херсонский... 2012, с. 233-234), the German professor F. von Strick, the British historian E. Minns, the guardian of the Kazan educational district A. Derevnytskyi, native historians and archaeologists M. I. Petrov, B. V. Farmakovskyi, V. V. Khvoika, A. A. Spitsyn, A. P. Pavlov and others (Поздравление... 1911).

The museum received letters not only from the researchers who were part of its scientific communications network before this transformation, but also from scholars who were just planning to get acquainted with the museum collections. In particular, in the correspondence of V. I. Hoshkevych with Kyiv local historian and collector S. L. Drozdov (1867-1933), the one who asked to send him the works of the Archive Commission, which until 1909 took care of the museum. In his reply to the researcher, dated by December 28, 1911, V. I. Hoshkevych said that "you can familiarise yourself with the nature of the activity (the KhPAAC — author's note) from the printed minutes of its meetings, which are sent to you at the same time. It did not publish any "Works". The museum became the property of the city of Kherson. I have recently moved it to a new, large room; I am currently putting the collection in order, and in 1912 I hope to publish the "Guide of the Museum" (Гошкевич 1911, арк. 2).

Such a number of congratulatory telegrams and attention from leading scholars to the provincial museum was in fact evidence of high appreciation of its scientific activity and recognition of the academic significance of the work of the "second plan" historian V. I. Hoshkevych among researchers of ancient history. In addition to the name, the museum's working hours had also changed: daily from 10:00 a.m. to 12:00 p.m., the entrance for visitors remained free (Юг 1911a). On May 31 of the same year, the KhPAAC finally ceased its work (Сінкевич 1999, с.19).

### The intellectual peak of V. I. Hoshkevych's biography (1909—1917)

In 1910, V. I. Hoshkevych published the first issue of the scientific periodical *Litopys muzeiu* (*Museum Chronicle*), which described the main archaeological finds in the Kherson province. Under the editorship of the scholar, seven issues

of the Museum Chronicle were published, the last in 1916. The establishment of the status of the City Museum of Antiquities every year attracted more attention not only of native historians, but also of world researchers. As a result, V. I. Hoshkevych managed to expand the circle of his scientific contacts. German scholar and editor of the magazine Praehistorische Zeitschrift K. Schuhgardt, Athenian historian G. Dragendorff, prof. K. Kinch from Copenhagen, Director of the Stockholm Museum of Antiquities, Dr. T. Arne, German researcher G. von Strick, Cambridge University professor E. Minns and others had come to get acquainted with the museum's exposition (Кармазіна 2013, с. 62). The stay of all the abovementioned scientists in Kherson can be partially traced through the materials of the local press. For example, the arrival on May 25, 1910 of the Danish archaeologist, professor of the University of Copenhagen, K. Kinch (1853-1921) (fig. 5) was covered by the local newspaper Kopeika (Kopeck - in English, hereinafter - Kopiika). A year before, at the International Archaeological Congress in Cairo, K. Kinch learned that the Berezan collection of vases of the 7th - 5th centuries BC of the Kherson Museum was of the same style as the vases found by him during the expedition to Rhodes Island. The Danish researcher studied the museum exposition for five days. It is interesting that during his stay in the Southern province, the scholar settled in the house of V. I. Hoshkevych in Hola Prystan and travelled a considerable distance to the museum every day (Пребывание... 1910).

After completing the study of Berezan vases, K. Kinch, impressed by the collection of artefacts found during the excavations of the ancient settlement Kozatske in the estate of P. M. Trubetskyi, asked V. I. Hoshkevych to make a tour at the expedition site for him. Having studied the defensive walls of the settlement, K. Kinch unequivocally attributed it to the Greek culture. It is interesting that before that V. I. Hoshkevych was sure that this was an ancient Roman settlement (IOr 1898a).

After the excursion, the Danish colleague decided to join the burial mound excavations of V. I. Hoshkevych in the Chernodolin estate of Count A. Mordvinov in the Dnipro County. The first investigated barrow contained two burials. Among the material finds were two arrowheads with partially preserved shafts painted with yellow and red stripes, an iron spear and an iron knife with a bone handle. Viktor Ivanovych attributed the burials to the cultures



Fig. 5. Professor of the University of Copenhagen, Karl Frederik Kinch (1853—1921)

no later than the 2<sup>nd</sup> century AD, most likely Sarmatian, although, according to archaeologist V. P. Bylkova, these mounds belonged to the Scythian culture (Былкова 1990, с. 68). There was an underground passage in the vault of the burial niche, which testified to the robbing of the burial mound. The Kherson Local History Museum preserves a photo of Professor K. Kinch during the excavations (fig. 5; 6; 7).

The study of two more mounds had to be cancelled due to K. Kinch's illness. It is an interesting fact that while receiving his Danish colleague, the Ukrainophile V. I. Hoshkevych introduced him to Ukrainian culture, in particular songs from Mykola Lysenko's collection, that were sung by the local choir for the patient, at the request of Viktor Ivanovych. According to information from the newspaper *Ridnyi krai (Native Region)*, the Dane was impressed by the melodiousness of the Ukrainian language. On June 4, 1910 K. Kinch returned to Copenhagen (Археологические... 1910). The following year, V. I. Hoshkevych finished the research he had started on the mounds in the Mordvinov estate.

In 1912, another foreign researcher, archaeologist M. Ebert (1879—1929) of the Berlin Royal Museum, became interested in the archaeological

research of the ancient settlement on the territory of the P. M. Trubetskyi estate. It is known from the materials of the newspaper Khersonska Dumka (Kherson Thought) that in May 1912 the he came to the Kherson Museum to familiarise himself with the expedition materials of V. I. Hoshkevych (Херсонский...2012, c. 292). From 1907 to 1913, Dr. Ebert conducted periodic archaeological excavations in and around Olbia. From V. I. Hoshkevych's article Ancient Cemetery and Settlement in Mykolaiv, published in the fourth issue of Museum Chronicle, it is known that in 1912 the scholar excavated a settlement and a burial ground of ancient times, discovered during construction on the territory of the future international pier, in Mykolaiv (Гошкевич 1914). Taking into account the coincidence of the time and location of the two expeditions, it can be assumed that the acquaintance of the scholars took place on the eve of the meeting in the museum or even earlier.

Scientific contact between V. I. Hoshkevych and the British historian E. Minns (1874—1953) is known from the researcher's letter to V. I. Hoshkevych, in which E. Minns congratulated the Kherson Museum on moving to a new building: "Dear gentlemen! Allow me to congratulate you on the festive opening of your museum. Even in distant



Fig. 6. V. I. Hoshkevych at the excavations of the ancient settlement of Kozatske on the estate of P. M. Trubetskyi

England, one can be interested in the antiquities of the Russian South, and I sincerely followed and worried about the changing fate of the collection of precious monuments of antiquity, which was created by many years of efforts by the honourable V. Hoshkevych. I now take great pleasure in providing this collection with a safe depository, and hope that for many years the finds of the same energetic custodian will continue to arrive there. In addition, in such a centre as Kherson, it is necessary that there should be a museum to which the donations and finds of the numerous antiquities lovers in your region would be transferred. Prosperity to the Kherson City Museum!" (Миннз 1912, с. 74-75). The same telegram was published on the pages of the Kopiika (Kopeck) (Поздравление... 1911) and Yuh (Юг 1911b) newspapers.

Among the scientific interests of E. Minns were Slavic studies and the ancient history of the Northern Black Sea region. In 1898—1901, the historian was in the territory of the Russian Empire, among other things collecting information for the book *Scythians and Greeks*, published in 1913.

A. V. Kostenko suggested that it was during this period that V. I. Hoshkevych and E. Minns got to know each other personally. This is confirmed by the fact that E. Minns was elected as a member of the OSHA, which also included V. I. Hoshkevych (Костенко 2016b, c. 10). In addition, during the visit of E. Minns to Odesa (probably in 1900—1901), the Kherson Museum exhibited the Berezan collection, which could interest the cholar.

The book Scythians and Greeks by E. Minns is stored in the collections of the Kherson Local History Museum. It was sent to Kherson in August 1926 with the signature: "To dear Viktor Ivanovych Hoshkevych for the Kherson Historical and Archaeological Museum as a sign of long-standing friendship, February 15, 1926. Ellis H. Minns" (Костенко 2016b, c. 8-10). In the preface to this work, there is a mention of the Kherson museum and personal thanks to V. I. Hoshkevych as a researcher who provided the author with information about archaeological finds in the territory of the Kherson region: "At Kherson, Mr V. I. Goszkewicz has kept me abreast of the progress of archaeology



Fig. 7. The excavations of the ancient settlement of Kozatske on the estate of P. M. Trubetskyi

in his district. At Chersonese, the late Director of the Excavations" (Minns 1913, p. 10). In his book, the researcher analyses in detail the barrow studies of V. I. Hoshkevych, described in the works Treasures and Antiquities of the Kherson Province and the journal Museum Chronicle, sometimes even criticising them. In particular, he describes the features of burials with "coloured skeletons", i.e., where the bones of people found were painted in a bright red colour, with ocher or another composition containing iron (Minns 1913, p. 142). The scholar does not agree with archaeologists D. Y. Samokvasov and V. I. Hoshkevych, who in their works attribute such burials to the Cimmerians.

In his book *Treasures and Antiquities of the Kherson Province*, V. I. Hoshkevych, explaining the features of Cimmerian burials, wrote, among other things, that some skeletons are distinctly painted in red, sometimes the entire skeleton is painted, and the paint even lies on the bones in a whole layer; in some skeletons, only the limbs are painted — the head, arms and legs; although other bones are not painted, pieces of red paint, sometimes yellow or white, are found with them (in the hand or next to the deceased). Usually this red paint turns out to be ocher (iron oxide) (Гошкевич 1903, с. 136-137). E. Minns adhered to the concept that these burials cannot be identified as Cimmerian, arguing this with

the research of Professor J. L. Myres, who called them "the Kurgan people" who had long blond hair: "Mr V. I. Goszkewicz of the Kherson museum unhesitatingly applies the name Cimmerian to graves of this class, which he enumerates fully as far as they occur in the government of Kherson. He says that in particular cases the position of the bones makes it appear that the colour was applied after the flesh had been removed, and suggests that there existed some arrangement like the "Towers of Silence". But there are too many suppositions concerned for this to be an argument in favour of the Iranian affinities of the Cimmerians. I take it these are the people Professor J. L. Myres calls "the Kurgan people", and declares to have been blonde longheads" (Minns 1913, p. 145). Modern science identifies these burials as belonging to the Yamna culture. Therefore, the scholar's criticism was appropriate.

Analysing the Scythian burials, E. Minns, as an example, cited the findings of V. I. Hoshkevych's expedition in 1896, and in particular the fragments of the bronze mirror and the handle of the statuette, which have already been mentioned. In his work, the researcher presented a high-quality photo of the artefact (Костенко 2016b, c. 15) (fig. 4).

Despite the lack of a sufficient source base for the study of the collaboration between V. I. Hoshkevych and E. Minns, it is nevertheless an excellent example of successful international communication between the scholars. Moreover, regardless of V. I. Hoshkevych's provinciality or "secondary nature" as a scientist, in the community of the Northern Black Sea region researchers (Костенко 2016b), not only his archaeological finds were analysed, but also his scientific conclusions and ideas, which meant recognition of his professionalism as an archaeologist and historian.

Returning to the chronology of the researc-her's scientific work, it is worth noting that after 1910, V. I. Hoshkevych did not receive "official" funding for archaeological expeditions from the Imperial Archaeological Commission, or the information about monetary receipts was not preserved in the relevant letters. According to the archive materials of the Institute of Material Culture History, during 1901—1917, he received eight Archaeological Excavation Permits for the works within Kherson and Tavriia Provinces, four of which were issued for research under the building of railway lines. The researcher ignored two Permits, and used the other two (during the construction of the Kherson-Dzhankoi railway branch) when he excavated mounds in 1913 and 1917 (Императорская... 2009). The researcher took the other four Permits every year to legitimise his possible mound researches, focusing on excavations in landlord estates. The explanation was simple: landowners paid for these works by hiring people at their own expense.

Since 1909, V. I. Hoshkevych, being tired of mound research, had begun to conduct archaeological explorations on the territory of Kamianska Sich. Most likely, he was prompted to this research by his friend and colleague D. I. Yavornytskyi, on whose order a topographical plan of this Sich was made for the first time back in 1887. However, Viktor Ivanovych was in no hurry to start work and had been preparing this expedition for several years. In 1910, the archaeologist conducted his first "Cossack" excavations at the site of Chortomlytska Sich (Летопись... 1910, c. 8-20). The results of the research were published in the Museum Chronicle. Among other things, the publication included a photo of a unique find — a body cross with enamel. It is known from the materials of the newspaper Ridnyi krai that in the same year V. I. Hoshkevych together with D. I. Yavornytskyi made an excursion to the ruins of Bazavlutska Sich near the Pidpilna River and visited the grave of I. Sirko (Черникова (сост.) 2012, с. 197-198).

Official expeditionary work on the territory of Kamianska Sich under the leadership of Viktor Hoshkevych had started in 1913. Excavations were carried out on the territory of the estates of F. S. Aharkov and V. I. Hoshkevych's friend M. I. Blazhkov, who owned two parts of the lands of the former Sich. To carry out the work, the landowners provided the archaeologist with ten workers. As a result of the excavations, V. I. Hoshkevych supplemented the plan of the Sich created by D. I. Yavornytskyi, and published it with a description of the work carried out on the pages of the Museum Chronicle. Apart from a few more articles in the Kherson press, the scholar's publication is the only source known to us for the results of this archaeological research (Гошкевич 1915, c. 4, 20).

The site was studied at four locations:

- mound near the Kamianka River;
- Konsulivka hillfort;
- Tatar cemetery;
- · Kamianska Sich.

In modern historical science, there are certain collisions with the interpretation of the researcher's words. In particular, V. O. Lenchenko, without paying attention to the location of the excavations, attributed to V. I. Hoshkevych the finding of ramparts, ditches and the remains of stone walls within Kamianska Sich, although according to A. I. Lopushynskyi this does not coincide with the presented excavation plan (fig. 8) (Ленченко 1990, с. 20-22, Лопушинський 2016 с. 23).

The territory on which the excavations were carried out was partly built up with rural houses. Only 24 out of 40 archaeological pits from kurins remained intact, in which tiles decorated with flowers and geometric patterns were found in 1913 (Гошкевич 1915, с. 7).

The map of V. I. Hoshkevych's excavations is somewhat difficult to understand, because it does not contain precise explanations of the symbols (fig. 8). The analysis of the publication allows us to draw the following conclusions: on the plan from the wall of the monument bordering the northern edge of the Sich, four parallel lines consisting of separate six-pointed crosses (points of pits or trenches) are shown. One of these lines — the longest — reaches the crossed-out kurin. Probably, this is the chimney named in the researcher's article as "a dug trench for a sample" (Гошкевич 1915, с. 8); fragments of massive glass cups and clay tobacco pipes were found in it. On another line of six-pointed crosses there is a four-pointed cross, which marks the investigated object, probably a furnace. During excavations in the

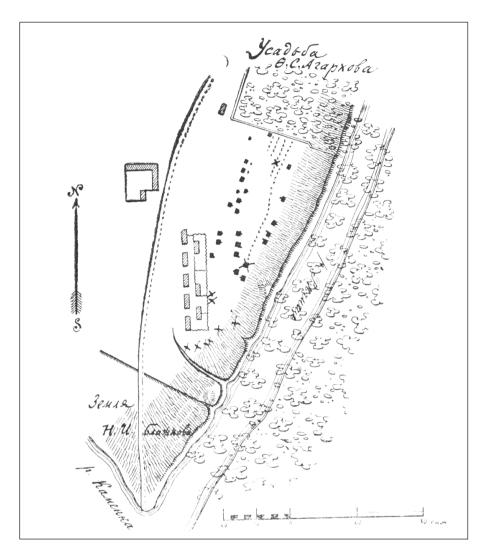


Fig. 8. Excavation plan of Kamianska Sich, 1913 (Гошкевич 1915, с. 8)

northern part of the Sich, three such ground furnaces were found that were used (Лопушинський 2016, c. 23). V. I. Hoshkevych attributed all the finds to the beginning of the 18<sup>th</sup> century, i.e. the period of the Sich's activity as an administrative centre.

V. I. Hoshkevych's main scientific achievement in this expedition was the assumption of the existence of two cemeteries in the Sich. One, according to the scientist, was used for the burial of ordinary soldiers, and the other — for the burial of honorable Cossacks and foremen. archaeologist made these conclusions after analysing the graves of Cossacks in both cemeteries. The correctness of these conclusions of V. I. Hoshkevych is also recognised by modern scholars. Collisions arise only in the imprecise formulation of the scientist's opinions, namely in his determination of the geographical location of these cemeteries: "It is necessary to assume that the indicated graves of the Zaporizhzhians on

the edge of Sich Square store the ashes of private soldiers; the cemetery for dignitaries was located in another place, half a mile from the Sich" (Гошкевич 1915, с. 8). The contradictions were caused by the fact that the location of the grave of the Kish otaman of the Sich, Kost Hordienko, the location of which was determined by D. I. Yavornytskyi in 1877 (Эварницкий 1887), should be located in the foremen's cemetery. At the same time, according to A. I. Lopushynskyi (Director of the National Historical Park "Kamianska Sich"), the grave of the Cossack K. Hordienko is geographically much closer to the Sich than the "half a mile" specified by V. I. Hoshkevych. Probably, V. I. Hoshkevych expressed his assumptions somewhat incorrectly and wanted to say that the foremen's cemetery was located half a mile not from the Sich, but from the cemetery of ordinary Cossacks.

So these cemeteries were located on two sides of the Sich, and the distance between them roughly corresponds to that indicated in V. I. Hoshkevych's publication (Лопушинський 2016, с. 23). In addition, it is worth noting that the archaeologist knew exactly the location of the grave of the Kish otaman, and described it precisely within the boundaries of the foremen's cemetery (Гошкевич 1915, с. 9).

In 1914, during works on the expansion of the park area in the Agarkov's estate, several more artefacts from the Cossack era were found: two complete and twenty fragmentary pieces of tiles used for lining furnaces, four clay tobacco pipes, a stone mortar and stone tools. All finds were transferred to the city museum (Реликвии... 1914). Archaeological excavations on the territory of the National Nature Park "Kamianska Sich", started by V. I. Hoshkevych, have been continued by modern scientists.

The museum collection of the Cossack era grew at an incredible speed. In addition to the excavations carried out by V. I. Hoshkevych, the museum's collections were replenished with gifts from local residents. From the materials of the local press, hundreds of donations of "Cossack" antiquities are known.

In 1914, V. I. Hoshkevych began research and excavations on the estate of Mykola Ivanovych Volokhin on the Dnipro Island opposite Tiahynka village of the Kherson region of the Kherson Province. Perhaps V. I. Hoshkevych was also inspired by D. I. Yavornytskyi, in whose writings was mentioned a high mound on one of the Tiahynka islands, to conduct archaeological exploration of this area. In another work, he wrote about the ruins of a 200-fathom-long hillfort in the south-eastern part of the island (Кобалия 2018, c. 174).

After the first explorations of the fortress ruins, V. I. Hoshkevych realised that the monument had been destroyed for years by local residents who dismantled it to build their own homes; this information was confirmed to him by the old residents of the village. During the work, the archaeologist was able to identify the following objects: "A" — the hypothetical fortification (wall) of the castle with a square citadel, which was located on top of the conditional letter "A", a hillfort in the form of a trapezoid and two mound-like burial grounds in the western part of the island (fig. 9).

The scholar had started excavations from the central tower, which had a regular square shape with an entrance from the northern side. Each side of the tower was 9 m long, the thickness of the walls of the building was 80 cm, and the total area, respectively, was 81 m<sup>2</sup> (Γοιικεβμ4 1916b, c. 3-4).

In addition to the citadel, a cemetery and several buildings were investigated, in one of which a furnace was found (Гошкевич 1916b, c. 7). Among the material finds, there were especially many fragments of ceramics and nails, and in addition to this, eight stone cannonballs, a small iron sickle, an iron braid, scissors, two knives and other small items were found (Гошкевич 1916b, c. 8).

V. I. Hoshkevych dated the monument to the 14<sup>th</sup>-16<sup>th</sup> centuries. After analysing the written sources, and more precisely, finding the testimony of the writer of the 16<sup>th</sup> century, Mykhalon Lytvyn, the researcher determined the name of the fortress as Balneum Vitoldi (Vytautas Customs House). Thus, the fortress was part of the system of fortifications on the southern border of the Grand Duchy of Lithuania, which was supposed to ensure the functioning of customs at the crossings. According to V. I. Hoshkevych, judging by the fact that many skeletons were not buried, as well as by the traces of fire and found stone cannonballs, the fortress was destroyed at the end of the 15<sup>th</sup> century as a result of a Tatar raid (Гошкевич 1916b, c. 7-11).

In addition to medieval material, monuments of ancient Greek culture were also found during the excavations. The scholar assumed that these finds got here at the stage of the construction of the fortress, which involved the use of spolia from ancient Greek ruins (Археологические... 1914). Excavations of the Tiahyn fortress are currently ongoing. Over the past few decades, the researchers have managed to discover that the territory of the fortress was significantly larger (Біляєва 2018). In 2018, historian D. R. Kobaliia developed a three-dimensional model of the site, which revealed a more complex fortification system of both the castle itself and the territory adjacent to it (Кобалия 2018, с. 172-198).

The next serious archaeological research was done by V. I. Hoshkevych in 1915. After conducting archaeological explorations and long-term analysis of manuscript sources, he tried to identify the ancient Greek city-colony of Odesa. Viktor Ivanovych presented his hypothesis in the work *Gde byil drevniy Odessos?* (*Where was ancient Odessos?*)<sup>2</sup>, published in 1915 in "Notes" of the Odesa Society of History and Antiquities (the OSHA) and in 1916 in the 7<sup>th</sup> issue of *Museum Chronicle*.

The fact is that by the beginning of the 20<sup>th</sup> century archaeologists were looking for the ancient city of

<sup>&</sup>lt;sup>2</sup> The author studied the location of modern Odesa, not Odessos near modern Varna.

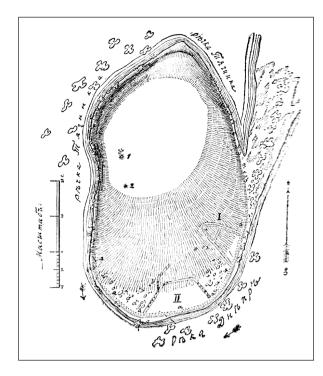


Fig. 9. Excavation plan of the Tiahyn fortress, 1914 (Гошкевич 1916b, c. 3)

Odessos exclusively around the estuary of the left bank of the Tylihul gulf. In 1909, V. I. Hoshkevych for the first time disagreed with this position of his contemporaries, believing that the city is located in the Berezan estuary, identifying it with the Saharii Bay mentioned in the narrative sources. This hypothesis of the scholar was criticised by the professor of the Byzantine Philology Department of the **Imperial** Novorossiysk University, S. D. Papadimitriou (1856—1921) on the pages of Notes (Zapiski Odesskogo obshchestva istorii i drevnostei, hereinafter Notes of the OSHA) (Агбунов 1985, с. 31-132). In 1912, S. D. Papadimitriou's article Mestopolozhenie drevney Odessyi (The Location of Ancient Odesa) was published in Notes of the OSHA, in which the archaeologist reported on the results of his excavations, which actually turned out to be unsuccessful, but the archaeologist had a clear position on finding the remains of Odesa a little further from the Tylihul gulf (Пападимитриу 1912, c. 389-395). It is obvious that this position of the professor annoyed V. I. Hoshkevych, so he started a fierce debate with the "top" member of the OSHA. In the preface to his work "Where was ancient Odessos?" Viktor Ivanovych wrote: "Prof. S. D. Papadimitriou left a note at our address. Acknowledging in it that the Greek settlement we discovered is a "very pleasant find" and "very interesting" (thanks for the compliment!), he claimed that it had no such relation to ancient Odessos... because, in fact, the settlement we discovered turned out to be precisely where it was indicated by ancient geographers, and not at all where he, Prof. S. D. Papadimitriou, unsuccessfully had searched for it three times" (Гошкевич 1916а, с. 2).

According to V. I. Hoshkevych, the ten-year search for the ancient Greek colony of Odessos had not yielded results due to an inaccurate understanding of measurement units. The ancient Greek writer Arrian (1st — 2<sup>nd</sup> AD), who described the location of Odessos, measured the distance in "stadia", but each state and period had its own understanding of this measure. For example, the Babylonian stadion was equal to 194 meters, the Roman — 185 meters, and there is a hypothesis that at the Olympic Games the stadia corresponded to 197.2 meters. V. I. Hoshkevych found written evidence that Arrian's stadia was equal to 197.2 meters. Moreover, the scientist added that Arrian measured length not in single stadia, but in multiples of ten. The ancient Greek writer defined the possible error as approximately 5 stadia, that is, about 1 km (Arrian, Per. P. Eux. 31; Гошкевич 1916a, c. 1).

After analysing the written sources of Arrian, which contain accurate data on the location of Odessos, and conducting geographical calculations, the scientist identified four possible locations of the ancient Greek colony. The first point, according to V. I. Hoshkevych, was located near Koblevo village — the Tylihul gulf, the second — on the left bank of the Sosytsk-Berezan estuary near Oleksandro-Dar village, the third — on the protrusion of the right bank of the estuary, the fourth — on the cape that separates the Sosytsk and Berezan estuaries.

Historically, the first search point is the most famous among archaeologists, because the search in this city resulted in an amphora and two Greek inscriptions. However, the settlement itself was not found. Moreover, Professor S. D. Papadimitriou did not agree with this hypothesis either. According to V. I. Hoshkevych, he was looking for Odess behind Karabash village (a little further from Koblevo village) for no reason. Archaeological explorations at the second and third points of the possible location of the ancient city hadn't yielded results. After surveying the deserted cape between the Berezan estuary and its western arm — the Sosytsk estuary,

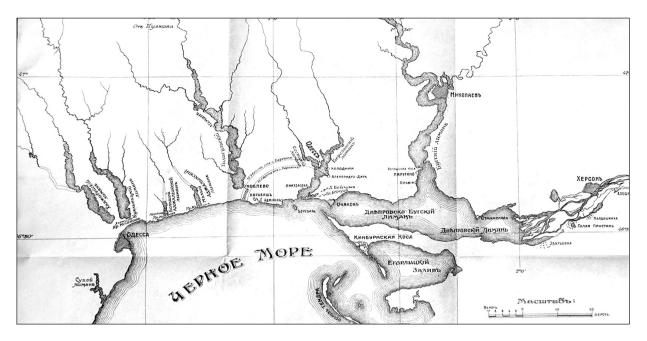


Fig. 10. The map of the Northern Black Sea coast created by V. I. Hoshkevych (Гошкевич 1916a, the annex)

V. I. Hoshkevych found a settlement with a double parallel fence (fig. 10) (Гошкевич 1916а, с. 1-2).

It is worth noting that in his calculations, the scholar also took into account possible palaeographic changes in the area. In addition, V. Hoshkevych explained the location of Odessos in the Berezan estuary with logical arguments: a more convenient geographical location than in the Tylihul gulf, and Olbia's trade needs. In the second conditional part of his work, V. I. Hoshkevych managed to determine the likely location of the small ancient Greek settlement of Skopela (Гошкевич 1916a, c. 3-6).

It is not surprising that after the publication of V. I. Hoshkevych's article, S. D. Papadimitriou criticised it in his work More about the location of ancient Odesa, which was also published in 1915 (Пападимитриу 1915). Modern science still does not have the exact location of the ancient Greek colony of Odessos. Discussions on this issue have been going on for decades. After all, the site is not where it should be according to the written sources. There are few supporters of V. I. Hoshkevych's hypothesis in this discussion, and most researchers still continue to look for Odess in the Tylihul gulf. The most recognised today is the hypothesis of M. V. Agbunov, who followed the path of V. I. Hoshkevych and carried out a paleological reconstruction of the area, not only the Berezan estuary, but the Tylihul gulf. And in 1981, M. V. Agbunov's underwater research yielded results — fragments of amphorae and handmade vessels were found (Агбунов 1985, с. 135). Despite this, discussions about the localisation of the ancient city continue to this day.

### "Soviet" period (1917—1927)

In 1918, during the hetmanship of Pavlo Skoropadskyi, V. I. Hoshkevych continued his active work, tried to preserve his international connections and started new ones. That year, the German archaeologist Theodor Wiegand (1864—1936), the founder of the Pergamon Museum, visited the Museum of Antiquities for the first time. However, the further aggravation of the political situation put the museum on the verge of survival. The fact that it was not closed, destroyed or looted is the sole merit of V. I. Hoshkevych and I. V. Fabrytsius, who continued their work during the famine of 1921—1923 (Костенко, Шевченко 2016, с. 125).

On February 21, 1922, V. I. Hoshkevych wrote an extensive letter to the scientific department of the Main Museum, which was part of the National Commissariat of Education of the Ukrainian Soviet Socialist Republic (NCE USSR) (Документы... 1922, c. 10-20). In it, the he described in detail the museum's collection, its structure and scientific achievements over 22 years of work. In addition, Viktor Ivanovych provided a list of scientific connections of the museum, which included both local and international historians.

His written appeal did not go unheeded, because in 1923 the museum was connected to in the centralised network of scientific museums of the USSR under the name of the Kherson State Historical and Archaeological Museum (the KSHAM). It should be noted that in the 1920s, museums were considered primarily scientific institutions. Further museum construction in the Ukrainian SSR resulted in the unification of all museums of the NCE USSR in the system of the Main Directorate of Science of the NCE USSR, which was explained by the strategy of creating a uniform structure of museum management apparatus. In 1925, during the introduction of this reform, only ten museums in the USSR received the status of state, among them the KSHAM (Яненко 2016, с. 7).

The last archaeological collection gathered by Viktor Ivanovych himself for his museum were objects found during the excavations of the Adzhyhol hillfort (Solonchaky village, Ochakiv Region, Mykolaiv Oblast) near Olbia in 1924. The Kherson archaeologist drew attention to the Adzhyhol hillfort during the prospecting in 1913, when he took the plan of this attraction. The official leader of the 1924 expedition was V. I. Hoshkevych, but in fact all organisational work was performed by his daughter Iryna Fabrytsius. In addition, one of the participants of the expedition was the historian and archaeologist Ye. P. Mamaienko, who would later work in the museum under the leadership of I. V. Fabrytsius. As a result of the completed works, the KSHAM was enriched with the first collection of Roman times (Костенко, Шевченко 2016, с. 126).

In addition to archaeological excavations, V. I. Hoshkevych throughout his life was engaged in research work, so-called "excursions", the results of which he partially published in the *Museum Chronicle*. The work of his life became

Агбунов, М. В. 1985. Загадки Понта Эвксинского (Античная география Северо-Западного Причерноморья). Москва: Мысль.

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Археологические раскопки в имении Н. И. Волохина. 1914. *Родной край*, 25 мая.

the selection of material for the archaeological map of the Kherson region that he conceived. However, the researcher did not have time to publish the work. Due to the famine of 1921—1923, the archaeologist's health deteriorated significantly. As he got older, his symptoms of multiple sclerosis worsened. Iryna Fabrytsius continued and successfully completed her father's work in publishing an archaeological map (Фабрициус 1951).

Staying in public positions, working in the county (zemstvo), public work, journalism and editing the Yuh newspaper, a wide circle of acquaintances among the powerful and financially secure people of the region, the intellectual elite of both Kherson Oblast and leading scientific centres of the Russian Empire and abroad contributed to the development of archaeological research and formation of the collection of the Museum created by V. I. Hoshkevych. V. I. Hoshkevych (who has long been perceived as a provincial archaeologist) put forward scientific hypotheses and entered into discussions with authoritative colleagues. The scholar had a wide range of scientific communications; foreign colleagues referred to his publications. V. I. Hoshkevych was a full member of many scientific societies: the OSHA, the Archaeological Commission of the All-Ukrainian Academy of Sciences, corresponding member of the Moscow Archaeological Society, the Tavriia Scientific Archival Commission, and the Main Centre for Historical Research of the Crimea. This is evidence of the high appreciation of his scientific activity and recognition among researchers of the ancient history of the South Ukrainian area. The archaeological explorations and excavations conducted by him became a significant contribution to the scientific understanding and popularisation of knowledge about the history of Kherson region.

Біляєва, С. 2018. Історико-археологічна спадщина Литви та України у Херсонській області: розкопки фортеці Тягин. *Scriptorium nostrum*, 2 (11), с. 160-171.

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Гошкевич, В. И. 1891. *Письмо М. И. Петрову*. Інститут рукопису Національної бібліотеки України ім. В. І. Вернадського, ф. 3, спр. 12940, 2 арк.

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Гошкевич, В. И. 1914. Стародавнє кладовище та городище в Миколаєві. *Летопись музея*, 4. 71 с.

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### АРХЕОЛОГІЧНІ ХРОНІКИ ВІКТОРА ГОШКЕВИЧА (1860—1928)

У статті представлено спробу комплексно висвітлити хронологію археологічної діяльності знаного краєзнавця, археолога та засновника першого у Херсоні музею Віктора Івановича Гошкевича (1860—1928). Інтелектуальну біографію вченого запропоновано поділити на кілька умовних етапів:

Перший етап — «київський» (1882—1890) — початки формування особистості в колі родини, навчання В. І. Гошкевича в Київському університеті св. Володимира, де сформувалося перше коло інтелектуальних зв'язків ученого з тогочасними провідними істориками.

Другий етап (1890—1928) — «херсонський», під час якого В. І. Гошкевич реалізувався як учений, організатор науки, музейної справи та громадський діяч. За проблемно-хронологічним принципом у межах цього етапу виділяємо кілька періодів.

- І. Початок наукової та громадської активності (1890—1905). У цей час дослідник працював секретарем Херсонського губернського статистичного комітету та розпочав наукову діяльність на Півдні України. Саме тоді відбувається соціальне утвердження В. І. Гошкевича в новому регіоні та розширення мережі його наукових комунікацій, зокрема, з Одеським товариством історії і старожитностей, до якого він вступив у 1896 р.
- II. Зміщення акцентів у життєвих стратегіях В. Гошкевича (1905—1909) згортання громадської активності у зв'язку з подіями й поразкою Першої російської революції та зосередження на науковій і науково-організаційній роботі. Цей період пов'язаний зі становленням Археологічного музею Херсонської губернської вченої архівної комісії як наукового та освітнього центру інтелектуального життя Херсонщини.
- III. Пік інтелектуальної біографії В. Гошкевича (1909—1917) на чолі Херсонського міського музею старожитностей та витончених мистецтв, це апогей його наукової творчості. Поступово вчений увійшов до кола провідних археологів-дослідників курганів Південного регіону України. Разом із тим, вивчаючи античні, середньовічні та козацькі пам'ятки, він розширив свої наукові інтереси та збагатив науковий доробок.
- IV. Радянський період (1917—1927) пов'язаний із новими соціально-політичними умовами життя в період утвердження радянської влади. Це був чи не найскладніший час у житті В. І. Гошкевича. Загострення політичної ситуації та голод 1921—1923 рр. поставили музей і самого вченого на межу виживання.

Ключові слова: В.І. Гошкевич, археологія, Південна Україна, Археологічний музей Херсонського губернського статистичного комітету, Херсонський історично-археологічний музей.

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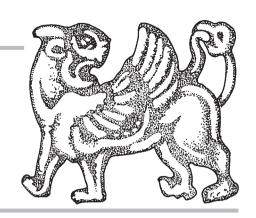
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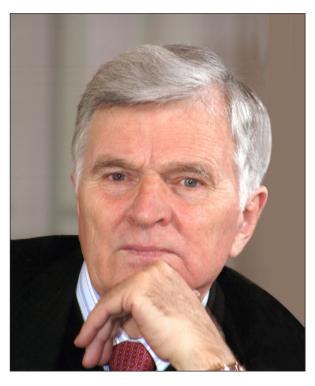
### СВІТЛА ПАМ'ЯТЬ ПЕТРУ ПЕТРОВИЧУ ТОЛОЧКУ (21.02.1938 – 28.04.2024)



28 квітня 2024 р. пішов із життя Петро Петрович Толочко — видатний фахівець з археології та історії Давньої Русі, доктор історичних наук (1981), професор (1988), академік НАН України (1990), політичний, громадський і культурний діяч. У 1970 р. Петро Петрович організував Київську постійно діючу експедицію (на правах відділу), яка у 1974 р. отримала повноцінний статус відділу археології Києва. Відтоді й розгорнулися масштабні роботи в усіх історичних районах столиці — на Старокиївській горі, у «місті Ярослава», Видубичах, Клові, Китаєві, на Подолі та ін. Поступово було взято під пам'яткоохоронний контроль числені новобудови в історичній частині Києва, розроблено й затверджено археологічні заповідні та охоронні зони в місті.

Не тільки наукове, але й громадське значення мало встановлення витоків Києва, ґрунтовно розроблене П. П. Толочком у монографії «Древний Киев» (1976). Учений пов'язував корені Києва зі слов'янськими поселеннями, що виникли на рубежі V-VI ст., за часів легендарного Кия, на горах старокиївській і замковій, які, на думку вченого, засвідчували безперервний розвиток до літописних часів. Дослідник перший звернувся до демографічних проблем давнього Києва та запропонував методику обчислення населення столиці Київської Русі на основі археологічних джерел. Деякі висновки П. П. Толочка щодо походження та ранніх фаз історії міста сьогодні аргументовано критикуються, проте громадськість Києва відтоді щороку відзначає Дні Києва.

Важливим напрямом діяльності П. П. Толочка стала програма відновлення пам'яток давньоруського зодчества, які були зруйновані в 30-ті роки ХХ ст. Так, відновлено давні святині — церква Успіння Богородиці Пирогощі, Золотоверхий Михайлівський собор і Успенський собор Києво-Печерської лаври. Авторитет Пе-



тра Петровича став запорукою того, що згадані пам'ятки були відтворені на науковій основі.

Захистивши 1981 р. докторську дисертацію та очоливши 1982 р. відділ давньоруської та середньовічної археології (куди входив і сектор археології Києва), Петро Петрович скерував фахівців на дослідження інших давньоруських міст і містечок, городищ, некрополів, продовжив програму вивчення давньоруського села, започатковану одним із його вчителів — В. Й. Довженком, націлював колег на комплексне дослідження вузлів пам'яток, а також суцільне обстеження територій і якомога повніше картування картографування пам'яток.

П. П. Толочко концентрувався на розробці принципових проблем Києва та Давньої Русі загалом. 3-поміж них — формування Києва та

Давньоруської держави, економічний і культурний її розвиток і динаміка тих процесів, демографічний потенціал, міжнародні стосунки, специфіка влади, роль князів, взаємини з кочовиками. Суттєве зростання археологічних джерел уможливлювало переосмислення відомих раніше, в новому світлі поставали події та факти, відомі за писемними джерелами.

П. П. Толочко створив українську школу археологів-русистів, до якої належить ціла плеяда його учнів. Серед них — члени-кореспонденти НАН України, доктори історичних наук Г. Ю. Івакін та О. П. Моця; кандидати історичних наук В. М. Зоценко, В. І. Якубовський, Б. А. Звіздецький, В. П. Коваленко, С. Р. Кілієвич, І. І. Мовчан, М. А. Сагайдак, С. Д. Панишко, П. С. Пеняк, О. В. Колибенко, О. Б. Супруненко та ін.

Загальний науковий доробок П. П. Толочка становить більше 500 друкованих праць, із яких понад 30 монографічних. За редакцією вченого вийшло чимало фундаментальних видань, монографій, наукових збірок, присвячених важливим проблемам історії та археології України. Працював головним редактором часописів «Археологія» і «Київська старовина».

Петро Петрович був одним з ініціаторів створення Українського товариства охорони пам'яток історії та культури (1966), яке очолив 1989 р. Також він був президентом Укра-

їнського національного комітету візантиністів, головою Українського національного комітету міжнародної унії слов'янської археології, у 1993—1998 рр., віце-президентом НАН України з гуманітарних наук, у 1998—2006 рр. — депутатом Верховної Ради України третього й четвертого скликання, де розробив і домігся прийняття закону України «Про охорону археологічної спадщини».

Учений завжди опікувався українськими музеями — підтримав і сприяв створенню музею історії Києва, Державного історико-культурного заповідника «Стародавній Київ», був членом наглядових рад інших заповідників.

Наукова й громадська діяльність Петра Петровича відзначена високими державними нагородами: медаллю «В память 1500-летия Киева» (1982), Почесною грамотою Верховної Ради Української РСР (1985), орденом «Знак почета» (1981), трьома орденами Ярослава Мудрого 5-го, 4-го і 3-го ступенів (1998, 2002, 2013). П. П. Толочко був членом багатьох іноземних академій і спілок: Центрального Німецького інституту археології (Берлін), Академії Європи (Лондон), Всеугорського товариства археології та мистецтв (Будапешт).

Від імені Інституту археології висловлюємо щирі співчуття родині та друзям Петра Петровича.

# ЗГАДУЮЧИ СОФІЮ СТАНІСЛАВІВНУ БЕРЕЗАНСЬКУ (15.05.1924 – 02.05.2024)

2 травня 2024 р. відійшла у вічність легенда української археології, доктор історичних наук, лауреат Державної премії у галузі науки та техніки Софія Станіславівна Березанська. Їй так і не довелося зустріти сотий рік свого життя 15 травня. Вона була свідком, жертвою репресій, а потім активною учасницею відродження української археології після епохи Розстріляного Відродження та страхіть Другої світової війни.

Шлях у науку розпочався 1943 р. у суворих степах Казахстану, де доньці спецпереселенців, що освоїла фах трактористки, вдалося знайти напівлегальну шпарину для вступу до Об'єднаного українського університету, створеного на базі Київського та Харківського

університетів у м. Кизил-Орда. Завершувала вищу освіту в Києві, а науковий поступ розпочала з відновлення археологічної експозиції в Херсонському історико-археологічному музеї (1948–1949).

Остаточне повернення до Києва було пов'язане зі вступом до аспірантури, де під керівництвом П. П. Єфименка 1953 р. вона успішно захистила кандидатську дисертацію на тему «Пам'ятки передскіфського часу на Уманщині та їх історичне значення». Становлення С. С. Березанської як багатогранного науковця відбулося в комплексній експедиції «Великий Київ» (1946–1959). Загалом, спочатку як співробітниця, а потім керівниця невтомна дослідниця провела близько 40 архео-

логічних експедицій на просторах республіки, а з 1991 р. — держави Україна. Результатом її польових досліджень на теренах від Волині до Слобожанщини й Донбасу стало виділення таких археологічних культур: багатоваликової кераміки, східнотшинецької, мар'янівської, бондарихінської, лебедівської.

Успішно захищена докторська дисертація «Північна Україна за доби бронзи (середина та друга половина ІІ тис. до н. е.)» 1977 р. була опублікована як однойменна монографія (1982). Софія Станіславівна невтомно публікувала матеріали своїх розкопок: поселення Пустинка на Дніпрі та Усове Озеро на Сіверському Дінці увійшли до золотого фонду вітчизняної науки.

3 ініціативи дослідниці реалізовано проєкт колективної монографії «Культуры эпохи бронзы на территории Украины» (1986). Тоді вперше розлогу характеристику отримали чотири культури: багатоваликової кераміки, зрубна, сабатинівська та білозерська, що належать до трьох періодів: перехідного від середньої до пізньої бронзи, пізньої та фінальної бронзи. У результаті система трьох віків В. О. Городцова зазнала істотної перебудови на п'ять періодів. Ця колективна праця стала викликом монографії О. О. Кривцової-Гракової, де перелічені вище культурні явища увібгано під парасольку «єдиної» зрубної культури (Кривцова-Гракова 1955). Крім того, досягнуті авторським колективом результати відображені в доповненому та переробленому другому виданні першого тому тритомника «Археология Украинской ССР» (1985). Тут С. С. Березанська виступила автором чи співавтором дев'ятьох розділів, увівши, зокрема, до системи культур бронзової доби пам'ятки мар'янівського та лебедівського типу. Є підстави вважати, що українські археологи в міру своїх скромних сил та обмежених фінансуванням можливостей наближали добу Незалежності, органічно вписавшись у Перебудову, що стартувала того ж таки 1985 р.

Софія Станіславівна була серед головних авторів усіх трьох фундаментальних видань Інституту археології АН УРСР / НАНУ: «Археологія Української РСР» (1971–1975); вид. друге (1985–1987); «Давня історія України» (1997—2000), удостоєних Державної премії (1977 та 2002 рр.).



Окремою сторінкою наукової біографії Софії Станіславівни стала підготовка наукових кадрів вищої кваліфікації. Під її науковим керівництвом захистили кандидатські дисертації О. С. Бєляєв (1980), Г. М. Тощев (1982), Т. О. Шаповалов (1984), С. М. Санжаров (1989), С. М. Ляшко (1993) та Й. В. Кобаль (1997). А ще десятки людей науки звертались до неї за науковою, а траплялося, що й матеріальною допомогою і завжди знаходили підтримку.

Своєрідною винагородою за вкладене в науку життя стали для дослідниці розкопки золотоносного Гордіївського могильника білогрудівської культури на Поділлі у 1988-1989 роках, проведені разом з Б. І. Лобаєм та В. І. Клочком, результати яких публікувалися 1994, 1998 і 2011 року. Уже на межі тисячоліть Софія Станіславівна керувала своєю останньою, Нетішинською експедицією на Волині, неподалік від реакторів Хмельницької АЕС.

Вічна шана й пам'ять Софії Станіславівні за невтомну працю на ниві української археології!

В. В. Отрощенко.

### СВІТЛОЇ ПАМ'ЯТІ ОЛЕКСІЯ КРЮТЧЕНКА

Непомірна втрата, біль, сум... 11 березня 2024 р. відійшов у засвіти молодий археолог, кандидат історичних наук, науковий співробітник відділу археології раннього залізного віку Інституту археології НАН України Олексій Олександрович Крютченко. Невиліковна хвороба обірвала життя дослідника на 37 році. В Олексія були учні — гуртківці, які були постійними учасниками чисельних експедиційних пригод. Деякі з них сьогодні навчаються та закінчують аспірантуру та вже мають наукові публікації з археології.

Олексій народився 14 червня 1987 р. в Харкові. Ще зі шкільних років він зацікавився археологією, відвідував археологічний гурток Ірини Борисівни Шрамко. Та вже у свої перші роки відвідування дитячого археологічного гуртка він визначив для себе, що хоче стати професійним археологом та буде займатися старожитностями скіфського часу. У школі Олексій брав участь у дитячих конференціях та конкурсі Малої академії наук. Із 2004 по 2009 рр. навчався в Харківському національному університеті імені В. Н. Каразіна. До речі, саме навколо Олексія тоді згуртувалася група молодих та умотивованих однокурсників. Ця компанія брала участь у багатьох харківських археологічних експедиціях, а деякі з них (Олександр Шелехань та Віталій Жигола) сьогодні є досвідченими археологами та працюють в Інституті археології. У процесі навчання і по його закінченні керував гуртком «Юні археологи». З 2011 по 2015 рр. Олексій Крютченко працював головним зберігачем при Музеї археології та етнографії Слобідської України Харківського національного університету імені В.Н. Каразіна. У 2014 р. він одним із перших став на захист Батьківщини, був поранений, отримав медаль «Захиснику Вітчизни». Побратими знали його за позивним «Археолог».

Повернувшись до мирного життя, 2015 р. Олексій вступив до очної аспірантури Інституту археології НАН України. Після її успішного закінчення був прийнятий на посаду молодшого наукового співробітника відділу археології раннього залізного віку. Фортифікація та захисні споруди городищ скіфського часу — тема яку Олексій досліджував ще зі студентства. Навчаючись на четвертому курсі університету він вже



був співавтором наукового звіту по розкопкам Циркунівського городища, оскільки керував ділянкою розкопу, здійснював розріз лінії укріплень. Згодом, уже в армії, до нього прийшло нове розуміння ролі та значення фортифікаційних споруд у будь-які часи. Усі ці напрацювання та практичні навички були покладені в основу грунтовного дослідження. У 2019 р. він захистив кандидатську дисертацію на тему «Захисні споруди скіфського часу Дніпро-Донецького Лісостепу».

З юних років Олексій був постійним учасником різноманітних археологічних експедицій з дослідження пам'яток палеоліту, Циркунівського та Ширяєвського городищ скіфського часу, Верхньосалтівського та Гришківського могильників та низки інших. Проте особливе місце в його археологічній долі посідало грандіозне

Більське городище скіфської доби. Тут він починав свою експедиційну діяльність під керівництвом І. Б. Шрамко, тут провів свій останній польовий сезон як заступник керівника Більської археологічної експедиції Інституту археології НАН України. Без перебільшення можна сказати, що кілька важливих і цікавих для вивчення цієї визначної пам'ятки археологічних відкриттів пов'язані саме з ім'ям Олексія Крютченка. Він керував також власними експедиціями, зокрема здійснював розвідки в басейні Сіверського Дінця та виконав розріз Перекопського валу.

Дослідник був співорганізатором проєкту «Літня польова археологічна школа» на теренах древнього Гелону (2016—2021) та засновником Ветеранського археологічного табору «Усі свої» (2021). Брав активну участь у культурнопросвітницьких заходах Історико-культурного заповідника «Більськ».

Із перших днів повномасштабного вторгнення Олексій Крютченко став на захист Батьківщини — брав участь у боях за рідний Харків. Проте восени 2022 р. в Олексія виявили невиліковну хворобу. Він до останнього боровся й із зовнішнім ворогом, і зі своїм недугом. Справжній мужній Боєць!

Олексій, або як його ласкаво називали друзі — Крюк, був справжньою душею компанії, любив, а головне, вмів жартувати. Це той взірець особистості навколо якої обертається світ, а позитивна енергія згуртовує всіх і заряджає веселими та безтурботними емоціями. Він назавжди запам'ятається нам як добра, світла і чуйна людина, готова прийти на допомогу.

Олексій Крютченко — автор понад півсотні наукових праць, написаних одноосібно та у співавторстві. До останнього, попри хворобу, Олексій працював над монографією. Не встиг... Ця праця має побачити світ і стати останнім його подарунком археологічній спільноті.

Несподіваний, передчасний відхід молодого перспективного вченого-скіфознавця — важка втрата не лише для відділу археології раннього залізного віку Інституту археології НАН України, а й для цілого українського скіфознавства.

Спочивай з миром, Друже. Світла пам'ять...

Друзі та колеги по відділу археології раннього залізного віку Інституту археології НАН України