

# THE EARLY MEDIEVAL GLOBULAR AMPHORAE FROM THE PASTYRSKE HILLFORT<sup>1</sup>

*Evelina Todorova\**, *Andriy Skyba\*\**, *Yaroslav Volodarets-Urbanovych\*\*\**

\* National Archaeological Institute with Museum, Bulgarian Academy of Sciences, 2 Saborna Str., 1000 Sofia, Bulgaria; evatodorova79@gmail.com

\*\* Institute of Archaeology of the National Academy of Sciences of Ukraine, 12 Volodymyra Ivasyuka Av., 04210 Kyiv, Ukraine; skyba-andriy@ukr.net

\*\*\* Institute of Archaeology of the National Academy of Sciences of Ukraine, 12 Volodymyra Ivasyuka Av., 04210 Kyiv, Ukraine; volodograd@ukr.net

## ABSTRACT

This paper presents the re-study of two early medieval globular amphorae found inside a semi-dug-out dwelling during excavations at the Pastyrskе hillfort, located in the Middle Dnieper area. Despite their similar shapes, the amphorae present differences in their fabric and so were produced in different, as-yet unidentified workshops. The Pastyrskе amphorae were dated to the late 6<sup>th</sup>/7<sup>th</sup> – 8<sup>th</sup> c. based on their similarities with other transport vessels from the Mediterranean, and an Eastern Mediterranean provenance was proposed. Graffiti and traces of repeated reuse on the vessels suggest they were most probably used in small-scale trade before they were deposited. No direct link can be established between their production centers in the Mediterranean and the Pastyrskе hillfort.

**Keywords:** LR 2/LR 13 amphorae, Early Byzantine, early medieval, Dark Ages, globular amphorae, Pastyrskе hillfort

## Introduction

The Pastyrskе hillfort is the largest early medieval craft, trade, and military-administrative center in Eastern Europe outside of Byzantium. It attracted attention from the scientific community almost immediately after V. Khvoyko discovered it in 1898. The results of the archaeological excavations<sup>2</sup> conducted there have become the cornerstone of mainstream ideas about the archaeology of the Middle Dnieper region in the 7<sup>th</sup> – mid-8<sup>th</sup> c., one of the least-studied periods of early medieval archaeology in Eastern Europe.

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<sup>1</sup> The word *городище* (gorodishche), as the early medieval fortified settlements are called in Ukrainian and Russian, does not have an exact translation into English. Words like “settlement”, “stronghold”, or “hillfort” are often used. Considering the characteristics of the Pastyrskе site, we believe that “hillfort” is the best translation.

<sup>2</sup> The hillfort in the village of Pastyrskе (“Zharishche”) was discovered and partially explored by V. Khvoyko in 1898 and 1901, at the same time as the first plan of the site was drawn up (Хвойко 1905, 94 – 98). In 1938, explorations on the right-bank part of the hillfort were carried out by I. Fabritsius (Фабриціус 1949, 80, рис. 1) and in 1939 by S. Korshenko (Петров 1948, 79). In 1946, the site was surveyed by P. Третяков (Третяков 1947, 99, рис. 3), and in 1949 and 1955, excavations were carried out by M. Braychevskyy (Брайчевський 1955, 67 – 76, рис. 1; Брайчевський 1957, 94 – 96; Яковенко 1968, 175 – 186, рис. 1 – 3; Тітенко 1956, 52 – 55). The most informative, comprehensive, and systematic studies were carried out under the direction of O. Prykhodnyuk in 1990 – 1993, 1995, and 1997 – 1998 (ПРИХОДНЮК 2005, 9).



*Fig. 1. Pastyrskе hillfort, two early medieval globular amphorae found smashed on the floor of semi-dugout No. 2 (after Приходнюк 2005, фото 5)*

*Обр. 1. Пастирско градище, две ранносредновековни сферични амфори, намерени разбити на пода на полуземлянка № 2 (по Приходнюк 2005, фото 5)*

In his 2005 book about the Pastyrskе hillfort, O. Prykhodnyuk published two early medieval globular amphorae among other finds (Приходнюк 2005, рис. 96: 1 – 2, фото 47: 1 – 2, фото 55). They were found smashed on the floor of semi-dugout structure No. 2<sup>3</sup> (fig. 1) together with a large jar of the so-called Pastyrskе type (Брайчевський, Приходнюк 1991, 4 – 6). Apart from a description of the transport vessels, O. Prykhodnyuk provided a brief and not very in-depth overview of similar Late antique and early medieval jars from the Eastern Mediterranean, Western and Northern Black Sea, and regions along the Don and Volga rivers. The author suggested that semi-dugout No. 2 was most likely a tavern and that the amphorae transported wine from the Crimea (Приходнюк 2005, 15 – 16, 63, 65).

Since the early 2000s there has been an increase in medieval amphora studies and publications that have shed new light on amphora production and circulation. Study of production centers and the weight-capacity sizes and distribution of amphorae, not only within the Byzantine Empire but also far beyond its realms, is of utmost importance for understanding how the medieval economy functioned and was organized. Therefore, a detailed analysis of two early medieval amphorae found in a clear archaeological context in the Middle Dnieper region is particularly pertinent. The current paper makes the Pastyrskе amphorae more “visible” in scholarly literature and readily available to be included in database for future scientific analyses. Their re-study attempts to determine their possible origin, refine their chronology, and reach a general conclusion on distribution patterns and networks.

<sup>3</sup> The semi-dugout No. 2 was explored in 1990 by an expedition led by O. Prykhodnyuk and is one of the most interesting early medieval structures discovered at the hillfort. It stood out among the others for its layout and dimensions as well as for its finds. The semi-dugout and the finds from it were repeatedly analyzed by O. Prykhodnyuk, including in his monograph on the site (Брайчевський и др. 1991, 10; Приходнюк 1995, 103; Приходнюк 1998, 8; Приходнюк 2004а, 224 – 226; Приходнюк 2004б, 267 – 268). At the same time, excavation data has provided new insights about this structure and the topic will be discussed in a future separate publication.

### The Site's Location

The Pastyrske hillfort is located in the Cherkasy district of the Cherkasy region, 3 km west of the village of Pastyrske (fig. 2). Until recently, the Svinolupivka farm dominated almost the entire territory and was a site of intensive economic activity. The medieval builders chose the hillfort's position successfully. Despite the fact that the ground here is generally flat, the site is located among ravines and hills and is visible only when approaching it directly. The hillfort has a total area of about 35 hectares and is ovoid in plan (fig. 3). It is surrounded by a powerful rampart along the perimeter, which was preserved to a height of up to 4 m (up to 10 m from the bottom of the ditch).

The territory of the hillfort itself is divided into two unequal parts by ponds formed by the Liana river, a tributary of the Gnyly Tashlyk river. The right-bank portion has steeper slopes and a larger area – about 15 hectares. A unique feature of the site's complex internal structure is the citadel located here, that was divided by internal defensive lines. According to the plan of V. Khvoyko from 1901, it covered about 0.2 hectares and was separated from the main part by three smaller ramparts (fig. 4). The latter were leveled in the first half of the 20<sup>th</sup> c. and have not survived to today. The left-bank portion of the hillfort slopes more and is smaller in area – about 5 hectares (another 5 hectares are occupied by ponds). The even gentle slope, proximity and so easy access to water, and protection from the winds make this part of the settlement the most convenient for habitation. This was the main inhabited area of Pastyrske. A significant number of early medieval residential structures located in compact groups were investigated here, indicating high-density development (fig. 5). We have detailed information about 19 semi-dugouts (including semi-dugout No. 2), two farm buildings, and a forge<sup>4</sup>. Here, V. Khvoyko recorded 26 “accumulations of pieces of clay coating”, under which there were “kitchen pits” with the remains of stoves or hearths (Хвойко 1905, 95 – 96). О. Prykhodnyuk interpreted these features as semi-dugout dwellings (ПРИХОДНЮК 2005, 15).

The historical circumstances of the site's emergence as well as the ethnic structure of its population remain matters of debate. Nevertheless, numerous finds of coarse pottery made without a potter's wheel, which come from both the dwellings and fill from the internal moats of the citadel, allow us to assert that Slavs (Antes) were its population's main demographic<sup>5</sup>.

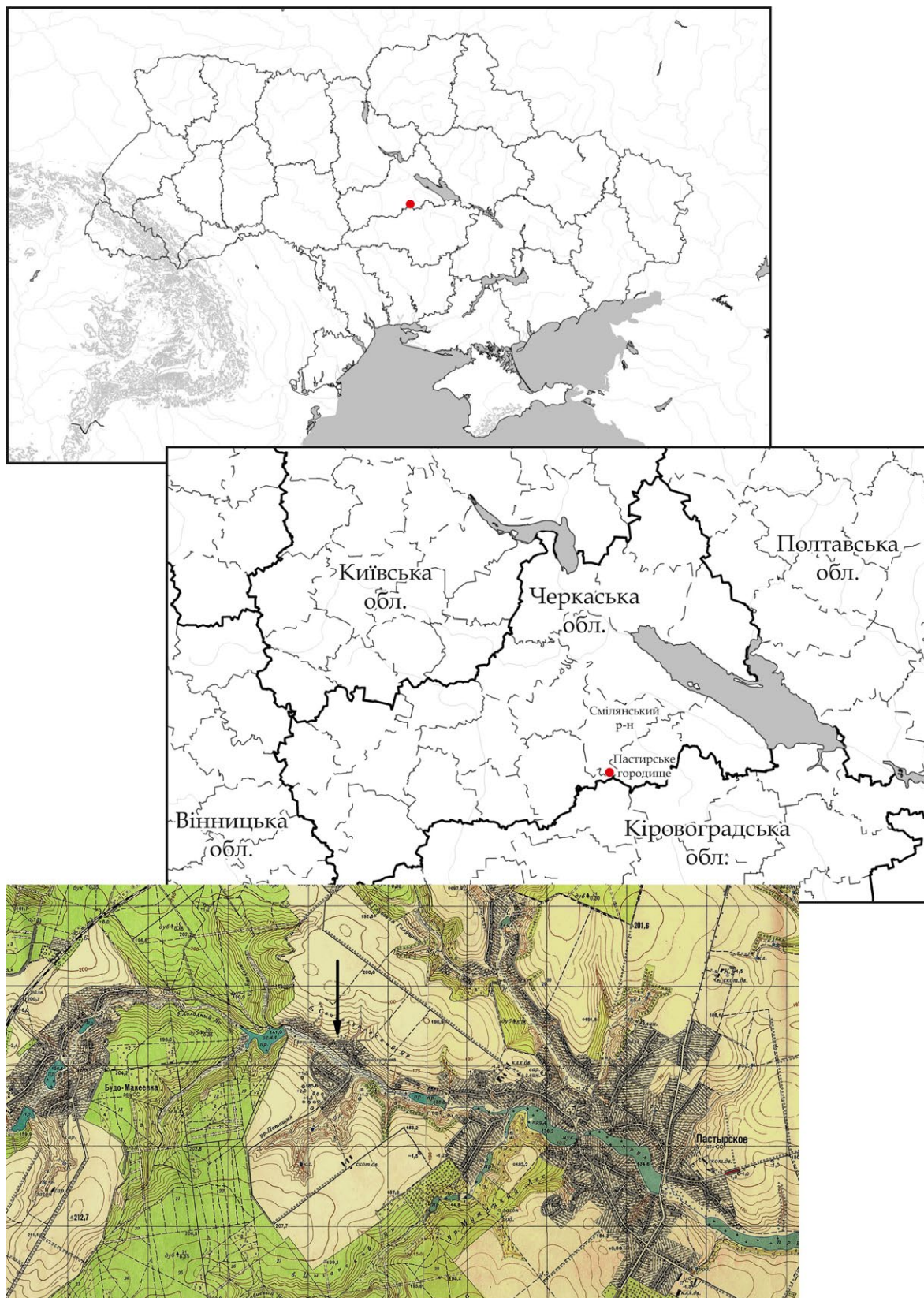
### The amphorae<sup>6</sup>

The first amphora found in semi-dugout No. 2 (Inv. No. A 4063; fig. 6, Table 1) has a big ovoid body with a bulging belly and a rounded base that tapers slightly towards the tip. The vessel's neck is high, wide, and conical. The rim has a thickened and almost horizontally cut lip with a rounded outer edge that is slightly turned outwards. The two heavy, arch-shaped handles are attached to the neck just below the rim and join the shoulders of the jar. They have an ovoid cross-section with a central rib running down their length. The amphora's entire outer surface has been peeled away. The fabric is hard with a chalky touch. A considerable amount of small (1 – 2 mm) individual white inclusions as well as some grog (1 mm) particles can be seen in the fabric. There are no traces of mica. The color of the fabric turned pink (5YR 8/3) after firing. The shoulders of the jar are decorated with five closely set bands of spiral combing that consist of five spiral lines each. Underneath there is a wavy band of five lines that is followed on the belly by nine closely set bands of spiral combing,

<sup>4</sup> The discovered forge indicates the location here of at least one of Pastyrske's craft centers.

<sup>5</sup> The semi-dugouts with adobe ovens, the handmade pottery typical of the Penkivka culture and the archaeological sites of the Sakhnivka-Volyntseve circle, as well as the fibulae of the Dnieper series are all associated with the Slavs (ПРИХОДНЮК 2005, 12 – 17, 35 – 47, 60 – 63).

<sup>6</sup> Both amphorae are currently stored at the Cherkasy Archaeological Museum of the Middle Dnieper Region.



*Fig. 2. Location of the Pastyrsk hillfort*  
*Обр. 2. Местоположение на Пастирското градище*

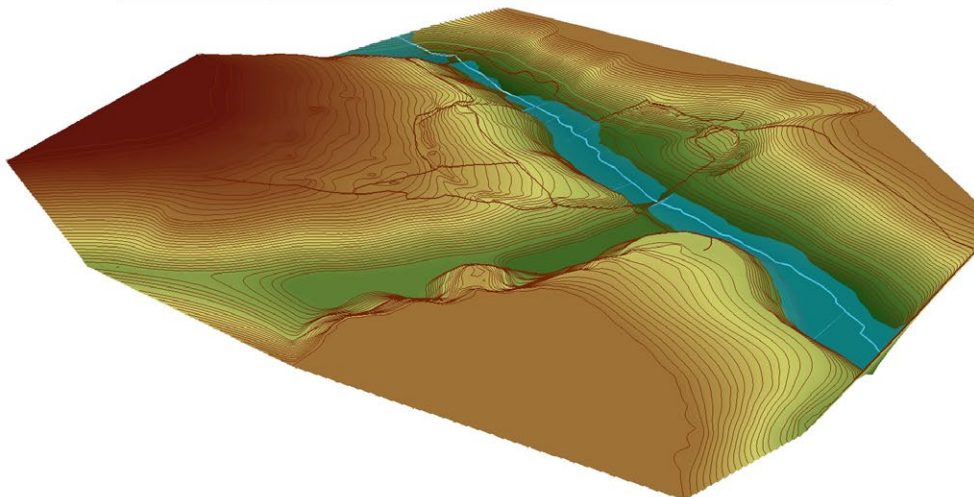
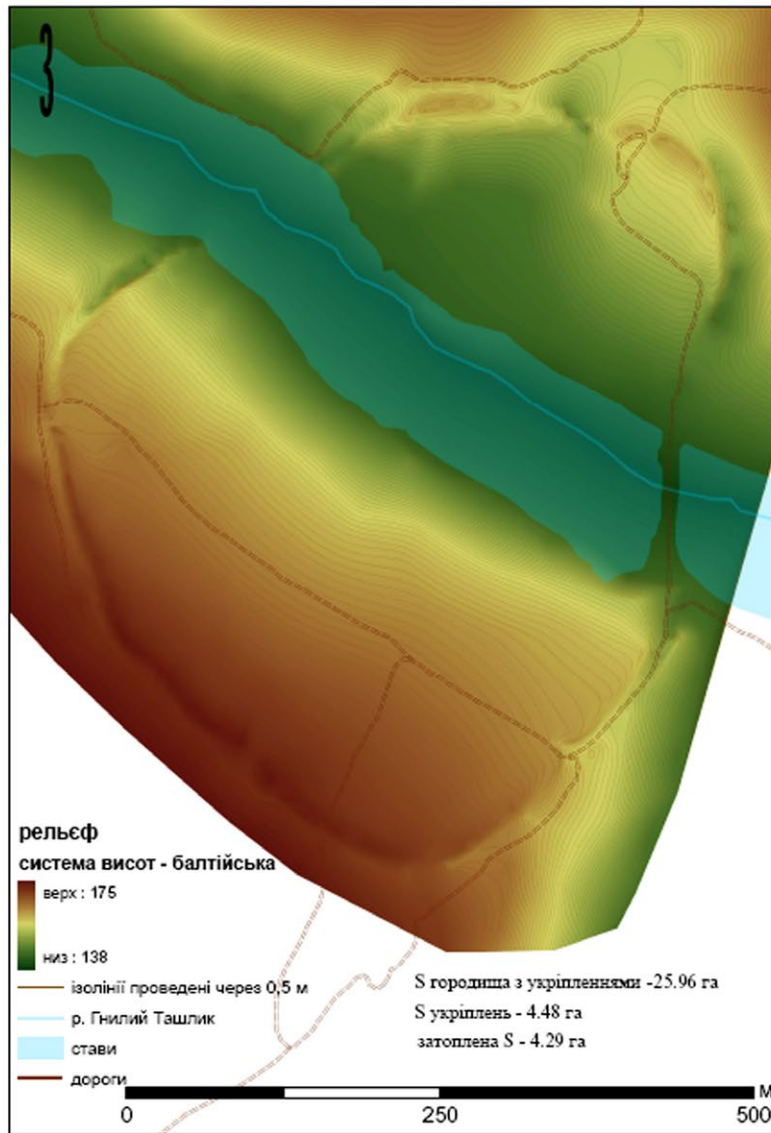


Fig. 3. Topography of the Pastyrskе hillfort (Author: O. Manigda)  
Обр. 3. Топографія на Пастирското градище (Автор: О. Манигда)

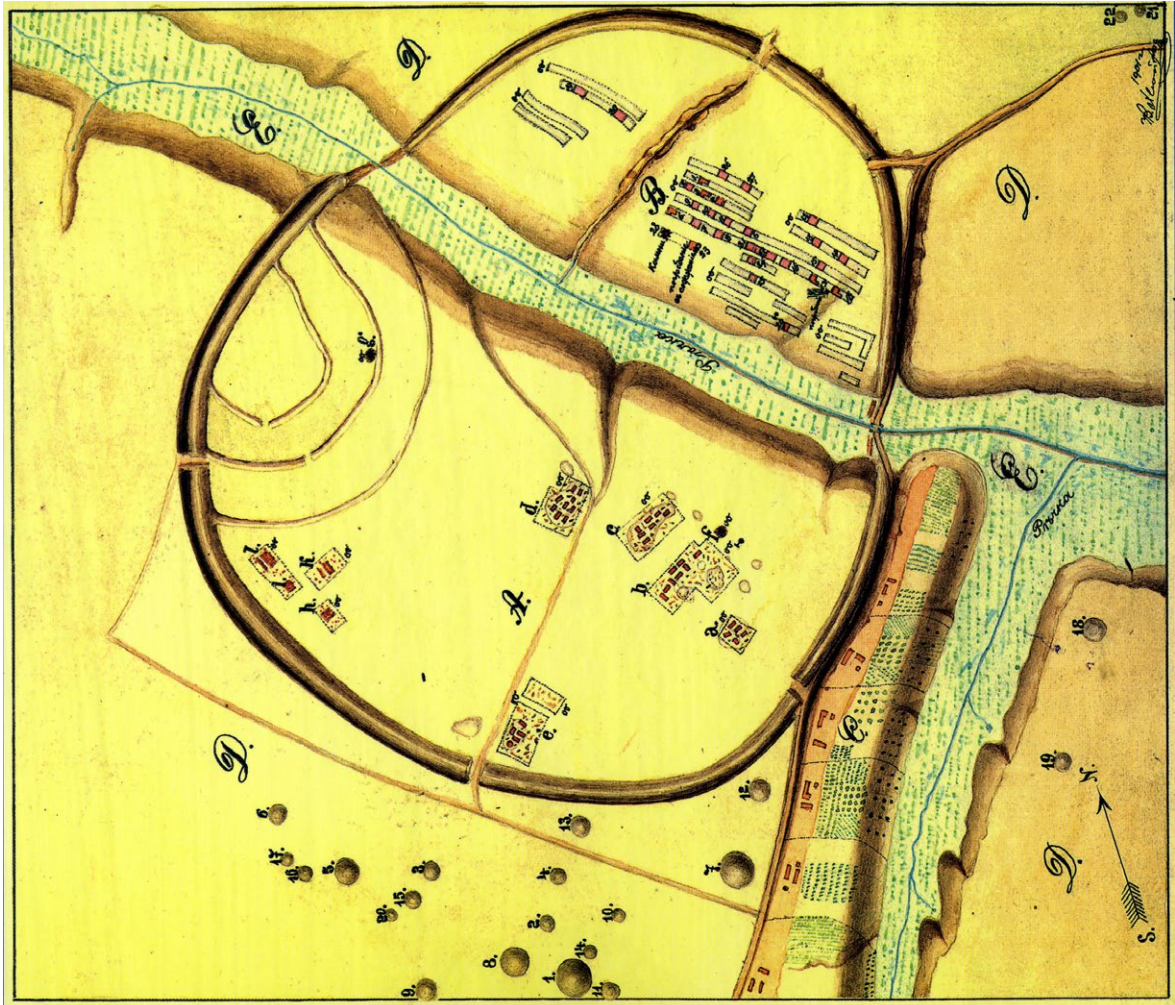


Fig. 4. Plan of the Pastyrskite hillfort (after Приходнюк 2005, рис. 2)  
Обр. 4. План на Пастырското градище (по Приходнюк 2005, рис. 2)

which consist of five spiral lines each. A large, cross-shaped graffito is documented on one side of the belly while another graffito ( $\text{I}\Omega$ ) is on the other side closer to one of the handles.

The second amphora (Inv. No. A4064, 4010-466; fig. 7, Table 1) also has a big, slightly ovoid body with a bulging belly. The base is large and rounded while the neck is high, narrower, and rather cylindrical with a slight conical widening at the base. The rim is straight, thickened, rounded, and only slightly turned outwards. The heavy arch-like handles are attached to the neck just below the rim and join the vessel's shoulders. They have an ovoid cross-section with a rib running down their length. The fabric is hard and well-purified but with a coarse touch, reminiscent of the fabric of LR 1 amphorae. It is mixed with a large amount of small (1 – 2 mm) white (probably quartz) and red (grog) particles. A considerable amount of fine mica can be noted as well. The color of the fabric after firing is light red (2.5YR 7/6) with some darker spots due to variations in firing conditions. No slip was detected on the outer surface of the vessel. Its body is decorated with 12 bands of spiral combing that consist of four spiral lines each. These are set more closely on the amphora's shoulders and farther apart on its belly. There is a broad wavy line of combing on the lower part of the body towards the bottom. Two graffiti were documented: one resembling a snowflake on the shoulders below the neck and another at the base of one of the handles.

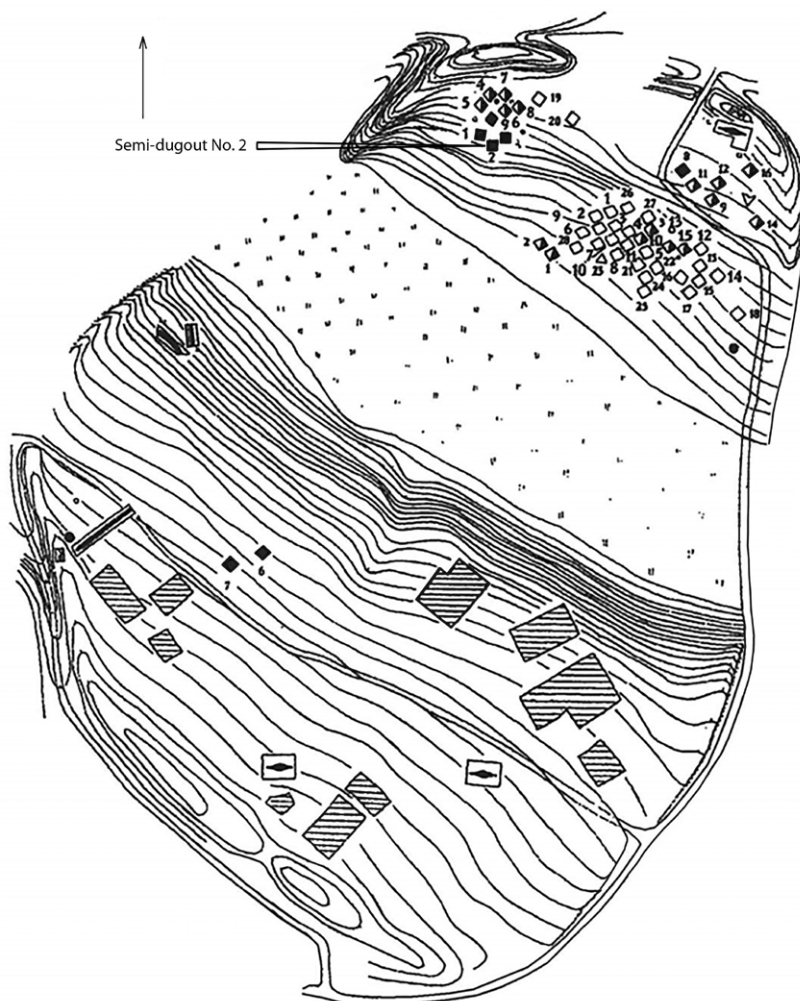


Fig. 5. Plan of the Pastyrskite hillfort (after Приходнюк 1998, рис. 1)  
 Обр. 5. План на Пастирското градище (по Проходнюк 1998, рис. 1)

	Amphora 1	Amphora 2
Height	50 cm	54 cm
Maximum diameter	34 cm	36 cm
Maximum diameter height (from the bottom)	34 cm	35 cm
Inner rim diameter	5.5 cm	6.5 cm
Outer rim diameter	7.5 cm	7.8 cm
Neck diameter just below the rim	6.7 cm	6.9 cm
Neck diameter at the base of the neck	24.5 cm	24 cm
Neck height	7.6 cm	12.3 cm
Length of the left handle	12.6 cm	15.9 cm
Length of the right handle	13 cm	16.3 cm

Table 1. Dimensions of the two amphorae  
 Таблица 1. Размери на амфорите



Fig. 6. Amphora No. 1 from the Pastyrskye hillfort (Authors: (1 – 3) T. Kurhina, D. Kushtan; (4) E. Todorova)  
Обр. 6. Амфора № 1 от Пастырското градище (Автори: (1 – 3) Т. Кургина, Д. Куштан; (4) Е. Тодорова)

### Typological parallels

From a typological point of view, both containers from the Pastyrskye hillfort belong to the so-called “Globular amphorae”, which are the successors of LR 2 and LR 13 amphorae. This kind of jars is one of the predominant shapes of transport vessels during the “Dark Ages” (7<sup>th</sup> – 9<sup>th</sup> c.). Meanwhile, despite being very similar at first glance, they show differences in shape and fabric that suggest these amphorae were produced in different workshops.

The LR 2 vessels from the cargo of the Yassı Ada shipwreck (early 7<sup>th</sup> c.; Bass, van Doorninck, Jr. 1982, fig. 8: 4 – 6; van Doorninck, Jr. 1989, fig. 1: 8 – 11; van Alfen 2015, fig. 2.1 – 2.3; Vo-Phamhi, Leidwanger 2020, fig. 6, fig. 9) are their closest references (fig. 8: 1 – 4). According to the latest re-study of the shipwreck’s cargo, the amphorae were produced to strict size and capacity requirements<sup>7</sup>. They were created especially to transport food supplies for the Byzantine army in the framework of the *annona militaris* (van Alfen 2015).

<sup>7</sup> Here E. Todorova would like to express her special gratitude to Prof. F. van Doorninck, Jr. and Dr. J. Leidwanger for regularly updating her on their still unpublished insights into the volumetric studies of the Yassı Ada’s LR 2 amphorae.

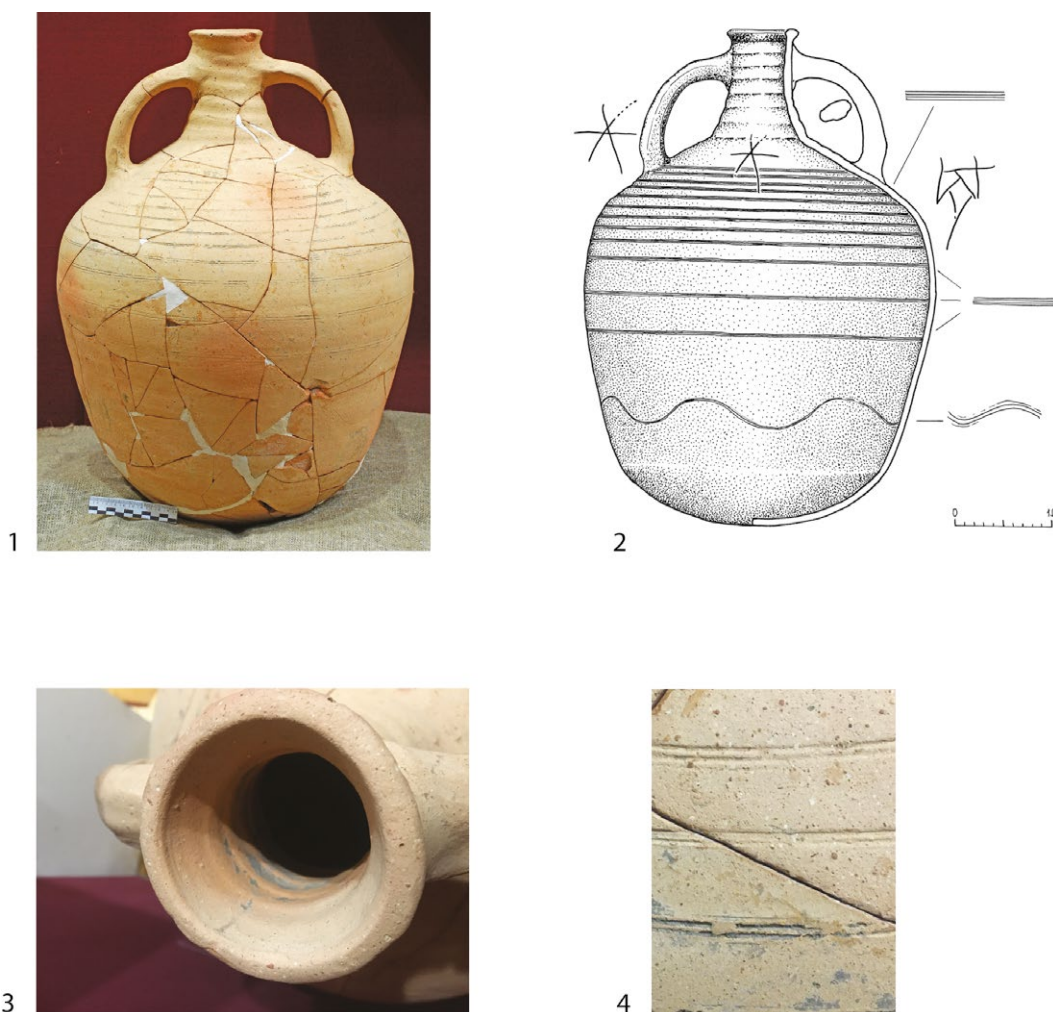


Fig. 7. Amphora No. 2 from the Pastyrske hillfort (Authors: (1 – 3) T. Kurhina, D. Kushtan; (4) E. Todorova)  
 Обр. 7. Амфора № 2 от Пастырското градище (Автори: (1 – 3) Т. Кургина, Д. Кушан; (4) Е. Тодорова)

Other examples of amphorae that are more or less similar but never identical (fig. 8: 5 – 12, fig. 9: 1 – 10) represent the following types from various locations: LR 2 from Emporio Chios (3<sup>rd</sup> quarter of the 7<sup>th</sup> c.; Ballance et al. 1989, 106 – 109, Plate 24: 236 – 237, Plate 25: 238); LR 2 found during the excavations of the Yeni Kapı shipwrecks (6<sup>th</sup> to 8<sup>th</sup> c.; Asal 2010, 54, 93 – 94, Cat. No. A25, Cat. Nos. A30 – A31); LR 2 from Thasos (end of the 6<sup>th</sup> – beginning of the 7<sup>th</sup> c.; Blondé et al. 2010, 411 – 412, fig. 18 – 19); LR 2 from the Port area of Chersonesus on the Crimea (end of the 6<sup>th</sup> – first quarter of the 7<sup>th</sup> c.; Романчук и др. 1995, 38 – 39, табл. 14: 75; Sazanov 2007, fig. 3: 24); some LR 13 locally produced at the ceramic workshops of Cyprus (end of the 6<sup>th</sup> or first half of the 7<sup>th</sup> c.; Demesticha 2003, 474, fig. 4a – c; Demesticha 2005, 169, fig. 2: A, B), Kos (late 6<sup>th</sup> – mid-7<sup>th</sup> c.; Poulou-Papadimitriou, Didioumi 2010, fig. 10 – 11a, b; Diamanti 2010, Pl. 112: 443 – 460; Diamanti 2012, fig. 5a, b), and Paros (late 6<sup>th</sup> – late 7<sup>th</sup>/early 8<sup>th</sup> c.; Diamanti et al. 2021, 603, fig. 4: 1 – 3, 5 – 7); LR 13 from the Roman imperial baths at Beirut (8<sup>th</sup> c.; Reynolds 2003, fig. 2: 5); types 29, 35, and 36 (mid-6<sup>th</sup> to 8<sup>th</sup> c.) from Saraçhane, Istanbul (Hayes 1992, 66, 71, 100, fig. 23: 2 – 4, 10, fig. 47: 171, 197); the amphora found above the vault of the southern gallery of Kalenderhane, Istanbul (8<sup>th</sup> – early 9<sup>th</sup> c.; Striker, Kuban 1975, 315, fig. 15); and locally produced vessels

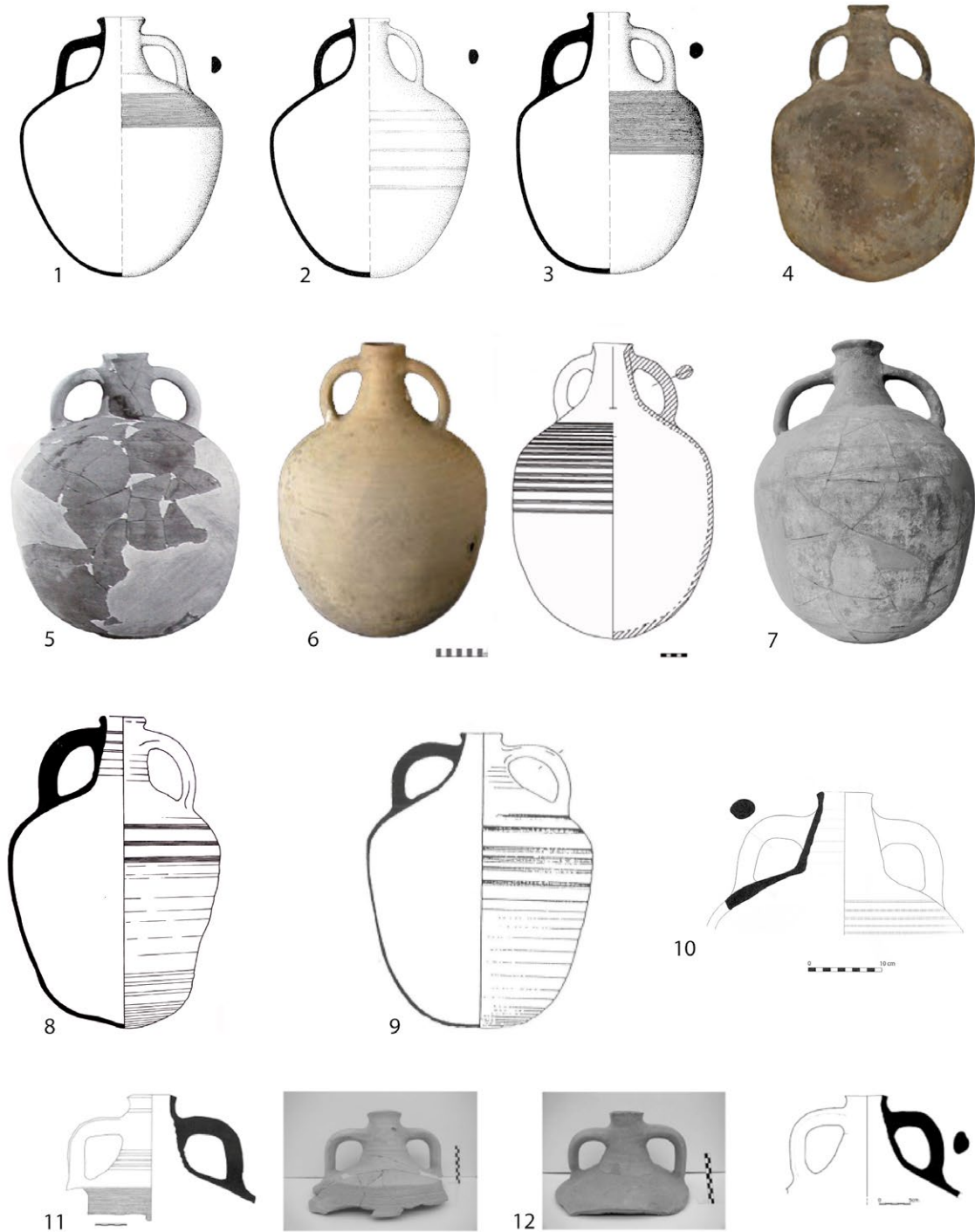


Fig. 8. LR 2 amphorae from: 1 – 4. Yassı Ada (after van Alfen 2015, fig. 2.1 – 2.3; Vo-Phamhi, Leidwanger 2020, fig. 9); 5. Emporio Chios (after Ballance et al. 1989, Plate 25: 238); 6. Yeni Kapı, Istanbul (after Asal 2010, Cat. No. A31); 7. Thasos (after Blondé et al. 2010, fig. 19); LR 13 amphorae from: 8 – 9. Local production from Amathous, Cyprus (after Demesticha 2005, fig. 2: A, B); 10. Local production from Halasarna of Kos (after Diamanti 2010, Pl. 112/443-60); 11 – 12. Local production from Kardamaina of Kos (after Poulou-Papadimitriou, Didioumi 2010, fig. 10 – 11a, b)

Обр. 8. Амфори LR 2 от: 1 – 4. Ясъ Ада (no van Alfen 2015, fig. 2.1 – 2.3; Vo-Phamhi, Leidwanger 2020, fig. 9); 5. Емпорио Хиос (no Ballance et al. 1989, Plate 25: 238); 6. Йени Капъ, Истанбул (no Asal 2010, Cat. No. A31); 7. Тасос (no Blondé et al. 2010, fig. 19); амфори LR 13 от: 8 – 9. Местно производство от Амафунта, о. Кипър (no Demesticha 2005, fig. 2: A, B); 10. Местно производство от Аласарна, о. Кос (no Diamanti 2010, Pl. 112/443-60); 11 – 12. Местно производство от Кардамена, о. Кос (no Poulou-Papadimitriou, Didioumi 2010, fig. 10 – 11a, b)

from Crete – Gortyn (end of the 7<sup>th</sup> – beginning of the 8<sup>th</sup> c.; Portale 2014, 478, fig. 7), Eleutherna (7<sup>th</sup> – 9<sup>th</sup> c.; Yangaki 2005, 284 – 285; Yangaki 2007), and Pseira (8<sup>th</sup> – early 9<sup>th</sup> c.; Πούλου-Παπαδημητρίου 2011, εικ. 29; Πούλου-Παπαδημητρίου 2001, εικ. 24). Examples with both Aegean and local origins that are very similar to the vessels from the Pastyrské hillfort are known also from Italy in some 7<sup>th</sup> and 8<sup>th</sup> c. deposits from the Crypta Balbi, Rome (Paroli 1992, Tav. 1: 3, Tav. 2: 6, Tav. 3: 7; Sagui et al. 1997, 44, fig. 2: 6, fig. 6: 2); from the sea near Sorrento (8<sup>th</sup> c.; Arthur 1993, fig. 4), from local products from the workshop at Otranto (from the first half of the 7<sup>th</sup> c. to the 9<sup>th</sup> c.; Arthur et al. 1992, 109, fig. 9: 1; Leo Imperiale 2015, 426 – 427, fig. 2: 1 – 2; Leo Imperiale 2018, fig. 3: 1, fig. 5: 5), on Sicily (8<sup>th</sup> – first half of the 9<sup>th</sup> c.; Arcifa 2018, 127 – 131, fig. 5: 10, fig. 26 – 28; Ardizzone 2000, fig. 2: 2), from Comacchio (8<sup>th</sup> – 9<sup>th</sup> c.; Gelichi et al. 2012, 167, fig. 8: 1, 3, 5), and from the port of Ravenna (8<sup>th</sup> c.; Cirelli 2009, fig. 4).

Despite the large number of older and more recent publications of globular amphorae from the northern Black Sea coast, for most of which scholars have proposed a local, Crimean origin, the only amphorae that are similar in outline and decoration but that show considerable deviation in shaping details and fabric are some examples from the Tau Kipchak settlement (second half of the 6<sup>th</sup> – 9<sup>th</sup> c.; Sazanov 1997, 94, fig. 3: 29), the Yalta museum (fig. 9: 11; 8<sup>th</sup> – 9<sup>th</sup> c.; Якобсон 1979, рис. 13: 5), the right shore of the Kotlubanki river opposite the Karnauhovo settlement (Ляпушкин 1958, рис. 1), and from Taman Peninsula (9<sup>th</sup> – early 10<sup>th</sup> c.; Анфимов 1953, рис. 52).

The second amphora from the Pastyrské hillfort has a similarly shaped neck, rim, and handles as some of the successors of the LR 1 vessels locally produced on Paros (fig. 9: 12; second half of the 6<sup>th</sup> – first half of the 7<sup>th</sup> c.; Diamanti 2016, fig. 8) and Irakleia, Greece (late 6<sup>th</sup>/7<sup>th</sup> – early 8<sup>th</sup> c.; Kormazopoulou, Diamanti 2021, 900, fig. 11); at Phoinike, Albania (8<sup>th</sup> c.)<sup>8</sup>; at Pati, Sicily (8<sup>th</sup> c.; Metaxas 2009, Taf. 23, Abb. 189a); and at the San Paolo Monastery, Rome (8<sup>th</sup> – 9<sup>th</sup> c.; Molinari et al. 2015, 161, fig. 2: 1 – 2).

### Graffiti and amphora reuse

Amphorae were of course not traded by themselves. They transported substance and so were often reused as long as they remained in good shape. Traces of reuse on amphorae are quite common in all periods. The containers from the Yassı Ada (early 7<sup>th</sup> c.) and the Serçe Limanı (early 11<sup>th</sup> c.) shipwrecks are the best examples (van Doorninck, Jr. 1989). The most usual signs of reuse are graffiti: marks incised in visible places on vessels such as their neck, shoulders, or handles after they were fired. Sometimes they appear quite illegible and as simple scratches, like the two graffiti on the second amphora from Pastyrské hillfort (fig. 7: 2).

Others, like the two Greek letters (ΙΩ) on the first amphora (fig. 6: 2), can be easily deciphered as the abbreviation of the Greek name *Ιωάννης*, which denotes ownership. The letters were most likely used by a small-scale merchant to mark his own batch of jars when he participated in a joint-venture with other small-scale traders that used the same ship. It is less likely but not impossible that these letters instead denote the name of the client at the final destination when the cargo was to be marketed privately. In the latter case, the graffiti again hint at small-scale commercial activity. So far, graffiti bearing abbreviations of the Greek name *Ιωάννης* have been documented on amphorae from different types and periods (Дюженко 2001, Табл. IV: 30; Тодорова 2012, 100, Табл. LVI: G36, G39), but this should not be surprising, since, as nowadays, the name was very common.

The other graffito on the first amphora, the cross-shaped one (fig. 6: 2), is among the most

<sup>8</sup> E. Cirelli presented this amphora at the 12<sup>th</sup> AIECM3 Congress in Athens in 2018, but a photo of it was not included in the final publication (Cirelli 2021).

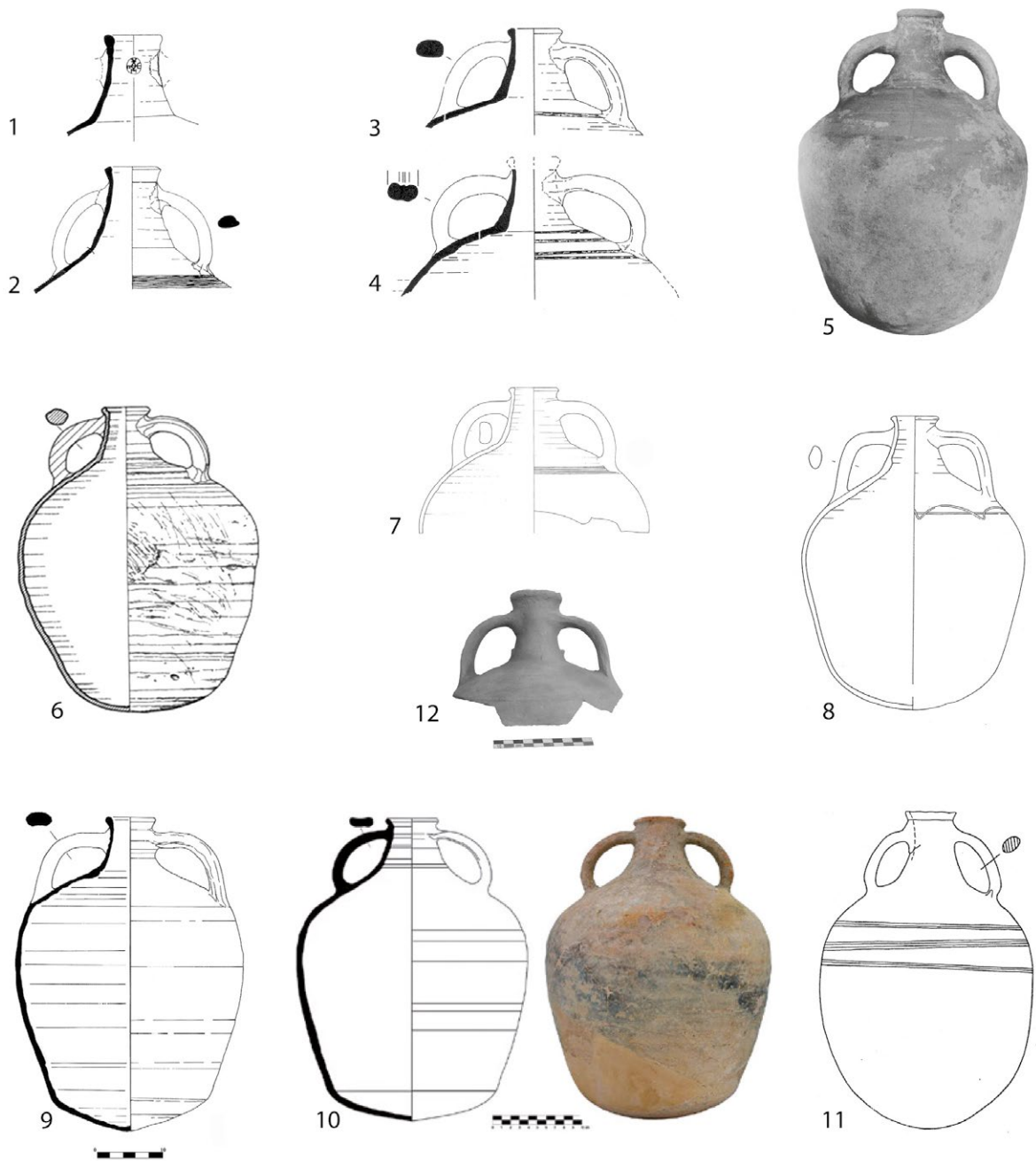


Fig. 9. Globular amphorae from: 1 – 4. Saracchane, Istanbul (after Hayes 1992, fig. 23: 3 – 4, fig. 47: 171, 197); 5. Kalenderhane, Istanbul (after Striker, Kuban 1975, fig. 15); 6. Gortyn, Crete (after Portale 2014, fig. 7); 7 – 8. Crypta Balbi, Rome (after Paroli 1992, Tav. 3: 7; Sagui et al. 1997, fig. 6: 2); 9. Otranto, Italy (after Leo Imperiale 2015, fig. 2: 1); 10. Rocchicella, Sicily (after Arcifa 2018, fig. 5: 10); 11. Yalta Museum, Crimea (after Якобсон 1979, рис. 13: 5); 12. LR 1 from Naoussa of Paros, local production (after Diamanti 2016, fig. 8)

Обр. 9. Сферични амфори от: 1 – 4. Сарачхане, Истанбул (по Hayes 1992, fig. 23: 3 – 4, fig. 47: 171, 197); 5. Календерхане, Истанбул (по Striker, Kuban 1975, fig. 15); 6. Гортина, о. Крит (по Portale 2014, fig. 7); 7 – 8. Крипта Балби, Рим (по Paroli 1992, Tav. 3: 7; Sagui et al. 1997, fig. 6: 2); 9. Отранто, Италия (по Leo Imperiale 2015, fig. 2: 1); 10. Рокичела, о. Сицилия, (по Arcifa 2018, fig. 5: 10); 11. Музея в Ялта, Крим (по Якобсон 1979, рис. 13: 5); 12. Амфора LR 1 от Науса, о. Парос, местно производство (по Diamanti 2016, fig. 8)

common markings documented on transport jars. It is difficult to say what it may have represented. Was it the easiest way to scratch a “check” mark (X), or should it be considered a cross, a sign of ownership used to mark commodities that belonged to the Church? In this case, the vessel was either produced by monastery compounds and then sold or was destined to be delivered to churches and monasteries for the use of their contents. The fact that both amphorae from Pastyrskе have more than one graffito is evidence for their long-term reuse.

### The amphorae’s contents

The volumetric study of the Yassı Ada vessels that was performed recently has shown that they were initially produced to transport commodities such as white wine, red wine, and/or olive oil. Conversely, the Dark Age globular amphorae were multipurpose vessels simultaneously used for transport and storage and held different kinds of wine (sometimes flavoured with plants, herbs, or fish sauce) or oil but also sauces, honey, or other liquid products (Todorova 2020, 404 – 406 and the literature cited there). Considering the fact that both amphorae from the Pastyrskе hillfort show traces of long-term reuse, as the graffiti hints, it is not possible to say if they were carrying the initial content for which they were primarily designed or another commodity when they reached the site where they were found<sup>9</sup>. They could have transported wine, as supposed by O. Prykhodnyuk (ПРИХОДНЮК 2005, 15 – 16), but oil is also an option. There is evidence from a later period from the Middle Dnieper region for amphorae found at or near jewelry workshops because olive oil was used in jewelry production (Noonan, Kovalev 1999, 123, 133 – 134). It has been documented that jewelry production existed among other crafts at the Pastyrskе hillfort (ПРИХОДНЮК 2005, рис. 50, рис. 62, фото 17, фото 54).

### Origin of the amphorae and issues in amphora manufacturing

Several ceramic workshops for the production of globular amphorae were studied recently all over the Mediterranean world, mainly in territories under Byzantine rule: on the islands of Kos (Diamanti 2010, 58 – 59, 72, 80 – 83, 114, fig. 38 – 139, T. 5 – 19; Poulou-Papadimitriou, Did-ioumi 2010; Did-ioumi 2014), Paros (Diamanti 2015; Diamanti 2016), Lipsi (Papavassiliou et al. 2014), and Cyprus (Manning et al. 2000; Demesticha 2003; Demesticha 2005) as well as in Southern Italy (Arthur et al. 1992, 93 – 99, 109, fig. 3 – 5; Arthur, Patterson 1998, 517 – 518, fig. 3c) and the Bay of Naples (Arthur 1989, 87; Arthur 1993, 231 – 235), and along the Southern shore of the Crimea (see an overview in Якобсон 1979, 39 – 58, рис. 20 – 32; Паршина и др. 2001, 53 – 73; Тодорова 2011, 446 – 447 and the literature cited there). As has already been pointed out, finding an exact match for both vessels from the Pastyrskе hillfort has proved challenging. This difficulty is compounded by the fact that neither volumetric measurements nor chemical or petrographical analyses were performed, not only on these amphoras but also on most of their typological parallels. Consequently, identifying their production workshop remains a promising task for the future.

### Conclusion

Based on similarities with other globular amphorae, it is possible to date both examples from the Pastyrskе hillfort to the late 6<sup>th</sup>/7<sup>th</sup> – 8<sup>th</sup> c., with the earlier period being more likely. The proposed date fits perfectly with the chronology of the site – first half of the 7<sup>th</sup>/last quarter of the 7<sup>th</sup> c. – mid-8<sup>th</sup> c. (ПРИХОДНЮК 2005, 79). It is quite possible that the time between when they were produced and deposited was longer, as the traces of reuse hint. There should be no doubt about

<sup>9</sup> Unfortunately, we could not take any volumetric measurements of the amphorae to check if the results could hint at a certain weight capacity or particular contents.

their Eastern Mediterranean provenance while the exact locations of the two ceramic workshops where they were produced remains uncertain. In our opinion, no direct link can be established between the amphora production centers and the Pastyrské hillfort. If one assumes an earlier date for the jars, it is possible that they were produced and used for the transport of the *annonna militaris*. Once they reached the Lower Danube, they could have been reused for small-scale trading, through Chersonesus and the Crimea, for example, and travel up the Dnieper river. During this journey, they may have changed hands several times. This is possible if we assume a later chronology (late 7<sup>th</sup> – mid-8<sup>th</sup> c.), since this was when several smaller, overlapping regions took place over the long-distance trade.

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## РАННОСРЕДНОВЕКОВНИТЕ СФЕРИЧНИ АМФОРИ ОТ ПАСТИРСКОТО ГРАДИЩЕ

*Евелина Тодорова\*, Андрий Скиба\*\*, Ярослав Володарец-Урбанович\*\*\**

\* *Национален археологически институт с музей, Българска академия на науките, ул. „Съборна“ № 2, София 1000, България; evatodorova79@gmail.com*

\*\* *Археологически институт, Национална академия на науките на Украйна, бул. „Володимир Ивасюк“ № 12, Киев 04210, Украйна; skyba-andriy@ukr.net*

\*\*\* *Археологически институт, Национална академия на науките на Украйна, бул. „Володимир Ивасюк“ № 12, Киев 04210, Украйна; volodograd@ukr.net*

### РЕЗЮМЕ

Пастирското градище е най-големият ранносредновековен производствен, търговски и военно-административен център в Източна Европа извън Византия. Разположено е на 3 км западно от с. Пастирске, Черкаска обл. (обр. 2). Заема площ от около 35 хектара. Укрепената му част е с яйцевидна форма и се състои от ров и насип, запазен на места до 4 м височина (обр. 3 – 4).

В резултат на проведените археологически разкопки са разкрити множество ранносредновековни жилищни структури, между които полуземлянки, стопански сгради и ковачница (обр. 5). Въз основа на намерената груба керамика, изработена на ръка, характерна за Пенковската култура, както и някои фибули, се предполага, че основната част от населението на градището са били славяни (анти).

Една от най-интересните ранносредновековни структури, разкрита на територията на Пастирското градище, е полуземлянка № 2. Тя се отличава от останалите не само по размера си, но и поради

това, че на пода ѝ са намерени разбити две големи ранносредновековни амфори (обр. 1). В първичната публикация на О. Приходнюк амфорите са представени доста общо. Изказано е предположението, че полуземлянка № 2 е била кръчма, а със съдовете е пренасяно вино от Кримския п-в.

Вземайки под внимание нарастващия брой публикации от началото на ХХI в., посветени на средновековните амфори и свързаната с тях проблематика, настоящата статия има за цел да представи едно ново, по-задълбочено проучване на съдовете от Пастирското градище, с което да се направи опит да се определи техният произход, да се стесни датировката им, както и да се направят изводи за начина им на разпространение и търговските мрежи, от които са били част.

Първата амфора има голямо яйцевидно тяло (обр. 6, Таблица 1), издут търбух и заоблено, леко заострено в средата си дъно. Шията е висока, широка и цилиндрична. Устийният ръб е леко извит навън, удебелен и почти хоризонтално отрязан, със заоблен външен ръб. Масивните арковидни дръжки са закрепени за шията, точно под устието. Имат елипсовидно сечение с изпъкнал надлъжен ръб. Цялата външна повърхност на съда е силно износена и излющена. Глината е твърда, но се усеща като тебешир. Примесена е със значително количество малки по размер (1 – 2 мм) бели включения и шамот (1 мм). Не се забелязват следи от слюда. Цветът на глината след изпичането е розов (5YR 8/3). Плещите на съда са украсени с пет близкоразположени ивици от по 5 връзани линии всяка. Под тях има снопче от пет вълнисти връзани линии. Търбухът е украсен с девет ивици от по пет връзани линии всяка. От едната страна на търбуха има кръстовиден графит, а от другата му страна, близо до една от дръжките, има друг графит (ΙΩ).

Втората амфора (обр. 7, Таблица 1) също има голямо, леко яйцевидно тяло и издут търбух. Дъното е широко и заоблено. Шийката е висока, по-тясна и по-скоро цилиндрична, с леко конично уширение в основата си. Устийният ръб е прав, заоблен и само леко извит навън. Масивните арковидни дръжки са закрепени за шията, точно под устието. Имат елипсовидно сечение и надлъжен ръб. Глината, от която са изработени, е твърда, добре пречистена и груба, подобно на тази при амфорите LR 1. Примесена е с голямо количество малки (1 – 2 мм), бели (вероятно кварц) и червени (шамот) включения. Сред примесите се забелязва и значително количество фина слюда. Цветът след опичането е светлочервен (2.5YR 7/6). Не се забелязват следи от ангоба. Съдът е украсен с 12 ивици от по четири връзани линии всяка. Те са разположени по-гъсто върху плещите и по-нарядко върху търбуха. Широка вълнообразна връзана линия е разположена върху долната част на тялото. Върху плещите има връзан графит, приличащ на снежинка, а друг графит е връзан в основата на едната дръжка.

От типологична гледна точка двата съда от Пастирското градище принадлежат към т.нар. „Globular amphorae“ (сферични амфори), които са наследници на късноантичните LR 2 и LR 13 амфори и са характерни за периода на „Тъмните векове“ (VII – IX в.). Въпреки че на пръв поглед разглежданите от нас амфори си приличат, те се различават по отношение на начина на оформяне на някои свои части, както и по отношение на глинено тесто, от което са изработени. Това подсказва, че по всяка вероятност са били произведени в различни ателиета и имат различен произход.

Въз основа на представените паралели (обр. 8 – 9) се вижда, че двата съда имат най-голямо сходство с амфорите LR 2 и LR 13 от Средиземноморието, които се датират в рамките на VII – IX в., докато приликите им с многобройните транспортни контейнери от Северночерноморския ареал, за голяма част от които се знае, че са местно, кримско производство, са по-далечни.

Наличието на графити по телата на амфорите – знаци, връзани след изпичането им, ни кара да заключим, че съдовете са били използвани дълго време и са били многократно преупотребявани. Графитът ΙΩ (обр. 6: 2) върху първата от представените амфори е разтълкуван като съкращение на гръцкото име Ιωάννης и най-вероятно е бил знак за собственост, макар все още да е трудно да се определи дали това са инициалите на дребния търговец, собственик на амфората, или на купувача (крайния потребител). Без категорична интерпретация остава и кръстообразният графит върху същия съд (обр. 6: 2). Възможно е това да е някакъв вид „отметка“ (X), но може да се разглеждат и като кръст, знак за собственост, с който да се маркират стоките, принадлежащи на църквата – произведени от манастирски комплекси и след това продавани, или предназначени за доставка до църкви и манастири.

Невъзможността да бъдат направени измервания на вместимостта на пастирските амфори не позволи да се направят и заключения за това, за преноса на какви продукти са били първоначално изработени. Вземайки под внимание това, че и двата съда имат следи от дълга употреба и преупотреба, не е възможно да се каже дали те са пренасяли продукта, за който първоначално са били създадени или друга стока, когато са достигнали мястото, където са били открити. Възможно е да са превозвали вино, както предполага техният откривател, но и дървено масло. Налице са данни от по-късен период от района на Среден Днепър за амфори, открити във или близо до ювелирни ателиета, където дървеното масло е било използвано в производството на бижута, каквото производство е документирано и на Пастирското градище.

Въпреки увеличаващия се брой през последните години на сигурно доказани керамични центрове за производство на амфори от Средиземноморието и Черноморския ареал, липсата на измервания на вместимостта, както и на петрографски и химични анализи на глинените теста не само на представените тук съдове, но и на техните паралели, не позволиха да определят точните ателиета, където пастирските амфори са били произведени.

Благодарение на приведените паралели двете сферични амфори от Пастирското градище могат да бъдат датирани в края на VI/VII – VIII в., като по-ранният период е по-вероятен. Предложената датировка съвпада и с хронологията на самото градище – първа половина на VII/последна четвърт на VII – средата на VIII в. Възможно е периодът между времето, когато те са били произведени, и времето, когато са били депонирани, да е бил по-дълъг, както подсказват следите от дълготрайната им употреба. Не би трябвало да има съмнение относно техния източносредиземноморски произход, макар ателиетата, в които са били изработени, все още да не са идентифицирани. Според нас не може да се установи пряка връзка между производствените им центрове и Пастирското градище. Ако приемем по-ранната датировка за двете амфори, е възможно те да са били произведени и използвани за транспортране на *annona militaris*. След като са достигнали района на Долен Дунав, те вероятно са били използвани повторно за дребномащабни търговски операции и чрез посредничеството на Херсон и Крим са достигнали до средното течение на р. Днепър. По време на това „пътуване“ не е изключено да са сменяли няколко собственика. Последното би било валидно, ако приемем за тях една по-късна датировка (края на VII – средата на VIII в.), което съвпада и с периода на разпадане на търговията на дълги разстояния на няколко по-малки, припокриващи се региона.

**Ключови думи:** амфори LR 2/LR 13, ранновизантийски, ранносредновековни, Тъмни векове, сферични амфори, Пастирско градище