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Recent Research in Northern Black Sea Coast Greek Colonies
Новейшие исследования греческих колоний Северного Причерноморья

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March 2006 was an exceptionally good month in Kraków for Polish-Ukrainian cultural and scientific cooperation. On March 17, a photographic exhibition entitled *In Search of Treasures. Polish-Ukrainian Research at Koshary near Odessa* was opened at the National Museum in Kraków. This was followed by an international conference held on the next day at the Institute of Archaeology of the Jagiellonian University: ПОНТИКА — РОНТИСА — ПОНТИКА.¹

Both events were the effect of cooperation between the Institute of Archaeology of the Jagiellonian University and the Archaeological Museum of the National Academy of Sciences of the Ukraine in Odessa, a cooperation which started several years ago, in 1998. The joint archaeological Koshary Project was launched then and, more importantly, closer ties were established between the two institutions.

Some time ago, Jarosław Bodzek (a member of the Koshary Project, staff member not only of the Institute of Archaeology at the Jagiellonian University but also of the National Museum in Kraków, where he heads the Numismatic Room) and Krystyna Moczulska (then in charge of the Ancient Art Gallery at the Czartoryski Museum in Kraków) came up with the idea to organize an exhibition of antiquities from Odessa in our city. Our joint suggestion to have a photographic presentation of the excavations and an academic conference to go with it was a natural follow-up. The Odessa exhibition,² was organized as part

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of the Kraków Museum’s ODESSA-KRAKÓW project. It was listed as one of the numerous cultural events designed to promote the Ukraine in Poland as part of the year-long program called “Year of the Ukraine in Poland” in 2005, which ran over from the preceding year into 2006. The official opening ceremony of the Odessa exhibition and the photo presentation took place on March 17 in the Main Building of the Kraków National Museum.3

Complementing the two exhibitions in the scientific sphere was a conference concerning the newest research in the Black Sea littoral. It took place on March 18 at the Institute of Archaeology of the Jagiellonian University in Gołębia Street and it proved to be an excellent forum for exchanging ideas and presenting the results of work by several expeditions excavating in the region from Tiras in the Ukraine in the west to Tanais in Russia and the Georgian Pichvnari in the east. The conference was attended by the late Vladimir P. Vanchugov, Director of the Archaeological Museum in Odessa. It was hosted jointly by Jan Chochorowski, Director of the Jagiellonian University’s Institute of Archaeology, and Ewdoksia Papuci-Władyska, head of the Classical Archaeology Department at the Institute and co-director, with Evgenia F. Redina, of the Koshary Project. Special guest Vassos Karageorghis, Director of the Anastasios G. Leventis Foundation (Nicosia, Cyprus), presented the achievements of the Foundation in the promotion, conservation and organization of exhibitions of monuments of Cypriot and Greek culture throughout the world, the Odessa Museum included.

The PONTIKA conference brought important conclusions which are presented in these proceedings. The conference also demonstrated the role that Kraków can play as a meeting place between the East and West of Europe. Many promising contacts were made at the conference between representatives of various academic institutions and museums. By the same token, the one-day meeting organized by the Department of Classical Archaeology at the Jagiellonian proved to be an important event for researchers focusing on ancient cultures on the Black Sea.

The exhibition and conference would hardly have been the success it was without the contribution of the staff, doctoral candidates and students of the Faculty of History and the Institute of Archaeology of the Jagiellonian University: Wojciech Machowski, Marta Kania, Grzegorz Łączek, Aleksandra Kowal, Maciej Czech, Katarzyna Mirczak, Sylwia Stelmach and Anna Drzymuchowska, as well

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3 Open until June 4, 2006; cf. Also E. Dziewisz, Złoto, groby i uczci, „KRAKÓW”, czerwiec 2006, 74-75.
as Sławomir Chwalek, a graduate of our Institute. Jarosław Bodzek and Mateusz Woźniak of the Archaeological Institute and the National Museum operated as a natural connection between our two institutions.

Ewdocjusz Papuci-Władyka
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АББРЕВАТИВЫ • СПИСОК СОКРАЩЕНИЙ

"ACIMB" — "Аннардул Комисиунки монументал оисторие: секция дин Басарбия"
"CNA" — "Срочика нумисматична и археологична"
"IOSPE" — B. Latyshev, Inscriptiones antiqueae orae septentrionalis Ponti Euxini,
Ed. 2, Petropolis 1885-1916
"KSIA AN SSSR" — "Краткие сообщения Института Археологии АН СССР"
(см. "КСИА АН УССР")
"MSROA" — "Материалы и Справочники Рецензийного Основания Археологического"
"MIA" — "Материалы и исследования по археологии СССР" (см. "МИА")
"NE" — "Нумизматика и эпиграфика" (см. "НЭ")
"RGF" — "Римское — Германские Форсунги"
"VDI" — "Вестник Древней Истории" (см. "ВДИ")

"АО" — "Археологические Открытия"
"АП УРСР" — "Археологические Открытия УССР"
"ВДИ" — "Вестник Древней Истории" (см. "ВДИ")
"ЗООИДА" — "Записки Одесского общества истории и древностей"
"КСИА АН УССР" — "Краткие сообщения Института археологии АН УССР"
(см. "КСИА АН СССР")
"МИА" — "Материалы и исследования по археологии СССР" (см. "МИА")
"МАСП" — "Материалы по археологии Северного Причерноморья"
"НЭ" — "Нумизматика и эпиграфика" (см. "НЭ")
ПГКСВП — Проблемы греческой колонизации Северного и Восточного
Причерноморья, Тбилиси
"СА" — "Советская археология"
СЗП-КЗАК — Северо-Западное Причерноморье — контактная зона древних культур, Киев
Grey ware from the Koshary site

During the Great Colonization, the coast of the Black Sea was settled by the Greeks. This process started in the 8th century and continued until the 6th century B.C. A dense system of colonies was developed in the Propontis and the Pontic region. These colonies provided Greece with basic food products, such as grain and fish, whereas Greek crafts, including pottery, were imported. In addition to vessels imported from metropoleis, local Pontic pottery production provided goods for the settlers. Different techniques as well as various types of clay were used to make pottery divided into various categories and groups. One of those groups, which is the subject of this paper, is so-called grey ware. The characteristic grey colour of this type of products was obtained in the second and the last (reductive) stadium of firing (Krzywiec 1954, 12; Rye 1981, 114-117; Jones 1986, 751-767).

Trying to determine the general chronological framework of grey pottery distribution, it should be mentioned that different groups of this category of vessels appeared in the Bronze Age and continued to be in use until the Roman period. In this paper, however, the author would like to focus on the Greek period (from the 8th to the 1st centuries B.C.) with special emphasis on the Classical and the Hellenistic periods.

Grey-coloured vessels can be found in the entire area of the Greek civilization. However, in the Black Sea region, where grey ware was much more widespread in comparison to other regions of the Hellenistic world, the situation was exceptional. It seems that in the case of some pottery groups from the Black Sea region, we can talk about a certain specialisation and individuality of pottery production with regard to Greece itself, especially in relation to groups belonging to grey ware. There is a hypothesis
suggesting separate Pontic pottery production of grey ware that was connected with large-scale trade within the Pontic region (Bozkova 1997, 8-9). This could be considered as evidence that a separate economic microsystem, based on local natural resources, existed in the area of the Black Sea and that it was adapted to colonial community needs in every respect, based on the local raw materials, characteristic only of the Black Sea region. In newly colonized territories (e.g. in the West, in Italy and Sicily) the Greeks had almost identical conditions as in their earlier settlements, but in the lands located on the Black Sea coast, the conditions were completely different. Geomorphology, climate, mineral resources, fauna and flora were significantly dissimilar. The other important reason contributing to creation of a separate Pontic economic microsystem was also the influence of barbarian communities living in the neighbourhood, mainly with Thracian and Scythian culture models, especially their customs and production.

Olbia, located on the northern coast of the Black Sea, together with its whole economic countryside (chora), is one of the sites where the occurrence of grey ware on a mass scale is characteristic. It is believed that the complex of ancient sites near the modern village of Koshary, where excavations are being carried out by a joint Polish-Ukrainian expedition of the Institute of Archaeology of the Jagiellonian University in Cracow and the Archaeological Museum of the Ukrainian National Academy of Sciences in Odessa, should be also regarded as belonging to the Olbian chora (Papuci-Władyka et al. 2005, 193-234; see Redina, p. 142-160).

The site described in this paper is situated near the modern village of Koshary, midway between modern Odessa and ancient Olbia (around 40 km to the east of Odessa). It is a complex consisting of a settlement, a burial ground and an open-air altar on the western bank of the Tiliugskii Liman (the ancient Axiakos River). It occupies a high promontory and the neighbouring plateau, now situated some 700 m from the coastline. The main part of the complex was the settlement located at the top of the promontory. Steep slopes marked the western and southern limits of the settlement; to the southwest, there was a deep ravine. An open-air altar in the shape of a mound formed by ashes remaining from sacrifices – the Russian zol'nik – on the south-eastern edge of the promontory, was discovered in the course of archaeological research. The necropolis occupying a vast plateau constitutes the north-western part of the complex, located at the top of the cape.

The pottery from the site in Koshary, presented in this paper, is hardly known (see: Kowal 2001; Kowal 2005). Most of the relics come from the Polish-Ukrainian excavations carried out from 1998 to 2005; the material which was discovered during
the earliest research conducted by the Russians and, after that, Ukrainian archaeologists was taken into account to a much lesser extent. The grey ware presented in this paper consists only of vessels with grey and black slip, as well as of potsherds without slip (kitchen ware).

The body of pottery from Koshary is generally mat, grey or dark-grey with characteristic green and yellow hue. Similar to Olbian grey ware, all vessels from Koshary (whole pots as well as sherds), have characteristic inclusions: mica and various quantities of limestone and quartz particles. Almost the whole surface of a vessel was coated with dark-grey, almost black slip that imitated black glaze and was polished. The percentage of surface coating varies from a thick layer on the whole vessel surface to thin stripes covering only a part of it.

In the grey ware from the Koshary site we can distinguish three main forms of open pottery: bowls, plates and cups.

**BOWLS**

The bowls can be divided into the following types:

**Incurved rim bowls (Fig. 1:1).**

This vessel shape is the most numerous represented, after fish-plates, among all grey ware found in Koshary. All potsherds of this kind have a rim more or less incurved and relatively thick walls. Incurved rim bowls of various categories of pottery (black glazed, colour-coated ware, plain ware, grey ware etc.) from the late Classical and the Hellenistic periods are found on almost every site. However, there is no precise definition of this form, since its shape and proportion changed with time. Generally, it appears that such vessels evolved from shallow forms (5th c. B.C.) to deeper (4th c. B.C.) to biconical (3nd–2rd c. B.C.) (Hayes 1991, 26-27; Rotroff 1997, 156-164). Large quantities of incurved rim bowls were found in the settlement and in the zošnik area within the Koshary site.

**Incurved rim bowls with one horizontal handle rising up above rim level (one-handlers) (Fig. 1:2).**

The relics from the site at Koshary belonging to this group are preserved fragmentarily. We have only three potsherds with a complete profile, while the rest of sherds are upper parts and handles with a piece of rim. The basic form of this vessel is generally similar to the previous form. The rim is more or less incurved. The distinctive feature is one horizontally placed handle attached to the edge of the rim rising slightly above rim
Fig. 1. 1 – Incurved rim bowl; 2 – Incurved rim bowl with one horizontal handle rising up above rim level (one-handlers); 3 – Out-turned rim bowl; 4 – Thick and flattened rim bowl; 5 – Bowls with rim bevelled inwards and grooves near the edge; 6 – Plate with a flat and wide horizontal edge (drawn by author).

level. The handle is semi-circular with an oval cross-section and rises approximately 2.5 cm above the edge. The ring-shaped foot of a vessel is not high. Just as in the previous group, this group of bowls appears also in the settlement and in the zol`nik area, but, interestingly, we did not find them in the necropolis area. On a few objects we can observe perforations, presumably traces of mending. Vessels from Koshary definitely correspond to the Olbian group, regarding form and production technique, although an almost identical form of a bowl with a horizontal handle, similar to skyphos, belonging in black-glazed ware, was popular in Athens from the 6th to the 5th centuries B.C. (Sparkes, Talcott 1970, 196, Fig. 8, Nos. 726-769). They reached their peak of popularity in the period from the 4th to the 3rd centuries B.C. (Roroff 1997, 151). All Olbian vessels from Trench I were found in contexts of the second half of the 3rd and 2nd centuries B.C. (Knipowich 1940, p. 156). On the basis of these discoveries, we can date our group of bowls to the period between the 3rd and the 2nd centuries B.C.
Out-turned rim bowls (Fig. 1:3)

This type of bowl has a moderately thick out-turned rim, sometimes slightly flattened, gradually becoming a belly, which in the middle of the belly or close to the base has slight or more sharp angularity. In the material from Koshary presented in this paper there are only six pieces of upper parts of such bowls. The rim is always curved out and more or less flattened. The angularity is usually situated approximately 3 cm below the rim. Unfortunately, no vessel with a complete profile was found. Bowls of this form are medium-sized; the rim diameter is between 16 and 20 cm. A majority of such vessels were discovered mainly in the zol'nik area and in the settlement.

Similarly shaped bowls were widely seen in the Hellenic world, especially among black-glazed ware and different categories of local pottery (colour-coated ware, red slipped, plain ware etc.). In Athens, out-turned-rim bowls were produced as early as the 5th century B.C., during the 4th century B.C. and throughout the whole Hellenistic period (Sparkes, Talcott 1970, 198; Rotroff 1997, 156-160). Due to their wide range of territorial distribution and the lack of characteristic features in Koshary vessels, it is difficult to set more specific time frames than the period between the 4th and the 3rd centuries B.C.

Thick and flattened rim bowls (Fig. 1:4).

Bowls of this type are regularly shaped with their round walls turning outside; the rim is thicker outside forming a cylindrical edge. All the preserved sherds from the Koshary site have almost identical dimensions (18–19.5 cm in diameter) and were discovered in the settlement layers. Olbian bowls of this type were found in mixed layers consisting mostly of material dated to the second half of the 3rd century and 2nd century B.C. (Knipovich 1940, pp. 156–157). Similar grey ware bowls were found in Pantikapaion almost exclusively in layers from the 3rd and 2nd centuries B.C. (Kruglikova 1957, pp. 120–121). Based on the above-mentioned analogies, we can date these vessels from Koshary to the period between the 3rd and 2nd centuries B.C.

Bowls with a rim bevelled inwards and grooves near the edge (Fig. 1:5)

This is a small group consisting of five sherds of bowls, with the rim bevelled inwards. They are decorated outside with two grooves just below the edge. Since these vessels are very poorly preserved, it is difficult to determine their dimensions and the shape of the foot. Vessels of similar form, especially regarding decoration, are characteristic of local West Pontic workshops, localized along the Tyas–Istrus–Odessos–Apollonia line. This form of vessel is typical of as early as the 5th century B.C.; however, they reached
their peak of development in the 4th and 3rd centuries B.C. (Alexandrescu 1977, 124-126). This type of bowl was very rare in Olbia.

**PLATES**

At Koshary, as on other sites, especially dating to the Hellenistic time, plates were among the most numerous and most popular forms of tableware. The analysed material was divided into two main types: plates with a flat and wide horizontal edge and, the most characteristic, fish-plates.

**Plates with a flat and wide horizontal edge** (Fig. 1:6)

This kind of ware has an oblique wall and a ring-shaped foot. The edge is flat and wide. Later vessels, though, have a slightly convex, but still horizontal edge. According to T.N. Knipovich (1940, 155), both types of vessels were found in Olbia in layers dated to the 3rd and 2nd centuries B.C. The author emphasised that in plates from the 3rd century, thickening and schematisation can be noticed, but for later artefacts (from the 2nd century B.C.) it is not always easy to determine the basic form of a given object. Plates with a flat and wide horizontal edge have thin walls. They are typically of high quality of the body and slip and carefully produced. Usually, the body is light grey with greenish hue typical for Olbia. Traces of reparations, such as perforation, are sometimes noticeable. Diameters are 18-21 cm. Sherds of plates with a flat and wide horizontal edge were found in the zol’nik and the settlement area. Due to similar form and features of the body and slip to Olbian examples, this type of vessel can be regarded as an Olbian product.

**Fish-plates** (Fig. 2:1).

A fish-plate is one of the most characteristic forms of the Late Classical and Hellenistic pottery. Its main distinctive feature is the so-called central depression (central well, cavity, central cup), designed to hold sauce, oil, vinegar, salt etc. A vessel of this kind is a shallow, massive dish about 25-30 cm in diameter, slightly elevated, with a high vertical and downturned rim, massive foot and deep central depression. No typical fish-plate has been found in the Koshary site, at least not in the grey ware pottery group. However, the most numerous represent form of Koshary grey ware is a fish-plate. Out of 396 analysed sherds, 107 are certainly fish-plates. This might be connected with certain specialization of the Koshary settlement. Since fish-plates were originally used to serve seafood, it may be assumed that a significant number of those plates at Koshary is evidence that the settlement specialised in fishery. This theory is confirmed by the presence of fishing hooks, as well as many shells and fish bones. A majority of fish-plates are
preserved fragmentarily, mainly as rims and ring-shaped feet with a central depression. Two intact plates were found in graves in the necropolis as grave equipment. Virtually all fish-plates found in the Koshary site belong to the grey-slipped pottery category. Many of them were mended: perforation might be made to tie up the parts together, so vessels could be used again. One particular sherd has traces of being reused but for a different purpose. It is a foot with a central depression; its surface that connects the foot with the disc was intentionally smoothened. In this way, a new vessel resembling a small bowl or a cup was created which could serve for example as a saltcellar. Another sherd preserved fragmentarily is a foot with a central depression and an incised graffito on the bottom – the Greek letters HP, probably the signature of the potter or the owner.

Fig. 2. 1 – Fish-plate; 2 – S-shaped profile cup with one handle; 3 – Jug with rim bevelled outwards; 4 – 10 Jug with a moulding below the rim; 5 – Jug with horizontal grooves on the neck; 6 – Jug with flaring rim edge (drawn by author).
The fish-plates from Koshary can be divided into two separate types depending on form. The basic determinants are the shape of the rim and the way the central depression is formed.

Type 1 – Fish-plates with a protrusion ("wall") surrounding a central depression.

Most fish-plates from Koshary belong to this type. The vessels have a rim in the form of a thick edge slightly turned outside, more rarely without turning. The inside part of the rim, close to the edge, is frequently decorated with two grooves. This type of fish-plate is relatively deep. The vessel surface is inclined at a 30° angle. The characteristic central depression is separated by a high protrusion, a ridge, differently shaped. Such a protrusion is sometimes turned inside and slightly thicker, resembling a small cup attached to a vessel, and sometimes it is straight and bevelled inside. The ring-shaped foot of this type of plate is relatively high and sometimes slightly profiled.

There is an exceptional similarity in form of all vessels of this type found at Koshary to objects belonging to the same category discovered in Olbia. All vessels of this type found in Koshary should no doubt be classified as the peculiar Olbian fish-plate with a ridge surrounding a central depression. Some fish-plates were found in Olbia in relatively early layers, dating to the 2nd half of the 4th century B.C., and others in layers from the 3rd century B.C. (Knipovich 1940, 161-162), so similar dating of the fish-plates from Koshary seems to be correct.

Type 2 – Fish-plates with a central depression in the form of a simple cavity.

Not all fish-plates from Koshary show direct analogies with the uniform Olbian type. Some plate sherds (mainly rims) have thick walls and one groove close to the rim; in this case the rim is quite wide, thick and turned outside. Such a form corresponds to classical fish-plates with a wide rim turned outside and with a central depression in the shape of a simple cavity. A few fish-plates preserved fragmentarily – a foot with a central simple-cavity depression, not separated from the rest of the plate, as well as a sherd of a plate with a central depression in the shape of a simple cavity separated from the rest of the plate by one groove, with a rim turned outside, decorated with one groove close to the rim – may be linked to this type. It is possible that the transitional form between this type and the one described previously is represented by a sherd of a vessel in the form of a foot with a central depression separated from the rest of the plate by a small protrusion and a groove. The technological details indicate evident similarity to Olbian plates (Kowal 2005, 88-93).

All vessels described by the author are relatively big plates, 20-28 cm in diameter (mostly 24-26 cm) and 5-7 cm high. In the Koshary site, fish-plates similar to those
described above were found in the settlement and within the zolnik area, whereas many rim and foot fragments were discovered in the necropolis. What is interesting, they are present not only in graves, but also in their fills and in the piatna, i.e. oval patches of different sizes, which probably are the remains of funeral banquets or places of sacrifices for the dead (for more on which see below).

**S-shaped profile cups with one handle** (Fig. 2:2)

The so-called S-shaped profile cups with one handle can also be classified as open vessels from Koshary. The Koshary inventory includes two pieces of this shape. Their dimensions are as follows: rim diameter — approx. 6 cm; height — 5 cm. The body is dark grey, fine-grained and dense. No analogies with Greek-origin pottery were found. Most likely it is a form whose prototype should be sought among hand-made pottery of Thracian or Scythian origin. Similar cups are known in hand-made Olbian pottery dated to the 4th century B.C. (Marchenko 1975, 70-72). This vessel type from Koshary possibly corresponds also to so-called S-profile cups with one handle elevated above the rim, known from Istris and other colonies in the western part of the Pontic region, as well as from the Thracian and Scythian areas.

In closed vessels, much more typological differentiation could be noticed than in open vessels. The main and the most diverse form is a jug; in addition to that, the big lekythoi, a table amphora, and so-called chytridion belong to grey ware. Moreover, we have obtained some sherds of closed vessels to which we do not have good analogies.

**JUGS**

This type of closed vessel, popular tableware at the time, is the most numerous group of closed vessels and has the most varied forms among the grey ware found in Koshary. A few forms of jugs have been distinguished as follows:

**Jugs with a rim bevelled outwards** (Fig. 2:3)

These jugs, according to M. Parovich-Peshikan (1974, 97-98), are the exclusive products of Olbian manufacture, although they were widespread in Pontic cities. He classified this kind of jug as Type 2 based on the material originating from the Hellenistic Olbian necropolis. All vessels belonging to the described form, from Koshary, Olbia and other Pontic areas, show extraordinary similarities. This type of vessel is rather small (usually 10-14 cm high, more rarely 20 cm). It has a long neck slightly widening upwards and a rim leaning outwards. The belly is usually wide and slightly flattened. The ring-shaped foot is short and thin, 4-8 cm in diameter. The handle is always attached to the
Grey ware from the Koshary site

rim and to jug shoulders. The handle has the characteristic shape of a question mark and often has a protrusion on the outside. It is very interesting that such jugs are found strictly in grey-body pottery without any red shades. Similarly to the above-mentioned fish-plates, the resemblance and consistently high standard of the whole group could be evidence of their Olbian origin and that they possibly were produced in workshops which specialized in production of such vessels.

In material from Koshary we have nine intact vessels belonging to this type, which are a frequent and characteristic element of grave equipment found in the necropolis. Pieces of this form are often discovered in grave fills, too. The remaining sherds come from the settlement and the zol’nik area. It is, after fish-plates, the most numerous form found among grey ware in the Koshary site. Seventy-two pieces and intact vessels classified into this group have been preserved. This form is typical of almost all Pontic area colonized by the Greeks, but its mass distribution is confirmed only in Olbia and its sphere of influence.

Jugs with a moulding below the rim (Fig. 2:4)

These jugs, apart from the previous form, make up the most numerous type of jugs in the Koshary site. This type was already classified during excavations carried out in Olbia in the years 1935–1936, led by T.N. Knipovich, as grey ware with dark grey, almost black slip in layers dated to the 3rd and 2nd centuries B.C. Such jugs, in contrast to the previous type, are also found among red-slipped pottery with red body, although in smaller quantities. A form with a moulding below the rim was described in greater detail by M. Parovich-Peshikan as a jug with a long, cylindrical neck. The handle is flat, bent at a right angle, one end attached to the shoulder, the other to a characteristic protrusion below the rim (Parovich-Peshikan 1974, 96-97, Fig. 87/4 1-4). It seems that most vessels from Koshary, which have similar form, should be assigned to this Olbian type (Type 4 of Olbian grey ware).

In the analysed material from Koshary, all jugs not classified as the described type possess one basic and distinctive attribute, the moulding below the rim. The differentiation of other features allows their division into at least two subtypes:

- jugs with a thicker oval rim slightly opening outwards and a moulding below the rim; it is quite a homogeneous group in shape and rim diameter (approx. 11–12 cm);
- jugs with a cylindrical neck, an out-turned edge and a moulding below the rim; rim diameter: approx. 8-12 cm.

We also possess two fragments of handles fixed to remnants of necks with a protrusion which seem to be pieces of jugs belonging to this type. All these pieces were found in the settlement and in the zol’nik area.
The described type of jug, unlike the previous type, was more popular in the northern and western parts of the Pontic region. Given the appearance of the body and slip of Koshary vessels and the closest above-mentioned analogies, these jugs are most likely of Olbian production and seem to date to the end of the 4th or to the 3rd century B.C.

**Jugs with horizontal grooves on the neck** (Fig. 2:5)

Unfortunately, no intact vessels of this type came up at Koshary. Sherds from Koshary belonged to the vessel form with a relatively wide rim (10–12 cm in diameter) and a slightly thicker edge turned outside. Small horizontal grooves go down the neck. The neck has an S-shaped profile, the narrowest in its middle section. Considering the similarities of bodies and other technological properties, it seems that this kind of vessel from Koshary is of Olbian origin, although such form was also characteristic of Western Pontic workshops (two pieces of Koshary jugs show close analogy to a vessel from Istros dating to the 5th century B.C., cf. Coja 1968, 316, Fig. 7/2). Such jugs were a distinguishing mark of Pontic grey ware production. Since jugs with grooves on the neck were especially popular in Olbia during the 5th and 4th centuries B.C. (Parovich-Peshikan 1974, 96–97), vessels from Koshary could be dated accordingly.

**Jugs with a flaring rim edge** (Fig. 2:6)

Pottery material from Koshary contains one almost intact vessel of this kind and a few sherds. A small jug (height: 12.6 cm; rim diameter: 6.4 cm) has a rim in the shape of a flaring funnel slightly profiled (one groove on the edge). The narrow neck is joined with a slender and high belly; the foot is short, ring-shaped. The handle is attached directly to the rim and to the belly in its widest part. With respect to form, this type of jug is also similar to some of the above-mentioned jugs with a moulding below the rim; it differs only from some of them by the absence of moulding. The described type, regarding form, corresponds also to jugs with a flaring rim and a spout (see below).

A form with a similarly shaped rim is also known from Athens (dating to the end of the 5th century; see Sparkes, Talcott 1970, Fig. 13/1586) and from Puntikapaion, from layers dating to the 4th and 3rd centuries, as well as from Elizavetovskoe Gorodishche (Kruglikova 1957, 122-123, Fig. 6/6). Based on the quoted analogies, we can generally date the described type to the period between the end of the 5th century and the beginning of the 3rd century B.C.

**Jugs with a flaring rim and a spout – guttus, askos, feeder** (Fig. 3:1)

Two almost intact vessels of this type belong to grave inventory found in the Koshary necropolis. These vessels are of a small size (rim diameter: 4.4.5 cm; height:
Fig. 3. 1 – Jug with flaring rim and spout – guttus, askos, feeder; 2 – Jug with rolled flaring rim and handle rising above rim edge; 3 – Lekythos; 4 – Amphora with twisted handles; 5 – Chytridion; 6 – Lopas (drawn by author).
10.6-10.8 cm) and almost identical in form. Both come from children’s, most probably babies’ graves (unpublished grave No. 211 for which see Papuci-Władyka et al. 2005, 222-23, Fig. 38; see also Laczek p. 111-119). Their characteristic features are: a flaring rim and a profiled belly (with one groove). The neck is short and smoothly joins with a wide belly. The distinctive spout with an opening for pouring liquid or drinking is attached to one side of the belly. The handle is attached directly to the rim and the belly, perpendicularly to the spout. Vessels of the described form clearly correspond to a specific group of grey ware found above all in children’s graves, characteristic for Olbia and its economic hinterland, as well as for many other Pontic sites (Parovich-Peshikan 1974, 85-86, Fig. 81/4–6). It is possible that putting vessels of this type into children’s graves was part of some initiation rite.

**Jugs with a rolled flaring rim and a handle rising above rim edge (Fig. 3:2).**

In the analysed pottery material from Koshary, a flaring rim is typical of vessels with more or less thicker edge of rim, oval or flattened. Vessels of this type are characteristic for the period from the end of the 4th century to the beginning of the 3rd century in Pantikapaion (Kruglikova 1957, 123-124, Fig. 6/7, 11) and Olbia, in the Archaic (6th c. B.C.) and Classical periods (first quarter of the 5th century B.C.) (Kozub 1974, 63, Fig. 32/1).

**Lekythoi (Fig. 3:3)**

This type of vessel was very popular from the Archaic to the Hellenistic period. Lekythoi served as toiletry vessels to store oils and perfume. They were also connected with funeral rites and were often put into graves. Lekythoi found in the Koshary site are usually medium-sized, with a rounded, relatively high belly and a short neck. This shape of vessel has a flat foot, sometimes slightly concave, rarely clearly separated, ring-shaped. The rim is turned outwards, sometimes right below the rim there is a small moulding. The rim is almost always profiled inside in a characteristic funnel-shaped way. The handle is attached directly to the rim and to shoulders in their widest part. Sometimes a handle is attached fixed to a moulding just below the rim. The described type of vessel from Koshary is generally rounded and not high (average height approx. 10–12 cm). Most of these vessels were found in the settlement and in the zol’nik area, and the rest in the necropolis, as items of grave equipment.

The form of the described lekythoi derives from archaic, rounded Deianeira lekythoi. Such vessels were also very popular in the Classical and Hellenistic periods (Sparkes, Talcott 1970, 152; Rotroff 1997, 169). Lekythoi with a rounded belly and
Grey ware from the Koshary site

A short neck, of size similar to our objects, were also discovered among grey ware from Olbia as a common item in grave inventories and date to the period between the end of the 4th and the beginning of the 3rd centuries B.C. (Parovich-Peshikan 1974, 106-107, Fig. 92). Vessels of this shape were very popular in the Pontic region.

Amphora with twisted handles (Fig. 3/4)

In the course of the excavations carried out in Koshary before the Polish-Ukrainian expedition was formed in 1998, one intact amphora had been discovered similar to those decorated in the West Slope style, although without a painted design. It is a rather big vessel (height: 36 cm), with two twisted rope handles attached to the neck below the rim and to the belly at the widest point. On the neck, in the place of attachment, there is a moulding. Additionally, on the neck, below the handle, there is another moulding and a groove. The rim of the amphora has the form of a profiled funnel-shaped edge turned outside. The ring-shaped foot is of medium height. It is a quite slender vessel, although the belly is slightly carinated. The amphora was covered with black slip.

West Slope style amphorae were produced in Athens in the period from the 230’s to the middle of the 2nd century B.C. (Roroff 1997, 258) and were often imported, copied and imitated. The amphora from Koshary corresponds to West Slope amphorae mainly by its characteristic twisted rope handles.

Kitchen ware was in use from the Archaic to Hellenistic period. The shapes of this kind of ware did not often change for centuries due to their utilitarian character. These vessels were used mainly for cooking. Kitchen ware was not covered with slip. The characteristic red discolouration caused by contact with fire is often visible on the body of this category of pottery.

Kitchen ware used for simmering, characteristic for the Greek culture, can be divided depending on forms typical also of the pottery material from Koshary. They are as follows:

chytra – a big, squat vessel, without a separate foot, with one handle and a chytridion, a miniature version of a chytra;

lopas – a vessel with a lid, without a separate foot, with a slightly pointed bottom, two horizontally or vertically positioned handles, with a characteristically formed edge inside the rim serving as a support for a lid.

Chytridion (Fig. 3/5)

There is one object of this type in the inventory from Koshary. This chytridion is a small vessel with a rounded bottom and a rounded belly, with a narrowing instead of
a neck and one handle attached directly to the rim and to the belly at its widest part. This vessel constitutes the only example of decoration regarding the grey ware from Koshary: three slip spots evenly spaced on the shoulder of the vessel. The chytridion was found in the necropolis in the first years of excavations and was an item of grave inventory (grave 24). This type of vessel was popular mainly between the 2nd half of the 4th century and approx. 270 B.C. and is found in the whole area of the Greek civilisation (Rattoff 1997, 215-216). Similar vessels were characteristic of children’s graves in Olbia dating to the Hellenistic period (Parovich-Peshikan 1974, 100, Fig. 89/3–4).

**Lopas** (Fig. 3/6)

A lopas is a relatively shallow pan, a variety of the chytra with a lid and two handles. In the material from Koshary there are pieces of lids and main parts of lopas-type pans. The lid of a lopas closely resembles a bowl or a plate turned upside down. The knob of the lid is mainly formed in the shape of a protrusion surrounding a small depression, more rarely without a depression. The edge of the lid is simple, in the shape of an oval thickening.

The main part of the material consists of flattened vessels without a separate foot, with walls bevelled conically or towards the bottom. The rim is slightly thickened; inside the vessel it forms a protrusion which supports the lid. Two handles are usually positioned horizontally, less often vertically, and are attached to the narrowest part of the neck and to the belly at its widest girth.

The body of this type of vessel is most often grey or light grey with greenish hue, sometimes reddish, fine-grained or medium-grained, porous. A characteristic strong burn is often visible, as are changes in the core, a result of long exposure to fire (reddish core centre). The significant difference between vessels under discussion and other grey ware pots is clearly visible, as they were not coated with slip.

Lopades are common on almost every Greek site. In Athens, such vessels were present mainly in the 5th and 4th centuries B.C. There is evidence of their existence in the Hellenistic period (Rattoff 1997, 216). Vessels almost identical in form to objects from Koshary discovered in the Athenian Agora date to the last quarter of the 4th century B.C. (Sparkes, Talcott 1970, 227-228). Similar vessels were found in Olbia dating to the period between the end of the 4th century and the beginning of the 3rd century B.C. (Kozub 1974, 63). Considering similarity in form and technology, vessels of this kind from Koshary should be dated to the 4th and the beginning of the 3rd century B.C.
Grey ware from the Koshary site

Storage amphorae (ca. 70 per cent) and hand-made pottery (up to 15 per cent) make up the most of pottery material belonging to movable findings discovered in the Koshary site. High and very high quality pottery tableware constitutes approx. 10 per cent of the material from the site. The above-described grey ware, compared to all pottery material from the Koshary site constitutes approx. 6.2 per cent and black-glazed pottery — 1.7 per cent. For example, Trench IV (16 squares with a total area of 400 square metres) excavated in the settlement between 1998 and 2002, yielded approx. 17,261 sherds of storage amphorae, approx. 3802 sherds of hand made pottery, approx. 1064 sherds of grey ware, 406 sherds of red body pottery and 294 sherds of black-glazed pottery.

Thus, grey ware is the most numerous category of high and very high quality tableware from Koshary. At the same time, this pottery category is relatively poorly diversified in shape, which is generally characteristic of this ceramic category. Only three basic forms of open pottery can be distinguished: bowls, plates and cups, whereas closed pottery forms include jugs, amphorae, lekythoi and kitchen ware, with jugs prevailing. The relatively high quantity of preserved fish-plates may be evidence of the specialisation of the settlement in Koshary. Since fish-plates were used for serving seafood, it can be assumed that, with their great number, the diet of the inhabitants was based mainly on seafood products. Such an assumption may form the basis to formulate a theory that the settlement in Koshary specialised in fishing (see the article by M. Kania, p. 62-73).

The most numerous and the most varied material from Koshary was found in the zol’nik area (approx. 40 per cent of all material studied by the present author). Most artefacts from the zol’nik are heavily damaged, mostly burnt, which may suggest that these objects were thrown into fire during sacrificial rituals. Moreover, lots of potsherds from the zol’nik and the settlement have drilled perforations which are traces of mending or converting damaged pottery into other vessels. It may provide evidence that the community inhabiting the settlement in Koshary was not very rich and could not regularly afford to buy pottery products. As there probably was no local wheel-made pottery supply, they must have been quite expensive.

In the necropolis, in addition to the intact or almost intact examples of grey ware, mainly jugs with the rim turned outwards (and a few other forms like jugs with a spout, lekythoi, amphorae and chytridion), which are almost invariable elements of grave inventories, sherds related to funeral rituals were found in features near graves. Such features are the above-mentioned piatna (Russian): oval patches distinguishable on the surface by darker soil colouring. They seem to be
places where funeral banquets or other ceremonies connected with the cult of the dead took place, whereas pieces of vessels found there were probably left after such ceremonies. It is typical that most vessels discovered in such sacrificial places were fish-plates with a ridge around a central depression and jugs with out-turned rim. They constituted the most characteristic and popular Olbian products in grey ware and apparently were very popular also at Koshary. Apart from the above-mentioned shapes of vessels, such ritual places produced less popular bowls with incurved rim and other bowls. Sherds similar to those found in the piastra were discovered in the ditch surrounding the burial mound explored in 1998.

Presence of only the most basic forms of grey ware vessels (and also red clay pottery) and absence of traces of local wheel-made pottery products suggests the status and role of a site, in this case Koshary, as a small Greek settlement, an element of the countryside, chora, surrounding a big city centre (polis). In this instance, the nearest centre of this kind, with opportunities and potential, linked economically (Olbian coins findings) with the settlement in Koshary was Pontic Olbia. The theory that the settlement in Koshary belonged to Olbia’s zone of direct influence is also confirmed by the fact that the grey ware found at Koshary was mostly produced in Olbia. The presence of such forms of vessels, like the bowls with a rim bevelled inwards and grooves near the edge, may be evidence of some relations between Koshary and western Pontic colonies, and the presence of S-shaped profile cups with one handle and S-shaped profile jugs – proof of links with groups following the Thracian or Scythian cultural model.

Analysis and comparison between artefacts from Olbia and Koshary clearly shows that the grey ware from Koshary site was, in most cases, produced in Olbia. A substantial part of the described relics can be classified as light-grey or grey body pottery with a typical greenish hue characteristic for Olbian grey ware. In addition to identical body colour, most objects have also standard Olbian inclusions – mica and particles of calcium and quartz. Although there can be some doubt regarding Olbian origin of some potsherds, no such uncertainties exist for two of the most popular forms of vessels found at Koshary: fish-plates with a protrusion surrounding a central depression and jugs with a rim turned outwards. Both forms are so typical for the environment of Olbia at that time that we can even talk about a specialisation in their production. Analysis of grey ware from Koshary reveals that it was a small settlement which did not develop its own wheel-made pottery, thus this place was completely dependent on the nearest pottery production centre, which was Olbia.
References

Alexandrescu P.
1977 Les modèles grecs de la céramique thrace tournée, „Dacia” 21, 113-139.

Bozkova A.
1997 A pontic pottery group of the Hellenistic age (a survey based on examples from the bulgarian Black Sea coast), „Archeologia Bulgarica” 1 no. 2. Sofia, 8-17.

Coja. M.
1968 La céramique grise d’Histria à l’époque grecque, „Dacia” 12, 305-329.

Hayes J.W.

Jones R.E.

Knipowich T.N.

Kowal A.
2005 The Greek Grey Ware fish-plates from the Black Sea region, „Études et Travaux” XX, 88-93.

Kozub J.
1974 Nekropol Olv’ii V-IV st. d.n.e., Kiev.

Kruglikova I.G.
1957 Remesliennoe proizvodstvo prostoi keramiki v Pantikapee v VI-III v. d.n.e., „MIA” 56, Moscow, 96-138.
Krzywiec R.
1954 Technologia rzemiosła garncarskiego, Wrocław.

Marchenko K.K.

Parovich-Peshikan M.
1974 Nekropol’ Olv’ii ellenisticheskogo vremeni, Kiev.


Rye O. S.

Rotroff S.

Sparkes B. A., Talcott L.
1970 The Athenian Agora XII, Black and Plain Pottery of the 6th, 5th, and 4th centuries B.C, Princeton, New Jersey.
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Краков, Польша

Сероглиняная керамика из Кошарского городища

Резюме

Понятие „греческая керамика“ обычно ассоциируется с высококачественной чернофигурной и краснофигурной керамикой, изготовленной, прежде всего, в Афинах или Коринфе. Тем не менее, кроме расписной и чернолаковой керамики, существовало много других групп гончарной греческой керамики, не таких популярных, как вышеупомянутые.

Одной из таких групп является так называемая «сероглиняная керамика», традиция изготовления которой существовала на протяжении многих веков. Первоначально, территория, где она появилась, ограничивалась до Малой Азии. Во время Великой греческой колонизации сероглиняная керамика появляется на западном побережье Средиземного и Черного морей, где впоследствии становится типичным элементом керамического комплекса греческой культуры, видоизмениясь во времени по формам.

В керамических комплексах греческих памятников, особенно находящихся на краю греческого мира, сероглиняная гончарная посуда появляется уже в VII в. до н. э. Значительное распространение она получает со второй половины V, а особенно в IV – начале III вв. до н.э.

В Копарском археологическом комплексе (Украина, Одесская область), среди прочего керамического материала, также присутствуют разнообразные формы сероглиняной посуды. Памятник расположен в зоне политического и экономического влияния Ольвийского государства, одного из самых больших на территории Северо-Западного Причерноморья. Значительная часть сероглиняной керамики из Кошар, датированная периодом IV – III вв. до н. э., по нашему предположению, относится к ольвийскому производству. Хотя не исключена возможность поступления определенного количества сероглиняной керамики и из других греческих центров. Распространенные формы сероглиняной керамики, которые встречаются в Копарах представлены мисками с загнутыми во внутрь краями, рыбными блюдами, кувшинами, гуттусами, светильниками и лекифами.