MASTER THESIS TITLE

“The material culture of the Olbia Pontika in the Northern Black Sea Region”

Stauros Christodoulou

Supervisor: Papuci-Wladyka Ewdoksia

1 The plans were taken from Minns, H.E 1971: 25-26.
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ABBREVIATIONS

AA Arhæologischer Anzeiger.
AJA American Journal of Archaeology.
AP URSR Arheologichni pam’jatki URSR (Archaeological monuments of the Ukrainian SSR).
BCH Bulletin de Correspondance Hellénique.
IAASP Issledovaniia po antichnoj arheologii Severnogo Prichernomorja (Investigations on classical archaeology of the Northern Black Sea littoral).
IAK Izvestiia Arkheologicheskoi Komissii (Preceedings of Imperial archaeological commission). St. Petersburg.
IOLbiae Inscriptiones Olbiae (1917-1965).
MIA Materiali i issledovaniia po arheologii SSSR (Materials and investigations on archaeology of the USSR).
OAK Otcheti Imperatorskoj arheologicheskoj komissii (Reports of Imperial archaeological commission).
PDKZP Pamjatniki drevnih kultur Severo-Zapadnogo Prichernomorja (Problems of Greek colonization of the North Black Sea littoral).
SEG Supplementum Epigraphicum Graecum.
TGE Trudy Gosudarstvennogo Ermitazha. Leningrad.
VDI Vestnik drevnej istorii (Herald of ancient history).
Preface

The intent of my master thesis is to gather all available information concerning the material culture of the Olbia Pontika in the Northern Black Sea Region. This issue has arisen after the collaboration which I had with my professor Papuci - Władyka Ewdoksia, Head, Department of Classical Archaeology Institute of Archaeology in Jagiellonian University, during the course Mediterranean Archaeology. The history the culture and the material which was found during the excavations, gave me me the urge to write up this big colony.

There are allocated three basic periods in the development of the material culture of Olbiopolites, as well as in the historical development of the Olbian state as a whole, each of which had specific features: 1) From the beginning of settling the territory of the city (mid. 6th c. B.C.) up to Getae invasion 2) from Geate invasion up to the middle of the 3rd quarter of the 3rd c. A.D and 3) from the end of the 3rd c. A.D. up to the 3rd quarter of the 4th c. A.D (Kryzhytskyy, Krapivina & Lejpunskaja 1994: 18-44).

However, I have tried to be focus on the material from the Archaic period (ca.590/580 c. B.C.-date of the Olbias’ establishment) until the end of the Hellenistic era (ca. 55 c. B.C – Burebistas’ sack), because the artifacts are numerous and I would like to emphasize more to the three first periods of Olbias’ existing (archaic, classical, Hellenistic).

From the very beginning, I should note that the decision to choose these three periods was quite difficult because the limit of the words I was obligate to write (25,000 worlds), wasn’t enough in order to cover the subject as I wanted. However, this was my chance to give plenty of information to the audience that really want to learn something new about this great colony of the Black Sea region.

During my search of references and articles, unfortunately I have faced many difficulties, because the 80% of the literature was written in Russian and Ukrainian, 15% was written in English and only 5% in French and German. In order to strengthen my information, I have taken the decision to translate some of the important articles and topics so to have more subjective crisis of my issue. Helpful guideline books that I mostly based on them are: Grammenos D.V. and Petropoulos E.K. (eds.) (2003) Ancient Greek Colonies in the Black Sea, Volume I, Thessaloniki, all the editions of Aarhus University Press (known as BSS) specially Lejpunskaja et al (eds) (2010) The Lower city of Olbia (Sector NGS) in the 6th c. B.C. to the 4th c. A.D.
Volumes I-II. England. Special emphasis was given to these two volumes, because the illustrations of NGS Sector’s excavations were plenty and very good preserved. Finally, another important reference was the catalogue from Trofimova. A. (2007) Greeks on the Black Sea. Ancient Art from the Hermitage. Los Angeles.

As I have already mentioned, because of the extremely big amount of information and photo galleries of the elements, I have provided the most considerable one to support the words that I have found during my search time. Lastly, I wish in this case to express my deep gratitude to the Professor Wladyka- Papuci Eudoksia, for her support of this research subject, the most significant person to rely on, based on her knowledge during the excavations she had at the Black Sea region.
Introduction.

The material culture of the inhabitants of Olbia, one of the most important colonies of the Northern Black Sea region, was Hellenic one in the essence and it was a component of an ancient culture as a whole. However, the existence of the antique polis on far oikumene, should have an effect on its development; during various and different contacts with local tribes (especially Scythians), it got rather essential local features.

The most important military, political and economic centre of the entire Northwest Pontus during the antiquity, has been reported to the ancient sources not so often as Olbia\(^2\) (or Olbiopolitae), than Borysthenes (or Borysthenitae). The well known are: Herodotus (Historiae, IV, 17), Pseudo-Skymnus (Periegesis, II, 804-812), Strabo (Geography, VII, 3.17), Pliny the Elder (Naturalis Historia, IV, 26)\(^3\), Arrian: “κατά δὲ τὸν Βορυσθένην ἄνω πλέοντι πόλις Ἑλλάς ὄνομα Ὀλβία πεπόλισσα” (Periplus Ponti Euxeni, 20.2), Ptolemy (Geog, III, v.14), Stephanus of Byzantius (Ethnica, 25) mentioned “Βορυσθένης and Ὀλβία”, Ammianus Marcellinus (Rerum Gestarum, XXII, viii, 40), Dio Chrysostom (Orationes, XXXVI, 48-57), Plutarch (Vita Cleomenis, II) and Anon (Periplus, 60).\(^4\) (Minns 1971: 451; West 2007: 81).

However, it is necessary to note that, in all monuments of Olbian epigraphy and on coins, the city is called Olbia. All that allowed coming to a conclusion that primordial names of Olbia, both in colloquial and in official languages were ΟΛΒΙΗ ΠΟΛΙ΢ and reduced ΟΛΒΙΗ (Vinogradov, Yu. G 1989: 26). In the opinion of Rusjaeva, this name occurs within the limits of the third quarter of 6\(^{th}\) c. B.C., having replaced more ancient name Borysthenes (Rusjaeva 1986: 43, 51).

Moreover, the rich epigraphic material complements the above information. These consist on consular decrees, dedication to gods, inscriptions in honor of important people and public lists. The numerous graffiti extend our knowledge of their religious life, their relations and their names (Maslennikov 2000: 52). This master thesis, is intended to present the rest chapters, based on the whole information we have (ancient scholars, epigraphic record, excavations and finds).

\(^2\)Ολβίη or Ολβία was the name that inhabitants gave to their city. They called themselves Olbiopolitae (Latshev, IOSPE: 33). Foreigners spoke of them as Borysthenitae, a name that they kept for the natives dwelling along the river Borysthenes. This river- name was applied to the whole region and by strangers to the city, which is called by Herodotus Βορυσθένειτεν ἡμίπολις (Historiae, IV, 17), or πόλις.

\(^3\) Pliny, NH.IV.26, gives the forms Olbiopolis and Miletopolis which occur nowhere else (for the real Miletopolis near Cyzicus v. Hasluck, Cyzicus: 74), the former must have existed to account for Olbiopolitae: of the latter we can say nothing.

\(^4\) In Anonymous, Periplus, 26, noted Όλβια Σαβία, but this is mere dittography, ΟΛΒΙΑΣΑΒΙΑ.
Chapter I. Site and Archaeological Research

To begin with, the site of Olbia itself is perfectly clear. The city stood on the right bank of the Bug estuary; there, about three miles abroad, at a point about a mile south of the village of Parutino (Map 1). About four miles below the city, the estuary opens into that of the Dnieper or rather into a common estuary some nine miles across. If we follow this common estuary eastwards about nine miles from the mouth of the Bug, it is narrowed by a sharp promontory Cape Stanislav and beyond begins the Dnieper liman proper.

Map 1. Satellite location of Olbia.

This Cape Stanislav, must be the Cape of Hippolaus mentioned by Herodotus (Historiae, IV, 53) and Dio Chrysostom (Borystheniticus, 7) as running out between the Hypanis and Borysthenes Rivers. Upon the Cape of Hippolaus, Herodotus says that there was a temple of Demeter (Μηηπόρος); Bruun also thought that he had found its site a mile to the north of the actual headland (BCA. XXXIV. Suppl: 140), but no certain remains have been investigated (Minns 1971: 454).
As far as the topographical sketch concerns, Olbia consists of three parts: the Upper (up to 42 m. above the modern level of Bug estuary), the Lower (up to 10 m.) and the Terraced city located between them covering almost with an amphitheater Lower one (Kryžickij et all. 2003: 390). The Upper city was the archaic core of the village and the center of the developing ἄστο. It remained the lung of the city- state until the invasion of Getae of Burebista in 55 c. B.C. Here, it was the oldest temple dedicated to Apollo Physician (Ἱητρό) and the Mother of the Gods, the Agora and the temple of Apollo Delphinos (Κορομηλά 2001: 201) (Plans 1-2.).
Furthermore, the Terraced city with a magnificent view of the port and the river was the main place of residence. From the end of the first quarter of 5th c. B.C., pit-shelter constructions disappeared and the city was built up with ground multi - chamber apartment houses with inner courts of usual for the Greek houses. These houses were grouped per quarters and in this case frequently had the common walls (Κορομηλά 2001: 201).

Finally, the Lower city has been sunk. Excavation shown that there were situated the port, the port facilities, stores and perhaps the fishmarket (it was mentioned in inscriptions)\(^5\), premises processing fish (salted), different workshops (e.g. leather) and also they were revealed parts of the water supply system (Κορομηλά 2001: 201) \((\text{Plan.3.})\).

\(^5\) "...ἐτι δὲ τοῦ πλείστου μέρους τοῦ πρὸς τόμ ποταμού τῆς πόλεως ἀπειχίστου ὄντος, τοῦ τε καταβαίτον λαμένα παντός καὶ τοῦ κατὰ τὸ πρῶτερον ὕπάρχον ἱδρυματικόν, ἐως οὗ ὁ ἔρως ὁ Σωσίας..." (IOSPE \(\text{F},32,\text{Olbia, 3rd c B.C.}\)).
Based on the above site, the location of Olbia was established by Engineer – General Suchtelev, started exploring the Olbia ruins in 1790, at a time when they were still officially within the Ottoman Empire. Also, P.S. Pallas visited the area in 1794. The interest at this early stage was mainly to focused on the identification of the site as the ancient Greek city of Olbia, as well as the discovery of the cemetery, the so-called “area of the hundred graves” (Kryžickij et al. 2003: 391) (Fig.1-2).
Fig.1. Dromos and krypt, at necropolis of Olbia.

Fig.2. Burial, at necropolis of Olbia.
In 1839, Mikhail Vorontsov, an ambitious governor-general of New Russia, sponsored the establishment of the Imperial Odessa Society which brought in the famous archaeologists in Russia, the Count Alexei Uvarov and Countess Uvarova, who gave much of their lives to Olbia. (Fig.3).

Near the end of the 19th c., the first publications on the history and archaeology of Olbia appeared; the most thorough and scientifically reliable for its time probably being V.V. Latyshev’s work on the political and economic history of Olbia based on epigraphic and numismatic evidence (Kryžickij et al. 2003: 391-392). Systematic excavations began there by Boris Farmakovskiy, from 1901 to 1914 and then, after war and revolution had subsided, from 1924 to 1928. He left behind him a series of meticulous and handsomely illustrated excavation reports which contain most of what is known about the “material culture” of Olbia (Ascherson 2007: 69).

What is more, after Farmakovskiy’s death, L.M. Slavin supervised over Olbian expedition of the Institute of Archaeology of AS of Ukraine (1936-1972). After Slavin’s death, the third generation took over from 1972, under the leadership of Kryžickij (1972-1995) and Krapivina (from 1995) (Kryžickij 1997: 7). It is worth to note that, within the sphere of private architecture, the living quarters of the Hellenistic period have been investigated, especially through the excavations conducted by N.A. Lejpunskaja, in the area of the northern part of the Lower City, Sector NGS. Lastly, excavations as well as research into a burial customs are conducted annually by V. Papanova of the University of Berdyansk (Papanova 2006).

Fig.3. Olbia, view toward the north. Mid – 19th c. from A.S. Uvarov.
Fig. 4. Olbia, dwelling house of the 3rd-2nd c. B.C., in the Lower town. Memory of Boris Farmakovsky.

To start with, the foundation of Olbia appeared as a result of the organized, planned Great Greek colonization. The first natives from Ionia and particular from Miletus, made their appearance in the area of the Lower Bug region in the second half of 7th c. B.C., which were established the Berezan peninsula (Eusebius, Chron.Can, 88; Vinogradov, Yu. G. 1989: 33). Borysthenes/Olbia founded by the same colonizers probably, in the first half of 6th c. B.C., in order to have the status of the city-state. However, about Olbia as a city-state we can speak enough confidently only from the end of the second third of 6th c. B.C., when already almost the whole Lower Bug region was inhabited with Greek immigrants as a result of spontaneous colonization (Kryžickij et alls. 2003: 398).

Based on the above, there is a graffito made in bone, which was found in the Berezan island probably dated to the third quarter of the 6th c. B.C., which according to Yu. G. Vinogradov, it is an important document containing useful historical information; it seems that the number symbols 7.70.700 and 7000, correspond to the four historical stages of the development of the Milesian colonists to conquer the Lower Bug Region and the gradual increase of the colonial population. Mainly in the last two stages (700 and 7000), he thinks that in this period, dated to the first half of 6th c. B.C., the union took place of the two settlements (Berezan and Olbia) into a unique polis under the name Borysthenes, while the erection of a temple dedicated to Apollo Ietros came to approve this political decision (Vinogradov, Yu. G. 1989: 78-80).

Analyzing the archaic period of Olbia in the middle of 6th c. B.C., we can see that it was a small settlement settled down in the southern and central part of the Upper City and consisting, mainly, from pit-shelters and semi pit-shelters (Fig.5-6). From the very beginning it was built the most ancient in Olbia cult site- temenos, connected to cults of Apollo the Doctor and Mother of Gods (Fig.7-8) (Rusjaeva 1986: 42; 1991:124-128) and at the end of the third- fourth quarter of 6th c. B.C., a central temenos erected, with basic cult of Apollo Delfinio (Fig.9-10) (Rusjaeva 1986: 66-67); the same period occurred agora – the area which had trading, administrative and

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6 ἐπτά· λύκος ἀσθενής, ἐβδο-μήκοντα· λέων δεινός, ἐπτ<α>-κόσιοι· τοξοφόρος φίλι<ο>ς δωρε-ἡ δυναμ' ἱππή<ο>ς, ἐπτακε<ο>ς· λιε<ο>ς· δελφίς όρονμος εἰρή-νη Ὀλβη πόλι, μακαρίως ἐκεί,μέμνημαι Λη-[τ]ο[ι]? (SEG, 36:694, VDI (1986.2) pp. 25-64).
pubic factions (Levi 1956: 48, 51; Kryžickij 1985: 66-67) (*Fig.11-13*). In the second half and mainly in the last third of 6th c. B.C., on both temenoi altars were under construction.

To sum up, the existence of these two temenoi, the agora and the coinage appearance of local bronze coin in the form of dolphins allows speaking about occurrence and city – state’s shape, at the end of the third quarter of 6th c. B.C. (Κορομηλά 2000).

*Fig. 5. Pit-shelter and semi pit-shelter of Olbia (plans and reconstructions of S.D. Kryžickij).*
Fig. 6. Upper city of Olbia, view of the southern part (courtesy of the Photo Archives of Prof. Papuci-Władyka E).
Fig. 7-8. Western temenos of Apollo Ietros and the Mother of the Gods at Olbia (courtesy of the Photo Archives of Prof. Wladyka-Papuci E).

Fig. 9. Western temenos of Apollo Ietros and the Mother of the Gods. Olbia (Reconstruction by Kryžickij).
Fig. 10. Altar, Central Temenos. Olbia. (courtesy of the Photo Archives of Prof. Wladyka-Papuci E).

Fig. 11. Central Temenos. Olbia (Reconstruction by Kryżickij).
Fig. 12. The Agora of Olbia (courtesy of the Photo Archives of Prof. Wladyka-Papuci E).
As far as their food supplies concerns, the population of the second half of 6th c. B.C., deal with agricultural, fishing, cattle breeding, partly – hunt, as well as other works and craft; archaeologists insist that in this particular time trade hasn’t begun yet (Коромилá 2001: 198).

Moreover, there were peaceful relations with the local tribes. Herodotus draws a sharp distinction between the city, its emporion (probably Berezan, then a peninsula) and its neighbors. Olbia’s immediate neighbors engage in agriculture, albeit together with pastoralism. They include not only Scythians but also the Callipidae, νέμονται ἑόντες Ἑλληνες Σκύθαι: “they range about being Greek-Scythians” (Herodotus, Historiae, IV, 17). The main verb indicates a pastoral lifestyle, as also does his explicit description of their life as being the same as the Scythians except for their agriculture in grain and legumes (Braund 2007: 38-39).

Nevertheless, it seems that following the tradition, Olbia tried to avoid mixing with people from barbarian community. There is scarce information on mother- Greeks of Anacharsis and
Skyles, the wife- Olbian citizen of the latter (Herodotus, *Historiae*, IV, 76-80). Based on the rich funerary complexes of the second half of the 6th c. B.C., one may assume that some Olbian citizens, married daughters of prosperous farmers from the Forest-steppe tribes (Rusjaeva 1992: 178-180). In the case of the Callipidae, something other than marriage between Greek males and local females may have been entailed. While details remain elusive, the earliest hypothesis seems to be that the Callippidae intermarriage with the population of Olbia itself, very possibly including marriage between local males and Olbian females.7 (Braund 2007: 41).

Passing now in the beginning of 5th c. B.C, there were essential changes of the whole life of Olbia. Excavations have shown that the pit and semi pit-shelter dwellings were replaced by ground adobe- stone houses of usual Greek types of that time (Fig.14-15), occupying not only the Upper but also the Lower City (Fig.16-17). Monumental constructions began, such as the city’s defensive walls, with towers and gates (Kryžickij and Lejpunskaja 1997: 112) (Fig.18-19).

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7 Compare the rather different Geloni, who developed a culture that was a mixture of Greek and Scythian by being Greeks who had settled among non- Greeks (Herodotus, *Historiae*, IV, 108-109).
Fig. 15. House with peristyle court-yard, Olbia (Reconstruction by Kryžickij).
Fig. 16-17. The Lower City of Olbia (courtesy of the Photo Archives of Prof. Wladyka-Papuci E).
Fig. 18. Tower, view from south-west. Olbia (courtesy of the Photo Archives of Prof. Wladyka-Papuci E).

Fig. 19. Western gate, Olbia (Reconstruction by Kryžickij).
In this era, there were radical changes in the economy of Olbia, in which basic wasn’t now the agricultural but trade. Inhabitants of Olbia were engaged in suburb agriculture, storing products in grain pits in the city, in the manors. At this time craft received significant development; metal working of different kinds, pottery, building, processing of bone and glass (more information is given below). The serious place occupied by actively developing trading – exchange relations both with hinterland and with local tribes (Lejpunskaja 1981).

According to some scholars, as a consequence of Scythian expansion, the Olbian economy itself in the 5th c. B.C., has been developed entirely on the mediation of trade instead of agriculture. Marčenko has written of a deliberate elimination by the Scythian elite of the Olbian periphery in order to assure Scythian monopoly in grain trade (Marčenko 1980: 142, non vidi cited after: Grammenos, Petropoulos 2003: 437). Vinogradov, Yu. G., claimed that, the Olbian economy of the 5th c. B.C., underwent a change of focus agriculture and stock- rising to transit trade in goods received from Scythians and passed on the Aegean world and also to craft production (Vinogradov, Yu. G. 1989: 107).

However, as Lejpunskaja noted, both these views underestimate the scale and potential for agriculture and stock- raising in the civic territory which Olbia retained, while they also overestimate the role of the market as a separate concern or force in Scythian exchange (Leypunskaya 2007: 128).

Based on the above, while archaeology shows these changes, a further change has also been supposed, which is rather less clear in the evidence: that is the creation of the so- called Scythian “protectorate”, over Olbia. The term “protectorate” is itself unclear: Yu. G. Vinogradov believed that, the power of the Scythian kings extended mainly over the economy of the polis, but there is no real evidence to show as much (Vinogradov, Yu. G. 1989: 82-121, esp.107). While Yu. G. Vinogradov in particular has argued for the existence and importance of some such protectorate, others have argued that it did not exist at all (eg. Anokhin 1989: 15-17; Rusjaeva 1992: 126; Kryzhitskyy and Lejpusnkaja 1997: 23-24; Kryžickij et al. 1998: 97-100).

The argument for a Scythian protectorate over Olbia rests primarily on inferences from coins and from Herodotus. However, its supporters have tried also to embrace within their arguments a range of archaeological data. The information derives during the reign of the following three
Scythian kings: Ariapeithes (ca. 480/70 B.C.), Skyles (ca. 470/50 B.C.) and king’s “protectorate” or that of his governor – Eminakos in (ca. 450/440 B.C.) (Kryžickij 2007: 123).

Some of the most important evidences of the probably existence of Scythian “protectorate” are: 1) the Anacharsis’ philhellenism (Herodotus, Historiae, IV, 76.5) and Skyles’ story, that Herodotus insisted on Scythian resistance to Greek influence: ἡ μὴ τὴν αὐτὴ γλῶσσαν τε Ἑλλάδα καὶ γράμματα ἐδίδαξεν (Herodotus, Historiae, IV, 78.1) (West 2007: 85); probably have been found the ruins of the “palace” of Skyles described by Herodotus in Olbia (Kryžickij 2007: 12), 2) the appearance of a whole range of burials of Scythian nomads on the lower reaches of the River Bug, allegedly “clustered along the northern border of the state of Olbia” (Vinogradov, Yu. G. 1981: 59), 3) the discovery of twenty-six mirrors in burials found probably in Archaic Olbia, shown at ten out of twenty-six are the so-called Scythian type (see below) (Skudnova 1988: 24-27), 4) the different coins, vessels and the ring all found in Olbia, with dedication to King Skyles (Alekseyev 2007: 41), and 5) the appearance of many non-Greek and semi-Greek names in Olbia’s onomastics.

A remarkable increase of barbarian names, like Igdampaies, Skyles, Spokes, Saitylos, Pharnabazos, Sagaris, Kolandakes, in the prosopography of Olbia already in the fifth c. B.C., has been shown by the late Yuri Vinogradov (SEG, XL, 1990, f.631).

The steady increase of Scythians in the population of Olbia cannot have been without consequences, of a cultural as well as social kind. Scythian items – like akinakes or the bronze model of a Scythian bow – were found already in the graves of the archaic necropolis of Olbia.

To sum up, Kryžickij believes that, all these facts are no objective criteria in order to establish the number of barbarians in the population of Olbia during the 5th c. B.C. These specific cultural features could only encourage the view that the city and its chora had a barbarian element but not a “protectorate” (Kryžickij 2007: 22).
Chapter. 3. Classical period (ca. 490/80- 323 B.C.)

The classical era of the life of Olbian polis, should be start with the Pericles’ expedition in Pontos, although by some scholars has never been taken place. There seems no reason to doubt the date usually given to Pericles’ expedition into the Pontus, ca. 437 B.C., thought it must remain provisional; Its main aims were probably to strengthen Athenian commerce in this region. Whether Olbia was enrolled in the Delian League it is not sure. According to the opinion of some scholars (Latyshev 1887: 45-47; Vinogradov, Yu. G. 1989: 126-134 ) and the “Coinage Decree” which was purchased in the village Parutino set out in 424 c. B.C., there is a town beginning with O (Appian. The Civil Wars, 447; 561) but it only paid a talent which is no more than Nymphaeum and perhaps Tyras (Braund 2007: 85; Minns 1971: 458).

At around the same time, it has been suggested that the tyrant Timesileos of Sinope took refuge at Olbia; for public decree of Olbia records honors to Timesileos and perhaps to his brother?, Theopropos (citizenship, ateleia and enktesis). However, the inscription gives no grounds for supposing that the tyrant took refuge at Olbia. Accordingly, the Olbian honors if they were given, are to be dated before Pericles’ expedition, when the tyrant of Sinope would have been a key figure in the Black Sea region, well worth cultivation, not much after ca. 440 B.C. and perhaps some years earlier (Sinope could supply the wine and olive which Olbia needed and could not produce for itself (Braund 2007: 83-84). The influence of Athens in Olbia was showed in close trading, cultural, religious and military connections. Olbia might be in the structure of the League about 25 years (Κορομηλά 2001: 202).

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8 Vinogradov, Yu. G. 1989: 109n. 123, responds to earlier criticisms, but they abide for the most part.

9 Ιτηροκλεί τῶν Ἐκατάυα Σινωπῆι ἀτελέη καὶ[ι] ἐγγών[οις — —] ἸOlibia, Olbia — ca. 475-450 BC? (another inscribed link between Olbia and Sinope in the 5th c. B.C.)
Concerning the economy of the polis in first half of 4th c. B.C., alongside with agriculture and crafts, trade took an important development with the centers of Classical World (Athens, N.Aegean, Sinope, Heraklea) and with local tribes (Callippidae, Alazones, Scythians). The formations of the polis, reduction of agriculture territory, active development of crafts at a significant level of their marketability were those levers which promoted the further development of trade. Already, in 5th c. B.C., there were credit relations between the citizens in the agora; graffiti is known with the list of debtors to the dealer of wine (Jajlenko 1980: 106).

Moreover, in 4th c. B.C., few inscriptions have survived, most epitaphs and grants of proxeny to foreigners: Diloptichus of Byzantium. Chaerigenes of Mesembria, Hellanicus of Rhodes (?), Nautimus of Callatis and a Dionysius whose city cannot be read. This last stone was found at Cherssonesus. All this points to lively intercourse with other trading cities.

Additionally, a decree found at the temple of Zeus Urius at the entrance of the Thracian Bosporus gives regulations for the treatment of foreign money at Olbia, directing that all copper, silver and gold, other than that of Kyzikos should be exchanged against Olbian currency according to market. Kyzikian staters have been found in Olbia and in later times their place was taken by those of the Macedonian kings. Until now (1971), only one autonomous Olbian gold stater has been discovered; according to the decree of Kanobos about money, one stater of Kyzikos was equated to 8.5 Olbian staters (Minns 1971: 459).

To change subject, the “Wealth” colony, had very good relationship with its mother city, Miletos, in the late classical era, as witnessed by the treaty from Miletos, dating before 323 and possibly to 330 c. B.C. This decree establishes equal citizenship or isopoleitia between the two cities, Miletos and Olbia. Citizens from either city could go to the other and enjoy a privileged status: exemption from taxation, the right to sacrifice in the public cults, special seats at public gatherings and the right to argue law suits in the public court that was reserved for citizens (Graham 1982: 83-162). This relationship was very unusual, for, while it was common for mother

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10 ἀγαθή τύχη. νασατ2 Ολβιοπολίται ἔδωκαν Δηλοπτίχωι Μενίας[κα]υθαντίωι αὐτῇ[κ]αι ἐκγόνοις
[προξενίαν], πολίτειαι, ἀτελειαν[ά]ντινχρηματίσι —[— — — — — — — — — — — — ]Ολβια, 9, Olbia — ca. 325-300 BC?
11 For more inscriptions see (Olbiae, 8-10; 14-15.
12 [— — — — — — — — — — — — — — — — — — — — — — ] εἰς πάντα τὸν χρόνον. Iolbia, 9,
Olbia - 4th c. BC.
cities to reserve the right to send later settlers to a colony as full citizens, the colonists’ right of return was usually strictly limited (see the foundation of Cyrene by Theraeans, Herodotus, *Historiae*, IV, 156.3).

Once more, this relationship must have been in effect in the past and then lapsed for some reason before it was reestablished in this treaty. However, a more likely date for the original treaty of isopoliteia is when the city of Miletos was being refounded, probably immediately after the Battle of Mykale. The returning Milesian refugees would have naturally looked to the colonies – many of them prosperous cities in their own right – back to the ruins of Miletos (Gorman 2002: 188).

Based on the above decree, we are in a position to assume the political system of Obian polis. At the initial stage in Olbia, the aristocratic form of board is supposed when managing role was executed by council of oligarchies (Kryžickij et al. 1999: 349). Later, Olbia was democratic slaveholding republic on the political system anyway from the 5th c. B.C., which on short intervals of time, under the assumption of a part of researchers, was replaced by tyranny in 5th c. B.C. (Vinogradov, Yu. G. 1989: 90-126), democratic in 5th – 2nd c. B.C., with sometimes alternated oligarchical (second half of 4th – 3rd c. B.C., probably about the middle of 3rd c. B.C.) form of board (IOSPE: 1987; Vinogradov, Yu. G. 1989; Anohin 1989: 33;).

This period ends with the siege of Olbia by Zopyrion, the Alexander’s governor of Thrace, in 332-331 c. B.C. During the siege, the citizens of Olbia released their slaves, granted citizenship to foreigners in the city, canceled debts and cooperated with Scythians; these emergency measures (related by the late antique writer Macrobius) contributed to their military success (*Saturnalia*, I, 11.33) (Babler 2007: 152). The campaign ended with a total defeat of Zopyrion and his 30,000 soldiers; the destructions’ siege left traces in the city itself and even more in the vulnerable settlements of the chora, which were burnt down, but quickly rebuilt (*Fig.20*).
To conclude, some scholars believe that the siege of Zopyrion never took place: Bertier-de-la-Garde (*Comparative Values*: 86, n.2.), refuses to believe in the siege, saying that you cannot besiege an unwalled town, but part of the circuit had been completed in stone and the rest was no doubt defended by walls of crude brick or a palisade and ditch for which very likely Protogenes substituted stone. Grote regards Zopyrion as an unknown person and declines to fix any date for his attack upon Olbia.

To the end of 4th c. B.C., belongs a tantalizing inscription\(^{13}\), in praise of a man who appears to have brought the citizens to one mind by arranging an impartial compromise? Presumably there had been a faction fight. Perhaps when the danger from Zopyrion had passed, there were difficulties between the old and the newly enfranchised citizens. But this discord may have to do with the subsequent decadence (Minns 1971: 459-460).

\(^{13}\) Ὀλβιοπολίται Ἀριστινδρωι Μελισσού [ορχ] [Ὁ]ρχομενίῳ [ἐξ Ἀρ][καδίας[ἐδωκαν] προενίαν[— — — — — — — —] Olbia, Olbia — ca. 400-350 BC.
Surprisingly, soon after Zopyrions’ siege, already at the end of 4\textsuperscript{th} – first half of 3\textsuperscript{rd} c. B.C., Olbia reached the best bloom of its history. Extensive building actions were carried out; there were reconstructed and re-planned the whole areas. The ruins of the buildings of the Hellenistic period have been kept in a very good condition and enable us to form the picture that shown several homes or entire neighborhoods. The terraced part of the city was substantially built up, the big construction, as monumental – defensive, cult and public- and private was conducted. Particular reference must be done, to the half kouros statue, which has been found in a room of the gymnasium. The whole area of the city achieves the maximum size – about 50-55 hectares and the population was near 15 thousand (Maslennikov 2000: 54).

In the times after Zopirion, the area and volume of trading connections with the Greek world were considerably extended. In this sphere of Olbian economy the certain changes were observed during the hellenistic period. Its first trade connections still proceeded and later brisk enough relations with the centers which appeared at this time on historical arena in connection with formation of new historian – economic event – Hellenism- Rhodes, Kos, Knidos, Italian region, Northern Africa began to be fastened and become stronger (Ostroverhov 1981: 111; Lejpunskaja 1994).

Main articles of import, as well as in previous time, remained a wine (\textit{Fig.21}), olive oil, raw material for some kinds of crafts (glass-works, paints for ceramics), smart utensils, fabrics, ornaments, subjects of art and many other artifacts. About brisk external trading activity, numerous finds of imported products, especially ceramics, in the layers of the city of time testify. The system of measures and weights with different images are known, as turtle, mostly with the image of the main deity of Olbia Apollo and inscription OABIO (Krapivina 1980: 83-98), special measured vessels with stamps of agoranomoi which number now had increased up to three (Ruban 1982; Levi 1985).
Nevertheless, since the second half of the 3rd c. B.C., the economic situation, international position of Olbia and social problems, were getting worst. The weak Olbia, forced to come under the protection of the potential Scythian king Skylouros, in the middle of the 2nd c. B.C; since then commonly was called “Scythian city” (Maslennikov 2000: 51). Whether the Olbiopolites liked their connection with Skylouros or not, it came into an end at the defeat of his son Palakos by Diophantos with the forces of Mithridates VI Eupator. That Olbia submitted to Mithridates, seems implied in the fragmentary decree (BCA. XVIII: 97, No.2) in honour of ... son of Philocrates, a master mariner of Amisos, thanking him for services in transporting supplies to certain Armenians in Sinope, also in facing a storm to bring home an embassy of the city’s and reinforcements granted to it by the king (Minns 1971: 464).

After the death of Mithridates VI Eupator in 64/63 c. B.C., Olbia was sack by the Getae with their king Burebista in 55 c. B.C.; our authority for it is Dio Chrysostom. The destruction was complete, while the city never was able to return to its past wealth (Maslennikov 2000: 52). After the complete abandonment of Olbia, wolves that had hosted the parturient Leto, returned to their lairs and Apollo never come back to the Olbia polis.
To pass now to Olbian institutions, the population of the polis, consisted of citizens, free aliens and slaves. We hear nothing of metoikoi. Only the citizens formed the politic body. Apparently, the constitution was at any rate in theory a pure democracy: we do not know of any class of citizens having any special rights, nor of any division into tribes or φρατρίαι. But at any rate in the restored Olbia, this democracy had become something very like an oligarchy. For one reason or another, the responsible offices of the state are concentrated in the hands of a small number of families; the same names occur again and again showing that these families held their own for generations.

The legislative bodies of the polis were People Assembly, in abbreviated form in inscriptions named People in which all competent citizens might participate and the Council. On behalf of these state institutes decrees of the polis were issued. Functions of the Council included preliminary discussion of all major questions of the state activity, and then they were taken out on People Assembly. Besides, the Council observed also of work of enforcement authorities (Kryžickij et al. 2003: 403).

Executive authorities were the Boule and the Ekklesia or Demos. The former seems merely to had probouleutic functions, propositions being first considered by it and then brought before the ekklesia. The formula for decrees generally mentions both. This formula when fully expressed gives the name of the proposer (ὅ εἰσηγησάμενος) and says that the proposal was stated (ἐἶπον) by the archons or in some cases by the archons and the Seven. In one complimentary decree, the proposal comes from the Synedroi, whom Latyshev regards as a permanent committee of the Boule like the prytaneis in many cities. Executive power in Olbia, belonged to colleges of magistrates. The only solitary officials were the king and the director of finances; there were five archons, six strategoi, five agoranomoi, a college of Nine and a college of Seven: we do not know the number of the astynomoi. Each college had a head as it was eponymous, for in official documents and the others are grouped round him as οἱ περὶ τῶν δεῖνα. Also, each college had its patron deity to which it made a dedication after its year of office – the archons to Achilles Pontarches, strategoi

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14 He proposes to restore the word in IOlbiae, 28 and 42.
to Apollo Prostates and sometimes to Achilles Pontarches; the agoranomoi to Hermes Agoraeus (Kryžickij et al. 2003: 403).

Analyzing the above, the Archons, a college of five devoted to Achilles Pontarches, were the principal magistrates. Their chief, the πρῶτος ἄρχων, in later times gave his name to the year. They were the main executants of the will of the ecclesia, which they summoned and before which they laid proposals. Of the Strategoi, we can mention that they formed a college of six with a ὑπηρέτης, whose good service is often recorded (BCA, XXIII, p.31, No.6), were the military leaders for, they had victorious triumphs and made dedications to Apollo Prostates\(^{15}\), offering Nikai in gold or silver, gold torques, a gold and jeweled belt, silver vases, a tripod, a gold wreath, a statue, a little couch and also χαριστήρια to Achilles Pontarches\(^{16}\).

Moreover, the college of Nine had something to do with the finances of Olbia, at least from the information that we have from the Protogenes decree. We hardly know more of the college of Seven. They support the archons in speaking for the decrees in honor of Protogenes and of two other benefactors, whose names are imperfect\(^{17}\) and they are responsible for the tariff of taxes on sacrifices\(^{18}\). Probably they administered the sacred treasury and its interests, were advanced by Protogenes and the other two men, and so the Seven lent their support to their being honored. Neither the Nine nor the Seven are mentioned in the later Olbia.

Lastly, the internal order and decency of the town and the conduct of trades and manufactures were the care of a college of five Agoranomoi: they suitably made dedications to Hermes Agoraeus\(^{19}\). Their names sometimes occur on amphorae and we have a bronze label off a vessel marked ΑΓΟΡΑΝΟ | ΜΟΥΝΤΟΣ | ΑΓΑΘΟ | ΚΛΕΟΥΣ | ΛΕΙΠΑ.\(^{20}\) The Astynomoi cannot be shown to belong to Olbia but certain amphorae and tiles marked with the name of the marked with the name of the maker and of an astynomos designated as such have been generally referred to Olbia (Minns 1971: 472-475).

\(^{15}\) Olbia, 50-74.

\(^{16}\) Olbia, 79-80, (the chief strategos wins the spear throwing).

\(^{17}\) οἱ ἄρχοντες καὶ οἱ ἔπτα ἐπην, IOSPE, I\(^{1}\), 13,16, vi.456.

\(^{18}\) IOSPE, I\(^{1}\), 76.

\(^{19}\) IOSPE, I\(^{2}\), 75.

\(^{20}\) Arch.Anz, 1990: 172, f.35.
Chapter 6. Cults.

In the sixth chapter, evidences as to cults of Olbia, are derived from the statements of Herodotus and Dio Chrysostom, inscriptions, one or two works of art and coins. These last, must be used with caution as often other than religious considerations dictated the choice of types even when these are actually heads or emblems of gods.

To start with, Apollo Prostates, the defender, he was as we have seen the object of special devotion on the part of the strategoi. Its dedications have been found just to the north of the Roman walls and this probably was the site of the temple. First epithet of the god was Ietros; moreover there is the kylix of the careless red-figured style that Count Bobrinskoj found at Zhurovka near Chigirin, inscribed Δελφινίοι(υ) ζυνή(τ) ἰηρο(ῦ), and this may have come from Olbia. This is rendered probable by the occurrence of the epithet Delphinius which spread from Athens and Miletus to most Ionian cities. In a fuller discussion of the kylix, Tolstoy maintains that the Healer and Delphinius are originally independent deities merged in Apollo. Granted that the myth in the Homeric hymn is aetiological should not the explanation be sought in the resemblance of Δελφοί and δελθίς? (Minns 1971: 477).

Zeus is mentioned in the inscriptions with various epithets. As Soter he receives the dedication of the decree in honor of Callinicos son of Euxenos and another made by some private citizen on behalf of the peace and safety of the city; there is a 4th c. B.C., fragment with the name Zeus Eleutherios. In the next century we have Zeus Basileus. Most interesting is the title Zeus Olbios; Callisthenes son of Callisthenes, is praised for “having been priest of the god who defends our city Zeus Olbios and having [vac] the god in holy fashion and making petition for good blending of the airs and so obtaining a favorable season”.

What is more, Demeter appears on some coins, with a mural crown adorned with ears of wheat; curiously enough her name has not yet appeared upon inscriptions and unluckily an

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21 IOSPE, 1^2, 12.
22 IOSPE, 1^2, 458.
23 IOSPE, 1^2, 105.
24 IOSPE, 1^2, 24.
uncertainty of reading in Herodotus (Historiae, IV, 53), makes us unable to determine whether she or Kybele had the temple by Cape Hippolaus. For Kybele and her cult we have the evidence of an inscription of Roman date recording the erection of a statue to her priestess.\(^{25}\) Her head appears on a rare coin. Probably, terra-cottas of goddess and priestess were found on the mosaic in the Prytaneum.

Aphrodite does not occur on the coins and the inscription\(^{26}\) which names her was set up by the Posideus. In any case the epithet Ἐὔπλοια is interesting; but there is a graffito Ἡσυαίος Ἀφροδίτη οἶνον\(^{27}\). On Berezan, G.L. Skadovskij dug up a kylix with the word ΑΠΑΣΟΡΗΣ. Artemis occurs on several coins and on one inscription, also round the neck of a vase in the shape of a woman’s head stands ΑΡΣΙΜΟΣΙΟΝ\(^{28}\). There was probably some cult of Hecate at her grove on Kinburn Spit, thought the only inscription there, is a dedication to Achilles (Minns 1971: 475-480).

Lastly, among heroes, Heracles and Achilles had the most important appearance in the Olbian religious life. Heracles could be regarded as the symbol of some party, presumably aristocratic, and that party and its entire works having been overturned by opponents. The coins with the head of the hero are rather rare but are assigned to the same period, the 2\(^{nd}\) c. B.C. Meanwhile, rather by contrast with wide-ranging Heracles, the cult of Achilles in the north-west Black Sea was strongly linked to Olbia, as dedications by Olbian magistrates show clearly enough (Braund 2007: 51). Dio said expressly, that the Olbiopolites honor him extraordinarily. Further, he mentioned that they had built him a temple in the city and another one in the island called Achilles’ Isle (Okhotnikov & Ostroverkhov 2003: 543); dedication epithets of Achilles are Hero and Pontarches.

To sup up, the whole history of Olbia, as it appears from the ancient sources, archaeological excavations and findings, shown that it is one of the most important settlements of the Northern Black Sea region, together with Panticapaeum and the Doric Chersonesus.

\(^{25}\) IOSPE, i\(^{2}\), 107.
\(^{26}\) IOSPE, i\(^{2}\), 94.
\(^{27}\) Trans. Od. Sec. XXIII, p.18.
Chapter 7. The Art of Olbian city. Ceramics

7.1 Pottery from Berezan

To start with the finds of the Olbian polis, firstly we should mention that the character of the material cultural of Olbiopolites, clearly came to light at investigation of numerous artifacts received at archaeological researchers of Olbia (see Boris Farmakovskiy). It seems appropriate here to expand slightly on the definition of archeologically “visible” and “invisible” artifacts.

Materials that are archaeologically “visible” are those that can survive in the soil and under normal conditions of deposition and preservation, usually do. Archaeologically “invisible” materials are generally those that are biodegradable and in normal soil conditions, where there is water, air and warmth. By far the most familiar and important “visible” material, is pottery. Pottery can be either everyday (most numerous) or decorated and can be also be used for transport or storage vessels (i.e. *amphoras* or *pithoi*) (Greaves 2007: 12).

I would be remised, if I didn’t mention briefly to the finds of Greek painted archaic pottery in Berezan island. The majority of scholars believe that the first Greeks who settled at the edge of the Berezan peninsula, basing on the testimony of Eusebius, reached the region around 647/646 B.C. (see: Eusebius, *Chronicorum Canonum Liber* 95b; Kryžickij, Krapivina 2001: 11). Another view, however, suggests that Eusebius’s testimony points to a date around 625 B.C., which is more acceptable by some archaeologists. Although a precise foundation date has not been determined so far, it is widely accepted that the first Greek settlement on the island of Berezan took place in the second half of the 7th century B.C., predominantly by Milesian colonists (Petropoulos 2005: 32).

Vase-painting has much to contribute to our knowledge of the visual culture. For the Archaic period, in particular, black-figure vases provide some of the best available iconographic evidence. Once a full black-figure technique emerges in Athens during the early 6th century B.C., many vase-painters devote themselves to human figure scenes. The animals of the previous century’s Orientalizing style lag for several decades. The subjects include mythological scenes, some more clearly narrative than others, religion and ritual, as well as portrayals of more mundane human life: drinking and dancing, riding and exercising. Shapes and their functions play an important role too, though the space available for decoration both dictates and limits
artistic possibilities. Such choices are on the part of painter and potter, or indeed there are some aesthetic, conventional or commercial reasons for them (Smith 2005: 75).

Majority of finds (70-90%) on Berezan island are fragments of late archaic amphoras. Mostly they were brought from the islands Chios and Lesbos, from Ionian cities Miletus and Klazomenae. According to the way of manufacture, the kitchen ware consists of two categories: earthenware and hand-made pottery. The table ware is represented by simple red clay and grey clay jugs and bowls, and by painted vessels brought from Ionians, and later – from Athens. Peculiarity of Berezan settlement consists in the presence of a significant group of East Greek pottery of the 7th century B.C. (Kryžickij et al. 2003: 470).

The large number of imported ceramics which appeared here at the end of the 7th and first quarter of the 6th centuries B.C. (primarily from Ionia and Corinth) serves as evidence of the physical presence of Greek colonists on Berezan. Judging from the number of finds on Berezan, Corinthian ceramics must have ended up in the Lower Bug region thanks to Ionian merchant-middlemen, who consisted mainly of emigrants from Miletus, Samos, Chios, and northern Ionian cities. The overall production of Ionian ceramics, which dominate the general mass of pottery found on Berezan, is typologically varied. The widespread use of imported pottery in the daily lives of the local population is evidence of the settlement’s successful development. Unlike the latter, the composition of imported Greek pottery found on Berezan indicates little about the ethno cultural identity of its owners and instead reflects the state of affairs of trade and politics at one or another moment in the Black Sea and Aegean.

As for the issue of the composition and proportion of the complex of Hellenic cultural materials at Borysthenes in the first three quarters of the 6th century B.C., it is also important to point out that the components of the complex (with the exception of wheel-made-pottery) are rather weakly represented in material found at the site (Solovyov 1999, p. 49-56). The main exporters of wine to Berezan island were Chios and Lesbos. Sometimes the olive oil from other cities of Greece was reaching the ancient settlement in the Black Sea. The export of tableware from Attics was growing and already in the end of 3rd quarter of the 6th century B.C. was the main one on the Berezan’s market (Solovyov 2005, p. 18).
Moreover, the most remarkable assemblage of different styles and traditions in vase painting is one of several factors contributing greatly to the importance of a site like Berezan: only there we have the possibility of relating the development of local styles manufactured in certain production centres (Chian, Aeolian, North Ionian and South Ionian) with one another.

Differences in the assemblage of pottery of Ionian mother cities (concerning the variety of shape, decoration or treatment), in particular, might be able to teach us more about the people living and trading on Berezan. Obviously, places like Berezan must also have functioned as some sort of bridge-head for the pottery trade in the Black Sea region in Archaic times – we seem justified in this notion by the unusually large quantity of more or less identical vessels of varying quality (Fig.22.).

It is worth mentioning that in comparison with the assemblage of pottery of Ionian mother cities some forms are missing almost completely in Berezan while others are present in higher (and unusually high) quantities. We do not find more than one of the well known Milesian one-handled drinking cups or mugs among the thousands of shreds deriving from Berezan, but on the other hand we have to deal with a surprising number of extraordinary forms such as lydia or askoi (Fig.23.). Another major difference between fragments and vessels found on Berezan and Archaic Ionian pottery (fine ware and not transport amphoras or coarse ware) found in cities like Miletos or Klazomenai, lies in the frequent application of dipinti, or three times more often, graffiti. Such a feature has already been well attested for other colonies and it is probably of specific interest if one tries to examine more closely the question of how the process of manufacturing, trading and, later, of using the vessel should be regarded (Posamentir 2005: 67-70). We should mention that a plausible explanation should be found for the fact that transitional or bilingual pieces of the North Ionian area (between Wild Goat and Black Figure or “Corinthianizing” style are widespread and well attested in Berezan (Fig.24.) (Posamentir 2005: 73).
Fig. 22. Collection of more or less identical vessels of known type found on Berezan (not scaled).

Fig. 23. A selection of askoi found on Berezan (not scaled).
Fig. 24. Transitional style of North Ionian pottery: from “Wild Goat” to black-figured (Corinthianizing) style (not scaled)
7.2. Other Archaic pottery

It is now time to focus on the Olbias’ art been found in the dwellings, the necropolis and the temenoi of this great city-state. In order to understand the mechanism of cultural development of these artifacts, it is worth noting to see the influence from the rest areas. At first glance, it is clear that the art of Olbia is fundamentally Greek and part of Mediterranean tradition. This can be seen from the subject matter of the images, the forms and types of objects, as well as in the technology of its own production (Trofimova 2007: 21). A comparison of the artistic evolution of the rest northern regions, central Greece and Ionia, shows that its development corresponds in all of the stylistic phases: 7th to 6th c. B.C. (The Archaic period), 5th to 4th c. B.C. (The Classical period), 3rd to 1st c. B.C. (The Hellenistic period) and 1st to 4th c. A.D. (The Roman period – although, as I have already noted, I will not make any reference).

I.1. Archaic Period

Beginning from the Archaic period ceramics, Olbia consists of painted objects of so-called Oriental or Carpet style appeared mainly from Ionian regions of ancient Greece, Athens (Fig.25.), Miletos (motherland), Corinth, Chios and other Mediterranean regions (Fig.26-27); however, in Olbia they are not numerous as it were submitted on Berezan (Table.1.). It should be noted that the quality of these imported ceramics was high (Trofimova 2007: 23). In Olbia there were mainly painted ceramics of the second half of 6th c. B.C. – late vessels of Fikellura style with images of deer, goats and fantastic creatures, Klazomenian vases with scale ornamentations (Fig.28.), the East – Greek ceramics decorated with strips of glaze (Fig.29.), painted Corinthian skyphoi (Fig.30.) and small kotylai (Fig.31.), Chian olpai and cups (Fig.32-33.) (Kryzhytskyy et al. 2003: 456; Trofimova 2007: 23).

<table>
<thead>
<tr>
<th>Production place</th>
<th>Amount</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Miletos</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Klaizomenai</td>
<td>4</td>
<td>2.5</td>
</tr>
<tr>
<td>Chios</td>
<td>16</td>
<td>10.2</td>
</tr>
<tr>
<td>Corinth</td>
<td>23</td>
<td>14.6</td>
</tr>
<tr>
<td>Other Mediterranean including Ionia</td>
<td>88</td>
<td>56.1</td>
</tr>
<tr>
<td>Olbia(?)</td>
<td>15</td>
<td>9.6</td>
</tr>
<tr>
<td>Total</td>
<td>157</td>
<td>100</td>
</tr>
</tbody>
</table>

Table.1. Percentage ratios between different groups of late archaic pottery from Sector NGS.
Fig. 25. Athenian black-figured lekythos and hydria, late 6th c. B.C. Olbia (not scaled).

Fig. 26. Fragments of amphoras-Fikellura style, late 6th-early 5th c. B.C., from Miletos (scale 1:2).
Fig. 27. Closed vessels – Banded pottery with plain decoration, 525-450(?), from Ionian centers of Mediterranean (scale 1:2).
Fig. 28. Fragments of closed vessels, second half of the 6th c. B.C., from Klazomenai (scale 1:2).

Fig. 29. Faience perfume pots, late 6th c. B.C., East Greek centre (not scaled).
Fig. 30. Fragments of skyphoi, third quarter of the 6th- early 5th c. B.C., from Corinth (scale 1:2).
Fig. 31. Fragments of kotylai, third quarter of the 6th - early 5th c. B.C., from Corinth (scale 1:2).
Fig. 32. Olpai, 550-475/450 c. B.C., from Chios (scale 1:2).

Fig. 33. Cups- handle stems from a lip, 525-475 c. B.C., from Chios (scale 1:2).
What is more, a lot of fragments of various objects, mainly ceramic, widely used in everyday life of Olbiopolitians, as well as inhabitants of other antique centers, were found out at revealing of cultural layers of Olbia. In housekeeping, there were used ceramics of different categories. There were containers, kitchen, smart utensils, and for dining room, toilet utensils, subjects for the special use (i.e. lamps, incenser cups).

From containers, *pithoi* and *amphoras* were the widest ones, been used for the housekeeping. In the big *pithoi*, they stored grain, fishes and fruits; they were frequently established in pantries, driving in a floor. On lips of *pithoi*, rather frequently, there were the digital designations by Greek letters, designating volume of a vessel. Fragments of such vessels, frequently meet in the premises, the whole one are rather rare. So the finding of seven *pithoi*, established in the special pantry opened in one of the rich houses near Zeus barrow is especially interesting (Farmakovskiy 1906).

*Amphoras* in the houses of Olbiopolitians were stored in pits- storehouses, drove in a floor (frequently beating off preliminary a leg) or established in special supports. In Olbia some “warehouses” of the amphoras intended especially for storage were opened. Usually they represented the pits dug in the basements of houses. The largest of them contained about 50 amphoras brought in 4th c. B.C., from Heracleia Pontika and Thasos. It was in the cellar of the apartment house in the northern part of the Upper city (site I), belonging probably, to the dealer of wine. Smaller by volume warehouses, were opened on site AGD in the Central quarter (Slavin 1962).

One of the earliest imported *amphora* from the Northern Ionia, was found in Olbia necropolis after the excavations of B.V. Farmakovskiy. This amphora dated to the second quarter of the 6th c. B.C., (height of 24.5 cm), is a rounded body, gradually narrowing toward the bottom, on a ring foot (*Fig.34.*). The neck is short and broad; the lip is overhanging and the handles are two-barreled. There is an ornamental motif on the neck in the form of a simple cable. The transition from the neck to the shoulder is marked by a narrow horizontal stripe. The body and the foot of the amphora are decorated with broad and narrow bands. On each side of the shoulder are three sets of concentric circles – executed without compass- with two double lotus buds between them (Trofimova 2007: 93).
Of special interest are the numerous ritual ceramics found in the area of the two temenoi. Considering the excavated building remains and the fragments of pottery found (mostly East Greek of the second quarter of the 6th c. B.C.), one should bear in mind that these were discovered within the oldest archaeological horizons with Greek material which were later repeatedly subjected to modification and destruction during the building of later ritual structures of various types and periods, including numerous bothroi (Rusjaeva 2003: 96).

Additionally, numerous fragments of amphoras and tableware including those with graffiti dedications to Apollo Delphinius, Zeus and Athena of the last quarter of the 6th – first half of the 5th c B.C., testify an intensive religious activity in the sanctuaries of these deities. To the same period belongs a considerable number of ceramic fragments of the Attic black-figured and black-
glazed kylikes that were property of sanctuaries of the supreme deity judging by the dedicating and marking graffiti \(\Delta \varepsilon \lambda \phi \imath \nu \iota \circ \alpha \), \(\Delta \varepsilon \lambda \phi \imath\), \(\Delta \varepsilon \Lambda\) (Fig. 35.) (Rusjaeva 2010: 67).

In addition, based on the excavations in Sector NGS between 1985-2004, there is a catalogue comprises 263 fragments of 253 Attic black-figured vessels, corresponding to about 75-80% of the total number of black-figured finds recorded in the finds lists. The black-figured pottery from Olbia in general is considered in a number of anthologies as well as in monographs and in papers dedicated to more general issues (see: Blavatskij 1953). Most detailed is the analysis in the publication of materials from the Western Temenos (see: Ajbabin et al. (eds) 2006: 169-177). This is the only publication that presents all the finds of black-figured pottery from one of the excavated areas of Olbia; the finds of black-figured vessels from the Olbia necropolis are also published in great detail (see: Skudnova 1988) (Nazarčuk 2010: 143). As I have already noted, the fragments of black-figured pottery from NGS belong almost exclusively to Attic production and have the composition, quality and color of the typical Attic clay; some examples of Archaic Attic production is forward (Fig. 36-38).
Fig. 36. Fragments of black-figured amphoras, 525 to early 5th c. B.C., Attic production (scale 1:2).

Fig. 37. Fragments of black-figured kraters, 530 to early 5th c. B.C., Attic production (scale 1:2).
Presence in Olbia of painted black-figured vases of known Attic masters like the Phanyllis Group (Fig. 39.), Lindos Group (Fig. 40.) and the Haimon Painter (Fig. 41.) were found (Nazarčuk 2010: 143). Bright products of this kind of the applied art found in Olbia, are kylikes with the image of Achilles, Peleos, Charonos, numerous “small-figured” kylikes, kylikes with a flower ornament, with images of Silen and menades, oinochoe with the images of Apollo, Artemis with a deer and Latona, Dionysos and Menades (Table. 2.) (Kryzhyskyy et al. 2003: 457).
Fig. 39. Fragments of black-figured vessels of the Phanyllis Group, 510-490 B.C., Attic production (scale 2:3).
Fig. 40. Fragments of black-figured vessels of the Haimon Painter and his circle, early 5th c. B.C., Attic production (scaled 2:3).
Fig. 41. Fragments of black-figured vessels of the Lindos Group, 490-470 B.C., Attic production (scaled 2:3).
<table>
<thead>
<tr>
<th>Black-figured forms</th>
<th>Number of vessels</th>
<th>%</th>
<th>Number of fragments</th>
<th>%</th>
<th>Number according to inventory list</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amphorae</td>
<td>10</td>
<td>3.95</td>
<td>12</td>
<td>4.14</td>
<td>12</td>
<td>4.60</td>
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<tr>
<td>Kraters</td>
<td>6</td>
<td>2.37</td>
<td>7</td>
<td>2.41</td>
<td>6</td>
<td>2.30</td>
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<tr>
<td>Olpae</td>
<td>6</td>
<td>2.37</td>
<td>6</td>
<td>2.41</td>
<td>6</td>
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<tr>
<td>Lekythoi</td>
<td>25</td>
<td>9.88</td>
<td>39</td>
<td>13.45</td>
<td>33</td>
<td>12.64</td>
</tr>
<tr>
<td>Lekanides</td>
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<td>5</td>
<td>1.72</td>
<td>4</td>
<td>1.53</td>
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<tr>
<td>Lids of lekanides</td>
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<td>2.77</td>
<td>8</td>
<td>2.76</td>
<td>7</td>
<td>2.68</td>
</tr>
<tr>
<td>Closed vessels, medium-sized</td>
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<td>3</td>
<td>1.03</td>
<td>3</td>
<td>1.15</td>
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<tr>
<td>Skyphoi</td>
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<td>Cup-skyphoi</td>
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<td>35.18</td>
<td>98</td>
<td>33.10</td>
<td>89</td>
<td>33.33</td>
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<tr>
<td>Type A cups</td>
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<td>11.86</td>
<td>37</td>
<td>12.76</td>
<td>31</td>
<td>11.88</td>
</tr>
<tr>
<td>Little Master cups</td>
<td>12</td>
<td>4.74</td>
<td>12</td>
<td>4.14</td>
<td>12</td>
<td>4.60</td>
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<tr>
<td>Band cups</td>
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<td>2</td>
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<tr>
<td>Unidentified cups</td>
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<td>19</td>
<td>6.55</td>
<td>19</td>
<td>7.28</td>
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<tr>
<td>Flower-Palmette Class</td>
<td>12</td>
<td>4.74</td>
<td>12</td>
<td>4.14</td>
<td>12</td>
<td>4.60</td>
</tr>
<tr>
<td>Cups of special forms</td>
<td>7</td>
<td>2.77</td>
<td>7</td>
<td>2.41</td>
<td>7</td>
<td>2.68</td>
</tr>
<tr>
<td>White-ground cups</td>
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<td>0.79</td>
<td>2</td>
<td>0.69</td>
<td>2</td>
<td>0.77</td>
</tr>
<tr>
<td>Total</td>
<td>253</td>
<td></td>
<td>292</td>
<td></td>
<td>263</td>
<td></td>
</tr>
</tbody>
</table>

*Table 2: Black-figured pottery from Sector NGS according to excavations.*
Additionally, the black-glossed pottery from Sector NGS between 1985-2004, comprises 472 catalogue entries from selected deposits as well as 162 fragments that have not been available for study. The shape repertoire of the 6th c. B.C. black-glossed pottery is limited to relatively few shapes and comprises 39 catalogued pieces; the material mainly dates to the last third of the 6th c. B.C. The two major shape groups are type C drinking cups (Fig.42.) and light-walled cup-skyphoi, as well as small stemmed dishes (Handberg and Petersen 2010: 192). The majority of the NGS pieces in this period are Attic imports but other fabrics from unidentified production centers are also present in the material.

Fig.42. Type C cups, 525-500 c. B.C., Section NGS-Olbia. (scaled 1:2).

29 For the definition of the term “glossed”, as opposed to “glazed”, see Warner 1986.
Of importance, are the so called “proto-Thasian” amphoras found in Olbia. Some time ago, V. Grace and I.B. Zeest distinguished the series of “Samian” and “proto-Thasian” amphoras, which in fact have nothing to do with either Samos or Thasos, as recently established by P. Dupont on the basis of a comparative analysis of the clays (Dupont 1999: 153-157, pls. 5-7). It was also noted, that the fabric and the shape of the amphoras vary significantly, suggesting that they come from different manufacturing centers rather than from a single one (Lejpunskaja 1981: 23). V.V. Ruban, though, attributed all or nearly all amphoras with a “profiled” toe (proto-Thasian) of the 6th and the first half of the 5th c. B.C., to Milesian workshops. (Monachov 2003: 247).

These amphoras are fairly common at sites in the Black Sea area and special in Olbias’ ground. The first series is represented by an amphora in the Odessa Museum kept among a number of undocumented Olbian finds (Fig.43.). The fabric of the Olbian example is red and dense, containing no special tempers. There are no reliable grounds on which the aforementioned vessels can be dated, but the neck of a similar amphora was found in Well no. 5 on Berezan, suggesting that the Olbian series may be dated to the middle or third quarter of the 6th c. B.C.

Fig.43. Amphoras with “profiled” toe, a) the Odessa Museum, b) the Berezan’ well no.5. (not scaled).
Ending with the “proto- Thasian” amorphas and with the Archaic ceramic period, dated to the first third of the 5th c. B.C., is characterized by a shorter neck of cylindrical rather than funnel-like shape. On the neck and shoulder of these amphoras, dipinti marks in black or red paint in the form of the letter “Θ” are fairly common. The majority of these amphoras come from accidental finds or rather broadly dated complexes. Useful examples come from the excavations of the necropolis of Olbia (Fig. 44.) and from the town-site (Fig. 45.) (Monachov 2003: 250).

Fig. 44. Amphoras with “profiled” toe, a) Necropolis of Olbia, 1975, b) Necropolis of Olbia, 1988. (not scaled).
Fig. 45. Amphoras with “profiled” toe, the town-site of Olbia. (not scaled).
7.3. **Classical Period**

With the advent of the classical era, especially in the 4th c. B.C., there was an upsurge in all aspects of the art, local as well as imported (mostly from Attica) (Fig.46.). Of great importance in the artistic life of the northern Black Sea region in the 5th and 4th c. B.C., were painted ceramics. A special place was taken up by the well known red-figured pottery.

Lekanides and askoi were especially popular in the late 6th -5th c B.C. and are well represented among the collection from NGS. In the 5th c. B.C., askoi with depictions of animals became widely distributed. The painter who painted the askos with a swan and a feline predator was most probably the Painter of Askoi from Al Mina (Fig.47.) (Vdovičenko 2006: 34, non vidi cited after Buravčuk 2010: 172). He was a miniaturist painter of the late 5th c. B.C., who made flat askoi on which chasing wolves, panthers and swans were represented; generally, common are askoi belonging to the Group of the Cambridge Askos (Fig.48.).

![Fig.46. Athenian red-figured bell-krater, second half of 5th c. B.C. (not scaled).](image)

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30 Traditionally in Russian literature, red-figured pottery has been separated into the following stylistic groups: “Modest” (Rus. Strogij -530-470 c. B.C.); “Free” (Rus. Svobodnij -470-430 c. B.C.); “Rich” (Rus. Roskošnij -430-400 c. B.C.); “Cursory” (Rus. Beglyj- 400-370 c. B.C.); and “Kerch” style (370-320 c. B.C.) (Buravčuk 2010:171). The Kerch style received its name due to the early finds of vessels (pelikai and lekanides) of the 4th c. B.C., being mostly from excavations in Kerch. However, in contemporary western literature, a different system of chronological subdivisions, developed by J.D. Beazley and by J. Boardman is accepted: the Archaic period (530-475 c. B.C.) and the Classical period (475-320 c. B.C.) which in turn is subdivided into the early Classical (480-450 c. B.C.), Classical (450-425 c. B.C.) and later Classical I (425-370) and II (370-320 c. B.C.) periods (Boardman 1975: 7-10; 1987: 9-10).
Fig. 47. Athenian red-figured figural oinochoe, woman’s head, 5th c. B.C. (not scaled).

Fig. 48. Fragment of askos, second quarter of the 4th c. B.C., Painter of Askoi from Al-Mina, Sector NGS. (scaled 2:3).

Fig. 49. Fragment of askos, second quarter of the 4th c. B.C., Group of the Cambridge Askos, Sector NGS. (scaled 2:3).
Lekanides of the Otchet Group are the most numerous; these are dated to the last 4th c. B.C. This group unites several craftsmen who painted lekanides with scenes of wedding preparations in the *gynaikonitis* (Beazley 1963: 1518-1521) (Fig. 50.). The finds of lekanides from NGS also include fragments which are attributed to the Group of the Painter of Vienna Lekanis (Moore 1997: nos. 1122-1123). This painter is known for his representations of heads of Amazons and griffins (Fig. 51.).

![Fig. 50. Fragments of Lekanides- Otchet Group, late 4th c. B.C., Sector NGS. (scaled 2:3).](image-url)
Ending with red-figured ceramics, the Kerch style of Attic vase-painting was finally established by the second quarter of the 4th c. B.C., based on the development of the “Rich” and “Cursory” styles (Fig.52.). The wide use of thick white paint, the impression of gilding and low relief giving the effect of a three-dimensional representation, compositions saturated with movement, the choice of subjects related to barbarian tradition and Dionysian motifs all became distinctive features of the style, which concluded the history of Attic vase-painting (Trofimova 2007: 26).

The Amazon Painter belonged to the earlier stage of the Kerch style; he widely employed polychromy. The design is often fairly careless and schematic, but on small vases it is distinguished by clear outlines. The scenes of Amazonomachy or Gryphomachy were among the favorite subjects of this vase-painter. On the pelikai, representations of an Amazon’s head, a horse or a griffin often appear; these are the so-called “portrait” pelikai (Fig.53.) (Schefold 1934: 134-135).

The passion for rich ornamentation of the Meidias Painter still continued to be seen, but, instead of the abundance of thin and clear lines in pen, there are lush and broad brush strokes. As a result, the design gained in terms of brightness and expressiveness, which were lacking in the
work of the painters of the earlier period (Buravčuk 2010: 172). The Griffin Painter worked ca. 360-330 c. B.C; in this creative works, both the earlier and advanced traits of the Kerch style are recognizable. The compositions are mostly dynamic; the outlines of the figures have manifold intersections creating a single mass of bodies moving in a united rhythm. The bodies of Amazons and the Greeks fighting retain their roundness and the modeling is gentle – the muscular system just traced in short and thin lines. The circle of the Griffin Painter was very wide; it included numerous vase-painters working in his workshop or imitating his style (Schefold 1934:159).

Fig. 52. Attic red-figured Pyxis, Kerch Style, Aphrodite and Eros, 4th c. B.C.(not scaled).
Fig. 53. Fragments of Kerch- “portrait” pelikai, end of the third of the 4th c. B.C. (scaled 2:3).
Additionally, the most important ceramics came from the burials; within the long period of excavation activity from the 19th century until the present day, approximately 3,000 burials have been revealed (Kryzhytskyy et al. 2003: 444). Unfortunately, many of these have been only been published in a very preliminary manner or not at all. O’ Connor (1999: 29) remarks that: “the most comprehensive books in western languages on Olbia have their focus on the settlement rather than the necropolis”.

Scholars (Kozub, Papanova, O’ Connor), divided the burials found in Sector NGS, in three phases with their own material: in the Phase 1 (550-520 c. B.C.) is represented by 38 burials amounting 16% of the Archaic and early Classical burial in the database, the Phase 2 (519- 480 c. B.C) clearly has the fullest representation, with 186 burials or 79% of the material. Finally Phase 3 (479-450 c. B.C.) is the least well-represented period with only 9 burials listed in the database constituting 4% of the total material.

The Olbian ceramics of the Phase1, are mainly imports. An account of the production centers can be presented as follows: Attic 8 pieces, Corinthian 8 pieces, East-Greek 42 pieces, Laconian 1 piece, local (or presumed local) 13 pieces, not stated 21 pieces. This picture follows the general distribution pattern of imports into the Black Sea region.31 The (Table.3) shows the ceramic shapes of the burials in Phase 1 (Petersen 2010: 78).

![Table.3. Ceramic shapes from Phase 1. Sector NGS-Olbia.](image)

On the other hand, the ceramics of Phases 2 and 3 (Classical period) are by far the most numerous types of grave utensils: represented by 679 pieces, distributed across 184 graves, which equals 94% of all burials in the two phases. In comparison with the production centers identified in Phase 1, the picture appears as follows: the Attic pieces have risen markedly to 29% against 9% in Phase 1; the Corinthian and Laconian imports stay at the same level, whereas a dramatic change occurs in the decrease of East Greek imports, with 22% against 45% in Phase 1. The local, or presumed local, pieces constitute a significant group of 22.7% against the previous percentage of 13.5% (Petersen 2010: 84).

Among the local, or presumed local, pottery, which mainly relates to wheel made ceramics of grey or red clay, there are only three pieces of handmade pottery, which equal 0.4% of the total amount of pottery from the two phases. The ceramic shapes from the phases 2 and 3 are depicted in (Table 4.). However, we may note that the amphoras, bowls, cups, jars, jugs (here also olpai and oinochoai), plates as well as lekythoi, were occasionally deposited in multiple numbers in the same burial. The explanation for the increase in ceramics from Phase 1 to Phases 2 and 3 may then be not so much connected with a wider range of shapes as with a higher number of pieces in the individual deposits (Petersen 2010: 85).

Table 4. Ceramic shapes from Phase 2 and 3. Sector NGS-Olbia.
Nevertheless, some ceramics were found in sanctuaries as votives providing the ritual character. Most of the votives found throughout the entire temenos belong to the period when the first Temple of Apollo Ietros was in use. It is the period from the end of the 6th to the last quarter of the 5th c. B.C., that the majority of the fragments of amphoras, mainly imported from Chios and Thasos, are dated. Hence, it is clear that the best Greek wines were purchased for the rituals. Many of the black-glazed kylikes and skyphoi (Fig.54.) bear different graffiti indicating that they belonged to the sanctuaries either of the Mother of Gods or of Dioskouroi (Rusjaeva 1992: 116-117, fig. 36, 46, 144). (Rusjaeva 2003: 103).

Fig.54. Athenian black-glazed pottery, 5th c. B.C.(not scaled).

It is worth noting that insight of bothroi, the predominant among all the categories of imported pottery of Classical period, was the Attic ware of various types. Of special interest is a unique dedication from Andokides to Apollo, incised on the base of a black-glazed skyphos dated to the second quarter of the 5th c. B.C. (Fig.55.). In this dedication, the four epicleses of that god (Delphinios, Ietros, Targelios and Lykeios) are mentioned together with the enumeration.
of all the months of the Olbian calendar, which correspond completely to the Milesian one\textsuperscript{32} (Rusjaeva 2003: 105).

\begin{center}
\textbf{Fig. 55. Dedication of Andokides to Apollo on the bottom of an Attic black-glazed skyphos, second quarter of the 5\textsuperscript{th} c. B.C. (not scaled).}
\end{center}

Based on the above inscription, it’s the first time we meet the epicleses Targelios, since so far we knew only one festival of the same name that was celebrated in many regions of Greece and Ionia, including Miletos. In the Pontic cities the epicleses Lykeios with regard to Apollo, has not been found, thought he was widely known under this name in many other lands of the ancient world (Rusjaeva 2010: 74). Also unique is a dedication to Aiginean Apollo on a black-glazed bowl of the first half of the 4\textsuperscript{th} c B.C., offered probably either by an inhabitant of the island of Aigina or by an Olbiopolitan, who had travelled there and had successfully returned under the aegis of the god (Rusjaeva 2003: 105).

During the Classical period, all of the sanctuaries continued to exist, but the remains of the new structures built within them are more uncommon, suggesting that in the majority of cases

\textsuperscript{32} For details see: Vinogradov & Rusjaeva 1980: 24-64; Dubois 1996: 160-164.
this was restricted to the erection of a number of altars. The number of offerings also slightly decreased. Predominant among the tableware was the Attic black-glazed pottery and to a lesser extent, red-figured pottery of the corresponding vessel types; these rarely bore graffiti (Rusjaeva 2003: 107).
7.4. Hellenistic period

Next comes the Hellenistic period marked by changes in all areas of arts and crafts pertaining to the ancient art of the Mediterranean. Athens lost her leading role and new artistic centers appeared, that exported their products to different corners of the ancient world. Works of art manufactured in Alexandria or Pergamon (Fig. 56-57) made their appearance in the cities of the northern coast of the Black Sea via the intermediate activity of Rhodes or through direct contacts. Important factor was the intensification of Oriental influence, which as a whole is characteristic of the Hellenistic era (Trofimova 2007: 31).

Fig. 56. Lagynoi (jugs for wine) imported from Pergamon (Asia Minor). (not scaled).
Of great significance it’s the very important category of the so-called imported “fish amphoras” been used for carrying fishes for trading reasons. Fish was one of the main resources of the Black Sea in ancient times. The main reason that fishing processing in Black Sea region has been developed were the numerous and large rivers of the area allowed inhabitants both fishing to live and for trade purposes; Tyras, Hypanis, Borysthenes, Pantikapeon, Hypakris, Terros and Tanays, strengthen the Black Sea with tones of fish. What is more, many ancient scholars mentioned that Borysthenes river is the most productive.  

33 «... τέταρτος δὲ Βορυσθένης ποταμός, ὃς ἐστὶ τε μέγιστος μετὰ Ἰστρον... τῶν δὲ λοιπῶν Βορυσθένης ἐστὶ πολυαρκέστατος, ὃς νομάς τε καλλίστας καὶ εὐκομιδεστάτας κτίνεσι παρέχεται ἵθυς τε ἄριστους διακριθὼν καὶ πλείστους, πίνεσθαι τε ἡδίστος ἐστὶ...» (Herodotus, Historiae, 4.53.1-2).
As we have already mentioned, inhabitants used fish not only for their diet but also for trade processing. This can easily be proved by the Geography of Strabo “...Τῆς δὲ χερσονήσου, πλὴν τῆς ὀρεινῆς τῆς ἐπὶ τῇ θαλάττῃ μέχρι Θεοδοσίας... κἂν τοὺς πρόσθεν χρόνοις ἐντεῦθεν ἦν τὰ σιτιοπομπεῖα τοῖς Ἐλλησι, καθάπερ ἐκ τῆς λίμνης αἱ ταριχεῖαι ...” (Strabo, Geography.7.4.1).

Finally, once again, Strabo offers us information about the fish species (Fig.58.) of the commercial importance in the Black Sea region “…ἄπασα δ’ ἡ χώρα δυσχείμερός ἐστι μέχρι τῶν ἐπὶ θαλάττῃ τόπων τῶν μεταξὺ Βοροσθένους ... ὁρκοτοὶ τέ εἰσιν ἱερός οἱ ἀπολιθθέντες ἐν τῷ κρυστάλλῳ τῇ προσαγορευμένῃ γαγήμη, καὶ μάλιστα οἱ ἀντακαῖοι, δείξαντι πάρισι τὸ μέγεθός”.

Important studies of the ichthyofauna in the Black Sea have been undertaken by Russian scholars, such as N.V. Ivanova, V.Ju. Marti, Ju. E. Lapin and V.D. Lebedev. They have demonstrated the supremacy of large species such as sturgeon, pike and catfish at sites situated nearby these large rivers (Opait 2007: 106).

Fig. 58. Main Black Sea fish species of commercial importance: 1) Beluga, Huso, huso; 2) Russian sturgeon; 3) Starry sturgeon; 4) Fringebarbel sturgeon; 5) Sterlet; 6) Turbot; 7) Pontic shad; 8) Flathead mullet; 9) Golden grey mullet; 10) Leaping mullet; 11) Atlantic mackerel; 12) Black Sea anchovy.
The Pontic “fish amphoras” differ in dimensions and weight from the Mediterranean ones but they seem to make use of same structure and shape. They have a wide mouth, a large trunco-conical neck and an ovoid body ending in a massive spike. These amphoras seem to have been larger and heavier than their western Mediterranean counterparts; they were also made in different sizes. Although the workshops for these types of amphoras have not yet been discovered, the pattern of their distribution can provide us with some clues to their prevalence (Opait 2007: 108).

The most important types of the so-called “fish amphoras”, bear the name of Zeest (the name of this scholar has already been mentioned above). Zeest 75 is a very impressive container, characterized by hefty dimensions and weight. The origin of the Zeest 75 seems to indicate by a Hellenistic amphora (Sinopean origin) and dated in the first quarter of the 2nd c. B.C. (Monachov 2003. pl. 106.1.). An example, discovered in Dobrudja at Greci, is to date the largest of this type (Fig.59.); however, one found at Olbia is only 125cm high.

Fig.59. Amphora type Zeest 75 from Greci.(not scaled).
Of particular note is the occurrence of stamps either on the neck or on the handles of these amphoras, employing the name of the ΚΑΛΛΙϹΤ/ΡΑΤΟΥ in genitive at Olbia (Fig.60.). The presence of these stamps suggests the existence of an organized and controlled production of this type of vessel (Opait 2007: 110).

Fig. 60. Zeest 75, stamped fragments from Olbia.(not scaled).

Special emphasis it should be give to the Hellenistic handmade pottery from Olbia. This is the most primitive way of manufacturing ceramic. It was consequently assumed that for a long time that any handmade ceramics were barbarian. However, finds in recent years, suggest that this statement is only partially true. A monograph on the handmade pottery of Olbia and Berezan by K.K. Marčenko (1988) represented the first profound research on handmade ceramics within a broad chronological framework employing a large amount of material (Gavriliuk unpublished: 130).
About 60% of the handmade cookingware of Olbia comes from the layers of sector NGS; 589 fragmentary and complete handmade vessels of the Hellenistic period unearthed in this sector. Below, the classification of the handmade pottery by morphological features is presented (*Table.5*). The data are grouped according to ethnic groups. The pottery of these groups differs not only in terms of shape, but also in the character of the treatment of the external and internal surfaces and the composition of the fabric and its tempers (Gavriliuk 2010: 336).

However, we will focus on the Greek group vessels mostly domestic wares. This group is represented by imitations of cooking-pot wares: casseroles, pots, kraters, casseroles – braziers, frying pans, bowls on legs and lamps; in Olbia the vessels of the Greek group make up 75.38% of handmade pottery. Fragments of 24 vessels are attributed to casseroles from Olbia (Sector NGS); they consist of vessels of three types. The typology of these vessels depends on their form and on how the handles are attached (Gavriliuk unpublished: 131). According to Marčenko, Olbia’s casseroles are dated from the second half of the 4th c. B.C. to the first half of the 1st c. B.C. (Marčenko 1988: 86-87, fig. 16.2).

Casseroles of the first type have two handles like pockets immediately beneath the rim or on the shoulder of the vessel. They show signs of use and the surface is carefully smoothed and burnished (*Fig.61*). The second type of casserole has one or two handles fastened to the rim and the shoulder (*Fig.62*).
Table 5. The main groups of handmade pottery from Sector NGS-Olbia.
Fig. 61. Olbian Casseroles of type 1, late 3rd or early 2nd c. B.C. (scale 1:4).
Fig. 62. Olbian Casseroles of type 2, 2nd-early 1st c. B.C. (scale 1:4).
Moreover, handmade casseroles might be decorated. An unusual kind is represented by a casserole from Olbia decorated with notches at the neck and another with a triangular stamp. Two handmade casseroles of the second type from Olbia had three handles, two horizontal and one vertical. Lastly, the third type consists of casseroles with one or two vertical handles fastened to the rim and the shoulder of the vessel (Fig.63).

![Image](image.png)

Fig.63. A fragment of Olbian Casserole of type 2, 2nd or early 1st c. B.C. (scale 1:4).

Additionally, casseroles-braziers account for 2.6% of handmade pottery of the Greek group in sector NGS at Olbia. These are low-walled vessels with upright walls or walls that curve inwards. The broad diameter of a rim coupled with a small and sometimes rounded base does not allow them to be classified as casseroles (Fig.64). As a rule, they have a lid and modeled handles in shapes forms seen on casseroles; the external face is smooth. The source of heat during cooking was both above and below the vessel. Casseroles-braziers were dug into heated coals and the food was baked in them (Gavriliuk unpublished: 131).
As far as the pots concern, a percentage of 29.5% in sector NGS at Olbia was found. They are made of clay to similar to that of casseroles. Sometimes such vessels had the vertical handle fastened both rim and shoulder. Only 14 vessels from Olbia were ornamented and hatching at the rim predominates. Five pots were ornamented by impressed fingermarks at the rim. It is possible to distinguish two different types (Gavriliuk unpublished: 133).

The first type consists of pots with a curved neck without a handle; this is the most common form. Fragments of this type of pot were found throughout Sector NGS (Fig.65). Small pots with a looped handle rising above the rim of the vessel make up the second type. On the band handle of I-49 there is a graffito (Fig.66) (Gavriliuk 2010: 329).
Furthermore, jugs make up 2.6% of the Greek group of handmade ceramics of those in Sector NGS at Olbia. They differ from pots in their elongated proportions. Like jugs, they have a high narrow neck with a narrow rim. Sometimes there is a ridge for a lid on the rim; as a rule, jugs are undecorated. The form and the sizes of handmade jugs repeat those of wheelmade vessels (Fig.67) (Gavriliuk unpublished: 133).
During the Hellenistic era, trading connections were reduced insignificantly. So, for instance the quantity and assortment of the import of the relief ceramics to Olbia was especially large in the second half of the 2nd c. B.C. Apart from the Attic ware all groups of the mould-made pottery (Fig.68.) were encountered in the city’s layers (Fig.69.). From this period, are finds of the so-called “Megarian” bowls (Fig.70.), marked with the names Κύρβεος and Ποσίδεος workshops which have been identified as being located in Smyrne (Krapivina 2005: 251).

“Megarian” bowls were entirely with vegetative and subject ornaments; similar décor had vessels of other forms – amphoras, situlas, kraters- also encountered in Olbia. From last finds a vessel of grey clay close to krater by its form with images of Eroses playing on musical instruments, vegetative ornaments and sockets (Samojlova 1994: 88-94). The majority of vessels of this group was brought from Ephesos, Pergamos, from islands of Delos and Samos but their certain part was made in Olbia and other places of the North Black Sea littoral (Kryzhytsky et al. 2003: 458).
<table>
<thead>
<tr>
<th></th>
<th>6</th>
<th>1.6%</th>
<th>27</th>
<th>7.5%</th>
<th>59.4%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athens</td>
<td>5</td>
<td>1.3%</td>
<td>3</td>
<td>0.8%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Pergamon(?</td>
<td>13</td>
<td>3.5%</td>
<td>2</td>
<td>0.5%</td>
<td>2.7%</td>
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<tr>
<td>Aeolia(?)</td>
<td>3</td>
<td>0.8%</td>
<td>2</td>
<td>0.5%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Kyme(?)</td>
<td>2</td>
<td>0.5%</td>
<td>36</td>
<td>9.6%</td>
<td>99.9%</td>
</tr>
</tbody>
</table>

Table 6. Comparison of the mouldmade bowls found in the deposits of Sector NGS-Olbia, according to their production place.
Fig. 68. Fragments of Kraters-mouldmade pottery, late Hellenistic period, Sector NGS-Olbia (scale 2:3)
Fig. 69. Fragments of the mouldmade bowls—figural decoration, Sector NGS-Olbia. (scale 2:3).
To sum up the review of the clay ceramics, we are drawn to the conclusion that we are dealing with ceramics from a number of manufacturing centers, like Athens, Aegean and Mediterranean islands, Pergamos and Alexandria. Many of these utensils were used for domestic purposes, ritual usage in the temenoi and of course for trade reasons. Usually, in traditional societies trade is analyzed in terms of various groups of good: agricultural, craft and raw material. It is unlikely that the Greek colonists and their metropoleis, whose principal branches of economy were agricultural and animal husbandry would have been in desperate need for food or finished goods from Scythia.

However, Olbia was one of the earliest colonists which were established and the navigators did know about its own existence as the cartography had been expanded (Anaximander and Hecateaus from Miletos). So, it was logical that all the famous centers could exported their clay ceramics (and not only) to this prosperous city.
CHAPTER 8: GRAFFITI

Olbia, is one of the few ancient cities of the Black Sea coast where excavations have produced quite a large number of graffiti. Explorations in Sector NGS testify to the fact that this peripheral part of the city was also inhabited by literate citizens. For various reasons, they incised primarily on vessels, full and abbreviated personal names, monograms, dedications to deities, symposiastic inscriptions, magic drawings, letters of the alphabet and symbolic marks. All in all, according to the inventory lists from 1985-2005 during the whole period of its excavation, this area has produced more than 370 graffiti (Rusjaeva 2010: 499).

However, the majority of them are very fragmentarily preserved; fully inscribed names of deities and names of owners are also few in numbers. Some of the latter could be reliably restored, thanks to similar names occurring in inscriptions, the rest only hypothetically. The majority of the sherds with graffiti come from mixed cultural layers and fills of basements, where they were accompanied by material of the 5th to the 2nd c. B.C. (Rusjaeva 2010: 499).

Basically, the graffiti are executed in capital letters. A few examples show, however, cursive letters (lunate sigma, omega, epsilon), which, in Olbian inscriptions, appeared from the middle or second half of the 4th c. B.C., originally as graffiti on pottery and lead. Ligatures occur in some names and words, while monograms are less common. Numerical marks are quite rare; a distinctive feature of considerable numbers of the graffiti is their careless execution.

In addition, the inscription and drawings are incised mainly on Attic vessels from the second half of the 5th to the first half of the 3rd c. B.C. The earliest examples belong to the end of the 6th to the first half of the 5th c. B.C., whilst the latest ones date to the second half of the 3rd and the 2nd c. B.C. The majority of the vessels with graffiti are drinking cups, more rarely plates, fish-plates, salt-basements and other types of tableware. Graffiti on fragments of greyware and red-clay plates and jugs of Olbian manufacture during the Hellenistic period are also present in the collection. As a rule, the inscriptions are placed on the bases of the vessels. Very seldom, mainly inexpressive marks and drawings were incised with a thin, sharp tool on the neck and body of the vessels.

34 The drawings and photos of the graffiti were made by T.A. Zinov’eva under the supervision of N.A. Lejpunskaja with some adjustments to the drawings by A.S. Rusjaeva.
amphoras, of which small fragments have been found. Some net sinkers made from amphora sherds and marked with single letters have been found as well. (Rusjaeva 2010: 500).

According to their content, the graffiti can be divided into the following groups and subgroups:

I. SACRAL GRAFFITI

1. Dedications (Fig. 71.).
2. Ostraka with names of deities (Fig. 72.).
3. Ostraka with magical signs and drawings (Fig. 73.).
4. Magical signs and drawings on vessels (Fig. 74.).

Fig. 71. Sacral graffiti, dedications, Sector NGS- Olbia. (scale 1:1).
Fig. 72. Sacral graffiti, Ostraka with names of deities, Sector NGS- Olbia. (scale 1:1).

Fig. 73. Sacral graffiti, Ostraka with magical signs and drawings, Sector NGS- Olbia. (scale 1:1).
Fig. 74. Sacral graffiti, Magical signs and drawings on vessels, Sector NGS- Olbia. (scale 1:1).

II. RITUAL AND SYMPOSIASTIC INSCRIPTIONS

III. NAMES OF OWNERS

1. Full names (Fig. 75.)
2. Abbreviated names and initials (Fig. 76.)
Fig. 75. Sacral graffiti, Full names, Sector NGS- Olbia. (scale 1:1).
Fig. 76. Sacral graffiti, Abbreviated names and initials, Sector NGS- Olbia. (scale 1:1).

IV. HOUSEHOLD AND NUMERICAL NOTATIONS

Fig. 77. Sacral graffiti, Household and numerical notation, Sector NGS- Olbia. (scale 1:1).
Chapter 9. Sculpture- terracotas

I. Archaic period

As noted, in the beginning the culture of the colonies on the northern coast of the Black Sea had a Hellenic character. Archaic sculpture, which has survived in a few fragments, was imported into the cities of the northern Pontus mainly from the mother city. The earliest monuments of ancient art in Olbia are kouroi – strictly frontal images of the naked young man-athlete in which probably was reflected the generalized image of the hero or the god, mostly Apollo. Almost all kouroi from Olbia were executed at the end of 6th c. B.C., on island of Samos (Kryzhytksyy et al. 2003: 458).

One of such sculptures, representing an outstanding monument of the culture of the end of 6th - beginning of 5th c. B.C., was found in a niche of one of the rooms of gymnasium (Levi 1985: 106,130). Kouros represents the volumetric sculpture of the young man executed from limestone, kept to a belt (Fig.78.). His hands densely adjoin two sides, body with wide shoulders and a thin waist stands directly, with easy turn to the left. Hairdress is formed from the long hair, falling in continuous weight on shoulders and a back. The face is wide, flat with the lengthened narrow eyes, a small mouth with sharply lowered corners; eyes are located at different height (Kryzhytksyy et al. 2003: 458).

There are neither direct analogies of general stylistics of Kouros in the North Black Sea littoral, nor in Motherland. In art treatment of an image of this monument there is traced the influence of three schools of an antique sculpture – Attic, Boiotian and Ionian (Samian). However, that fact is especially interesting that kouros was made in Olbia, most likely by the sculptor of the Greek origin living in Olbia, that testifies to appearance of school of sculpturing in Olbia not later a boundary of 6th – 5th c. B.C. (Kryzhytksyy et al. 2003: 459).
No *stelai* have been found in situ amongst the material from the Archaic and early Classical periods in Olbia. However, F25, F122, F182 and F184 were reported to have yielded fragments of marble in the fill above the burials. There have been several pieces of funerary sculpture in both marble and terracotta found in the area of the cemetery, amongst them the upper part of a marble kouros, ascribed to Richter’s Ptoon group, the upper part of a terracotta kouros and some late Archaic marble lions, possibly connected with funerary monuments. (Petersen 2010: 73).
There are some big statues of the marble lions made with a big expressiveness and vitality, been found in Olbia (Fig. 79.). A statue of the middle or at the end of the 5th c. B.C.\textsuperscript{36}, is kept in the Odessa Archaeological museum, representing a fantastic creature with a body of a lion and wings of a shynx or gryphon. The intense muscles of legs, the paws and the flexible movements of a body, flat feathers with ovoid endings are perfectly connected (Kryžickij et al. 2003: 461).

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{Fig.79-Marble-lion-6th-c.-B.C.-from-Oльbia.png}
\caption{Marble lion, 6th (?) c. B.C., from Olbia.}
\end{figure}

\textit{Stelai}, of both plain type with inscription and relief-decorated type with inscription are also attested from the late 6th c. B.C., onwards (Papanova 1993: 129-131). A great example is the \textit{Leoxos stele}; it is a fantastic piece of sculpture and very interesting iconographical testimony from the late Archaic Olbia (Fig. 80.). The stele with two carved sides was found in the cemetery of Olbia in 1895. \textit{Side A} depicts a naked youth, presumably resting, with a spear in his right

\textsuperscript{36} Trofimova (2007: 15) dated this statue in the 6th c. B.C.
hand and side B also shows a youth, this time equipped with a Scythian gorytos for both bow and arrows, holding an arrow in his hands.

Along the shorter sides of the stele runs an inscription telling us that it was dedicated in memory of Leoxos, son of Molpagores, who died away from home. There have been many suggestions regarding the possible interpretation of the iconography of the stele. Some suggest that this stele is a classical example of “Greek versus Barbarian” but recently P. Guldager Bilde has put forward the intriguing argument that the stele could reflect the cultural complexity of the region, thus showing one and the same person in two different aspects of life: as civic citizen and as warrior, with the Scythian outfit simply being the most appropriate and technologically advanced for war in this region (Kryžickij et al. 2003: 460; Petersen 2010: 73-74).

37 B.V. Farmakovskij considered that in that stele, a Greek soldier and an amazon were represented; this monument is a votive stele, devoted to Athena-Leodota (Farmakovskij 1915: 82-127).
As I have already mentioned, imported marble statues and local limestone sculptures were located in different parts of the city and placed on tombs at the necropolis while in sanctuaries, graves and houses there found many terracotta deities and animals (Rusjaeva 2010: 64). The first temples and altars were decorated with different imported polychrome architectural details made of terracotta; terracotta figurines were painted with red, brown, pink and blue paint. They represented mostly goddess Demeter as goddesses of fertility at this time played rather important role.

For the beginning of the late Archaic period, relatively few ritual activities have been recorded. They took the form of separate bonfires or single wooden altars for burning sacrificial offerings and also included a very small number of votive gifts. For these, in the 6\textsuperscript{th} c. B.C., some wooden tables and partitions were erected, as well as some primitive structures on posts on
which traditionally were set *xoana*, statues and figurines of the worshipped deities (Rusjaeva 2010: 95).

Numerous researchers after the discovering of the Black Sea, have shown that the first centuries turned to be very important in the life of ancient Greeks from the point of view of the formation of polis structures, of main forms of culture including religion and related to the artistic development (Kryžickij et al. 2003: 342-360).

What is more, on the western temenos judging by the devoting and marking graffiti, as well as by fragments of sculptures and terracotta, one can define them as sanctuaries of the Mother of Gods, a sanctuary of both Hermes and Aphrodite, separate sanctuaries of Aphrodite and Dioskouroi and also a number of sanctuaries of some anonymous deities (Rusjaeva 2010: 69).

Moreover, in the same time in Olbia, many examples of minor plastics were brought in which treatment of images had the same features, as in a large sculpture. More often there are small figurines of the so-called goddess of Rhodian - Ionian origins. These figurines represent a woman quietly sitting on a throne or in an armchair while her figure is motionless. Her head is put directly, hands lay on arm ruins, legs are located strictly in parallel (Kryžickij et al. 2003: 459).

Nevertheless, protomes of goddesses and generally female figures, were frequently found in the houses of Olbiopolites; usually, are connected with the island of Rhodes originals and many of them repeated the types known there. It is interesting that already in the 6th c. B.C, Olbian masters made similar products basing on imported samples (*Fig.81*).
Fig. 81. Terracotta Protomes fragments of goddesses, Archaic, Sector NGS-Olbia. (scale 2:3).

There are also terracotta images of other gods, thought much less often; figurines of Aphrodite (?), Artemis(?), Athena(?), Dionysos(?), Eros(?), Herakles(?), Satyr(?) and images of animals \(^{38}\) (Fig. 82.) (Kryžickij et al. 2003: 459).

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\(^{38}\) Rusjaeva 1987: 169.
Small anthropomorphic figurines executed extremely schematically and carelessly, without observance of proportions, are productions of local manufacture. On a manner of execution, these figurines sharply differ from contemporary to them Greek samples of fine plastics. However, local manufacture of terracotta figurines on the Greek samples, thought small in number, already existed in Archaic time. The find, in particular of the Samian mould of the beginning of the 5th c. B.C., convincingly testifies to that. The bust image of the girl, most likely Kore-Persephone, executed in this form, was made in quite antique style. At this time Olbian masters of terracotta figurines, usually repeated once again known images of that ones of Motherland (Fig. 83.) (Kryžickij et al. 2003: 459).
Fig. 83. Female protome from the Samian mould, Archaic. Olbia. (not scaled).
Moving now to the new era, it is important to mention that the great bulk of art monuments found in Olbia is connected to the Classical epoch. It is the era which gave to the world original masterpieces of works. Many sculpture pieces have been copied from the important schools of Athens. For example, the figure of Athena-Parthenos found in Olbia, is one of free images of well-known statue of Phidias. The goddess is dressed in Doric tunic, with amour-aegis and image of gorgone, the left hand leans on a shield (was not kept) (Farmakovskij 1905). Unfortunately, few examples survived in order to examine this era.

Having in mind that in Olbia and generally in the North Black region, original products of such great sculptors of Greece as Phidias, Skopas, Praksiteles, Lisippos are not present (except for signatures of Praksiteles and Stratonedes under not preserved statues). However, there are some pieces executed without any doubt under the influence of their schools; bright examples of such products are the heads of statues of Asklepios, Hygeia, Eros and the body of Apollo (Fig. 84.) (Kryžickij et al. 2003: 461).
Fig. 84. a and b. Fragmentary marble statue of Apollo of the 4th c. B.C. Olbia. (not scaled).

Based on the above, one of the remarkable products of an ancient sculpture is the marble head of Asklepios, close to sculptures of Skopas on a pathetic image of the face, modeling details providing some technical features. The fragment of the other statue representing a marble head female head, probably goddess Hygeia, carries on itself the influence of the school of Praksiteles, probably from Alexandria branch, where the pupils of the sculptor worked. Of importance, it’s a number of fragments sculptures from Alexandria school and especially the figure of Artemis-Olbian- a small marble figure, brightly transmitting jerky movements, underlined by fluttering tucks of cloths. (Kryžickij et al. 2003: 461-462).

It is necessary to notice that during the Classical period, the local sculptural school also achieved significant development. Remaining in a channel of the Greek and world art, local masters introduced their peculiarities in the products. Frequently samples for local products were only antique subjects with the difference that they have not blindly copied originals and definitely processed them. During the Roman era, however, were especially clearly shown and earlier they have just already arisen and developed.

One of the bright monuments of the local sculpture is the small calcareous relief, representing goddess Cybele (or Demeter-Kore), in a traditional pose sitting in an armchair, holding a timber
in one of her hands and a small lion at her legs. We can note that it repeated the iconography of marble and terracotta images of the goddess (Fig. 85). So, from Olbia there is the marble relief practically similar to calcareous. The calcareous relief is not an individual find of such image of Cybele, however other copies both are less expressive and were poorly preserved (Kryžickij et al. 2003: 462).
Once again, in Olbia terracotta figurines were found in Clasical times. As the previous period, some fragmental figures have been found through the different excavations. An anonymous enthroned goddess, not completely frontal but with a slight twist of the head towards her right was found. She holds both hands on her knees, dressed in a *peplos* with *apoptygma* and over head and shoulders hands a cloak (*Fig. 86.*). Additionally, a standing female, very stylized, clad in a short cloak covering the head and hanging her back over a foldless dress; complete with the exception of the head, which is missing. On the breast is a rounded item (aegis? - probably Athena?) (*Fig. 87.*). Lastly, a torso of standing female clad in chiton and himation covering head and lower body, with both arms bent at the elbow and under arms lifted up (*Fig. 88.*) (Bilde 2010: 446; 449; 451).
Fig. 86. Anonymous enthroned goddess terracotta, early classical, Olbia. (scale 2:3).
Fig. 87. Standing female terracotta (Athena?), classical, Olbia. (scale 2:3).

Fig. 88. Torso of standing female terracotta, late classical, Olbia. (scale 2:3).
III. Hellenistic period

The Hellenistic period in Olbia is characterized by two major processes: a) the economic and cultural zenith in the last third of the 4th and first third of the 3rd c. B.C., and b) a lingering crisis caused by repeatedly bad harvests and wars, relative subjugation by the kingdom of Skylouros, then joining for a brief period the Pontic Kingdom of Mithridates VI Eupator; finally, there was the devastating invasion of the Getae under the leadership of Burebista about the middle of the 1st c. B.C.

However, in contrast to the previous era, the number of sculptures and terracotta figurines were increased significantly. On the western temenos, small marble statues appeared: Apollo, Hermes, Hermaphroditos, Aphrodite and other deities unidentified because of their poor state of preservation. It is probable that in the last third of the 4th c. B.C., a bronze statue of Apollo Ietros created by the Athenian sculptor Stratonides and commissioned by a certain rich Olbiopolitan, Leocrates of the clan of the Eusisibiadai, was installed in the Western Temenos (NO 65; Levi 1965: 86-95; Rusjaeva 1992: 36).

A peculiar result of the religious and philosophical development of the cult of Apollo in Olbia is represented by an apophthegm of the members of the aforementioned thiasos of the Boreikoi, according to which this god appears already devoid of any epikleses – in the hypostasis of an universal deity personifying the Sun, Earthy Welfare, Light and Life (Rusjaeva 1992: 18-20; Dubois 1996: 155-156).

It was well known that Olbia contained many imported statues representing the various artistic schools – Ionian, Attic, Alexandrian- known in Miletus, its founding city. Inscriptions preserved on the bases of statues erected in the northern Black Sea area mention the well-known Athenian sculptors from the 4th c. B.C.: Praksiteles, Polycrates and Stratonides (Latsyhev 1916).

Just a few pieces of stone sculpture – no more than ten in total- were found in Sector NGS. Only two more or less complete figures are represented: a figure of a sitting woman and a statue of Kybele. The other pieces are minor fragments from small-scale sculptures: a head of a man, perhaps Asklepios or Zeus, a foot on a pedestal, perhaps a representation of Herakles and smaller fragments of statues. All of them are executed in the visually same, rather coarse-grained white or yellowish marble.
Of greatest interest is a recently excavated find, a nearly life-size statue of a seated young woman. It was found in 1991 in Sector NGS, located in the area of House III-1, but had no relation to the Hellenistic house. The sculpture was unearthed in the surface layer, practically in the humus, above the Hellenistic remains. The statue represents a young woman sitting on a chair (Fig. 89). The head is missing, as are parts of the arms and the right foot; the torso is cracked and its surface abraded in places, especially in the area of the shoulders and chest and a long amorphous diagonal ridge is noticeable on the right side of the chair.

Fig. 89. Statue of a woman (Muse?), hellenistic, Olbia. (scale 1:2).
There is difficulty in interpreting the image of this statue. Usually, seated figures of women are depictions of Demeter or Kybele. Yet Demeter is usually shown as a mature woman; to be shown as a young goddess is rare. Seated depictions of the Muses, the Moirai (Fates) and other female deities are also known. Most scholars noted that this Olbian statue is a Muse. This is indirectly proved by the fact that she was probably part of a sculptural group and Muses were usually represented in groups of at least three. If one allows that in the Hellenistic period there was a theater (Fig. 90.) in the terraced part of Olbia (note that it has never been found in excavations), then it is possible that the Obian Muse once stood there (Lejpunskaia 1994; Lejpunskaia 2010: 465).

![Fig. 90. Stone with inscription concerning the appearance of theater, Olbia. (not scaled).](image)

The second sculpture of particular interest is a small marble relief of Kybele enthroned. It was found in the Hellenistic filling of Basement 368 in House III-3 in the same quarter where the previously mentioned figure was found. It was probably crafted in a local workshop of the middle of the 3rd c. B.C., which issued small votive reliefs in limestone and, less often, in marble,
in particular with the image of Kybele in statuary pose. There is no head preserved and part of the tympanon is lacking; she is dressed in a short chiton with a belt in the waist. In her right hand Kybele holds a bowl, while on her lap a schematic lion cup is represented (Fig.91.) (Lejpunskaja 2010: 466).

Furthermore, a further fragment of a marble sculpture was found in Basement 343 of House IV-3. It is the lower part of a sculpture with the right foot preserved, perhaps of Heracles leaning against his club. The foot and the trunk are smoothed; on other surfaces there are rough tool traces of a toothed chisel. The character of the image and the carefulness of the study of the details of the foot point to a date in the Hellenistic period, most likely not later than the 3rd c. B.C.(Fig.92.).
What is more, a small marble male head, presumably an image of Zeus, Poseidon, Hermes, Dionysus or Asklepios, was found in the area of House III-2, immediately under the humus layer on top of the grey clay layer. On the top of the head is a rounded feature, perhaps a pilos with vertical grooves on the crown. The head is executed in a realistic manner. The original height of the figure would have been ca. 40 cm (Fig.93.) (Lejpunskaja 2010: 466-467).

Fig.92. Fragment foot, Herakles (?), hellenistic, Olbia. (scale 1:2).

Fig.93. Male head, probable belongs to a God, hellenistic, Olbia.(scale 1:2).
Lastly, the other sculptural fragments are less importance. One is a fragment of an arm bent in the elbow (*Fig. 94.a*), another is part of a shin(?)\(^1\). In addition to these sculptural fragments, which are difficult to interpret a grinder in the form of a finger (*Fig. 94.b*) and a marble disk (*Fig. 94.c*), which could be a part of a sculpture (a board or a tympanon?), should also be mentioned (Lejpunskaja 2010: 465).

\[\text{Fig. } 94. \quad \text{a. Fragment of an arm bent in the elbow, b. fragment finger and c. marble disk, all belong to different statues. (scale 1:2).}\]

Lastly, in Olbia a plenty of various terracotta figurines were found. Development of new features had an effect on products of fine plastics in art and this branch of art creativity achieved special development during the Hellenistic epoch. In our colony, a plenty of terracotta figurines from Attica, Boeotia acted, at the end of the period, from Myrine and Smyrne. The circle of images of figurines extended – there are images practically of all gods and goddesses, standing draped boys (*Fig. 95.*), comic actors and grotesques (*Fig. 96.*) and some isolated female and men heads (*Fig. 97.*). Among images of animals there are figures of turtles and birds (*Fig. 98.*) – gifts to Aphrodite – pigs – gift to Demeter, lions and monkeys (*Fig. 99.*) (Rusjaeva 1982 no vidi after Kryžickij et al. 2003: 463).
Fig. 95. Terracotta – Standing draped boys, hellenistic, Olbia. (scale 2:3).

Fig. 96. Terracotta – Comic actors and grotesques, hellenistic, Olbia. (scale 2:3).
Fig. 97. Terracotta- Comic actors and grotesques, hellenistic, Olbia. (scale 2:3).
Fig. 98. a. Fragments of bird terracotta, b. fragments of turtle terracotta. (scale 2:3).

Fig. 99. a. A pig terracotta and b. fragments of lions terracotta. (scale 2:3).
Ending with Hellenistic era, of great importance is a marble relief providing both stylistic and social interest of the Olbian city. It’s about a polychrome marble (traces of gilding, red and yellow paint were kept) dated at the last years of the Classical period. The entitle Relief of Sytonoi, was engaged in the control of grain trade and purchase of a grain during crisis when the prices for bread were especially high (Fig.100.).

At the left side, were represented five men’s figures in which three are standing before an altar. On the background of an altar, there was a young man with fiale conducting the sacrificial ram. On the right side, providing a stage of a meal, were depicted a reclining man (probably heeding Hero) and a sitting woman holding a vessel in her hands, before a little table with viands; in the lower part of the stele, are listed the names of sytonoi. The stylistics of this relief and its plot testify for the benefit of Olbian origin of a sculpture, thus as sample for him served antique dedicative steles (Beletskij 1969: 157 non vidi, cited after Kryžickij et al. 2003: 463).

Fig.100. Marble stele of Sytonoi from Olbia, locally made. (not scaled).
CHAPTER 10. MIRRORS

Among all of the currents of art in the northern Black Sea region at the earliest stage, toreutics stand out in their extraordinary originality. From the end of the 6th c. B.C., Olbia was the source of the most outstanding material. Local as well as Greek imported objects have been found in the burials and the city. These monuments are so exclusively original that it is customary to speak of the existence of a distinct Olbian style of metalwork. The most impressive group is considered to be that of the Olbian mirrors.39

The mirrors from Phase 2 and 3 (for the chronology of the burials see above), amount to 20 in total, found in a 1:1 ratio in 20 burials. There are two distinctive types of mirrors (which reflect rather well the ethnic polarity of the research) – the so-called “Greek type” with disc and handle cast separately and often decorated with small figures of panthers, deer and masks of Gorgons. On the other hand, it’s the so-called “Scythian type” with disc and handle cast as one (with finials and sometimes incised decoration of “Scythian animal style” motives (some details will be given further) (Trofimova 2007: 23-24; Petersen 2010: 92).

What is more, the mirrors found in female burials, being undoubtedly rooted in the Hellenic tradition, represent an important object in a woman’s everyday life and may, thus, hardly be seen as an indication of barbarian ethnicity of the buried. Moreover, the appearance of mirrors in Scythian burials could also point to a Hellenic influence on the barbarian culture. Hence, the finds of mirrors in Olbian burials where they are linked to the cult of the chthonic Demeter do not necessarily have any connection to barbarian traditions (Kozub 1974: 83-85).

As suggested by A.S. Rusjaeva, the finds of mirrors in male graves related to the cult of Dionysus and cannot be viewed as a reflection of barbarian traditions either (Rusjaeva 1992: 178). It is noteworthy that out of 26 mirrors found in the Archaic necropolis of Olbia, more than half belong to Greek types, while only a dozen are presumably Scythian (Skudnova 1988: 24-27).

39 The mirror is a very common type of grave good in almost all parts of the ancient world and also in the Black Sea region, both in burial contexts of coastal settlements and in nomadic societies (O’Connor 1999: 42-43 with references and percentages for mirror finds at selected coastal localities; for examples from nomadic burials, see Dvornichenko 1995: 111-113).
The probable manufacturing centre for the latter type is still uncertain and Olbia cannot be excluded from the list of candidates. Even if one could prove their barbarian provenance, this would not automatically imply that their owners were barbarian of ethnicity (Kryčickij 2006: 110). Now, I will analyze three different mirrors – one “Scythian” type, one imported and probable one local one- as samples of the whole 26 mirrors.

Firstly, this “Scythian” type bronze mirror (Fig.101.), is dated between 550-500 c. B.C., found in Olbia necropolis by B.V. Farmakowsky in 1912. It’s a mirror with flange raised above the round disk; the handle is made of four ribs terminating in a sculpted figurine of a panther. At the base of the handle is a figure of a recumbent deer on a narrow, smooth foot. The unique feature of mirrors such as this is the casting of the thick disk with the vertical rim at right angles to the surface. There is a semicircular protuberance where the handle was riveted and soldered to the disc on the obverse (Skudnova 1962: 13, no.i, fig.7).

The form is not typical for a Greek mirror; the animals are executed in Scythian animal style. The deer’s snout is long and narrow and the scrolls of the antlers are marked by four indentations (Fig.101a.). The schematic figure of the panther has a thin and elongated torso, the fat tail is curved in at the end and almost not separated from the body, the snout is narrow and the details have not been worked (Fig.101b.) (Skrzhinskaya 1984:126, non vidi: after Antichnaia kul’tura Severnogo Prichernomr’ia: 105-129).

In the Olbia necropolis “Scythian” style mirrors are often found in rich burials with gold jewelry. These mirrors are found also on Berezan, Taman, Podolia and Trasylvania; there is no consensus as to where they were made. Some believe that they were made in Olbia, others think the Carpathian basin played an important role, together with other centers, where other objects in Scythian animal style were made. Remains of bronze casting have been found on Berezan and casting molds for producing Scythian style plaques have been found on Berezan and in Olbia. This would seem to strengthen the hypothesis that “Scythian” type mirrors were made in Obia (Skudnova 1988: 113).
Fig. 101. “Scythian” type mirror from the necropolis of Olbia, a. a deer detail and b. a panther detail, Burial no.36, 550-500 c. B.C. (not scaled).
Furthermore, of importance is a bronze mirror of “Argive-Corinthian” type with a round disk and flat handle terminating in a round medallion with a Gorgoneion, dated in the late 6th-5th c. B.C. (Fig.102.). The rim of the disk is framed by plain cable. The handle has small protrusions at the base, decorated with swirling rosettes rendered through delicate incisions. On the handle, is a lotus bud in the middle and a pearl thread in relief on the edge (Pharmakowsky 1914b: 241, fig.59.) (Fig.102.a).

The Gorgoneion at the end of the handle is in Archaic style; her hair is twisted into ringlets, her almond-shaped eyes have raised brows. She is snub-nosed and her cheeks and chin form a single oval shape closing at the nose. Her ears are small and detailed and her open mouth shows her tongue hanging out between her fangs. The use of Greek elements in the decoration leaves no doubt that the creator of this wonderful mirror was a craftsman raised in the traditions of Greek Archaic art (Pharmakowsky 1914b: 241, fig.59.) (Fig.102b.).

Three more mirrors with similar decoration are known, thought their proportions are not as elegant as those of the present mirror and their decoration is poorer. Mirrors of this type found in ex-southern Russian form a separate group. B.V. Farmakowsky has pointed out that the influence of Ionia can be seen in the decoration of these mirrors (the lotus bud, the cable) and he considered them to have been produced locally in Olbia. His opinion was upheld by a majority of researchers, even though some deemed his arguments to be insufficient (Pharmakowsky 1914a: 27-28).

Now, new evidence of the high artistic level of bronze production in the various areas of the northern Pontic Region has emerged. Casts, dies and the remains of workshops have been found on Berezan, in Olbia and its chora, in the Iagorlytskoe settlement, in Nikonion, Pantikapaion, Myrmekion, Phanagoria and Torikos. In the early third quarter of the 6th c. B.C., Greek craftsmen arrived with the second wave of colonists on the northern coast of the Black Sea. This migration was related to the attack of Persia on Lydia and the Ionic cities in 546 c. B.C. (Bilimovich 1976: 59-60).
Mirrors/Olbia
Fig. 102. “Argive-Corinthian” type from the necropolis of Olbia, a. a lotus detail and b. Gorgoneion detail, Burial no. 10, late 6th-5th c. B.C. (not scaled).
Lastly, I will note for a bronze mirror with inscription found once again in the necropolis of Olbia, which at the present moment is preserved in the antiquity department of the Hermitage (No. 16964). The year of finding this mirror is unknown; it is round shaped and its handle ends with stylized bucrania. An inscription is engraved on its reverse side (verso) by tiny, hardly noticeable touches (the letters are 0.55 – 0.80 cm in height) (Fig. 103).

Based on the manner of writing out, the inscription is dated by the end of 6th and the beginning of 5th c. B.C., and it is one of the small number of inscriptions from Olbia done in a representative for the Archaic culture letters type. As a whole, neither the reading nor its translation provokes any debate. The transcription proposed as follows: ΔΗΜΩΝΑΣΣΑ | ΔΗΝΑΙΟ | ΕΥΑΙ | ΚΑΙ | ΔΗΝΑΙΟΣ | ΔΗΜΟΚΛΟ | ΕΙΑΙ. In the center of the mirror in big letters is engraved the syllable – AL. The translation reads: Demonassa, daughter of Lenaios enjoi also you, Lenaios, son of Democles enjoi! (КНИПОВИЧ 1956: 132).

In the publications so far, the mirror has been defined as one of the earliest monuments in Hellas, presenting aspects of Orphic religiousness. The inscription carries two names, which are Greek and most probably belong to apoikists from the metropolis of Olbia – Miletus. As it is clearly seen in the transcription, the patronim ΔΗΝΑΙΟ and the proper name ΔΗΝΑΙΟΣ are identical. Both are theophor names that originate from the epithet of the god Dionysus - Ληναιος.

The uniformity of the names could be interpreted in two ways: the first one is this of the family relations; based on it A. Rozanova takes that the man and the woman in the inscription are husband and wife. However, from the point of the Greek filiation, if we accept that there is a family relationship between the both, it will be more probable to be father and daughter. The second possible way of interpretation is the one of the cult sameness and propinquity. Then the concurrence of the names could be taken as originating from the belonging of the both to a common religious cause and environment where the theophoric names deriving from the epithet ΔΗΝΑΙΟΣ of Dionysus prevail.

40 All known opinions so far rally around this assertion: Розанова, Н.П, Бронзовое зеркало с надписью из Ольвии в: Античная история и культура Средиземноморья и Причерноморья, Пенинград, 1968, 248-255; Русяева op.cit. 97ff; Burkert op.cit. 123ff; West op.cit. 374ff.

41 For more details about this inscription, the cult of Dionysus and the Lenaea as winter festival of the wine, see Alexieva 2000: 1-11.
Fig. 103. The Bronze Ritual Mirror from Olbia Pontika, the Hermitage No. 16964, end of 6th – beginning of 5th c. B.C. (not scaled).
I have decided my next object category to be the famous bronze weights from Olbia. They are preserved in so good condition, which allow us to discover the main role of this group. Weights from the northern Black Sea region became the subject of studies as early as the second half of the 19th c. later, publication of weights was continued both in works devoted entirely to these objects and in other publications, together with other finds from excavations. Nevertheless, the study of weights is still far from competition, as new finds constantly necessitate corrections of the prevailing assumptions (Krapivina 1997: 63-65 non vidi cited after: Krapivina 2003: 117).

The weights from Olbia are mostly rectangular, square and occasionally oval or rounded, metal plates, some of which have a small vertical ridge round their edges. Some weights are of conical, trapezoid or spheroid shape with a flattened base. Some examples are carefully executed, while others are of rather careless workmanship (Bertier- Delagard 1907; 1911, non vidi, cited after: Krapivina 2003: 117).

Unfortunately, the dating of such weights is complicated by the constant changes of the weight standard in relation to the monetary one. Studies of weights from the Athenian Agora have shown that as early as Solon’s reform of 594 c. B.C., the beginning of the official Athenian metrology, two weight systems co-existed: all fractions of the weight talent were 5% larger than those of the monetary talent.42

Furthermore, independently of the monetary system, the weight system continued to undergo considerable alterations and saw minas weighting 92, 112, 126, 138, 150 and 175 coin drachms (Lang and Crosby 1964: 2-5, 17-21). The standard of 100 coin drachms was in use from the 6th until the 3rd c. B.C., the standard of 105 in the 6th c. B.C. and those of 112 and 126 drachms in the 5th and 2nd c. B.C. The rise of the standard to 138, 150 and 175 monetary drachms is believed to have taken place only in the 2nd c. B.C (Lang and Crosby 1964: 6-7).

All of the previously published bronze weights from Olbia served as control weights. Noteworthy is the presence of a relief representation and an inscription on some of them (the names of the city and the agoranomos) (Krapivina: 1980). During recent years, new material has accumulated, which enables us to expand and refine our knowledge of the subject. I will describe

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42 For example, a mina of the weight system corresponds to 105 drachms of the monetary system.
some samples—catalogue of the bronze weights from Olbia, both those previously published and the ones recently discovered.

Starting from a bronze weight from a private collection, is trapezoidal shape, measuring 0.7-0.8 x 0.8 x 0.05-0.15 cm and of weight 0.85 gr. On the obverse, there is an image of a head in a helmet right—probably Athena; on the reverse, a stylized representation of a dolphin. The head of Athena is fairly common as a countermark on the Obian silver and copper coins\(^\text{43}\) from the 3\(^{\text{rd}}\)-2\(^{\text{nd}}\) c. B.C., and typical on the coins of smaller denominations with the abbreviation ΒΣΕ from the first quarter of the 2\(^{\text{nd}}\) c. B.C. (Fig. 104.) (Krapivina 1980; Karyškovskij 1988: 62).

![Figure 104. Bronze weight, from private collection, Olbia. (scale 1:1).](image)

Once again from private collection, a bronze weight cleaned and mostly well preserved, is almost square, measuring 1.8x 1.7 x 0.2 cm; weight 5.64gr. On the obverse, is rather unclear representation of a human head (Demeter?); on the reverse is a dolphin and a low frame (Fig. 105.). A photograph of a weight of similar shape and dimensions has been published among the plates of P.O. Karyškovskij, but unfortunately its actual weight is not specified (Krapivina 1980; Karyškovskij 1988, pl.XI).

\(^{43}\) Because of the limit of the words, I will not give any further information about the monetary system and the coinage of the Olbian city. The Obian’s coinage is totally very big issue and can be examine in different essay.
A rectangular shape weight with slightly pronounced corners derives from a private collection (Krapivina 2003: 118). Its own dimensions are 2.5x2.8 x 2.1-2.6 x 0.5 cm and the weight 31.04 gr. On the right side of the obverse are two parallel incisions cut through a representation of an eagle on a dolphin – the emblem of Olbia. Below this, the inscription ΟΛΒΙΟ is discernible; this image is similar to that on the reverse of silver coins with Demeter from the 4th c. B.C. (Karyškovskij 1988: 166, pl.XI). The weight of our specimen corresponds to eight drachms of the Euboic-Attic system of standard 100 (Fig. 106.).
Moreover, from the collection of the Institute of the History of Material Culture, in St. Petersburg comes the new weight from Olbia (Fig. 107). It is in excellent state of preservation; the shape is rectangular with slightly pronounced corners, measuring 3.3x3.6 x 3.2-3.4 x 0.5 cm and weight 48.691 gr. On the obverse is a dolphin, facing left; the inscription ΟΛΒΙΟ above it and ΔΙΟΝΥ beneath it are visible. On the reverse, illegible signs have been incised. The weight was found in a room in area E-2 and it can be dated to the 3rd c. B.C. The weight corresponds to 1/8 of the Euboic-Attic mina of standard (Krapivina 1980: 86).

Next weight comes from the Museum of Archeology IA NASU, Kiev, in excellent preservation (Fig. 108). It is square with slightly pronounced corners; the dimensions are: 2.7x3.0 x 2.7x3.0 x0.5 cm and the weight 49.393gr. On the obverse, is a dolphin represented in high relief with the inscriptions ΟΛΒΙΟ above it and ΑΠΙΟ beneath it. Drawn on the obverse is a monogram, which may read: TE. The weight corresponds to 1/8 of the Euboic-Attic mina of standard 100 (Krapivina 1980: 86, 90).
Of importance is a very well preserved weight from a private collection (Fig. 109.); the weight is rectangular, measuring 3.6x3.4 x 0.4cm and weight 51.3 gr. On the obverse a dolphin is schematically represented. Beneath it, the inscription ΟΛΒΙΟ/ ΦΙΛΩ is legible. Below the tail of the dolphin is a circular countermark 0.8-0.9 cm in diameter with a representation of a woman – possibly Demeter - *en face*. The weight corresponds to 1/8 of the Euboic- Attic mina of standard 100 (Krapivina 2003: 122).
A great example of bronze weights comes from the Museum of Archeology IA NASU, Kiev (Fig.110). The weight is rectangular, measuring: 3.4x2.9-3.0 x 0.4-0.5cm and weight 52.52gr. On the obverse, represented in low relief, is a male head in profile. In front of it an arrowhead pointing downwards; possibly Apollo is intended. Beneath his image, is the inscription ΟΛΒΙΟ; above the arrowhead is a circular countermark 1.0 cm in diameter, 0.5 cm deep, representing a flying butterfly. On the reverse, an incision: +I can be seen. The weight corresponds to 1/8 of the Euboic-Attic mina of standard 100 (Krapivina 1980: 86, 90).

Moreover, from the Museum of Archeology IA NASU, Kiev (Fig.111.), there is the weight made of an Olbian “aes” with a Gorgoneion. Such “aeses” are dated to the third quarter of the 5th c. B.C. (Krapivina 2003:123; Karyškovskij 1988: 160). Dimensions: 3.60x0.19-0.35cm; weight 58gr. However, the average weight of this type of “aeses” is 113gr (Karyškovskij 1988: 58). The weight is roughly equivalent to 1/8 of the Euboic-Attic mina of standard 105. Some examples of similar weights are reported from the Athenian Agora (Lang and Crosby 1964: 4-5).
I have to add also, the total amount of five weights that have been found in Sector NGS. Only two of them were found within rooms. All the weights are of lead and of rather careless workmanship, especially the two round ones (Fig.112.); one of these is dated no earlier than the 2\textsuperscript{nd} c. B.C. (Fig.113).
Bronze and lead weights

Fig. 113. Lead weight, 2nd c. B.C., Sector NGS-Olbia. (scale 1:1).

What's more, the three rectangular weights are small, corresponding to four drachms and 1/8 of the Euboic-Attic weights mina of the standard of 100 monetary drachms. (Fig. 114.) From the Athenian Agora, examples weighing 46gr (poorly preserved), 49gr, 53gr and 53.5gr are known (Lang and Crosby 1964: 50, 57-58, 105; Krapivina 2010: 519-520).
Fig.114. Lead weights, 6th- 3rd c. B.C., Sector NGS- Olbia. (scale 1:1).
To conclude this chapter, the control weights are represented mainly by small bronze specimens, which may have been parts of sets of weights used for weighing coins in the course of exchange. The iconography of the majority of these is connected closely with that of the local coins. They mostly correspond to the Euboic – Attic weight system. However, as early as 1911, A.L. Bertier-Delagard warned that small weights should not be considered since they may equally well have been part of a different weight system (Bertier – Delagard 1911: 79-80, non vidi, cited after: Krapivina 2003: 120).

Additionally, the control weights of the board of agoranomoi are the most numerous and the most important for the history of Olbia. These can be dated to a shorter time-span than the other bronze weights, possibly to the period between 350 and 200 c. B.C.; their appearance must have been connected with the final stage of the transition from the cast coins to struck ones (Karyškovskij 1973: 98-101, non vidi cited after: Krapivina 203: 126-127).

Finally, various countermarks and scratched symbols are found only on control weights of the agoranomoi. These are probably connected with verification of weights under other agoranomoi. The countermark ΠΟ on a weight may be connected with the agoranomos Posideios and the scratched ΔΤ is possibly related to the agoranomos Eumelos known from some stamps on Olbian measuring oinochoai (Ruban 1982: 39).
CHAPTER 12: SMALLER METAL OBJECTS

The production of jeweler and bronzemelting workshops occupied the significant place in material culture of the early period of the history of Olbia. In imported things from Greece moulding, granuling were widely used, ornamental and subject motives, plants and animals were represented. Here, mainly Ionian products came- bracelets with lion’s heads, ear-rings with shields decorated with granuling and electrum rings with carved images (Kryzhytskyy et al. 2003: 460).

The metal objects from excavations in Sector NGS constitute a fairly small group of finds. The classification of this category of artifacts is based on the principle of their functions, which allows us to discern groups as well as different types and variants of objects. All the artifacts are divided according to their material: bronze, iron, lead and gold. The bronze objects found in the area under consideration include the following groups of items: tools and household articles, toiletry items and personal ornaments and weaponry. Iron is represented by tools and household furnishings; lead by household articles and ornaments and finally gold manly jewelries (Krutilov 2010: 479).

Bronze tools and household implements include bodkins (Fig. 115.), pipes (Fig. 116.) and rods for various purposes (Fig. 117.), tweezers (Fig. 118.), a stylus (Fig. 119.), knife (Fig. 120.), a handle of a vessel (Fig. 121.), nails and ear-rings.

Fig. 115. Bronze bodkins, Section NGS – Olbia. (scale 1:2).

Fig. 116. Bronze pipes, Section NGS – Olbia. (scale 1:2).

Classification developed by V.V. Krapivina.
Fig. 117. Bronze rods, Section NGS – Olbia. (scale 1:2).

Fig. 118. Bronze tweezers, Section NGS – Olbia. (scale 1:2).

Fig. 119. Bronze stylus, Section NGS – Olbia. (scale 1:2).

Fig. 120. Bronze knife, Section NGS – Olbia. (scale 1:2).

Fig. 121. Handle of a bronze vessel (?), Section NGS – Olbia. (scale 1:2).

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45 Finds of tweezers are rare in Olbia and they are altogether fairly uncommon throughout the northern Black Sea region (Korpusova 1983: 119 non vidi, cited after: Krutilov 2010: 480).
The nails are subdivided into three types: type 1 has a long shaft, square in section and a rounded head for carpentry; type 2 has a circular long shaft and a round head for joinery work; type 3 are small upholstery nails, usually with a square shaft and a round, flattened head (Fig.122-124.). (Krapivina 2010: 131).

Fig.122. Bronze nails (type 1), Section NGS – Olbia. (scale 1:2).

Fig.123. Bronze nails (type 2), Section NGS – Olbia. (scale 1:2).

Fig.124. Bronze nails (type 3), Section NGS – Olbia. (scale 1:2).
Weapons are represented by bronze cast trilobate arrowheads with a protruding or hidden socket and a cross-section shaped as a three-pointed star or an equilateral triangles\textsuperscript{46} (Fig. 125.) (Meljukova 1964: 28 non vidi, cited after Krutilov 2010: 479).

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{bronze_arrowhead.png}
\caption{Bronze trilobate arrowhead with a protruding socket, Section NGS – Olbia. (scale 1:2).}
\end{figure}

Furthermore, iron tools and domestic implements from Sector NGS comprise fragmentary sickle (Fig. 126.), knives with a “humped” back (Fig. 127.), chisel (Fig. 128.), clamp (Fig. 129.) and nails of two types: type 1 has a long shaft with a square section and a circular head, while type 2 has a circular shaft and round head (Fig. 130.) (Krapivina 2010: 134).

\textsuperscript{46} Types 4-7, 9, 10 according to A.I. Melyukova’s classification (1964).
Fig. 126. Iron sickle⁴⁷, triangular in section, Section NGS – Olbia. (scale 1:2).

Fig. 127. Iron knives, Section NGS – Olbia. (scale 1:2).

Fig. 128. Iron object with rectangular section with traces of a wooden grip (chisel?), Section NGS – Olbia. (scale 1:2).

⁴⁷ Similar sickles are widely known in the northern Black Sea area, particularly in Olbia.
Clamps of this kind were used in construction for fastening wooden elements (Krapivina 1993: 84, fig.87).
Domestic articles of lead include spindle whorls of various shapes (Fig. 132.) and fishing-net weight (Fig. 133.).

Fig. 132. Lead spindle whorls of hemispheric and conical shape, Section NGS – Olbia. (scale 1:1).

49 Spindle whorls are very common finds throughout the entire northern Black Sea littoral. In Olbia, they occur in all layers of the settlement and in the necropolis. Moulds for casting lead spindle whorls are also frequently found (Furmans’ka 1958: figs. 1-3, pl. II.3 non vidi, cited after Krutilov 2010: 482).
This chapter ends with the gold objects; gold was used to give a more elegant appearance to objects made of other materials. In the late archaic and classical jewelry, the artistic possibilities of the metal itself were fully exploited. The brilliant surface of the base, on which traces of forge work are preserved, outlined the dull fluorescence was a symmetrical but free design of a filigree decoration combined with small granulation (Kalashnik 2004: 60). The three gold items that are intended to be analyzed there were found in Olbian necropolis; often they were gifts and sometimes family relics (Artamonov 1970: 85-86).

The pair of earrings consisting of a wire ring (one gold, one silver) with three pendants in the form of birds is dated on the late 6th c. B.C. (Fig. 134.) The birds are soldered to the broadened lower part of open rings. Each hollow figurine consists of two die-stamped halves. The broadening lower parts of the rings are reminiscent of boat-shaped earrings, many of which were found often with wire rings in the graves of the Archaic necropolis of Olbia and in Nympaion. It is possible that the bird figurines had a certain meaning – perhaps a symbol of love, for according to a myth, Zeus and Leto united in the guise of quails (Skudnova 1988: 119-121).
The pair of ear pendants consisting of round convex disks and hoops bent to fit the curve of the ear is dated in the third quarter of the 6th c. B.C. (Fig.135.). The shields soldered to the hoops are turned in such a way as to cover the earlobe and be noticeable both from the front and from the profile of the woman wearing them. The free end of each hoop has a pinecone finial. In the middle of the shield is a relief head of a lion, soldered together from repoussé- stamped halves. The convex surface of the shield is decorated with a modest but expressive design of granules and rows of beaded and plaited wire. The pendants are made in the best tradition of Ionian art, as evidenced by the beautifully executed animal heads and graceful granule design (Skudnova 1988: 150).
Last but not least, dated in the 5th c. B.C., is a seal ring with carved image (Fig.136.). This ring has a stirrup form characteristic of early rings, with the hoop broadening in the middle to a pointed oval bezel. On the bezel is a depiction of Danaë carved in the Severe Style, raising the hem of her chiton in the expectation of the golden rain, the guise in which Zeus came to her. For the (female) owner of the ring, the subject matter of the seal could symbolize divine benefaction and heavenly blessing (Furtwängler 1900: 143). The sex of the buried person is not clear: a copper mirror and a sword were also found in the burial (IAK 13: 114).
Fig. 136. Gold ring with carved image of Danaë, 5th c. B.C., necropolis of Olbia.
It is important to mention another three small categories that fulfill the puzzle of the great material cultural of Olbia Pontika: bones, glass and stone objects.

I. Bone objects.

Owing to the availability of the raw material and the simplicity of working it, objects made from animal bone were widely used throughout the entire ancient world and particularly in the Greek poleis of the northern Black Sea littoral (Peters 1986: 23-32 non vidi, cited after: Krutilov 2010: 483). In Olbia, bone objects are found in all layers of the Lower City, the Upper City and in the necropolis (Nalivkina 1940: 187-201; Semenov 1958: 92-97 non vidi, cited after: Krutilov 2010: 483). Bones of large cattle, sheep and goats, horns of wild animals and occasionally ivory (which was probably imported as already finished articles) served as the raw materials for these objects (Peters 1986: 23-32 non vidi, cited after: Krutilov 2010: 483).

In terms of their functional features, the bone objects found in Olbia can be divided into tools (rasps, polishers, bodkins, knife hilts) (Fig.137-143.), domestic implements and ornaments (Knucklebones made from astragaloi, plaques from a casket and sockets) (Krutilov 2010: 484).

Fig.137. Rasp made from bones, Tools, Olbia. (scale 1:2).
Fig. 138. Bone polisher, Tools, Olbia. (scale 1:2).

Fig. 139. Bone bodkins, Tools, Olbia. (scale 1:2).

Fig. 140. Bone knife hilts, Tools, Olbia. (scale 1:2).
Astragaloi were widely used in Greece and the northern Black Sea region as gaming and fortune-telling dice, as well as amulets and votive sacrifices to gods. In Olbia astragaloi are found in all layers of the town and in the necropolis (Krapivina 1993: 84, fig.87).
II. Stone objects.

Furthermore, objects made of stone are fairly common finds in Sector NGS. They were made both of imported (marble, volcanic rocks) and local stone (shell rock, sandstone and limestone); the range of objects is not varied. Represented are stone slabs (Fig.144.), marble louteria (Fig.145.), small altars (or incense burners) (Fig.146.), small grinders or pestles intended for grinding cereals and dyes (Fig.147.), whetstones made of dense fine-grained rock and fishing-net weights (Krutilov 2010: 469).

According to V.V. Krapivina, the whetstones found in Sector NGS belong to one of the following three types. Type 1 (Fig.148.), small, elongated whetstones with a rounded cross-section, the lower tip pointed to some extent and a suspension hole in the upper part, type 2 (Fig.149.); are small, elongated whetstones with a square cross-section and a suspension hole in the upper part and finally the 3\textsuperscript{rd} type (Fig.150.), are flat whetstones, sub-rectangular or trapezoid in section (Krapivina 2006: 204).

Once more, fishing-net weights also divided into three types; the type 1 (Fig.151.) with weights of rounded shape from shell rock with a hole in the centre, the type 2 (Fig.152.) with weights of oval shape made from sandstone or limestone with hole in the narrow side and lastly, the 3\textsuperscript{rd} type (Fig.153.) with weights of oval shape made from limestone with grooves along the longer sides (Krapivina 2006: 204).

Fig.144. Stone slabs, Olbia. (scale 1:2).

\footnote{It is quite probable that the sockets shown above were parts of flutes. However, another interpretation of these objects is also possible, for example for securing the elements of composite objects (Peters 1986: pl.XV. 7.)}
Fig. 145. Stone Louteria, Olbia. (scale 1:2).

Fig. 146. Domestic altars (or incense burners), Olbia. (scale 1:2).
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Fig. 152. Fishing-net weights (Type 2), Stone, Olbia. (scale 1:2).

Fig. 153. Fishing-net weights (Type 3), Stone, Olbia. (scale 1:2).
III. Glass objects.

My subject is going to finish with glass objects; glass objects from excavations in Sector NGS are represented by 204 beads, five inserts, and three gaming counters, a fragment of cosmetic stick, fragments of a bracelet and 31 fragments of glass vessels. Small ornaments, beads and pendants are the most common glass object found. Practically, all of the beads comply with the typology developed by E.M. Alekseeva. The main criteria for identification of bead types are the color, decoration and the shape, all visually distinguishable technological features. Regrettably, the poor state of preservation and strong iridescence does not always allow us to define the color of the glass and the method of manufacture (Puktina 2010: 487).

Some of the objects so not correspond in date to the chronology of their contexts and they have been attributed to later periods. The presence of these objects in older contexts may be explained by their small size and streamlined shape which allows them to sink into the lower layers during post-depositional processes.

Ornaments of monochrome glass are the most common: 48 beads and 11 pendants. In terms of their shape, several types can be distinguished (Fig.154-158). Monochrome beads were manufactured throughout the entire Classical period, but the Hellenistic period and the first centuries A.D., saw their utmost diversity (Alekseeva 1978: 62-75 non vidi, cited after: Puktina 2010: 487).

Fig.154. Conical beads, 1st c. B.C., Section NGS - Olbia. (scale 1:1).

52 Alekseeva. E.M. (1975) Antičnye busy Severnogo Pričernomor’ja. Moskva, 12-22. This study has retained its importance as it contains the most extensive collection of beads of the Classical period (in Russian).
Fig. 155. Biconical beads, 4th – 3rd c. B.C., Section NGS - Olbia. (scale 1:1).

Fig. 156. Ribbed beads, 3rd c. B.C., Section NGS - Olbia. (scale 1:1).

Fig. 157. Parallelepiped beads, 3rd c. B.C., Section NGS - Olbia. (scale 1:1).

Fig. 158. Pyramidal bead, 4th-3rd c. B.C., Section NGS - Olbia. (scale 1:1).
Pendants in the form of small stylized vessels of transparent glass of various hues were very popular. These are found at many sites of the Classical period. The group under consideration contains five such items: three pendants of the 4th-3rd c. B.C. (Fig. 159.) and two dated to the 2nd-1st c. B.C. (Fig. 160.).

Fig. 159. Pendants, 4th-3rd c. B.C., Section NGS - Olbia. (scale 1:1).

Fig. 160. Pendants, 2nd-1st c. B.C., Section NGS - Olbia. (scale 1:1).
Ornaments of multicolored glass include beads with eyed, spotted and polychrome designs; beads decorated with “eye-type” patterns constitute the most numerous and varied group among the polychrome glass ornaments in the northern Black Sea area. Once more, in Sector NGS, six round beads of different colors have been uncovered. Four examples are dated to the 4th-3rd c. B.C. (Fig. 161.), one to the 3rd-2nd c. B.C. and another one to the 2nd c. B.C. (Fig. 162.). In terms of their manufacturing technique, all of the eyes are applied (Puktina 2010: 487-488).

Fig. 161. Beads of rounded shape, 4th-3rd c. B.C., Sector NGS-Olbia. (scale 1:1).

Fig. 162. Bead of rounded shape, 2nd c. B.C., Sector NGS-Olbia. (scale 1:1).

Of most interest, are the sets of beads from Room 465 in Houseblock V and from House VI-2. The string of beads found in Room 465 consists of 74 tiny, short, cylindrical beads of opaque white, yellow, turquoise and black glass, (Fig. 163.) dated to the 4th-3rd c. B.C. Beads of this type became widespread in the northern Black Sea area from the 3rd c. B.C. The string from House VI-2 includes 28 pendants of pyramid shape made of transparent dark-blue glass and 15 rounded beads of opaque blue glass decorated with nine blue and white eyes (Fig. 164.) (Puktina 2010: 487-488).
Fig. 163. A string of 74 beads, 4\textsuperscript{th} - 3\textsuperscript{rd} c. B.C. Sector NGS-Olbia. (scale 1:1).

Fig. 164. A string of 43 beads, 4\textsuperscript{th} - 3\textsuperscript{rd} c. B.C., Sector NGS-Olbia. (scale 1:1).
Lastly, in the excavation of Sector NGS, 9 products were manufactured by the sand-core technique include fragments of the upper body of a flask (*Fig. 165*), the walls of an amphoriskos (*Fig. 166.*), and of an alabastron (*Fig. 167.*), as well as the neck of an oinochoe (*Fig. 168.*). Among the cosmetic vessels are four body fragments decorated with a festoon pattern (*Fig. 169.*). Similar vessels were fairly widespread in the ancient world. They are dated to the 4th-3rd c. B.C. and attributed to workshops of the eastern Mediterranean (Fossing 1940: 60-76, figs. 27-48; Grose 1989: 60-170). In the northern Black Sea region, such vessels are common at sites of both Greek and Roman periods (Kunina 1997: 247-253) and at Scythian sites (Dzigovskij and Ostroverchov 2000: 79-84 non vidi cited after Puktina 2010: 489).

*Fig. 165. Flask of opaque blue glass- Upper part, 4th-3rd c. B.C., Sector NGS-Olbia. (scale 1:1).*
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CHAPTER 15: GENERAL CONCLUSIONS

To sum up, Olbia Pontika is one of the biggest colonies, not only of the Northern Black region but of the whole Black Sea area. It’s one of the greatest cities, been established during the Second Greek Colonization and been developed based on the habits and the lows of its own motherland (Miletos). The area been excavated by many scientists/archaeologists from the end of the 18th century until nowadays, succeeded in bringing into the light important information that until then the humanity ignored.

All the above material elements that I have tried to focus on my essay did prove the existence of a great Greek civilization. The decision to mention the finds of three different periods (archaic, classical and Hellenistic), had a goal to see the evolution of these items and the coexistence between Olbia and the rest regions (Scythians, Athens, Aegean, Mediterranean and Asia Minor).

The most important pieces that really worth to be mentioned were found mostly in graves/nekropoleis and at temenoi (for ritual purposes). As I have already noted, ceramics are the biggest category of all material and this is logical because clay was easy to be created and because its own daily usage was firmly usual (tableware, transportation, ritual purposes and for commercial matters); sculpture and terracotta on the other hand provide the glimpse of the style and technology of this region as well as they show the love to their gods.

The most important observations from the analyses of the grave goods can be summarized as follows; the burials feature an unparalleled high number of metal deposits, both of precious metals and of other kinds of metals. There is also a relatively numerous weapon deposits compared with other Black Sea localities and the Greek world in general.

What is more, the burials based on the materials that have found, propably reflect the general notion of a prosperous and peaceful period in the city’s existence; in general, a very diverse, multifaceted and cross-cultural attitude to burial customs can be seen, with possible elements of both Greek and barbarian (Scythian) cultural affiliations.

As I have shown at (Tables 2&3), the unique nature of the burial material from Olbia, has naturally over time, prompted a number of specialist studies. Common to them, all has been a clear interest in the opportunity to use the material in an ethnic discourse on relations between the Greeks and the Scythians of the region. There are two main directions within the body of
research on the the burials from Olbia: one group has tried to prove the existence of a Scythian population living in Olbia (Kapošina, Knipovič, Bessonova), whilst the other team has been keen to stress its “Greekness” (Furmanskaja, Skudnova, Papanova) (Petersen 2010: 112).

Whether the aim is to prove the existence of a Scythian population or “Greekness”, the methodology is based on the same premises: Greeks used Greek objects and practiced Greek customs, whereas Scythians used Scythian objects and practiced Scythian customs. Even when there are attempts at explaining, for example, Greek ceramics in Scythian burials or Scythian daggers in Greek burials, the arguments only stretch as far as Scythians assimilating to Greek customs or effects of Greek trade with the Scythians (Petersen 2010: 112).

Ultimately, there can be no doubt that the material record of the burials from Olbia displays a multicultural complexity which can only lead one to suggest a high degree of cultural interaction, perhaps based on hybrid cultural identities which were created and negotiated to fit specific social strategies and situations.

To conclude, the whole pieces of the material culture of this city, confirm that Olbia Pontika was one of the richest colony of the Black Sea and it has Greek character. Moreover, it was a great importer of goods but also a famous production center. No published material from any other locality can match in quantity, variety and richness than of the Olbia Pontika.
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GLOSSARY

AMPHORA:

two-handled storage jar.

Aphrodite:

Greek goddess of erotic love and beauty.

ARTEMIS:

virgin Greek goddess of the hunt, wild animals and childbirth.

ASKOS:

small container taking its name from the Greek word for wineskin, which its shape resembles.

ASSOS/-OI:

mold-cast (as opposed to struck) bronze Olbian coin.

ATHENA:

virgin Greek goddess of wisdom, wafare, arts and crafts.

CHORA:

the delimited territory controlled by a polis.

CYBELE:

Anatolian mother-goddess who was assimilated into the Greek and Roman pantheons.

DANAE:

mythical woman impregnated by Zeus in the guise of a golden rain, which produced the hero Perseus.

DEMETER:

Greek goddess of agriculture and fertility.
DINOS:
   large bowl with a globular body and no handles used for mixing wine and water; is often placed on a tall stand.

DIONYSUS:
   Greek god of wine, vegetation and theater.

ELECTRUM:
   natural alloy of gold and silver used in the earliest coinage in Asia Minor.

GORGON:
   one of three monstrous sisters with snakes for hair whose gaze turned men to stone.

GORGONEION:
   severed head of the Gorgon Medusa, used as an apotropaic device.

GRIFFIN:
   mythological hybrid creature combining characteristics of a lion, a raptor and a snake.

HERAKLES:
   important Greek hero known for his strength and for his ten Labors.

HYDRIA/-AI:
   three-handled vessel for transporting water.

KORE/-AI:
   maiden: in art, a statue of a standing young woman who is modestly dressed.

KRATER:
   deep, wide-mouthed, two handled vessel for mixing wine and water.
KURGAN/TUMULUS/TUMBA:
burial mound enclosing a central burial chamber and often, several secondary burials.

KYLIX/KYLIKES:
two-handled cup.

LEKANIS/-IDES:
shallow dish, usually with a lid, used by women for toiletries and other items, associated with wedding ritual.

LEKYTHOS:
tall cylindrical oil bottle with a narrow neck, thick rim and one handle.

NAOS:
Greek temple.

OINOCHOE/-AI:
one-handed wine pitcher.

OLPE/-AI:
small to medium sized oinochoe.

PELIKE/-AI:
two-handled vessel resembling an amphora, widest toward the bottom.

PHIALE/-AI:
shallow libation bowl occasionally used for drinking.

POLIS/-EIS:
greek city-state, i.e., a usually small city and the surrounding countryside under its political control.

PYXIS/-IDES:
small, cylindrical, lidded containers.
**SATYR:**
mythical woodland follower of Dionysus, combining male features with those of a horse and goat.

**SCYTHIANS:**
road cultural grouping of semi-nomads, who dominated the Eurasian steppes between the 8th and 1st c. B.C.

**STATER:**
standard Greek unit of weight, hence, the main denomination of early Greek coinage.

**TEMENOS/-OI:**
a holy area, usually enclosed; often the area surrounding a temple.