

THE COMMERCIAL NETWORKS IN THE BLACK SEA REGION AND TRADE WITH ATHENS IN THE CLASSICAL PERIOD

Inga GŁUSZEK

Institute of Archaeology Nicolaus Copernicus, University Toruń

Introduction

The article concerns the problem of trade connections between the Greek cities of the north-western Black Sea coast and its relations with Athens in the classical period. The colonization of the north-western Black Sea coast dated back to the 7th century BC. The first colonies at this territory are Histria and Borysthenes (today Berezan Island) the next colony was Olbia and the youngest cities are Nikonion and Tyras¹. According to Eusebius of Caesarea Histria was established by Miletus at 657/656 BC but archeological research allows to date the site on ca. 630 BC². Borysthenes is dated back by Eusebius at 647 BC³ but in this case the archeological sources confirm that the first Greek settlement at that area developed at 625 BC⁴. Greek colonists settled at the territory of Olbia about 50–70 years after establishing Borysthenes, it is in the second quarter of the 6th century BC⁵. The time when Olbia started to develop into the main polis in the region was at ca. 530 BC⁶. The first Greek settlement at Nikonion is dated back to the third quarter of 6th century BC⁷ as the same as it probably is in the case of Tyras. Allworth the excavations in Tyras are difficult because of latter Turkish settlement and the archeological sources from the beginning of the city are limited. Some of scholars stressed that Tyras might be the youngest Greek poleis in this area and could be dated back to the last quarter of the 6th century BC⁸ (Fig. 1).

The all mentioned cities were colonies of Miletus⁹ but there is a strong suggestion that Nikonion could have been colony of Miletus and Histria as well. The theory is based at numismatic findings from Nikonion, where a large number of cast bronze coins from Histria were found¹⁰. In other cities in the region coins from Histria are also well represented by findings of cast examples with legend ΙΣΤΡ or ΙΣΤ at one side and the wheel with four spokes at the other

¹ Shelov 1964, p. 219–224; Brashinsky 1970, p. 133; Drews 1973, p. 18–31.

² Eusebius 95b:667; Aleksandrescu 1962, p. 58–62; 1978, p. 19–21; 1999, p. 72–76; Vulpe 1997, p. 181–191; Ivanchik 1998, p. 322–326.

³ Eusebius, Chron. Can. 88.

⁴ Kopejkina 1979, p. 106–107; Kryzhickij/Rusjaeva/Krapivina/Lejpinskaja/Skryzhinskaja/Anochin 1999, p. 41.

⁵ Vinogradov 1989, p. 79; Bujskih 2005, p. 157.

⁶ Kryzhyckij *et al.* 1999, p. 348–349.

⁷ Sekerskaja 1976, p. 94; 1989, p. 22–23.

⁸ Karyzhkovski/Kleiman 1985, p. 42.

⁹ Pseudo Skylaks 68; Pseudo Skymnos 798–803; Plin. NH 112; Eusebius, VII, 657.

¹⁰ Preda 1960, p. 21–38; Zaginaylo 1966, p. 100.

side. These coins are characteristic in Nikonion for the 6th century BC¹¹ are steel represented in numismatic findings in the 5th century BC from the all cities of the north-western sea coast¹². The close relations between Histria, Nikonion and Olbia are well noticed in archaic period though in classical times the contacts between neighboring cities began to play the main role in local trade network. The Olbian influence in Nikonion and Tyras is confirmed by findings of bronze cast coins in disc shape. These coins have the depiction of Athena, Gorgony or Demeter at one side and wheel with four spokes at the other side¹³. The first examples of these coins are dated back to the second quarter of the 5th century BC¹⁴. The production of that coins (with depiction of Demeter) last to the first half of the 4th century BC¹⁵.

The numerous findings of this bronze cast coins in Nikonion proves that the economical connection between these cities already existed in the begging of the third quarter of the 5th century BC¹⁶. The first Olbian cast coins with depiction of Gorgon appeared in Nikonion in the middle of the 5th century BC¹⁷, the bronze cast coins with legend APIX are known from the period 430–410 BC¹⁸. The findings of coins from Olbia increased in the next century. Those are coins with legend OABIO, image of Demeter at one side and the eagle on a dolphin at the reserve side are known in Nikonion from the beginning of the 4th century BC¹⁹. First coins from Tyras known in Nikonion are dated to the last decade of the first half of the 4th century BC²⁰. The coins from Tyras appeared also in the second half of the 4th century BC²¹. This late numismatic evidence shouldn't be considered as the suggestion that the economical relations between these two poleis had developed just in the late classical period. The connections between Tyras and other cities are more difficult to detect mostly because of problems in archaeological excavation process at the site and fragmentary knowledge about the city before late 4th century BC. The first foreign coins known from Tyras came from Histria and are dated to the second half of the 5th century BC²².

Sailing conditions

The development of trade in cities situated on the Pontic coast depended on many conditions among which the sailing skills might be very important. The navigation abilities of Greeks effected to development of the sea routes connecting poleis in trade network. The technical sealing skills of Greeks were as well important for local – inertial Black Sea trade as for long-range maritime trade with Mediterranean poleis. In the 7th and 6th century BC the Greeks reached new territories and settled colonies by travelling along seashores²³. This way of sea traveling is also continued in the Black Sea territory by the chronology of colonization process played on the Pontic basin²⁴. Some of the oldest colonies settled at Bosphorus bank are Bizantion and

¹¹ Mielczarek 1999, s. 7–20.

¹² Sekerska 2007, p. 482.

¹³ Karyzhkovski 1988, p. 41–48.

¹⁴ Zograf 1951, p. 123.

¹⁵ Zograf 1951, p. 123–124, pl. XXXI, 4.

¹⁶ Zaginaylo 1966, p. 120–130.

¹⁷ Sekerska 2007, p. 482.

¹⁸ Anochin 1989, p. 78.

¹⁹ Zaginajlo 1966, p. 108–110, 206; Anochin 1989, p. 78; Sekerska 2007, p. 484.

²⁰ Anochin 1989, p. 78.

²¹ Zograf 1951, p. 66–67; Zaginaylo 1966, p. 103, 122.

²² Samoylova 2007, p. 440.

²³ Rougé 1981, p. 11–23.

²⁴ Carpenter 1948, p. 1–10; Hind 1984, p. 71–97; Agbunov 1987; Zubarev 2005, p. 14.

Chalkedon²⁵. The next cities established after Bosporian centres, older than poleis from eastern part of the Black Sea, are Apollonia Pontica and Histria on west coast²⁶ and Heraclea Pontica and Sinope at the southern coast²⁷.

It is natural that this communication routes turned into trade network connecting poleis placed near to each other²⁸. The influence of Histria in Nikonion in the 6th century BC and strong position of Olbia in the next century pointed out by numismatic findings proved this process very well²⁹. It is quite probable that the changes in sailing conditions caused some changes in maritime trade. In this point of view it is important to mention about so called “short routes” through the Black Sea which lead sailors by the open sea from southern cities strait to the ports of the northern poleis (Fig. 2). The date when this sea routes started to existing is still in dissection but it is possible that maritime traders, had known about this way of travelling already in the last quarter of 5th century BC³⁰.

The contacts with poleis situated outside of Pontus could have been more complicated because Greek sailors had to face up to narrow straits, strong currents as well as headwinds of Propontis trying to get to the Black Sea. It is often stressed that sailing into Pontus was a problem for Greek sailors and was easy and save only for three or fourth months of late spring and summer time. Considered this and the fact that coastwise manner of sailing took at least 20–25 days for vessel to conquer the distance between Bizantion and Olbia in both ways³¹ stayed a question about attractiveness of the Black Sea trade based on direct connections between poleis so distance to each other like Athens and Olbia. It might be possible that the trade network was constructed in different way and that some factor-cities could be involved and interested in trade with the Black Sea.

Athens and Black Sea in historical writings

The first historical information about the Athenian interest focused on Pontic poleis doesn't concern trade and economic sphere of their existence. At least it is not directly described in historical relation. They passed some political and military actions undertaken by Pericles when representatives of Sinop citizens turned to him with a request for help³². Pericles together with naval forces of Delian League was present at Aegean Sea between 440–439 BC because of conflict between Samos and Miletus and final rebellion of Samos against the Delian League control³³. According to Thucydides during the military actions some of Synope citizens came to Pericles asking for help with expelling the tyrant Timesileos from the city. After defeating rebelled island Pericles together with a fleet of thirteen ships under the command of Lamachus set off to Sinope and like historical sources noticed he not only forced Timesileos to leave Sinope but also granted requests of other cities as well³⁴. The date of Periclean expedition on Pontus is not known but

²⁵ Ps. Skymn. 715; Herodot 4.144.2; see also: Merle 1916, p. 9–10; Cook 1946, p. 77.

²⁶ Apollonia Pontica: Ps. Skymn 728–731; Tsaneva/Panayotova 1990, p. 77–79; Histria: Eusebius 95b:667; Aleksandrescu 1962, p. 58–62; 1978, p. 19–21; 1999, p. 72–76.

²⁷ Heraclea Pontica: Ps. Skymn 968–975; Burstein 1976, p. 14–15; Saprykin 1997, p. 23–27; Synope: Herodotus, 4.12.2.

²⁸ Zolotarev 1979, p. 9–10; Obrin 2002, p. 99–102.

²⁹ Preda 1960, p. 21–38; Zaginaylo 1976, p. 74; Karyshkovsky 1962, p. 210–215.

³⁰ Strabon 7. 4. 3; 1. 479; 3. 235; 5. 205; 387; Maksimovan 1954, 46–57; Berenbejm 1958, p. 201–202; Gaydukievich 1969, p. 11–20.

³¹ Labree 1957, p. 29–33; Rougé 1981, p. 156.

³² Plutarch, Pericles 20. 25.1–2. 24.1; Thucydides 1.115.2.

³³ Thucydides 1.115.2.

³⁴ Thucydides 1.115.2.

scholars placed it between 438–432 BC³⁵. These words of historical writer become a canvas of the theory about strong influence of Periclean politics on Pontic poleis including his presence in Bosporean Kingdom and even Olbia, but there is no other evidence that this journey through Pontic cities have ever had place³⁶.

Some of Pontic poleis are mentioned as members of Delian League in *phoros* decree dated to 425/424 BC, it make stronger the theory of political and first of all economical interest of Athens in the Black Sea territory. The fragment saying about Black Sea poleis is highly damage so most of cities' names are reconstructed in hypothetically way but the decree mentions such cities like Apollonia Pontica, probably Olbia, Tyras and Nikonion³⁷.

Although locating the Pontus Euxini poleis in separate group in Athenian decree proves that some of the Black Sea cities were member of the Delian League it doesn't prove that including those to the League had place during Periclean expedition and that these cities had some closer or direct trade connections with Athens. The participation in Delian League could have been just farther, indirect, consequence of Athenian intervention in Sinope and establishing the first in the Black Sea, *cleruchi* at Sinope and Torikos³⁸.

Black Sea maritime trade – written sources and archaeological finds

The information about Pontic trade in written sources is far from detailed relation. The first information about Mediterranean – Black Sea trade concerns grain and was passed by Herodotus (7, 147). But the author doesn't say anything about the destination of described merchant ships; he also says nothing about Pontic port where these ships started their journey from.

The most complete description of Pontic trade might be found in Polybius writings. The ancient author says that “*in respect of the necessaries of life the staple articles of trade were cattle and slaves. There were also brought down to the Mediterranean lands honey wax and salt fish in quantity which served the comfort of life. From the Greek seas and lands there were carried back to the Pontic lands oil and wine of all kinds; wheat was carried sometimes in one direction sometimes in the other according to need*”³⁹. A sit appears from quoted source the Black Sea poleis are perceived as one – homogeneous economic territory offering similar products of the trade exchange. The text clearly points out that the best under the account of the quality as well as profitable goods offered by the Pontic cities are cattle and slaves. The cattle trade is hard to confirm but there are some information about slave trade which may be referred to the Pontic territory⁴⁰.

The presence of slaves in Greek Black Sea cities is confirmed by epigraphic sources from Olbia or Phanagoria⁴¹ but this only proves that slaves' labour was needed in Pontic poleis and that trade of them had local range. In the other hand the pirates activity referees in written sources referees almost only to eastern part of Black Sea – Bosporean Kingdom, Sindis lands and Colchis⁴².

³⁵ Surikov 1999, p. 98–102,105–106.

³⁶ Latshev 1887; Vinogradov 1989, p. 126–134; Brashinsky 1958, p. 110–121; Mattingly 1996, p. 151; Kallet-Marx 1993 p. 24–27; Stadter 1989; Braund 2005, p. 24–45.

³⁷ Meritt/West 1934; Meritt/Wade-Gery/McGregor 1939; Karyshkovsky 1960, p. 82–99; Saprykin 1986, p. 55; Vinogradov 1989, p. 126–134.

³⁸ Plutarch, Perykles 20.2.

³⁹ Polybius 4. 38. 4.

⁴⁰ Goldenberg 1953, p. 200–209; Blavatsky 1954 p. 31–56; Staerman 1960, p. 134–139; Finley 1962, p. 51–59; Kallistov/Nejhardt/Shifman/Shishowa 1968; Braund/Tsetskhladze 1989, p. 114–125; Tsetskhladze 1990, p. 129–151; Gavriyuk 2003 p. 75–85; Braund 2005, p. 24–45.

⁴¹ Vinogradov 1998, p. 153–178.

⁴² Brashinsky 1973, p. 130–131.

The epigraphic source which says about Black Sea slaves and their prices is the list of Kephisodoros' goods sold at an auction in 414 BC⁴³. This is the only source which gives the idea about the intensity and the profitability of a Pontic slaves' trade in Athens. In preserved text among fifteen slaves belonged to Kephisodoros there were mentioned five Tracian slaves and only one came from Scythia⁴⁴. How the list shows most of slaves from Pontic have the Thracian origins and proves that value of Scythian slave is not significant relating to the other prices. The fact that the most of slaves from the Black Sea region belonged to Kephisodoros came from Thrace draws the possibility that Pontic slaves in Athenian market came from other territories of northern Black Sea than Scythia. It also suggested existence of different routes of that trade for example through Macedonia or Aegean islands.

The Scythian slaves are also mentioned by ancient historians' writings. Andokides says about three hundred Scythian archers served in Athenian polis forcers⁴⁵ Aristophanes described the Scythian police in Athens in action⁴⁶. There is also a large group of vase paintings present in decoration, as one of the interpretations says, Scythian slave-archers⁴⁷. The discussion about Scythian archers in Athens is very complex, and there are two main theories in this matter. One rejects the probability of Scythian slave trade developing in Athens and treats the iconography as prove of symbolic way of thinking about specialized archers from Scythia. The other treats the mentioned sources as a proof of existing trade with Black Sea focused on "recruiting" skilful archers. Allworth the problem is difficult to study if one excepted that archers described by Andokides and Aristophanes, depicted on black and red figured vases actually present real Scythian slaves leaving in Athens it suggests that the trade of Scythian archers might be considered as very specialized and narrow branch of Pontic trade and in this way it couldn't have a large scale of range.

The all evidence about the slaves from Scythia says that this kind of trade wasn't in any way significant for Athenian merchants. There is only one information about market value of that slaves and it shows that they reached the average price, the other sources says about Scythian slaves important because of it high qualification in archery however the credibility of this sources is questioned⁴⁸ and also doesn't prove that this kind of trade was the one which pulled the Athenian's attention to the Black Sea and involved all Pontic poles.

Pontic grain is often brought up in discussion as product attracted enough to drive attention of Athenian merchants⁴⁹. It seems, that on account of the large population and limited productivity of land cultivated in Attica this argumentation have to be reconsidered. Allworth the argumentation that the Pontic territory wasn't able to product enough grain for maritime trade⁵⁰ and Athens were self-sufficient in 5th century BC⁵¹ still stay strong. The different conception says that the low potential of agricultural productivity in Attica described by Plato as *the bones of a wasted body*⁵², the large number of population and high grain consumption suggested that Athens wasn't able to provide enough food for their citizens based only on an own

⁴³ Meggis/Lewis 1988, s. 79.

⁴⁴ Issager/Hansen 1975, p. 32; Davies 1993, p. 89.

⁴⁵ Andokides 3. 5; Ajschines 2. 173.

⁴⁶ Lysistrata/Thesmophoriazusaee/Ecclesiazusae.

⁴⁷ Plassart 1913 p. 151–213; Vos 1963; Lissarrague 1992, p. 125–149; Lavelle 1992, p. 78–97; Ivanchik 2002, p. 23–42.

⁴⁸ Pinney 1993, p. 134–140.

⁴⁹ Isager/Hansen 1975, p. 19–29; Garnsey 1988 p. 123–140; Shcheglov 1987, p. 99–122; Brashinsky 1963, p. 35–45.

⁵⁰ Noonan 1973, p. 231–242; Tsetschladze 1997, p. 243–252.

⁵¹ Sallares 1991, p. 73–80; Osborne 1987, p. 41–43.

⁵² Plato/Critias, 111b5.

production already in the 5th century BC⁵³. Production of the grain which barely satisfied needs of population could cause the threat of the market collapse in situation when the harvest was poor or crops were destroyed in other way. This created the space for the development of grain trade imported from different parts of world well-known to Greeks not excluding the Black Sea territory.

Like Polybius noticed except slaves' strong side of Pontic poleis trade was its agriculture potential. The analyses of rural settlement of Olbia and Nikonion have showed that during the first half of 5th c. BC the *choroi* of both cities have developed and was constantly growing in the second half of the 5th c. BC. The analyses of agricultural potential of north-western Black Sea cities came to conclusion that they were not only able to provide the food for their own citizens but were able to product surpluses used for trade as well⁵⁴.

The Black Sea maritime trade network

None of these sources does inform how maritime trade in the Black Sea region was organized. Taking the archaeological sources as a base to reconstruct the trade network between Pontic poleis and external cities we have to look at epigraphic and transport amphorae findings as main sources for farther study. There are no epigraphic findings (for example proxeny decrees) from the north-western polis expressing information about long distance trade in the archaic and early classical period. The findings which may shade a little bit of light at the subject are trade amphorae found in large number in Olbia, Nikonion or Histria in that period. It occurred that in archaic period the most of trade amphorae found in Olbia and Nikonion came from Aegean centres like Chios, Samos, Thasos or Lesbos.

At the 6th and first half of 5th century BC most of amphorae found in Olbia and Nikonion came from Chios it is almost over 30% of all amphora findings from each city. At the second place in Nikonion are amphorae from Thasos; at the third place are findings from Lesbos. In Olbia there was Samos at second place and Lesbos at the third. The amphorae of Thasos became relevant in Olbian findings in the second half of the 5th century BC⁵⁵.

This suggested that northern Pontic cities were involved in trade with poleis located in the nearest "outside-Pontic area". It is no less important that in early classical period each of mentioned Aegean poleis possessed significant maritime fleet, had strong economic position and in this point all of them already have been connected with Miletus⁵⁶. They also became the members of Delian League from its beginning and were economically connected and used in this way by Athens⁵⁷. In this situation Athens didn't have to look for closer connection with Pontic cities because using the trade network already existing between the northern Black Sea poleis and Aegean islands was enough to gain those goods which were important for Athens. As it was said before the sailing conditions at the Black Sea area also were important in trade. The sea transport inside the Black Sea basin wasn't difficult but ancient maritime merchants who wanted to sail in the Black Sea had to come across narrow and difficult in navigation straits of Dardanelles and Bosphorus. This long and dangerous sea route could force the natural developing of trade network between Pontic and Mediterranean area where Aegean ports gained certain importance. The geographical localization of Aegean islands and the experience of Aegean sailors throw

⁵³ Moreno 2007, p. 12–16, 31; Bissa Leiden 2009, s. 179.

⁵⁴ Shcheglov 1990, p. 375–376; Shcheglov 1991, p. 51–58.

⁵⁵ Leypunskaya 1981, tab. 31; 2001, p. 42–45; Sekerskaya 1989, p. 85–88, tab. 61; Monachov 2003, p. 11–30, 43–50.

⁵⁶ Quinn 1981; Sarikakis 1924, p. 121–131.

⁵⁷ Tucydydes 3. 2. 2.

the Propontis waters put them in very best position to run an agency for purchase and sale the all goods offered by Pontic cities. The poleis like Bizantion, Chios, Lesbos, Samos, Thasos and Miletus had perfect localization connecting the west – Athens and other Mediterranean polis with east – Black Sea colonies. The Athenian merchants didn't have to spend their efforts on sailing directly to Pontic poleis. The including Aegean islands and Propontis cities to Delian League and establishing *cleruchiai* like Sestos and Abydos⁵⁸ in both sides of Dardanele gave Athens enough political and economic power to take control over Aegean Sea. This action in further consideration provides them well position also in controlling trade with the Black sea region⁵⁹.

The situation in internal Pontic trade changed in the second half of the 5th century BC when the “short sea routes” connected directly the cities from the northern part of Black Sea with Greek centres lying on the south Pontic coast. The southern Pontic poleis like Heraclea Pontica and Synope become more active not only on maritime trade area but also like Heraclea established their own colony Chersonesus at northern part of Black Sea⁶⁰. This actions effected intensification of local-Pontic connections in trade and weakening the influence of Aegean traders in the Black Sea. The large number of trade amphorae from Heraclea Pontica and Synop dated to the 4th century BC exceeding the number of finds from Chios and other Aegean poleis⁶¹ suggested that these southern Greek poleis became the main participants in the northern Black Sea trade in the late classical period. The other evidence like proxeny decrees for citizens of Sinope and Heraclea Pontica found in Olbia also dated to the 4th century BC⁶² proved that booth southern poleis gain grate economic importance in northern Black Sea trade.

Probably the political events like dissolved of Delian League and Athenian's lost in Peloponnesian War caused some impact in Black Sea trade network. When the connections with old Aegean partners lost their strength the initiative was took over by southern Pontic cities. New situation could also require more direct action from Athens what is proved by proxeny decree for Athenian citizen found in Olbia dated to the second half of the 4th century BC. Athenians could try to maintain their control and influence in northern Pontic cities not only by individual actions but also by using their *cleruchiai* in Sestos and Abydos and in Sinope and Torikos.

Bibliography

- Agbunov 1987 = Agbunov M. V., *Antichnaja locja Chernogo Morja*, Moskva, 1987.
- Aleksandrescu 1962 = Aleksandrescu P., Autour de la date de fondation d'Histria, in *Studii Clasice* 4, 1962, p. 49–69.
- Aleksandrescu 1978 = Aleksandrescu P., Les ceramiques de la Grece de l'Est dans les colonies pontiques, [w:] in *Les ceramiques de la Grece de l'Est et leur diffusion en Occident*, Bibliotheque Naples 4, 1978, p. 52–61.
- Aleksandrescu 1999 = Aleksandrescu P., *L'Aigle et le Dauphin. Etudes d'archéologie pontique*, Bucarest-Paris, 1999.
- Anochin 1989 = Anochin V.A., *Monety anticnykh gorodov Severo-Zapadnogo Pricernomoria*, Kiev, 1989.
- Berenbejm 1958 = Berenbejm D. I., O puti Grekov cherez Chernoe More, in *Sovetskaja Archeologija*, 3, 1958, p. 201–202.

⁵⁸ Meggis 1972, s. 31–33; Boardman 1973, p. 240–241; Sacks/Brody/Murray 2005: Abydos, Sestos.

⁵⁹ Mattingly 1996, p. 151–158; 2008 p. 96–110; Walbank 2008, p. 132–136.

⁶⁰ Pseudo-Skymnos, 826–831; Vinogradov/Zolotariev 1999, p. 91–129; Zedgenidze 1979, p. 78–82; Kac 1990, p. 69–75.

⁶¹ Lejpunskaya 1981, tab. 31; Sekerskaya 1989, p., p. 88, rys. 61.

⁶² Knipovich/Levi 1968, no. 1, 6.

- Bissa 2009 = Bissa E. M. A., *Governmental Intervention in Foreign Trade in Archaic and Classical Greece*, Leiden, 2009.
- Blavatsky 1954 = Blavatsky V. D., Rabstvo i jego istochniki v antichnykh gosudarstvach Severnogo Prichernomor'ja, in *Sovetskaja Archeologija* 20, 1954, p. 31–56.
- Boardman 1973 = Boardman J., *The Greeks Overseas*, London, 1973.
- Brashinsky 1958 = Brashinsky I. B., Pontijskaja ekspedicija Perikla, in *Vestnik Drevnej Istorii* 3, 1958, p. 110–121.
- Brashinsky 1963 = Brashinsky I. B., *Afiny i Severnoe Prichernomor'je v VI–II v. do n.e.*, Moskva, 1963.
- Brashinsky 1970 = Brashinsky I. B., Opyt ekonomiko-geograficheskogo rajonirovanija antichnogo Prichernomor'ja, in *Vestnik Drevnej Istorii* 2, 1970, p. 133–137
- Brashinsky 1973 = Brashinsky I. B., Pontijskoe piratstvo, in *Vestnik Drevnej Istorii*, 3, 1973, p. 124–133.
- Braund 2005 = Braund D., Neglected slaves, in *Vestnik Drevnej Istorii* 4, 2005, p. 24–45.
- Braund/Tsetsckhladze 1989 = Braund D., Tsetsckhladze G. R., The Export of Slaves from Colchis, in *Classical Quarterly* 39 (1), 1989, p. 114–125.
- Bujskih 2005 = Bujskih A. B., *Antichnoe poselenie Adzhigol i bliz Ol'vii*, Starozhitnosti stepovo Prichernomor'ja i Krimu 12, 2005, p. 164–189.
- Burstein 1976 = Burstein S., *Outpost of Hellenism. The Emergence of Heraclea on the Black Sea*, Berkeley, 1976.
- Carpenter 1948 = Carpenter R., The Greek Penetration of the Black Sea, in *The American Journal of Archaeology* 52, 1948, p. 1–10.
- Cook 1946 = Cook R. M., Ionia and Greece in the Eighth and Seventh Centuries B.C., in *Journal of Hellenic Studies* 66, 1946, p. 67–98.
- Davies 1993 = Davies J. K., *Democracy and Classical Greece*, Cambridge, 1993.
- Drews 1973 = Drews S. R., The Earliest Greek Settlements on the Black Sea, in *The Journal of Hellenic Studies* 96, 1973, p. 18–31.
- Sacks/Brody/Murray 2005 = Sacks D., R. Brody L., Murray O. (eds.), *Encyclopaedia of the Ancient Greek World*, New York, 2005.
- Finley 1962 = Finley M. I., The Black Sea, Danubian regions and slave trade in antiquity, in *Klio* 40, 1962, p. 51–59.
- Garnsey 1988 = Garnsey P., *Famine and Food Supply in the Greco-Roman World*, Cambridge, 1988.
- Gavrilyuk 2003 = Gavrilyuk N. A., The Greco-Scythians Slave-Trade in the 6th and 5th Centuries B.C., [w:] P. G. Bilde, J. M. Højte, V. F. Stolba (eds.), *The Cauldron of Ariantas. Studies Presented to A. N. Scheglov on the Occasion of his 70th birthday*, in *Black Sea Studies* I, 2003, Aarhus, p. 75–85.
- Gaydukievich 1969 = Gaydukievich V. F., O putjach proischozhdenija drevnogrecheskich korablej v Ponte Evksinskom, in *Kratkie Soobshchenija Instituta Archeologii* 116, 1969, p. 11–20.
- Goldenberg 1953 = Goldenberg V. A., Severnoe Prichernomor'je kak rynek rabov dlja Sredizemnomorskogo mira, in *Vestnik Drevnej Istorii*, 2, 1953, p. 200–209.
- Hind 1984 = Hind J., Greek and Barbarian Peoples on the Shores of the Black Sea, in *Archaeological Reports*, 1984, s. 71–97.
- Isager/Hansen 1975 = Isager S., Hansen M. H., *Aspects of Athenian Society in the Fourth Century B.C.*, Odense, 1975.
- Ivanchik 1998 = Ivanchik A. I., Die Gründung von Sinope und die Probleme der Anfangsphase der griechischen Kolonisation des Schwarzmeergebietes, [in:] G. Tsetsckhladze (ed.), in *The Greek colonisation of the Black Sea area. Historical interpretation of archaeology, Historia. Einzelschriften* 121, Stuttgart, 1998, p. 297–330.
- Ivanchik 2002 = Ivanchik A. I., 2002, Kem byli "skifskie" luchniki na atticheskikh vazach epochi archaiki, in *Vestnik Drevnej Istorii* 2, 2002, p. 23–42.
- Kac 1990 = Kac V. I., Emporia Chersonoz, in *Antichnyj mir i archeologija* 7, 1990, p. 69–75.
- Kallet-Marx 1993 = Kallet-Marx L., *Money, Expense and Naval Power in Thucydides, „History” 1–5.24*, Berkeley, 1993.
- Kallistov/Nejchardt/Shifman/Shishowa 1968 = Kallistov D. P., Nejchardt A. A., Shifman I. Sh., Shishowa I. A., *Rabstvo na periferii anticnogo mira*, Leningrad, 1968.

- Karyshkovsky 1960 = Karyshkovsky P. O., Ol'vija i Afinskij sojuz, in *Materialy po Archeologii Severnogo Pričernomor'ja* 3, 1960, p. 57–111.
- Karyshkovsky 1962 = Karyshkovsky P. O., Ol'vijskie assy s isobrazheniem sovy, in *Sovetska Archeologija*, 2, 1962, p. 210–215.
- Karyshkovsky 1988 = Karyshkovsky P. O., *Monety Ol'vii. Očerki denezhnogo obrashčeniija severo-zapadnogo Pričernomor'ja v antichnuju epochu*, Kiev, 1988.
- Karyzhkovski/Kleiman 1985 = Karyzhkovski P. O., Kleiman I. V., *Drevnyj gorod Tira*, Kiev, 1985.
- Knipovich/Levi 1968 = Knipovich T. I., Levi E. I., *Nadpisi Ol'vii*, Leningrad, 1968.
- Kopejkina 1979 = Kopejkina L. V., Osobiennosti razvitija Berezanskogo poselenija v svjazi s chodom kolonizacionnogo procesja, [w:] in *Problemy grecheskoj kolonizacii Severnogo i Vostochnogo Pričernomor'ja*, 1979, s. 106–113.
- Kryzhickij/Rusjaeva/Krapivina/Lejpinskaja/Skryzhinskaja/Anochin 1999 = Kryzhickij S. A., Rusjaeva A. S., Krapivina V. V., Lejpinskaja N. A., Skryzhinskaja N. V., Anochin V. A. *Ol'vija. Antichnye gosudarstvo v Severnom Pričernomor'je*, Kiev, 1999.
- Labree 1957 = Labree B. W., How the Greeks Sailed in to the Black Sea, in *The American Journal of Archaeology* 61 (1), 1957 p. 29–33.
- Latyshev 1887 = Latyshev V., *Issledovanija ob istorii i gosudarstviennom stroe goroda Ol'vi, St-Petersburg*, 1887.
- Lavelle 1992 = Lavelle B. M., Herodotos, Skythian Archers, and the doryphoroi of the Peisistratids, in *Klio* 74, 1992 p. 78–97.
- Leypunskaya 1981 = Leypunskaya N. A., *Keramicheskaja tara iz Ol'vii*, Kiev, 1981.
- Leypunskaya 2001 = Leypunskaya N. A., Torgovlja Ol'vii s o. Chiosom (po amfornomu materialu), [in:] *Mezhdunarodnye otnosheniija v bassejne Chernogo Morja v drevnosti i seredine veka, Rostov nad Donem*, 2001, p. 42–45.
- Lissarrague 1992 = Lissarrague F. N., *L'autre guerrier. Archers, peltastes, cavaliers dans l'imagerie attique*, Paris, 1992.
- Maksimova 1954 = Maksimova M. I., Kratkij put cherez Chernoe More i vremja ego osvoeniija grecheskimi morechodami, in *Materialy i Issledovanija po Archeologii SSSR* 33, 1954.
- Mattingly 1996 = Mattingly, H. B., *Athens and the Black Sea in the Fifth century B.C.*, [w:] O. Lordkipanidze, P. Lévêque (eds.), *Sur les traces des Argonautes*, Besançon, 1996, p. 151–158.
- Mattingly 2008 = Mattingly, H. B., Periclean Imperialism, [in:] P. Low (ed.), in *The Athenian Empire*, Edynburg, 2008 p. 81–112.
- Meggis 1972 = Meggis R., *The Athenian Empire*, Oxford, 1972.
- Meggis/Lewis 1988 = Meggis R., Lewis D., *A Selection of Greek Historical Inscriptions to the end of the fifth century B.C.*, Oxford, 1988.
- Meritt/West 1934 = Meritt B. D., West A. B., *The Athenian Assessment of 425 B.C.*, Ann Arbor, 1934.
- Meritt/Wade-Gery/McGregor 1939 = Meritt B. D., Wade-Gery H. T., McGregor M. F., *The Athenian Tribute Lists*, vol. I, Cambridge, 1939.
- Merle 1916 = Merle H., *Die Geschichte der Städte Byzantion und Kalchedon*, Kiel, 1916.
- Mielczarek 1999 = Mielczarek M., Monety obce i miejscowe w greckim Nikonion, in *Wiadomości Numizmatyczne*, 167/168, 1999, s. 7–20.
- Monachov 2003 = Monachov S. Ju., *Grecheskie amfory v Pričernomor'je. Tipologija amfor vedushchich centrov-eksporterov tovarov v keramicheskoi tare*, Moskva, 2003.
- Moreno 2007 = Moreno A., *Feeding the Democracy. The Athenian Grain Supply in the Fifth and Fourth Centuries B.C.*, Oxford, 2007.
- Noonan 1973 = Noonan T. S., Grain Trade of the Northern Black Sea in Antiquity, in *American Journal of Philology* 94 (3), 1973, p. 231–242.
- Obrin 2002 = Obrin A. V., Morskie torgovyje puti v Pričernomor'e v VII–IV v. do n.e., [in:] S. D. Kryzhickij (ed.), *Severnoe Pričernomor'e v antichnoe vremja*, Kiev, 2002, p. 99–102.

- Osborne 1987 = Osborne R., *Classical Landscape with Figures. The Ancient Greek City and its Countryside*, London, 1987.
- Pinney 1993 = Pinney G. F., Achilles Lord of Scythia, [w:] W. G. Moon (ed.), *Ancient Greek Art and Iconography*, 1993, Madison, p. 127–146.
- Plassart 1913 = Plassart A., Les archers d' Athènes, in *Revue des études grecques* 26, 1913, p. 151–213.
- Preda 1960 = Preda C., Monedele histriene cu roata și legenda "IST", in *Studii și Cercetări de Numismatică* 3, 1960, p. 21–38.
- Quinn 1981 = Quinn T. J., *Athens, Samos, Lesbos and Chios 478–404 B.C.*, Manchester, 1981.
- Rougé 1981 = Rougé J., *Ships and Fleets of the Ancient Mediterranean*, Middletown, Conn, 1981.
- Sallares 1991 = Sallares R., *The Ecology of the Ancient Greek World*, Exeter, 1991.
- Samoylova 2007 = Samoylova T. I., Tyras: The Greek city on the River Tyras, [in]: D. V. Grammenos, E.K. Petropoulos (ed.), *Ancient Greek Colonies in the Black Sea 2* (2 vols.). BAR International Series; 1675 (1–2), Oxford, 2007, p. 435–470.
- Saprykin 1986 = Saprykin S. Ju., *Herakleja Pontijskaja i Chersones Tavričeskij*, Moskva, 1986.
- Saprykin 1997 = Saprykin S. Ju., *Heraclea Pontica and Tauric Chersonesus before Roman Domination, VI–I Centuries B.C.*, Amsterdam, 1997.
- Sarikakis 1924 = Sarikakis R. L., *The Size of the Slave Population at Athens During the Fifth and Fourth Centuries Before Christ*, Urbana, 1924.
- Sekerska 1976 = Sekerska N. M., Archaicheskaja keramika iz Nikonija, in „*Materialy po Archeologii Severnogo Pričernomor'ja*” 8, 1976, s. 81–95.
- Sekerska 1989 = Sekerska N. M., *Antichnyj Nikonij i ego okruža v VI– IV w. do n. e.*, Kiev, 1989.
- Sekerska 2007 = Sekerska N. M., The Ancient City of Nikonion, [in]: D. V. Grammenos, E. K. Petropoulos (ed.), in *Ancient Greek Colonies in the Black Sea 2* (2 vols.). BAR International Series; 1675 (1–2), Oxford, 2007, p. 471–506.
- Shcheglov 1987 = Shcheglov A. N., Severopontyjskaja torgovlja chlebom vo vtoroj polovinie VII–V v. do n.e., [w:] O. Lordkipanidze (ed.), *Pricharnomor'e v VII–V v. do n.e.*, Vani, 1987, p. 99–122.
- Shcheglov 1990 = Shcheglov A. N., Le commerce du blé dans le Pont septentrional (seconde moitié VIe–Ve siècles), [w:] O. Lordkipanidze, P. Lèvègue, *Le Pont-Euxin vu par les Grecs*, Paris, 1990, p. 375–376.
- Shcheglov 1991 = Shcheglov A. N., Pro zjernovyj potencijal antichnyh dierzhav Pivnichnovo Prichjernomor'ja, in *Archeologija*, 1991, p. 51–58.
- Shelov 1967 = Shelov D. B., Zapadnoe i Severnoe Prichernomor'je v antichnuju epochu, [w:] *Antichnoje obshchestvo, Trudy konferenciji po izucheniju problem antichnosti*, Moskva, 1967, p. 219–224.
- Stadter 1989 = Stadter P., *A Commentary of Plutarch's Pericles*, London, 1989.
- Staerman 1960 = Staerman E. M., O nekotorych voprosach istorii rabstva, in *Vestnik Drevnej Istorii*, 4, 1960, p. 134–139.
- Surikov 1999 = Surikov I. E., Istoriko-geograficheskie problemy Pontijskoj ekspedycji Perikla, in *Vestnik Drevnej Istorii*, 2, 1999, s. 98–114.
- Tsaneva/Panayotova 1990 = Tsaneva M., Panayotova K., Antichni nekropoli na Apolonia, in *Arkheologičeski Otkritiya i Raskopki*, 1990, p. 77–79.
- Tsetskhladze 1990 = Tsetskhladze G. R., Zu den kolchischen Sklaven in der griechischen Welt, in *Klio* 72, 1990, p. 129–151.
- Tsetskhladze 1997 = Tsetskhladze G. R., On the Pontic Grain Trade in the Archaic and Classical Periods, [in:] *Antichnyj mir Bizantija*, Charkov, 1997, p. 243–252.
- Vinogradov 1989 = Vinogradov Ju. G., *Političeskaja istorija ol'vijskogo polisa VII–IV do n.e. Istoriko-epigraficheskie issledovanie*, Moskva, 1989
- Vinogradov 1998 = Vinogradov Ju. G., *The Greek Colonisation of the Black Sea Region in the Light of Private Lead Letters*, [w:] G. R. Tsetskhladze (ed.), *The Greek Colonisation of the Black Sea Area*, Stuttgart, 1998, p. 153–178.
- Vinogradov/Zolotariev 1999 = Vinogradov Ju. G., Zolotariev M. I., Chersones iznachalnyj, in *Drevnejshije gosudarstva Vostočnoj Evropy 1996–1997*, Moskva, 1999, p. 91–129.
- Vos 1963 = Vos M. F., *Scythian Archers in Archaic Attic Vase-Painting*, Groningen, 1963.

- Vulpe 1997 = Vulpe A., En marge de Ps.-Skymnos 766–770, [in:] G. Simion et al. (eds). *Premier age du fer aux bouches du Danube et dans les regions autour de la mer Noire*, Tulcea, 1997, p. 181–191.
- Walbank 2008 = Walbank M., Proxeny and Proxenos in Fifth-Century Athens, [w:] P. Low (ed.), *The Athenian Empire*, Edinburgh, 2008, p. 132–139.
- Zaginaylo 1966 = Zaginaylo A. G., Monetnye nachodki na Roksolanskom gorodichshe (1957–1963 gg.), „*Materialy po Archeologii Severnogo Prichernomor'ja* 5, 1976, p. 100–130.
- Zaginaylo 1976 = Zaginaylo A. G., K voprosu ob ekonomicheskikh svyazach Zapadnogo–Severo-Zapadnogo Prichernomor'ja v VI–V vv do n.e. po numizmaticheskim dannym, in *Materialy po Archeologii Severnogo Prichernomor'ja* 8, 1976, p. 68–82.
- Zedgenidze 1979 = Zedgenidze A. A., K voprosy o prichinach osnovaniya Chersonesa, [w:] O. Lordkipanidze (red.), *Problemy grecheskoj kolonizacii Zapadnogo i Vostochnogo Prichernomor'ja*, Tbilisi, 1979, p. 78–82.
- Zograf 1951 = Zograf A. N., Antichnye monety, in *Materialy i Issledovanija po Archeologii SSSR* 16, Moskva, 1951.
- Zolotarev 1979 = Zolotarev M. I., Novye dannye o drevnich morskich putjach v Ponte Evksinskom, [w:] *Problemy grecheskoj kolonizacii zapadnogo i Vostochnogo Prichernomor'ja*, Tbilisi, 1979, p. 9–10.
- Zubarev 2005 = Zubarev V. G., *Istoricheskaja geografija Severnogo Prichernomor'ja po dannym pismennoj tradicii*, Moskva, 2005.

THE COMMERCIAL NETWORKS IN THE BLACK SEA REGION
AND TRADE WITH ATHENS IN THE CLASSICAL PERIOD
(Abstract)

The political changes had found their influence in at political and economical situation in Pontus Euxinus region but it didn't effect in collapse of the maritime market – neither internal nor external one. The new situation forced Athenians to undertake more direct and individual actions but it only proves that the goods from the Black Sea played some role in maritime trade network. Probably in the 4th century BC they even were more important for Athens which lost their political power and economical support of Delian League. The leading position of Athens allowed them to control Pontic trade in the 5th century BC but and the experience which they acquired and had opportunity to continue trade contacts with Pontic cities in the 4th century BC.

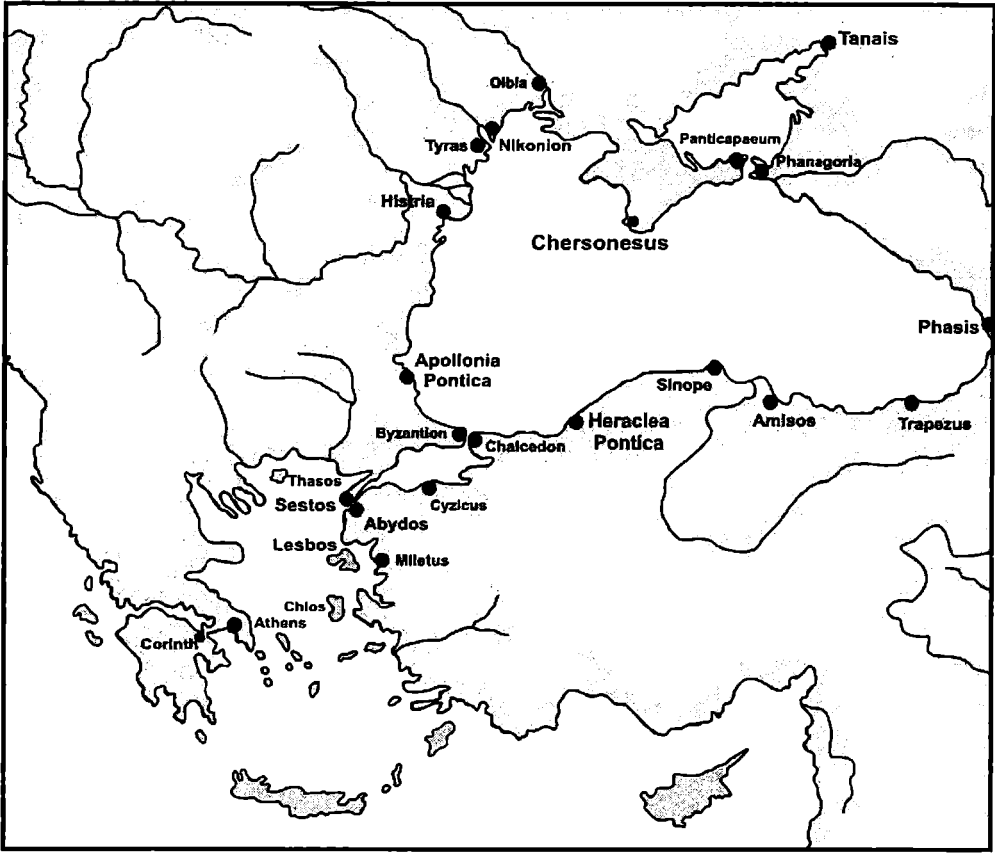


Fig. 1. The Greek colonies at the Black Sea (draw. I. Głuszek)

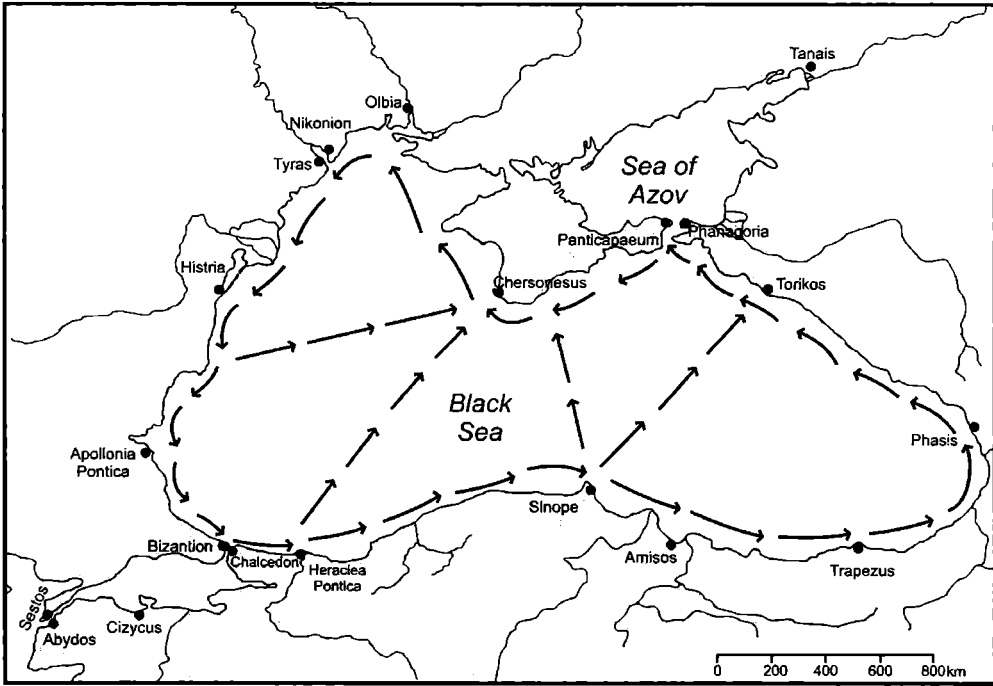


Fig. 2. Sea routes in the Black Sea basin in Classical Period (draw. I. Głuszek)