

époque (II^{ème} siècle ap. J.-C.). Nous observons, tout d'abord, qu'il s'agit d'un propriétaire (ou peut-être armateur) d'un navire commercial, qui a repris une grande quantité de statuettes (en or, en ivoire et en pierre), certes, d'un producteur athénien (ou de quelque part d'Attique) qu'il voulait vendre dans les villes d'Ionie. Le texte parle clairement de l'intérêt personnel de l'armateur, à savoir celui de transporter et de commercialiser les statuettes. Aussi, l'intention de l'armateur était de commercialiser la cargaison de son navire.

Le terme par lequel on désigne l'armateur du navire sur lequel Apollonios voulait s'embarquer était celui d'*emporos*, marchand important mais aussi, souvent, tout comme dans ce cas, armateur ou transporteur. Il faut faire quelques précisions sur la sémantique de ce terme. La première, et la plus révélatrice, confirmée par le passage susmentionné, se rapporte au plurisémantisme des termes grecs qui nommaient des marchands ou des armateurs.

Ainsi, la terminologie grecque relative aux personnes de la sphère des relations commerciales (*emporos*, *kapelos*) est relativement confuse et ceux qui s'occupent de ce domaine commencent par la fausse prémisse que tous les commerçants du monde gréco-oriental étaient classifiés selon des critères rigoureux, généralement acceptés. En réalité, ces critères étaient beaucoup plus élastiques que nous nous imaginons aujourd'hui³. C'est pourquoi on a montré à juste raison que la traduction du terme *emporos* ou *naukleros*, était une combinaison artificielle de concepts antiques et modernes, en soutenant dans ce sens l'utilisation du terme grec⁴. On a souligné aussi que ce terme, tout comme celui de *navicularius* échappe aux définitions modernes parce qu'au long du temps, les fonctions de ces personnes se sont modifiées et se sont superposées. On ne peut pas accorder à ces termes des valences uniques, en faisant abstraction de la région où ils sont mentionnés ou du contexte chronologique⁵.

Bien que ceci soit le sens général des termes ci-dessus mentionnés, il faut mentionner le fait qu'à l'époque romaine interviennent des modifications qui imposent une nuance par rapport à la définition du domaine d'activité de ces deux catégories de commerçants. Par exemple, l'analyse des sources épigraphiques de cette période montre le fait que les *emporoi* n'étaient pas de commerçants strictement spécialisés, leur activité s'intégrant dans ce qui s'appellerait des affaires commerciales d'envergure⁶. Il est significatif à noter de ce point de vue leur présence dans le contexte du trafic de marchandises des directions commerciales dont l'intensité était bien motivée telles que celles qui assuraient le commerce entre le Proche Orient et les Indes ou la Chine par la mer Rouge⁷. D'ailleurs le contexte où ils sont mentionnés est lié, en général, au trafic maritime de marchandises d'où il résulte aussi la qualité de grands commerçants de ceux-ci⁸. Ce qui nous semble être important est aussi le fait que les *emporoi* commercialisaient des produits par des intermédiaires qui pouvaient être même des membres de leurs familles ou purement et simplement des intermédiaires-revendeurs⁹. Il résulterait donc que les *emporoi*, qui sont en général mentionnés dans le contexte de la navigation commerciale¹⁰, étaient de grands marchands maritimes dont les affaires visaient le trafic de marchandises à grandes distances¹¹.

Le passage de l'ouvrage de Philostrate, où le propriétaire du navire, désigné d'une manière très claire par le terme d'*emporos*, est suffisant, à mon avis, afin de constater une confusion terminologique réelle dans ce domaine. Pourtant, plusieurs passages de certaines sources littéraires antiques, ou des scholies byzantines selon le modèle des travaux antiques, démontrent, sans conteste, le fait que, *emporos* était, également un grand marchand et un transporteur ou propriétaire de navires commerciaux. Ainsi, dans une scholie tardive au Aristophane¹², on précise le fait qu'*emporos* était celui qui faisait des affaires sur mer. Encore plus révélateur est

³ Finkelstein 1935, 320-321.

⁴ Paoli 1930, 23-24.

⁵ Une analyse pertinente de la terminologie grecque relative aux personnes de la sphère des relations commerciales (Finkelstein 1935, 325-336.) met en évidence, en vertu des sources littéraires, le sens des deux termes, *emporos* et *kapelos*, ainsi que la spécificité de chacun. Ainsi, tandis que le *emporos* était un grand commerçant maritime qui s'occupait du commerce interprovincial, le *kapelos* représentait-il le commerçant local, en fait, le marchand „au détail“. Cette différence résulterait même de la terminologie commerciale grecque, selon laquelle *kapelos* signifiait le commerce local et *emporos* le commerce interprovincial (Hasebroek 1923, 393-425). De plus, quant au terme de *kapelos*, on a montré qu'il concernait seulement le marchand qui achetait des produits directement du producteur tandis que celui qui achetait d'un autre commerçant (étant donc intermédiaire) était désigné par le terme de *palinkapelos*.

⁶ Rougé 1966, 274.

⁷ Casson 1990, 195.


⁸ Velissaropoulos 1980, 36.

⁹ Rougé 1966, 271.

¹⁰ Velissaropoulos 1980, 35.

¹¹ Heichelheim 1938, 705.

¹² Schl. in Aristoph. (Schl. plut., 521, 28):

C. 

L'épave contenait¹⁵ plus de 600 amphores, certaines ayant le sceau sur l'anse : **ZHN ΦΙΑΑ** et **NΦ**, qui font partie de ladite «Zenon Group». Dans une première acception, due à V. Grace, les amphores de cette épave étaient considérées d'origine égyptienne et mises en relation avec le célèbre Zénon de Caunos qu'il serait engagé dans le commerce du vin avant de devenir intendant de la dôrea du diocète Apollonios. Dans ce cas, la cargaison du navire aurait été formée d'amphores produites en Egypte, peut-être sur le domaine administré par Zénon de Caunos, et destinées à la commercialisation, éventuellement en Asie Mineure. Une autre hypothèse, fondée, en principal sur des analyses par fluorescence X effectuées au laboratoire de céramologie de Lyon, est formulée en faveur d'une origine cnidienne des amphores de l'épave de Serçe Limanı B. La première hypothèse me paraît être plus plausible, et, dans ce cas-là on aura affaire à un transport d'amphores égyptiennes vers Asie Mineure.

Culip D, Espagne, (Cala Culip, Cap de Creuse), datée à l'époque de Vespasien.

C'est une épave très riche en objets découverts : environ 100.000 pièces, entre lesquelles : des amphores Dr. 20 (BARN, CALPC, LSTRL, ROMANI), d'origine italique. 1.500 coupes, produites en Baetica et plus de 3.000 pots produits dans les ateliers de céramique de La Graufessenque. La cargaison du navire, contenant des catégories de produits fabriqués en Italie, en Baetica et au sud de la Gaule, suggère d'une manière très claire le trajet choisi par l'armateur afin de pouvoir reprendre des marchandises céramiques, commandées avant probablement, et qu'il pouvait vendre, à son tour, à des commanditaires des centres inconnus.

De l'analyse comparative des informations offertes par les découvertes de certaines épaves de la Méditerranée et par les sources littéraires et épigraphiques, on peut tirer quelques conclusions préliminaires concernant l'organisation du commerce maritime de cet espace. Ainsi, la découverte dans certaines épaves (Culip D, Serçe Limanı B, Kyrenia) de quelques charges formées, le plus souvent, d'amphores produites parfois dans des régions éloignées de l'endroit de la découverte des épaves, confirme les réalités suivantes :

1. le fait d'établir des relations directes entre les producteurs de marchandises et les marchands (ou armateurs);
2. l'existence des commandes préalables de la part des commerçants, confirmées par les producteurs, en vue du transport des marchandises dans des points connus d'avance;
3. la fixation et la préparation des routes commerciales, en vue de la reprise des marchandises de régions différentes (voir le cas de l'épave de Culip D);
4. la fréquence du trafic de marchandises sur certaines routes commerciales, mise en évidence à partir de l'analyse de la charge des épaves et du tonnage des navires était directement proportionnelle à l'importance des marchandises commercialisées.

L'évaluation de la cargaison de quelques épaves hellénistiques et romaines, à laquelle on ajoute des informations littéraires peu nombreuses, mais importantes, nous offre des indices précieux concernant un aspect essentiel de l'économie antique : le rapport entre la demande et l'offre.

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¹⁵ Empereur, Tuna 1988, 344.

Natural Resources of the Lower Dnestr River Area and the Economic Potential of Tyras and Other Ancient Centers of the Dnestr River Estuary Area

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Rezumat: *Articolul prezintă evoluția geomorfologică a limanului Nistrului, zonă în care a existat anticul Tyras. Analiza este bazată atât pe studii moderne, cât și pe izvoarele literare și epigrafice antice insistând pe resursele naturale existente în această zonă.*

Cuvinte cheie: *resurse naturale, zona Nistrului Inferior, potențial economic, Tyras.*

Key words: *natural resources, Lower Dnestr River area, economic potential, Tyras.*

Ancient Tyras was founded on the western bank of the Tyras River twenty kilometers from the sea. In archaic times the natural environment differed from the present time. Ancient authors also pointed out that fact. Moreover, natural conditions changed during a long period of existence in ancient Tyra and medieval Belgorod.

The discrepancy between the archaic and modern geographical situation, subsequently described in the works of ancient and modern authors, was widely discussed. In 1978 Agbunov outlined the evolution of a bank line in the lower Dnestr River area¹. It was stated that two thousand years ago there was no estuary in the place where the river met the sea. The Tyras flowed into the sea in two arms. Between them, there was an island inhabited by Tyragets², which had been mentioned by Pliny. The island had been flooded in the time of the Nymphaea transgression. The place where the river met the sea was located more to the west, near the southwest end of the Budaksky (Šabolatsky) estuary³. The recent version states that in the sixth and fifth centuries B.C. the Tyras had one main deeper S-shaped riverbed with the cities of Tyras and Nikonia situated on its banks and a shallower western riverbed which joined the main riverbed higher up.

Later, in the fourth and third centuries B.C. „another deeper riverbed of the Tyras appeared”⁴. It was proved by the fact that a settlement of Molog III and a settlement of *Zatoka I* was not located on the bank of the modern estuary but farther on the mainland. That fact made Ohotnikov assume that the settlements had been located primarily on the bank of the river, and only after the riverbed had deviated to the east did they appear at a distance from it⁵.

This hypothesis seems to be far-fetched and not proved by geological research. It should be mentioned that there were two Hellenic settlements discovered in 2004 located on the same line with the settlement of *Zatoka I* on the bank of the modern estuary. All the space around the village of Shabo, which is located directly on the bank of the estuary, and the area between the bank and the railway line (the investigation of the Belgorod-Tirsky expedition, 2004) were occupied by the settlements related both to pre-Roman and Roman times. Part of the settlements is on the same line with the settlement of *Zatoka I*. Thus, there were settlements which simultaneously existed on the bank of the river Tyras which coincided with the bank line of the current estuary.

The Tyras, one of the rivers in the Scythian area⁶, influenced the infrastructure of the region. It was not only a waterway connecting the seaside with continental areas but also a source of fish. Besides, the river supplied water for fields and cattle. In archaic times the Tyras was a deep, rapid and navigable river described by some ancient authors⁷.

The level of the sea was lower in archaic times. It is difficult to ascertain for sure as it varied during the archaic period. According to Shilik, in the second half of the first millennium B.C. during the Phanagoric

¹ Agbunov 1978.

² Plin., *Nat. hist.*, IV, 82.

³ Agbunov 1979, 136.

⁴ Ohotnikov 2002, 251.

⁵ Ohotnikov 2002, 251.

⁶ Herod., IV, 47, 51.

⁷ Val. Flac. *Arg.*, IV, 84-85; Ovid., *Ex Ponto*, IV, 10, 50; Ps.-Svymn, 798-803; Ps.-Arr., *Peripl*, 87; Strabo, VII, 3, 15.

regression, the level of the sea could be at least three to four meters high but not more than seven to nine meters high⁸. In the first century A.D. the level began to rise and reached its maximum height by the beginning of the second half of the first millennium A.D. (Nymphaea transgression). It caused damage to the old banks. The island of the Tyrageis went underwater. This time is remarkable for creating a Dnestr lake. As a result of this process, there is no doubt that some riverside areas of Tyras and Nikonia plunged into the water. As a result of this situation, Tyras had to expand to the west. The lower Buh area was in a similar situation. The island of Berezan originated from a peninsula. The Berezan and Sositsky lakes along with the Yagorlitsky bay also were formed⁹.

It is very important to determine the climate at the time when the Hellenics inhabited the northwest pre-Black Sea area. There is no general approach to the periodization of climate changes in this region. Researchers use the Blytt-Sernander chart; according to it, the seventh to fourth centuries B.C. represented a subboreal period, and the third century until the present day represented a subatlantic one. Some data state that the climate on the lower Dnestr River area in the Iron Age was similar to the present one with some minor changes¹⁰. The adjacency of the geographic position of the lower Dnestr River to the lower Buh River areas determines similar climate conditions. Having been drier before, the climate in the seventh century B.C. became warmer and damper and reached its hottest peak in the fourth and third centuries B.C.¹¹. Later, until the end of the first century B.C., the climate became dry and droughty; then it changed to moderately hot and humid. In the fourth century B.C. a droughty period returned¹².

Regarding Tyras, we have no evidence either from ancient authors or from epigraphic sources to reconstruct the climate peculiarities and natural resources of the lower Dnestr River area. The only exception is Pseudo-Scymn who wrote, „The river of Tyras is deep, with lots of pastures around. It gives fish and is safe for cargo boating” (vv.798-803). Pseudo-Scymn pointed out only rich pastures. Really, in the time in which we are interested, the river was located in a steppe zone. Flood lands were very important for the development of farming; therefore, the author mentioned that resource in particular.

It should be mentioned that there was a forest resource in that area. At that period forests occupied the floodplain territories of the Tyras¹³. The hollows were full of bushes (dog-rose and blackthorn) and trees (willow, elm, alder, oak, birch, teil, maple, beech, pine, fir, poplar, and acacia), the pollen of which had been found in paleontological profiles of the northwest pre-Black Sea area¹⁴. The remains of those plants can be seen nowadays in the hollows near the Dnestr Lake and on the lower terrace of its banks. Wood resources allowed the ancient people to build private homes, fortification constructions and public buildings, to make domestic things, and to develop the metallurgical industry and shipbuilding. This assumption is confirmed by numerous findings of ash and objects related to those industries and the discovery of smelters and the remains of wooden objects. The ancient author Zocim also pointed out the building of thousands of ships near Tyras by barbarians¹⁵.

The wild nature of the lower Dnestr River area was varied. One could find wolves, hares, reindeer, roes, and beavers in the forests near Tyras. Flocks of saigas (*Saiga tartarica*) had begun to increase since the third and second centuries B.C.¹⁶. There were bustards, grey partridges, steppe eagles, black grouse, wood grouse, geese, swans, ducks, cranes, and pelicans. It is necessary to mention that hunting for wild animals in the archaic communities was of secondary importance. The segment of hunting for wild animals in the lower Dnestr River area did not exceed 5%¹⁷. The ancient Greeks who lived in the lower Dnestr River area paid more attention to raising neat and small cattle, pigs, and horses.

There are reasons to believe that raising cattle, farming, growing grapes, and fishing played an important role in the life of the inhabitants of Tyras. The rich soil contributed greatly to farming¹⁸. The rich soil was typical for the north and northwest pre-Black Sea areas. It was mentioned by ancient authors. Strabon wrote, „The rich soil which had been once ploughed gave a thirty-times harvest”¹⁹. Obviously, the ancient author exaggerated the harvest rate. It is necessary to mention that the left bank of the river possessed richer soil than the right bank.

⁸ Šilik 1975, 72, 73.

⁹ Kryžickij *et alii* 1999, 27-28.

¹⁰ Kryžickij, Čepalyga, Volontir 1988; Kremenetsky 1991.

¹¹ Kryžickij *et alii* 1999, 28-29.

¹² Ievlev 1997, 8, 9; Brujako 1999, 32, fig.7.

¹³ Sokolsky 1971, 16.

¹⁴ Brujako 1999, 37.

¹⁵ Zoc., I, 42.

¹⁶ Dinesman 1977, 13.

¹⁷ Brujako 1993, 11.

¹⁸ Brujako 199, 33.

¹⁹ Strabo., VII, 311.

Therefore, the left bank was more inhabited than the right one. Only Tyras on the right bank has remains dating back to the sixth and fifth centuries B.C. There were many early settlements on the left bank²⁰.

Taking into consideration the various findings of millstones and grinders and the remains of grain, we can state that people in the lower Dnestr River area grew wheat, millet, and grapes²¹. The growing of grapes is proved by numerous embossings of grapevines and clusters on the coins of Tyras and the discovery of stone presses which were used for making wine.

Tyras was located near the deposits of some rare materials. There were deposits of shale, limestone, sand, and clay which were used both as construction materials and as materials for making ceramics. Not far from the lower areas of the Dnestr, there were abyssal rocks which were used for making labor tools for grinding and milling. In the upper reaches of the Yuzhny (South) and the Buh (Hypanis), there were deposits of sandarac, tin, silver, and gold²². In the lower areas of the Dnestr, there were salty lakes which were a source of salt²³. There were deposits of haematite sands not far from Tyras. They were found in the area of the Odessa shoals, some parts of which had been higher than the surface of the sea in the first millennium B.C. Such deposits were found in the Budak swell²⁴. The Carpathian-Balkan region with rich deposits of various metals is not far from this region.

Naturally, such a location as Tyras and other antique cities of the lower Dnestr River area had to sustain the dynamic development of Hellenic centers. But why did the ancient Greeks appear in the lower areas of Tyras so late? On the whole, this region was more preferable to be inhabited than other lands of the north pre-Black Sea area. It is necessary to mention that, at the end of the seventh and sixth centuries B.C., the region had not been inhabited by barbarian tribes yet. Cimmerians already had left the steppe of the northwest pre-Black Sea area, and the Scythians had not settled stably here yet. No settled population was there. This rather interesting situation has not been explained as yet. Maybe this territory was a kind of *dead* zone separating two worlds. To the west behind the Danube, there was a world of tribes united by the name of "Thracian Halstatt", but its border did not cross the left bank of the Danube in its lower stream and the forest-steppe areas of Moldavia. There were no settlements at that time. They would appear only in the fourth century B.C.

Some nomadic tribes, Scythians in particular, were not too quick to inhabit the *dead* zone. Archeological data testify to the fact that intrusion of those nomadic tribes in the territory between the Danube and the Dnestr was gradual. The first wave of Scythians in the seventh and sixth centuries B.C. did not pass through the steppe but through the forest-steppe. Later, at the end of the sixth and fifth centuries B.C., Scythians began to penetrate into the steppe pre-Black Sea zone. We are aware of some Scythian warrior burials of that period. At the same time there is no barbarian settlement in the steppe seaside zone. Thus, there were very favorable conditions for creating Greek colonies in the lower Dnestr River area. There was good climate, rich soil, a deep river connecting the seaside with continental areas, and the absence of a hostile population. But there was a negative aspect in this situation. The desolated area was not good for trading and getting an additional labor force; therefore, the Greek colonies were slow to develop. The Dnestr's colonies yielded the two Greek colonies, Ister and Olbia. The *dead* zone provided a quiet existence on the one hand but restricted any growth on the other hand.

All works dedicated to an interaction between the antique and barbarian worlds pointed out the profitability of their trade and cross-cultural merger. We will not argue that point but will highlight some problems which are not solved yet.

In spite of the low density of the Hellenic population at the end of the sixth and fifth centuries B.C., it was a period of establishing their economy. The population in Ophius-Tyras at the end of the sixth and fifth centuries B.C. did not exceed 2,800 people²⁵. Nikonia had 800 inhabitants at the peak of its development²⁶. Creation of the Greek colonies would have been impossible in conditions of isolation; therefore, it is difficult to imagine the absolute absence of trade and economic contacts with people who inhabited the steppe and forest-steppe areas. We can claim the affluence of barbarian people in the Greek colonies as proved by the discovery of specific ceramics.

It is impossible to reject the fact of trading with barbarian tribes who lived higher up the river. Some Hios amphoras were found in the Thracian settlements of the Buh-Carpathian region. The amphoras had arrived from antique centers such as Tyras²⁷. Special attention is drawn to the village of Chobruchy, which is located on the left bank near the town of Slobodzeya. The settlement was located in a convenient place near the river crossing. It was a great trade centre similar to the villages of Kamensky and Kapulovsky. There are fragments of imported, festive Greek pottery, ceramic amphoras of the sixth and fifth centuries B.C., terracotta, and fragments of vases

²⁰ Odrin 2005, 14-15; Ohotnikov 1983.

²¹ Odrin 2005, 20-35.

²² Vitr., VII, 7, 5; VII, 31.

²³ Burkser 1928, 55.

²⁴ Brujako 1999, 207, fig. 52.

²⁵ Kryžickij 1997, 63.

²⁶ Brujako 1999, 82.

²⁷ Mateevici 2004, 11-12.

from Thasos, Hersones, Knide, Rhodos, and Paros between the fourth and second centuries B.C. marked with the trademarks of those centres. The settlement was a centre of trade with Greeks from the lower Dnestr area. Paleobotanical and paleozoological research proved that in the sixth century B.C. it was an area for growing grain (*Triticum monococcum*, *Triticum dicoccum*, *Triticum spelta*, millet, barley, and oats). The raising of cattle had been developing. Archaeologists found numerous remains of bulls, sheep, goats, pigs, horses, and dogs²⁸. Arrian echoed Ptolemy's Laga saying about a military campaign of Alexander the Great against the Hettas, "...after having crossed the Danube we walked for the whole night through huge fields"²⁹. Probably, farming products could be delivered to Tyras in exchange for wine, oil, and other goods produced by ancient craftspeople.

In the fifth century B.C. when the Scythian population began to play a more important role in that territory, the relationships between Tyras and the barbarians became stronger. Some researchers think that the Scythians had been establishing their protectorate over some ancient cities of the northwest pre-Black Sea region, Olbia Pontica, Nikonika and, probably, Tyras³⁰. In the fifth and fourth centuries B.C. the Scythians were strong in the military arts. Their political activity was directed to the west. During this time their routes had to pass by Tyras, which created threats to the city. This circumstance made the inhabitants create a system of fortification at the end of the fifth and the beginning of the fourth centuries B.C. On the other hand, the economy of the city was developing rapidly. It would have been impossible if the relationships with the barbarians were hostile. The rapid growth of Tyras is proved by the list of fees of the members of the Athens Union, according to which Tyras paid a phoros (membership fee) four times greater than Nikonika³¹. Thus, one can state that, at the end of the sixth through the fourth centuries B.C., the lower Dnestr area was an influential economic and geographic area possessing both considerable natural and human resources with developed antique and barbarian communities (the Scythians and the Hettas).

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²⁸ Nikulice, Fidel'skij 2004.

²⁹ Arr., *Anabasis*, I, 4, 1.

³⁰ Vinogradov 1989, 90-108.

³¹ Karyškovskij 1959, 111.