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HISTORY OF THE ANCIENT NAVIGATION ON THE BLACK SEA IN SHORT

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The Black Sea coast has been inhabited since ancient times. During the ages different tribes and peoples have been connected with the sea and the big rivers, which flow into it. Today we don't know the names of the tribes that created the highly developed civilization during the Neolith Age and Eneolith Age. But we can definitely say that the people populating the land on the west of the Black Sea during the next Bronze Age (3200 – 1200 B.C.) were called Thracians.

The first data for existing navigation come from the Early Eneolith Age. This is a clay model of a boat found during excavations of the village mound Sava, Varna district (Fig. 1). This site is situated at the lower reaches of the river Golyama Kamchiya, and the object is a dug-out model. According to the archeologists M. Mirchev and D. Zlatarsky it is a religious object. It is made of red clay, roughly moulded, length 6,1 cm, and width 2,5 cm (Mirchev, Zlatarsky, 1960).

During the Stone-Copper Age there was a development of the economical relations between the different cultures of the Black sea coast. There was an intensive trade especially of copper and copper tools basically by sea.

We can talk about systematic trade with copper at the end of the V millennium B.C. (Late Eneolith). It spreads mainly on the Northeast of today's town of Varna and Dobrudja. The cultural center Varna (the settlements near the Varna and Beloslavsko lake) is the most possible starting point for this trade directed to the territory of the cultural complex Kukuteny-Tripolie. The Navigation on the North of Varna could

have been coastwise till reaching the river mouths upstream of the ancient rivers – the Danube, the Prut, the Bug and the Dniester (then the level of the Black Sea was 90 to 120 meters lower than today).

The complex conditions for navigation in the Black Sea (the absence of islands, safe bays and the frequent storms) lay high requirements to the navigators. As the type of the means of transportation is concerned, according to Henrieta Todorova, it is most real to presume navigation by solid ships, equipped with fans and oarsmen (Todorova, 1993).

At the very end of the V th. millennium B.C. the disaster (the Flood) put an end to the brilliant Balkan Eneolith cultures.

We can't say for sure if there was navigation during the Early Bronze Age but we could assume that the people who lived in the coastal settlements at that time were related with the sea. There are a lot of remains from such hamlets: they are eight from the Varna – Beloslav Firth, at Sozopol, at cape Atiya, at the mouth of the river Ropotamo, at cape Urdoviza.

We don't have any data for the Middle Bronze Age but this of course doesn't exclude the possibility of the existence of navigation. We have a range of port centers situated along the whole coast, since the second half of the II millennium B.C. (Late Bronze Age) till the VI th. century A.D., which are evidence of developed sea trade. There are artificial quays and reefs left from them, which at certain periods were used also as ports. Those which started functioning at about the middle of the II millennium B.C. are at cape Shabla (Karon Limen), cape Kalliakra (Tirizis), the north port of Messambria, Apollonia, cape Maslen nos (Tera), the north port of Urdoviza.

For the dating of the objects helped the metal ingot in the form of ox leather, found in 1972 at 8 meters depth at cape Kalliakra (Toncheva, 1973), as well as the numerous stone anchors with openings typical for the Late Bronze Age (Dimitrov, Porojanov, Orachev, 1982).



Fig. 1

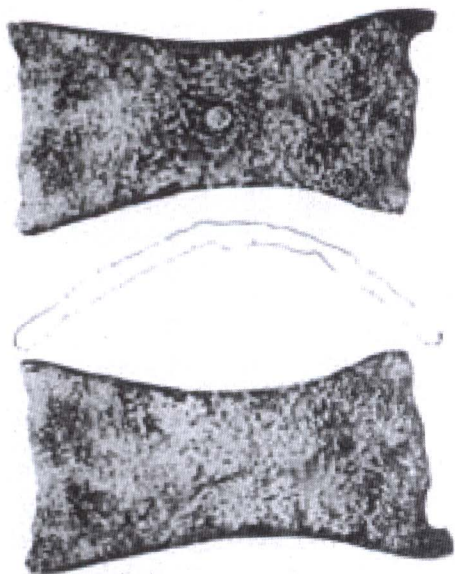


Fig. 2

The metal ingot from cape Kalliakra (Fig. 2) is most close in form to the copper ingots found near Kime, the Euboea Island. Ingots in the form of ox leather are drawn in one Egyptian tomb from XV – XIV century B.C.. It is shown in a scene how the inhabitants of the island of Crete give presents to the pharaoh Thutmose III (1504 – 1450 B.C.) similar ingots (Fig. 3). Ingots with almost the same form, made of copper and tin, found near the cape Gelidonia.

The stone anchors with a groove and one hole (Fig. 4, 5) could be considered most primitive and ancient. The groove was used for tying and the hole – for attaching the ship rope. This type of anchors was used as weights and was convenient for rocky but not sandy bottom. This was the reason for creating anchors with more than one hole. Sharpened wooden spikes were put in the holes, which were without a rope, and they stuck in the sandy bottom. The most common is the stone anchor with three holes. These anchors are called stone-wooden ones.

The two-hole anchors found along the Bulgarian Black Sea coast are rectangular, big in size and made of not well-moulded stone. It is considered that both holes were used for ropes (Fig. 6).

The three-hole anchors found in the Black Sea are of two types. The first ones are very well moulded with well-formed sides and edges and usually are tra-



Fig. 3

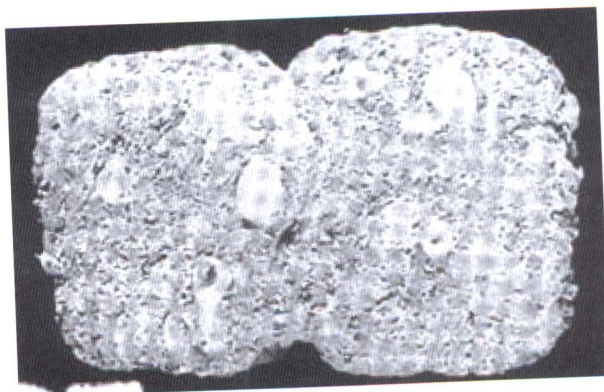


Fig. 4

pezium-shaped (Fig. 7). The holes form an isosceles triangle and are situated in one plane. The anchors, which are very big, have an irregular form and the holes are not symmetrical.

Several reasons, especially the comparison with the famous Mediterranean anchors, lead to the conclusion that they were used mainly in the II millennium B.C. and most probably they belonged to Phoenician, Egyptian, Cretean and Aegean ships.

A pyramid shaped anchor with two holes in perpendicular planes is of great interest. It was found in 1974 on the West of the island of St. Kirk. Such an anchor is drawn on an Egyptian bas-relief kept in the tomb of the pharaoh Sahure (the middle of the third millennium B.C.). The low opening of the Sozopol anchor is rectangular which shows that it was meant for a wooden spike.

We could make a bold assumption that at least a part of the stone anchors with holes belonged to Thracian ships. The Greek historian Diodorus who ascribes the thalassocracy in the Aegean Sea after the Trojan War to the ancient Thracians gives us the reason to make such a conclusion. It is logical to accept a Thracian navigation in the Black Sea. But for now, this is only a hypothesis.

The famous voyage of the ancient Hellenic heroes in search of the Gold Fleece by the ship «Argo» refers to that period. It dates back to the XII th. century B.C. and was glorified by Apollonius Rhodes who lived in the III rd. century B.C.. The ship itself was equipped with a sail and ten oars. The earliest penetration of the ancient tribes in the Black Sea field is mentioned in «Argonautica». But as it was stated above there are evidences for the existence of navigators which date back to XVI – XIV c. B.C., i.e. several centuries before the Argonauts. The result of the difficult voyage was reduced to gaining gold, enlarging the wealth and treasures through piracy.

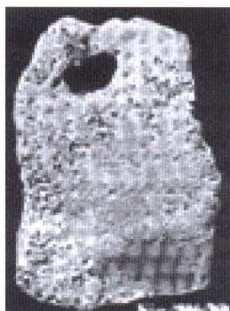


Fig. 5

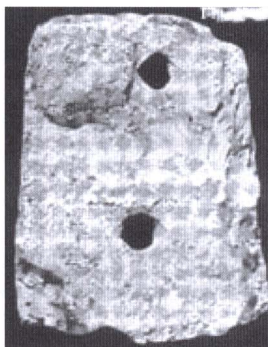


Fig. 6

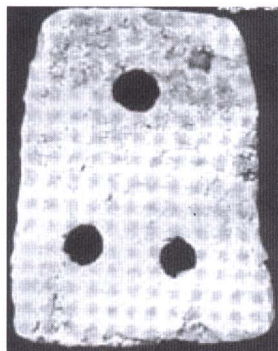


Fig. 7

It is mentioned about contacts of East-Mediterranean peoples with the inhabitants of the Black Sea coast in other Greek legends, too. Such is the story of Odysseus's stay in the land of Cimmerians («Odyssey» book X, XI and XII – it is assumed that the action takes place on the Black Sea); the legend about Achill's stay on the island of Leuca (today's Snake's island) at the mouth of the River Danube; the legend about the stay of Agamemnon's daughter Iphigeneia in Taurida. But the mythological stories do

not allow us chronologically to define when the penetration of the Mediterranean ships in the Black Sea took place.

A number of ancient authors tell us about the penetration of another Mediterranean tribe – the Kari. The very name of the ancient port at the cape Shabla is Karon Limen (when translated it means Karian port). Bulgarian science relates Karian navigation to the period before the Hellenic colonization (between XI and VII c. B.C.). About ten stone stocks that weigh from 30 to 60 kg., found in the aquatory of the Strandzha's coast, are rendered to Karians. At about the end of the period they are replaced by lead ones.

Images of lead-wooden anchors are found on coins from Apollonia Pontica. (Fig. 8).

At the end of the VIII c. B.C. the Great Greek Colonization of the Black Sea started. The first hamlets were swept by Cimerian tribes and the settling of the Greeks was delayed with half a century. The foundation of the Greek colonies took place basically in the second half of the VII and the beginning of the VI c. B.C.. The growing number of colonies and the better knowledge of the coast of the Black Sea turned the initial negative notion about the «inhospitable and gloomy sea» *Ἀξένοσ Πόντος* turned to «hospitable and friendly sea» *Εὐξίνοσ Πόντος*. Miletos played the most important role in the foundation of the colonies, followed by Megara. At about 630 B.C. the

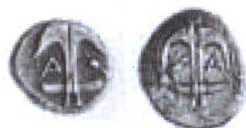


Fig. 8

Miletians finally settled in Sinope. Later, at VI c. B.C., they founded Amisos and Trebizond East of Sinope. In the middle of VII c. B.C. they founded Istria near the mouth of the river

Danube, ten years later – Olbia near the mouth of the rivers Bug and Dnieper. The West European coast was colonized after that – they established Apollonia (Sozopol), Odessos (Varna) and others. In the VI c. B.C. they founded Pantikapaion (Kertch) and Theodosia and at the end of the century Tanais came into existence at the mouth of the river Don. Smaller trading posts were established on the Caucasian coast such as Phasis and Dioscourias. The less active Megarians founded Heracleia of Pontos in 560 B.C., and in 510 B.C. Messambria (Nessebar) and about 422 B.C. inhabitants of Heracleia of Pontos settled in Chersonesos (Sevastopol).

The object of the sea trade was the export of iron, copper, lead, timber, fish, wheat, Thracian and Scythian slaves from the lands at the Black Sea and the Greeks imported pottery, wine, vegetable oil, perfume and jewellery.

We don't know what type and how big the ships, which sailed across the sea, were because we don't have any preserved vessels up to now. Guess work is only possible. We can judge by the size of the anchors for the tonnage of the ships. This is relevant not only for the time of the Greek colonization but for the Bronze Age and the time of the Roman Domination and for the Middle Ages, too. The only exception is the ship at the village of Kiten, Bulgaria, which dates back to XVII or XVIII c. (Porojanov, 2000).

After the conquering of the Balkan Peninsula by the Romans the Black Sea region remained in the outskirts of the state and the field turned into an inner, closed sea. Clay items of the so-called Italian type amphorae, from II c. B.C. to I – II c. A.D., widely spread along the Mediterranean, haven't been found along the West coast till now. Pottery from this period, made mostly in the southern Black Sea towns, situated along the Asia Minor coast is found during underwater researches.



Fig. 9

Proof that navigation wasn't abandoned, as a means of living are the images of vessels on coins from the Black Sea ports (Anchialos – today's Pomorie, Kallatis – today's Mangalia, (Fig. 9).

The situation changed completely at the beginning of IV c., when in 330 the Emperor Constantine the Great (324 – 337) moved the capital in Byzantion, later called Constantinople. This way the Black Sea region turned out to be in the center of the Empire and the coasts – economically strong centers. Crafts and trade became stronger, and so did navigation – a number of ports were restored. The numerous and various amphorae and other pottery material, from IV – VI c. in which the transported goods were put, are a proof.

The fact, that on 18.V.536 the Byzantine Emperor Justinian (527 – 565) turned Odessos into a center of a vast sea region, which included the West Pontus coast but the Kiklades islands, the district Cariya in Asia Minor and the island of Cyprus, points out the greater importance of the Black Sea coast.

During that era goods weren't transported only in amphorae. Evidence for that is the cargo of a ship, loaded with roof tiles, which has sunk near Anchialos. We can date these sunk in the sea tiles to V or VI c. Apparently the transportation of building materials by sea was a usual practice (Lazarov, 1975).

Constantinople, whose geographical situation is extremely favourable, kept in its powers the entire trade by the Black Sea, the Archipelagos and the Mediterranean. Wheat, vegetable oil, salt, leather, iron and iron ore etc. were imported for the needs of the North neighbours of the Byzantine Empire – Gothic and other tribes, and furs, copper and wax was imported.

During VII c. as a result of a home and foreign crisis in Byzantine and the territorial losses, the amount of trade, including the Black Sea one, decreased. It was mainly due to the decline of crafts and the loss of a number of big towns among which are Alexandria, Beirut, Damascus, Antioch and many others.

At the end of XI c. the Black Sea hegemony of Byzantium was broken. The Byzantine fleet experienced more tangibly the influence of the Roman towns – states. Venice was the most active one at the beginning, later followed by Genoa and Pisa. The fight for superiority among the Italians was extremely severe. The Byzantine merchants suffered a hard blow when in 1204 the knights of the Fourth Crusade conquered «the Capital of the World» – Constantinople and the Byzantine Empire disappeared from the historical scene for a certain period of time.

On 13.III.1261 in Nymphaion (Asia Minor) the emperor Michael VIII Palaiologos (1259 – 1282) signed a trade contract with Genoa. According to its terms the Black Sea should have remained closed for foreign ships except for Genoa's and Pisa's. Thus the beginning of Genoa's domination in the Black Sea field was set. In 1263 the Venetians defeated Genoa's navy, which supported the Byzantines. Michael VIII Palaiologos signed a contract with the Venetians, too on 18.V. 1265, which was ratified in 1268. In this way the Venetians received great trade privileges and the rivalry with the Genoas sharpened. The Emperor, forced to trim, renewed the terms of the Nymphaion contract with Genoa.

In XIII – XIV c. Genoa, Venice and Ragusa merchant ships sailed across the Black Sea. The foreign trade of Byzantine was mainly in the hands of Italians. Byzantine fleet was in decline and was almost completely replaced by the strong fleets of the trade republics.

In 1453 the Ottoman Turks conquered Constantinople, an event that led to a delay in the historical development of whole Southeast Europe. The Turks pushed Italian merchants, who had trading posts in Tana and Kaffa, away from the Black Sea trade in the last quarter of XV c. (e.g. Kaffa was conquered in 1479). With the beginning of XVI c. the Black Sea was closed more than ever and turned into a Turkish lake.

Merchants from the town of Ragusa gave up trading by the Black Sea, too.

The history of navigation on the Black Sea was being written by the navigators of the Ottoman Empire and Russia during the following centuries.

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