

ASSUMPTIONS AND ASPECTS RELATING THE CONJUNCTION IN WHICH THE DANUBE CROSSING OPERATION BY ALEXANDER MACEDON AND HIS ARMY TOOK PLACE. ASSUMPTIONS AND ASPECTS RELATING THE CONJUNCTION IN WHICH THE DANUBE CROSSING OPERATION BY ALEXANDER MACEDON AND HIS ARMY TOOK PLACE

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Abstract: Numerous historical sources from antiquity tell about the Danube crossing operation by the Macedonian Army, operation that took place in the year 335 B.C. and at which Philip II attended, still found in royal duties.

The descriptions of the Danube crossing operation, according to the authors, represent unrealistically counterfeit copies of various authors, more or less competent and in good faith, fact that inadmissible attempts the historic reality and truth. Consequently, the work is an analysis of the crossing area and the existing conditions corresponding to that historical stage, namely 335 B.C.

Finally, there are appealed some aspects of the story belonging to the ancient historian Flavius Arianus who comes without important and realistic clarifications.

Under the reign of Philip II, the kingdom of Macedonia becomes the Hegemon of the Greek world, it is adjacent to Thessaly in the southern part, to Epirus and Illyria to the west and northwest and to the north to Thrace, inhabited by free Thracians, who towards north came to the Danube and across it there were the Geto-Dacians. The free Thracians lived similar to the Celts on the hills and tops of hills, which they hardened and from where they offered stout resistance to the earlier attempts of Macedonia to conquer them. A grim episode of this resistance is narrated by Ptolemaeus Lagines an historian scribe of Philip II army.

Macedonia was therefore travelling an auspicious time, being probably the greatest military and administrative power of the Balkans, trying to expand its influence. From this perspective a future leader was sought, Philip II having already reigned for 20 years. In this context it can be assumed that crossing the Danube by the Macedonian army, from which Alexander the Great was part of, was a test of their driving skills; the test was not simple and easy, because from Macedonia to the Danube there was a distance of at least 350-400 km which had to be gone through by a large army, which we appreciate to be around 3,000-4,000 fighters, most of them being footmen who went on roads that went through all forms of relief. The northern area of the Rhodope Mountains, the upper Thracian Plain, the Srednia Zagora mountains, Stara Planina and some edge of the Prebalkan Plateau, this was the possible route to reach the Danube Valley, as it is natural in the mountainous areas, the roads were following the valleys and the water courses. Among them we can mention the Iskar River, which flows from the Balkan Mountains and which after approx. 350 km, flows into the Danube, but a few km

before it washes the ancient colony-city Oescos now called Gigen Caim Bulgana. Almost mirroring, across the Danube there is the old Dacian village called Sucidava, which became Castrum during Roman times and later Valahul Celeiu, next to Corabia.

In connection with the town Sucidava, it existed also during the Byzantine Empire and long before, when it limited its borders during an Avar-Slavic attack and it was conquered, destroyed and deserted at the end of the 7th century our era. Its remains assured the appearance of other smaller towns in the area.

Under the reign of Alexander the Great, the Macedonian kingdom had an important army, estimated at about 10,000 fighters who were well trained, organized and led by competent commanders whose names have gone down in history ever since. Under these circumstances, we believe that crossing the Danube was not done under the command of Alexander Macedon, but under the command of professional generals and owners of the necessary experience. But on the line of counterfeiting reality related to the Danube crossing, we will express ourselves with discretion concerning the narrative of the crossing deployment. Thus it was argued that the Danube crossing took place in one night what we consider to be an aberration of some mentally disordered and incapable scribes, idea which has to be absolutely contradicted for reasons which we shall set out: so starting from the area of Iron Gates, where the Danube banks and close to each other and the distance between them is 1 km. From here the Danube riverbed permanently widens throughout its entire route and it is thought that whatever the crossing point would be, the distance between its banks was at least 1.3-1.4 km. Even assuming a serene night with a full moon, the perception of the bank which had to be reached was not easy or safe. To this we would add the thrust produced by the water stream whose average speed is estimated at 1.2 m/ s, which leads to an oblique crossing, with 2-3 km longer. Even by daytime, this was not a rational possible crossing and more, in the absence of necessary resources, such as rafts and bridges vessels, which had to be built, transported and assembled on the water stream. In their absence, the scribe accompanying the Macedonian army mentioned the use of monoxile boats belonging to the locals. Even this theoretically possible solution, could not practically solve the problem only partially. Who believes that the monoxile boat was a solution then he has never seen a monoxile boat and doesn't know what transport options it has.

As the name suggests, the monoxile boat is a craft, hollowed from a single timber, meaning from a single tree trunk. From here it obviously results the simple fact that a monoxile boat can carry loads that can enter the hollow space, which depends on the length of the tree trunk and of its diameter. To appreciate these dimensions today, we must consider the reality in line with the time considered for this purpose. A first assessment will be based on archaeological traces found on Dacian territory.

Thus, according to Mr. Cristian Crăciunoiu in the book "Ancient Sailing Ships" Ed. Sport-Tourism Bucharest 1983, the first records of monoxile boats are found at the Lower Danube Museum in Călărași, where there is an incised ceramic crock, incision interpreted as a primitive craft (monoxile boat) considered to be performed in the Neolithic of the 4th millennium within the space of Hamangia culture.

Also in the area of the Danube, at the Archaeology Museum of Oltenița, there is an exhibit, a clay model of a vessel called monoxile boat, which is considered to be similar to an analogous pattern, found in the city of Ur in Mesopotamia, which is dated as of year 3500 B.C. The two archaeological tokens confirm only that within the Lower Danube area there were crafts used without providing constructive information on their destination. Maybe this was not possible.

Along with this information resulted from the existence of artifacts, we will use a story that comes from a chronicle written by the Burgundian Knight Walerand de Wawrin, participant in the expedition made by the crusaders knights found on the Danubian track together with the papal fleet in 1445, in the attempt to stop the advance of the Ottomans towards Europe, which had already occupied a number of cities – Danubian cities. Thus, the fleet led by Walerand de Wawrin forming a coalition with the papal fleet led by Cardinal Condolmieri Francesco, shall coordinate their forces with Iancu de Hunedoara and Prince Vlad Dracul of Romania, the successor of Mircea cel Bătrân (Mircea the Elder), who military supported the crusaders fleet with 40-50 monoxile boats, according to the records of Walerand. At this juncture, it is firstly recorded the use by Romania of guns called bombards, which fired with stone or iron cannonballs. Bombards were used in the siege which had as purpose the retaking of the city of Giurgiu; subsequently the crusaders fleet withdrew.

In 1456 Iancu de Hunedoara takes part in the naval battle of Belgrade. On July 14, 1456 the naval battle at Salankemen occurs. On the Danube, Iancu de Hunedoara's fleet defeats the Turkish fleet, thus managing to send aids to the besieged Belgrade, which launches a vigorous Christian counterattack that puts to rout the army of Mohammed II.

Iancu de Hunedoara achieves a brilliant victory and Pope Callixtus the 3rd calls Iancu de Hunedoara "Christ's most powerful athlete". At this historic juncture, the role of navigation and the need for a fleet becomes increasingly clear. Moldavia cannot understand this, and even more on 30 March 1392 Roman, Prince of Moldavia called himself "the great one world ruler of God's mercy, Lord, Io Roman-Prince, which owns the land Moldavia from the mountain to the sea". The historiography records a brief reign of Roman I between 1392 and March 1394. In this respect it is not thought that Roman-Prince-Vodă could do something notable in the field of Moldavian navigational aids. Actually the hydrographic network of Moldavia could not be compared to that of the Land of the Romanians, where the Danube represented an area of deployment of many events, especially military ones. Of these we will present those carried out during Michael the Brave (Mihai Viteazul), who had great concerns for shipbuilding, the use and development of navigation, steps which were officially recorded. Thus, an English report of 22 March 1595, states that Michael's craft, armed with soldiers, attacked all along the Danube the trafficking in ammunition and supplies sent from Hungary and sent to the Ottoman army.

Also, an Italian source of 29 March 1599, coming from Girolamo Capello, the Venetian envoy to the Sublime Porte, who claimed that Michael the Brave's army had captured from the Turks three galleys that he used along with approx. 80 boats "unseen before, called *ici*"; we notice that the boats are, and were already built of planks, so it was another stage of boat construction, which means the abandon of the hollowing technology and therefore the use of boards produced by sawmills, the abandon of the monoxile boat whose transport capacity was limited by the dimensions of the tree trunk imposed by the species of the used tree and by his age.

Thus the monoxile boat remains a wooden kayak, commonly used individually, so having no other enclosed spaces for other transport tasks than that of the single boater.

Choosing the tree trunk as raw material required even from the start a carrying capacity conditioned by the volume which had to be hollowed in the trunk, which, depending on species and age, allowed the completion of a hollowed area whose sizes depend on the trunk diameter and the adopted length. Thus, for rivers, the length of the monoxile boat depended on the characteristics of the watercourse flow path.

Thus, a riverbed containing irregularities and obstacles requires a short boat, easily manoeuvrable, ultimately the capacity of the boat's handling and manoeuvrability depending on

the ratio between its length and width. In conclusion, the completion of the craft depends on what the nature in that area offers us, depending on the geographical and forestry conditions.

Thus, in most Dacian space characterized by plains, plateaus and Pre-Carpathians areas, the oak tree was predominant, which under normal growth conditions reaches diameters of 0.6-0.8 meters. Only secular oaks exceeded the diameter of 1 meter; of course secular oaks are not to be found everywhere, but the abundance of forest oaks vegetation found on the Dacian territory explains that most of the monoxile boats debris found so far were made of oak, a hardwood which has withstood time and which was easy to find. Perhaps other monoxile boats that were made from other species did not withstand time. Thus in the Danube area of meadows, the oak does not grow, but white poplar does and it can reach up to 2 meters in diameter. However, the specific gravity of the white poplar is lower than the one of the oak in a percentage of 40% and in the same report with the specific gravity there is also the density of the wooden material and the time resistance capacity -degradation- and therefore the disappearance of archaeological traces. The fact that there were not found any remains of the monoxile boats belonging to the Danube fishermen from the area is understandable and natural. Of course, the causes that generated the lack of archaeological evidence of real monoxile boats may have other explanations; we will mention a few examples: such an indirect cause could be the usage of different names than the usual attested ones, which because of the lack of information or education, had an area of limited use. Thus the long narrow boat used in most cases individually is known to have come from India, where it was called "log canoe" and it is known as monoxile boat within the European area. In Esse, in the Netherlands there were discovered traces of a modest monoxile boat, made of a pine trunk of 3 meters length and with a circumference of 44 centimetres. We emphasize that the hollow of the trees trunks was not the privilege of the Europeans, the necessary tools being found everywhere: stone axes, chisels, scrapers and drills for lighting the fire, which was used for carving by means of limited firing.

The existence of the hollowed boats is known all over the world, both in Australia, New Zealand, Oceania, and the two Americas (especially in South America) where log canoes were the means of transportation of the nomad populations; we will only notice the unusual length of monoxile boats which often reached 18 meters.

Krieger, the explorer, notes that the populations on the south-eastern coast of Alaska Peninsula were itching after carving the log canoes of cedar and the Indians of Alaska equipped their monoxile boats with carvings of mythical or totemic animals, realizing the process of carving in a careful and painstaking way. In East Africa on Tanganyika Lake, all fishermen had monoxile boats. Finally we say that most discoveries related to water transport come from Egypt, the eastern Mediterranean, and Europe.

The oldest boat discovered and made from a hollowed log dates from the year 7200 BC for the European zone.

Monoxile boats found on the Dacian territory

A monoxile boat called "dubas" was found in September 1992 on the left bank of the Dniester, just below Tighina-Bender, the city's beach, Republic of Moldova. There was found a fragment of a boat hollowed out of an oak, fragment which is now kept in the museum of the city mentioned above. This fragment is part of a larger boat, estimated as being 9 meters and the fragment was named *Dubas* (a larger boat). The word comes from Slavonic and it was founded on the word "dub" which in Russian and Ukrainian means tree-processed wood, hollowed; in European language it would be called monoxile boat. In all likelihood the *Dubas* and its achievement was an activity and a real concern for many people, as there were two villages on

the left bank of the Dniester. At 40 kilometres above Tighina-Bender there is the village Dubăsarii Vechi and even further above, at other 15 km one can find Dubăsari town, the “district center”.

The origin of Dubăsari and Dubas is blurred by the lack of documents. The situation is normal, nearly normal for the territories seized and mastered by the Soviet power, especially in border areas.

Our only option is to use what there is, general information and especially that which is persistent and stable in time. The toponyms and their etymology, as well as those resulting logically are transmitted directly by customs, traditions, myths or stories – which are told from generation to generation; thus the Bessarabian writer Tudor Colac in his volume “Crăuleni’s Land” - ethnofolkloric cradle, states that after a legend, some time ago on these lands (where the Dubasari villages are) there were some stray needy fishermen, their only wealth being some old log canoes, almost obsolete, called *dubasuri*. They loved the hill which housed them and not far from there, the oak forest was murmuring. They didn’t use the old log canoes too much; they raised them on the shore and left them to their fate. The place where they made their huts was called Dubăsarii Vechi. The story is logical and natural, so even possible and of course it should be continued. Also logical and natural is to consider that fishermen remain fishermen, thing that urged them to make new boat, *dubasuri*, which apparently raised the locals’ interest, for Dubăsarii Vechi grew and flourished, becoming an important settlement. It is believed that this condition is not only due to fisheries. We believe that a more important revenue source was building and selling their *dubasuri*.

Next, the authors will present some assumptions based on the reality that has been documented.

After the name given to the craft, nor canoe or small boat, or monoxile boat, it seems that those needy fishermen were Ukrainian-Slavs. They lived between Bug and Dnieper, or maybe in a smaller area, only between the Bug and Dniester, where it is known that the Slavs tribes called *anți* lived; they were defeated by the Avars, who in the year 562, under the leadership of the khan called Baian, reached the Danube.

We will also mention other influences and cohabitation between Slavs and Pechenegs, who participated in the campaign of Igor, King of Kiev, who arrived in Dobruja in 944 our era and the Pechenegs were mentioned in Moldova. We also state that in 968, Svetoslav, King of Kiev, debarked in the delta, leading an army of 60,000 people; but he was defeated.

To all these aspects we will add the fact that the Slavs came from east and spread and inhabit the space around Kiev, from the northern part of Novgorod and to the Dniester, where there was (already) the Geto-Dacian population, who established many towns; these towns’ names contained the specific Dacian phoneme *dava*.

It is also known that at the formation of the Kievlean state, an important contribution was brought by the Varangians – the Vikings’ eastern branch. It is certified that the Slavs settled on the river banks, which forced them to live from fishing and therefore to deal with boatbuilding, a field that they had certainly learned before from the Varangians.

Turning to the two Dniester towns Dubăsari, the authors’ assumption and belief is the following: probably that Dubăsarii Vechi was a Slavic settlement which grew on account of the construction of monoxile boats, which were called *dubasuri* and which were very much-needed particularly in the Moldova of Mușat family (Peter I, Roman I, Alexander the Great, Stephen the Great); Moldova was crossed from north to south by an important network of waterways that had to be both crossed and used. In this regard we believe that the interest of Mușat voivodes was

manifested for these monoxile boats-*dubasuri*, as we would explain below: we will present the arguments of the past and current reality.

Thus, from Dubasarii Vechi, below the Dniester River, at just 4 km far, the place suggestively called “Vadul lui Vodă”, a toponym generated by a reality, as we think. We will state that the title of “Vodă” is specific to Moldovan statehood. The first of the Mușat voivodes who used it, Roman I called himself “Io-Roman Voivode” – meaning *Vodă* and no king or prince. So *Vodă* is a nickname used by Moldovans from the right bank of the Dniester River and this is it. In our opinion, a Mușat *Vodă*, went several times to see for himself the *dubas* and deal with the *dubas* craftsmen.

These technical wonders of the 14th and 15th century and even till the current construction of log canoes, plank boats, possibly due to the emergence of sawmills, human driven or equine and which the historical sources consider them a Germanic accomplishment, origin inferred by the term sawmill, derived from the German term *Säger* which means *saw* and which came around 1500s or earlier in Transylvania and in the Land of Romanians, probably via Saxons.

It is natural that once with the advent of sawmills and of planks to abandon the construction by hollowing the *dubas*; the new plank boats received different names, but basically they kept the main dimensions of monoxile boats and also some specific constructive elements. Thus the ends of monoxile boats are usually identical, aspect kept at the boats called *lotcă*, which are great fishing boats, with a length of 9 meters – close to the 10 meters of the hollow space of the monoxile boat found on Dacian territory.

We will also specify that the emergence of abandoning the monoxile boat construction once with the appearance of the sawmill in the Romanian Principalities (approx. 1500) has not prevented or removed the usage of the already constructed monoxile boats, whose usage is attested by the beginning of the 9th century and even later. Thus in 1974, it was found in the Village of Scoposeni Commune of Gorban, Iași County, a monoxile boat made of poplar wood of 6.3m, made by a craftsman named Oghina. The great advantage of this boat is its simple construction, with a technology accessible to everybody.

Throughout the paper, the authors presented a reverse practical material, designed to allow the reader to find out how Alexander Macedon, who was at the beginning of his ascension managed a performance, so that some historical sources, as the authors believe, consider it an exaggeration. Below, in order to get closer to a possible reality, we have developed an explanatory postscript, which is based on an account delivered by Flavius Arianus, a well known ancient historian.

Most sources found by the authors were children who had the same subjectively counterfeit story. We had the chance to find the account of the historian Flavius Arianus, whose description seems more accurate and closer to the facts. Consequently we will consider this account which we will use, partially reproducing it and in an effort to enhance the borders; the Macedonian royalty decides to trigger a campaign of repercussion and intimidation against the Thracian-Getae, established on the left bank of the Danube.

To this end the Macedonian army was brought on the right bank of the Danube. Alexander, son of Philip II was also part of the Macedonian Army, but historical sources do not indicate the position officially held by Alexander, his plan of crossing the Danube being not known.

Arianus, the historical scribe, claims that Alexander withdrew his ships, probably because on the opposite bank the Thracian-Getae had gathered in large numbers to prevent passage. The

Macedonian Army was estimated at about 4,000 horsemen and over 10,000 foot soldiers. On one of the ships Alexander climbed too. Meanwhile, Alexander changed his route plan.

Thus he ordered that the skin of the soldierly tents to be used for confectioning pleated tubes filled with straw, as rafts. The authors believe that this solution for floating was not known. Until then they knew only the rafts made of simple pleated tubes, filled only with air, but less secure. In parallel the Macedonians stole from locals monoxile boats, carved in tree trunks. The authors think these monoxile boats were less used to transport soldiers, serving merely as guides for crossing the river. As Arianus stated, monoxile boats were used for fishing, for crossing the Danube, but also for piracy. Eventually, Arianus considered that the number of those crossing the Danube was not only about 1,500 horsemen and 4,000 foot soldiers, so not the entire army, as other historians put it. Crossing the Danube was still done overnight. The Macedonians went through the abundant standing corn, so as not to be seen, the progression being done on the left bank of the Danube. With dawn, the Macedonians started treading the wheat with their lances tilted, until they reached the uncultivated sites. But as they left the field, Alexander himself took the cavalry in the left wing and he ordered Nicomar (general) to bring the formation in square position. But the Gets couldn't resist even to the first attack of cavalry. They were amazed by the crossing of Danube at night and by the number and serious organization of the phalanx. Under these circumstances the Getae-Thracians began to flee to a city that lies at a distance of Istrude, a "parasanga". The authors have translated this word as representing a distance slightly larger than the beating of an arrow. Analyzing some data and from some correlations, the authors consider that this city can be considered the old Geto-Dacian settlement called Sucidava, located not far from the present location Corabia, specifically in the area of Lake Celeiu. The Dacians left the so-called city that was not confirmed. Alexander easily conquered the locality from where he took a rich capture and pleased with his deed, crossed happily the Istra in the Macedonian camp, in the same day, located on the right bank of Istra. Sure, this story seems true and possible; it illustrates the direct strategic capabilities of Alexander, who had not yet become "the Great".

Some clarifications needed: the crossing Danube operation was made in 335 B.C. when King Philip II was alive. He was assassinated a year later. The authors consider their approach as a liability towards the truth of real history and not to that counterfeit by some historians.

By their concerns, the authors have the power needed to restore the historical truth.

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