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CZAJKA KOZACKA I OKRĘTOWNICTWO W ZLEWISKU MORZA CZARNEGO XVI-XVIII WIEKU

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Adnotacja. W artykule omówiono podobieństwo tradycji okrętownictwa różnych narodów krajów zlewiska Morza Czarnego XVI-XVIII wieku. Ustalono, że w wyniku tego rozpowszechniło się wykorzystanie przez Imperium Osmańskie małych statków rzecznych i morskich. W szczególności były to czajki osmańskie w celu ochrony przed najazdami kozackimi ujęć Dunaju i Dniepru. W tym samym czasie ewolucja czajek kozackich i sajek dunajskich miała miejsce w kierunku zwiększenia ich siły artyleryjskiej i uniwersalności z powodu konfrontacji ze statkami osmańskimi. Ten wzajemny wpływ był konsekwencją podobnych naturalnych warunków rozwoju przemysłu stoczniowego ludów zlewiska Morza Czarnego, a także trwałej militaryzacji życia pogranicza europejskiego. Pokazał wysoki poziom okrętownictwa narodów, które były w stanie postrzegać doświadczenia zewnętrzne, wzbogacał ich tradycje i stymulował rozwój różnych gałęzi gospodarki.

Słowa kluczowe: czajka, kozactwo, czajka osmańska, sajka, ewolucja okrętownictwa, wzajemne połączenie tradycji okrętownictwa.

COSSACK CHAIKA AND SHIPBUILDING IN THE BLACK SEA BASIN OF THE 16TH–18TH CENTURIES

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Abstract. The article considers the similarity of shipbuilding traditions of different peoples of the Black Sea basin of the XVIth – XVIIIth centuries. It is established that as a result, the use of small river and sea vessels by the Ottoman Empire spread. In particular, these were Ottoman chaikas to protect against the Cossack raids of the mouths of the Danube and Dnipro. At the same time, the evolution of Cossack chaikas and Danube jays took place in the direction of increasing their artillery power and versatility through confrontation with Ottoman ships. This mutual influence was a consequence of similar natural conditions for the development of shipbuilding of the peoples of the Black Sea basin, as well as the permanent militarization of life on the European front. He testified to the high level of shipbuilding of peoples who were able to accept external experience, which enriched their traditions and stimulated the development of various sectors of the economy.

Key words: Cossacks, chaika, Ottoman chaika, saika, the evolution of shipbuilding, mutual influence of shipbuilding traditions.

КОЗАЦЬКА ЧАЙКА ТА СУДНОБУДУВАННЯ В ЧОРНОМОРСЬКОМУ БАСЕЙНІ XVI–XVIII СТОЛІТЬ

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Анотація. У статті розглядаються схожість суднобудівних традицій різних народів країн басейну Чорного моря XVI–XVIII століть. Встановлено, що внаслідок цього поширилося використання Османською імперією

малих річкових та морських суден. Зокрема, це були османські чайки для захисту від козацьких набігів гирл Дунаю та Дніпра. Водночас еволюція козацьких чайок та дунайських сайок відбувалася в напрямку збільшення їх артилерійської потужності та універсальності через протистояння з османськими суднами. Цей взаємний вплив був наслідком схожих природних умов розвитку суднобудування народів чорноморського басейну, а також перманентної милітаризації життя європейського фронтиру. Він засвідчив високий рівень суднобудування народів, які були здатні сприйняти зовнішній досвід, що збагачував їхні традиції та стимулював розвиток різних галузей економіки.

Ключові слова: чайка, козацтво, османська чайка, сайка, еволюція суднобудування, взаємовплив суднобудівних традицій.

Introduction. The legendary warship of the Zaporozhian Cossacks chaika was an effective weapon in the process of military confrontation with the Ottoman Empire in the Black Sea basin. In the XVIth – XVIIth centuries almost no city on the Black Sea coast was insured against attacks by Cossack flotillas. The traditions of Cossack shipbuilding were developed on a new technological basis in the XVIIIth century. Also, this ship became one of the symbols of the freedom-loving Zaporozhian Cossacks, a testament to its ancient military and shipbuilding traditions. At the same time, the emergence of this military-technical phenomenon cannot be explained only by the shipbuilding traditions of the Ukrainian people. Shipbuilding, like many other sectors of economic life, is developing in line with its trends and external influences. Particularly significant are the external influences of neighboring peoples who live in approximately the same natural conditions. The study of shipbuilding in this context is an important area for studying the cultures of different peoples and their potential for development.

Main part. The development of shipbuilding in different countries of the Black Sea basin has acquired widely covered in the scientific literature of various countries. The issues of shipbuilding in the frontier are covered in some way in the works of V. Ostapchuk (USA), I. Bostan (Turkey), R. Gradeva (Bulgaria), V. Milchev (Ukraine) and others. However, the available data need to be supplemented and systematized.

The purpose of this study was to determine the signs of the mutual influence on the evolution of shipbuilding of the Countries of the Danube River Basin, the Ottoman Empire, and the Zaporozhian Cossacks by descriptive and comparative methods. The relevance of this is due to the place of shipbuilding in the history of any country. The vessel has always been the most modern way of transportation for its time which embodied the latest advances in materials processing, navigation, geography, labor organization, martial arts, security, logistics, and more. Therefore, it can be considered one of the signs of the cultural level of society, which is provided by the experience of many generations, a kind of civilization tradition.

The reverse side of the growth of the power of the Ottoman Empire in the 15th-16th centuries was a permanent military tension at the borders, in particular in the area of the Eastern European frontier. Moreover, the confrontation of different societies continued on land and on water. Sporadic attacks of Zaporozhian Cossacks on vessels in the territories controlled by the Crimea and the Ottoman Empire took place in the 15th century, in the particular, the clash near Tyagin in 1492. The attacks had intensified in 1538 when the Ottomans captured the lower reaches of the Dniester and Dnipro.

A similar situation had developed on the Danube border, where military confrontation had also taken place with the use of ships. Gradually, the militarization of border life had become one of the factors in the development of shipbuilding from the Danube to the eastern shores of the Black and Azov Seas. The dominance of the Ottoman Empire in the Black Sea has ensured thanks to a powerful fleet. It consisted of two parts. The basis was galleys, kalyats, galleons, etc. They were used in battles at the sea and coast. However, this was not enough for further advance by land and to control the territories. The second part of the fleet consisted of small vessels for reconnaissance, transportation of goods, and participation in battles. These narrow and long sailing vessels of the river and coastal navigation were generally inherent in the shipbuilding of the Mediterranean and the Black Sea basins. Due to numerous tasks, they have acquired numerous variations – from a cargo river-sea vessel to a luxurious and expensive boat to serve the sultan's harem. One such boat is on display at Istanbul's Maritime Museum. Despite the functional diversity, these vessels had a single name. This is probably due to the general similarity of the design. The name of these vessels 'saika' (turk. 'sayqa') was used in different languages with a specific pronunciation for each of them.

In particular, that was the Danube saika, or shaika (hun. 'sajka'). These boats evolved significantly, as the militarization of the Danube border had led to the development of military shipbuilding. The forerunner of saika can be considered the Hungarian river pinnace (hun. 'naszad') – a light warship, which probably originated under German influence in the late 15th century. It had an oblique sail and towing straps. Together with the bowsprit and steering wheel, its length reached 24 meters. A special feature was two storage cabins – on the bow for the gunner with a light gun, and on the stern for the skipper (Veres, Woodman, 2002: 125).

Undocked saikas (8 – 15 m long) were used by the Ottoman army on the Danube and the Black Sea for transportation of goods and in military affairs during the 16th – 18th centuries (Остапчук, Галенко, 1996: 354). There were also larger saikas up to 25 m long. Their garrison consisted of 18 – 24 rowers, twenty soldiers, and a skipper (Bostan, 2009: 334). At the beginning of the Austro-Turkish War of 1566 – 1568, the armed shallow rowing clinker-built saikas with a capacity of 35 – 40 soldiers were used in the attack of Suleiman the Magnificent army of 100,000. For the same purpose, a number of shipbuilding centers were established on the Danube and its tributaries. About 400 ships were built in the Serbian town Smederevo, Bulgarian Vidin, and Ruse. In addition to these transport saikas, other transport vessels were built, including palandaria. The ships were also built in other cities

controlled by the empire – Krusevac (Serbia), Zvorin (Bosnia), Pozega (Slovenia), Nikopol (Greece) (Gradeva, 2001: 163). The active use of small river transport vessels, according to the Bulgarian researcher R. Gradeva, actualizes the question of local shipbuilding traditions, which the empire inherited with the advent in the Balkans (Gradeva, 2001: 162–164). This is evidenced, in particular, by the clinker fastening of the planking on these saikas, which is typical of medieval technology. At the same time, the researcher emphasizes the Ottoman Empire's repercussions on the peoples of the peninsula: 'The river also brought war and borders closer to the Balkans, helping to militarize the local society, which mostly lived according to border laws, always ready to defend and attack. During the war with the Holy League at the end of the 17th century, this proximity strongly influenced the local population' (Gradeva, 2001: 174).

This affected all areas of its life and, in particular, shipbuilding. In the 17th century, the traditional Danube pinas became longer, lower and received the Turkish name 'saika'. However, the renaming could have taken place under the influence of the Italian 'sajetta' or the Ukrainian 'chaika'. In the 18th century, as a result of specialization, the half-saika, full saika, double saika, and other varieties appeared. The 12m half-saika had low freeboard, shallow draft, two light half-pound guns on the bow and stern, slanted sail, protective shield, towing straps, and up to nine pairs of oars. The double-saika reached 27.5 m, had towing straps, two masts with square sails, which were used as auxiliary, one gun at the bow and six in the sides with gun ports (Veres, Woodman, 2002: 125). Since the 60's of the 18th century the saika evolved into the Serbian sailing and rowing vessels. During the fight against the Ottoman Empire, they were used by Serbian border guards and Zaporozhian Cossacks, who served the Austrian Empire. These ships were characterized by the peculiar naval architecture of that period (transom, bowsprit). This direction of evolution had a distinct universality. Their purpose was to transport soldiers and cargo, guide and protect crossings, patrol, fight with small enemy vessels with the help of 6 – 8 light guns on 'big chaikas' or 2 – 4 guns on 'half-chaikas' (Мильчев, 2007: 41, 61, 62, 74, 76). The universality is also emphasized by the development of sailing rigging.

In the Black Sea frontier zone perhaps the first mention of a Kozak ship under its classic name is recorded in the Polish 'Chronicle of Martin Bielski' of the 16th century. It describes the overcoming of the Dnipro rapids by the Cossacks: 'The Cossacks usually overcome the rapids in their leather boats, which they call chaikas (pol. 'czajki') by taking them downstream and upstream with ropes. According to Greek historian Zonara, the Rus harmed the Greek Caesars in such boats reaching Constantinople from time to time' (Kronika, 1856: 1359). Given that the author died in 1576, this information should be attributed to the date of his death or even to the middle of the century. This is confirmed by the Austrian historian J.C. Engel, who connects the beginning of the construction of leather chaikas with the Cossacks leader Prince Dmytro Vyshnevetsky (Энгель, 2014: 196), who built a fortification of the Cossacks headquarters on the Dnipro Island Mala Khortytsia in 1554. Thus, the very first mention of the chaika indicates a characteristic feature of Cossack's shipbuilding – the creation of universal river and sea vessels with features of succession from ancient Rus times. The occasional use of light leather vessels at sea in the coastal strip cannot be completely ruled out. However, long naval campaigns required stronger vessels. These were the chaikas described in later sources.

In the '30s of the 17th-century d'Ascoli wrote about long hollowed and well-armed chaikas (saiche): 'long chaikas, like frigates' (Описание, 1902: 97–98). Beauplan described in detail the process of constructing such boats by hollowing out of the wood and clinker planking. The Cossacks inherited this method of attachment from the Vikings. In contrast, the Ottoman ships used carvel planking (the planks were laid edge to edge). The Cossacks boat had the equally pointed bow and stern, two oars for control on the bow and stern, a layer of brushwood on the sides, 10 – 15 pairs of oars, 4 – 6 guns, and length up to 20 m. The ratio of length and width reached a value about 5 – 6 times. The garrison consisted of more than 50 soldiers. The sail played a supporting role (Боплан, 2004: 257–259). Thus, the Cossack Chaika was a universal transport and combat vessel for transporting troops, conducting landings, boarding, raids, and more. Flotillas of chaikas comprising several dozen and hundreds of ships began to operate in the Black Sea. The Ottomans often used the name 'şayka' for them, which could be the name of similar vessels used by the Turks in particular on the Danube (Ostapchuk, 1987: 49). The superiority of the Cossack chaikas over the galleys in speed, maneuvering ability, and action on river and sea shoals was the reason for the combat use of such vessels in the Ottoman fleet. Their widespread use was carried out in areas that were dangerous because of the Cossack's threat. It is known about 60 vessels that gathered to defend the Danube and the sea coast in 1614–1615, and the flotilla of 'Kiliya' and 'Ackerman' chaikas that defended the mouth of the Dnipro in 1621 (Остапчук, Галенко, 1996: 351, 357). It was significant that these were not only captured from the Cossacks but also specially built vessels. Regarding their characteristics, V. Ostapchuk and O. Galenko wrote: 'We can assume that the Ottoman chaika was an imitation of a Cossack chaika (or at least they borrowed a lot of its combat features from the Cossacks), with some of its advantages – maneuverability and ability to float in shallow waters of rivers and sea coasts, and by the sea (but there is no evidence that the Ottomans tied their chaikas with reeds for buoyancy, as did the Cossacks...)' (Остапчук, Галенко, 1996: 354). Taking into account the high level of shipbuilding of the Ottoman Empire, probably the 'Ottoman chaikas' for the Black Sea had planked framing and were fastened edge to edge. This, in turn, could not remain unnoticed by the Cossacks, who at that time made their boats on the basis of dugouts with clinker planking.

At the end of the 17th century, the Moscow Empire gradually joined the competition for supremacy at the Black Sea. In the '30s of the 18th century, Russian Field Marshal Burkhard Christoph Graf von Münnich

recognized the Cossack boat called 'dub' as the most suitable for sailing across the rapids. His schematic drawing depicted a keel at the base of the ship instead of the dug-out known from d'Ascoli and Beauplan's descriptions (Чертеж (248/1/558): 19). This testifies in favor of the spread of planked ships building in Zaporizhia. Its beginning can be attributed to the last decades of the 17th century. This period is considered to be the time of appearance of the Cossack boat 'dub' (after the material dub (eng. oak) (Жавжарова, 1999: 45). The quality of this wood allowed replacing the hollowed wood in its base with a lighter keel without reducing the strength of the boat.

During the 18th century, Zaporozhian Cossacks worked on state-owned shipyards and constructed the planked ships. In particular, the 'novomanirna Cossack boats' were built at the Zaporizhia shipyard during the Russian-Turkish War of 1736-1739. The underwater archeological research and reconstruction of one of such boats raised from the Dnipro bottom near the island of Khortytsia in 1999 prove its resemblance with the Cossack chaikas of the previous century (Кобалия, Нефедов, 2005: 138). Another example is the 'Zaporozhian boats' of the Kremenchuk shipyard of 1787-1791 (Контракт (243/1/2): 1). They are also identical in size, proportions, purpose, and even names. However, due to the increase of combat missions, 'Zaporozhian boats' took a separate place. To counter the Ottoman fleet of battleships, they were equipped with 18-30 pounders guns (Материалы, 1901: 86, 123, 213, 228). As a result, the Cossack variety of gunboat appeared, which became the first such ship in the fleet of the Russian Empire.

Thus, the interaction of different shipbuilding traditions was inherent in the initial stage of the creation of the Russian Black Sea Fleet. However, it was not limited to the participation of Ukrainians. This is proved in particular by the data about the construction of Kirlangichs – sailing-rowing artillery vessels of Mediterranean origin 25-30 m long at the Kremenchuk shipyard. They were built by other bearers of shipbuilding traditions who arrived from Kherson, namely 19 Greek carpenters, 11 Turkish carpenters, 6 Turkish blacksmiths, and 20 other Turkish workers commanded by an ensign of Greek descent (Ведомость (243/1/29): 33).

The level of similarity and interaction of shipbuilding traditions of the peoples of the Black Sea basin can also be identified by considering the etymology of the term 'chaika'. The term 'chaika' is considered Turkism mastered in the Ukrainian language from two points of view.

First, it is the Tatar origin of the leather boat, and the name 'chaika' from the Tatar 'kaik', 'chaik', which means 'round boat' (Яворницький, 1990: 273). The modern Polish researcher W. Zamosczynski considers leather boats of the Lower Dnipro of the 16th century symbiosis of nomadic and settled cultures (Zamoscinski, 2017: 271, 275).

Secondly, modern linguistics questions the origin of the name of the Cossack boat 'chaika' from the Tatar 'kayik'. This can be confirmed by historical sources on the actions of the Tatars in the aquatic environment, who did not use watercraft in forcing rivers but overcame their swim, with the help of horses and small rafts (Литвин, 1994: 66, 101-102) (Боплан, 2004: 215, 253). In addition, from the sources of the XVIII century, it is known that the small kayaks captured by the Cossacks were dragged into the steppe by the Tatars, and the larger oaks were cut down on the spot. (Архів Коша, 1998: 547-548) (Архів Коша, 2003: 412, 441-442) (Архів Коша, 2006: 142). At this time, the traditional method was still used for crossings, which was especially problematic in the spring due to the seasonal depletion of horses (Сборник, 1899: 279). Linguistically, the name 'chaika' is derived from the Turkic-speaking environment, but not from the Tatar, but from the Turkish word *şayka* (saika), which also means 'boat'. It is from here that it was borrowed in other languages, namely: 1) *czajka* – Polish; *čajka* – Czech and Slovak; *шайка* – Bulgarian; *шайка* – Serbian and Croatian (Чайка, 2012); *sajka* – Hungarian *sajka* – German (Bokor, 1896) (Veres, Woodman, 2002: 125).

Borrowing was due to the immediate neighbourhood, trade, cultural and other ties of the peoples, as well as through other languages. At the same time, it is believed that the Ukrainian language itself acted like such a mediator (Свобода, 1980: 3290), as a result of which the term 'chaika' got into the languages of the West Slavic peoples (Чайка, 2012).

In general, it is possible to identify the main directions that indicate the processes of convergence of shipbuilding traditions of the peoples of the Black Sea basin.

First, the main direction of evolution of the Danube saika XVIth-XVIIIth centuries was the development of artillery. This was due to the need to create on its own basis a certain analogy of the Ottoman galleys. Also became widespread universal transport and combat boats with 6-8 light guns to perform a wide range of tasks.

Second, the Ottoman fleet, whose power was based on large ships, felt the need for small ships such as the Balkan saikas and Cossack chaikas. In the XVI century this led to the emergence of a number of new shipbuilding centres on the Danube, and in the XVII century Ottoman chaikas to counter Cossack ships in the Black Sea.

Third the main directions of the evolution of Cossack shipbuilding in the XVIII century there was a transition from single-story ship construction to board and increase the power of guns. This was due to the need to resist the fleet of the Ottoman Empire and caused a number of structural and technical modifications.

The above list of areas of interaction can not be considered exhaustive. He testifies that shipbuilding, like many other branches of economic life, is developing in line with its own trends and external influences. Particularly significant are the influences of neighbouring peoples who live in approximately the same natural conditions. Interaction of shipbuilding traditions of XVIth-XVIIIth centuries testifies to the level of culture of peoples, their ability to perceive external experiences, and influence other traditions. The similarity of shipbuilding features is also one of the examples of the formation of a single dynamic cultural field in the Black Sea basin.

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