



## PORT BAGLAR

Archaeological surveys in the water area of Cape Hristos and the hinterland between the capes of Kolokita

The capes of Sozopol

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#### Ivan Hristov

### PORT BAGLAR



ARCHAEOLOGICAL SURVEYS IN THE WATER AREA
OF CAPE HRISTOS AND THE HINTERLAND BETWEEN
THE CAPES OF KOLOKITA
AND AGALINA NEAR SOZOPOL



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## This book is dedicated to the 50th anniversary of the National History Museum

#### Editor:

Assoc. Prof. Dr. Preslav Peev Fridtjof Nansen Institute of Oceanology – BAS

#### Maps:

eng. Totyo Angelov

#### Photos:

Ivan Hristov, Todor Dimitrov

#### Translation:

Tsveta Raychevska

#### Prepress:

Vanya Hristova

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#### Introduction

The present book is another of my studies dedicated to the maritime archeology of the West Pontos. More specifically, it is related to the water area of Cape Hristos near the town of Sozopol and to the adjacent hinterland of the Kavatsite Bay. I believe that the water area in question was an important harbour zone in close proximity to the large ancient and medieval urban centre. Its importance was determined by the exceptional geographical location: a bay protected from the north and north-easterly winds, good depth measured maximum close to the shore.

Although the bay remained unattested in Antiquity, it was part of the Apollonia/Sozopol harbour system and possibly that "second" port mentioned by an anonymous 6th-century author. In the Late Middle Ages, the waters of Cape Hristos were marked on West European maps under the name of Port Baglar. The existence of a 'port' is also confirmed by some Western European and Russian travellers and diplomats.

However, the true significance of the harbour zone to the south of Sozopol is determined by the archaeological finds recovered from the seafloor. For the most part, they were found underwater without any context. Now they are part of the National History Museum collection and some private ones. Another group of archaeological materials fortunately found its way into the largest Bulgarian museum after two underwater expeditions undertaken in the area in 2022. It is the results of these surveys that form the basis of the present research work.

Structurally, the book includes six chapters. In addition to the results of the underwater searches, the data yielded by the geophysical surveys carried out in the water area of Cape Hristos in 2022 are also examined.

The book includes a review of the written source on the studied coastal area as well.

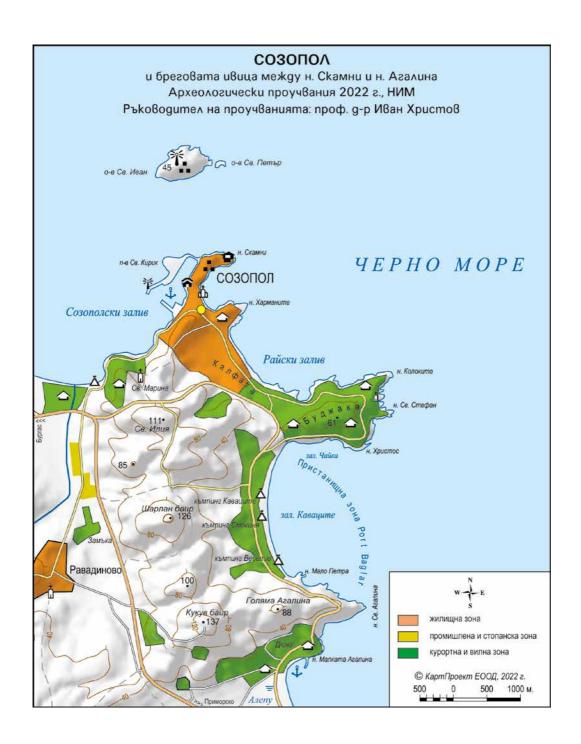
In two separate chapters, the development of the harbour system of Apollonia/Sozopol is traced, as well as the chronology and the concentration of archaeological structures of different types in the hinterland to the west of the Kavatsite Bay on an area of about 10 square metres. Here, the relationship between the uncovered archaeological structures and the maritime communications is also sought.

I am particularly thankful for the valuable advice and information provided about the researched region to Assoc. Prof. Krastina Panayotova, PhD (NAIM at BAS), the late Prof. Bozhidar Dimitrov, PhD (NHM), Assoc. Prof. Krasimir Nikov, PhD (NAIM at BAS), Alexander Minchev (Archaeological Museum of Varna), Assist. Prof. Daniela Stoyanova, PhD (St. Kliment Ohridski University in Sofia), Chief Assist. Stefan Velev, Ph.D. (St. Kliment Ohridski University), Margarita Popova, PhD (NHM), Kiril Velkovski, Engineer, Chief Assist. Nayden Prahov, PhD (Centre for Underwater Archaeology, Sozopol), Tencho Tenev (Municipal Diving Centre in Sozopol) and Todor Dimitrov (NHM).

# Notes on the location of the bay at Cape Hristos, the hydronymy and toponymy in the coastal area to the south of the Budzhaka Peninsula

The bay under study is situated to the south of Sozopol and bounded by the Budzhaka Peninsula to the north and Cape Golyama Agalina to the south (Fig. I.1). According to the system of regional taxonomic units in the landscape zoning of Bulgaria (Γεοιραφίας μα Βυλιαρίας, 1997), the coastal zone falls into the intermountain area of the Thracian Lowland and the southeastern Bulgarian low mountains. It is part of the Strandzha sub-region and more specifically of the Rosen – Meden Rid region. From a geographical perspective, this is a landscape area distinguished by the strong fragmentation of its coastline, a vast bay with a beach in the Kavat-site locality, dunes and high craggy shores around the Golyama and Malka Agalina capes (Πεπροβ, Ποποβ 1989, 128 – 129).

The longest part of the bay at Cape Hristos is 2.5 km. The maximum depth here is about 20 m. The bay is extremely well protected from the north and partly northeast winds thanks to the protruding Budzhaka Peninsula and its capes Kolokita, St. Stephen and Hristos (Fig. I. 2). The location of the pound nets (talyans) for the live-entrapment of fish species, traditional for our Black Sea littoral, is an indication of how convenient and protected from the winds a bay is. These gears are set in areas protected from the strong north and northeast winds. According to Constantine Papayoanidis, a Sozopol-born teacher and member of the Greek Ethnographic Society (Папайоанидис 2004, 115), the talyans were divided into two categories: for mackerel and for fish intended for preservation (saltfish). The first type of pound nets was set up during the winter season, while the second type



I. 1. Map of the researched area



I. 2 The bay at Cape Hristos

for saltfish was used in the spring (April – May); in the studied area they were located at the capes Hristos, St. Stephen and Sts. Galini.

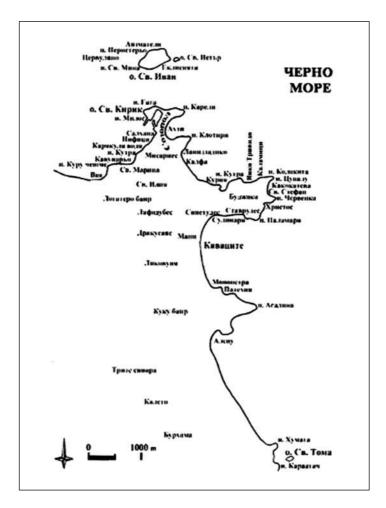
According to St. Raychevski there were two spring pound nets in the bay of Cape Hristos. Other spring pound nets were set up near the capes of Golyama Agalina and Malka Agalina (*Paŭчевски 1997, 79*). It is very likely that the places where the *talyans* used to be set up were the same over the time (on the appearance of the talyans on the Black Sea coast, see *Maврофридис 1992, 186 – 197*).

In the context of the topic under consideration, we should note that the availability of drinking water sources was of essential importance for the development of a given coastal micro-district. Papayoanidis mentions such a large water source. He writes about the 'very old fountain (*G. Kutambey*) in the Kavatsite locality, about 2.5 km away from the town', known for its clear and cold water. We learn that by channelling the water of this fountain and of other ones situated near it, Sozopol and the Small Island, i.e. St. Kyrikos, thanks to the cooperation of the Bulgarian government, were supplied with the vital drinking water (Папайоанидис 2004, 24).

Actually the coastal toponyms and hydronyms between the capes mentioned above have survived thanks to the local history studies and the information acquired from the 19th–20th century maps.

The names of the promontories and the small bays/coves in the considered area to the south of Sozopol have generally remained unchanged in the last 150 years. In his history of Apollonia Pontica-Sozopol, Constantine Papayoanidis provides valuable information on the place names both in the town and its surrounding area. In the second edition of the book, it was supplied with a catalogue of the most frequently used regional place names, some of which are almost unknown to the people now residing in Sozopol ( $\Pi$ anaŭoahuduc 2004, 185 – 204). One can assume that probably the Greek place names have an ancient origin, persisting down the generations at least until the beginning of the 20th century (Fig. I. 3).

The results of the field expeditions carried out between 1979 and 2004 by the Centre for Maritime History and Underwater Archeology in Soz-



I. 3. Map of the sites in the southern surroundings of Sozopol after K. Papayoanidis)

opol added other toponyms that enriched the list of localities situated to the south of Sozopol (*Традиционна морска култура 2009*). During these expeditions, a huge amount of toponymic material was collected through talks with aged locals well acquainted with the surroundings. In their work the researchers focused on the search for and recording the names of places and settlements situated along the coastline, those related to the area of Sozopol being particularly useful in this very case (*Традиционна морска култура 2009, 124 – 131*).

For the purpose of the study it will be useful to recall the most important toponyms and hydronyms accompanied with a brief comment and additions where possible:

**Achmalitsi**. A locality to the south of the Mapi site.

**Agalina**. A small peninsula with two capes both bearing the name Agalina, namely Golyama Agalina and Malka Agalina; the local people associate Agalina with a church of St. Galina, in Greek Άγια Γαλήνη (Fig. I. 6) that as they say once had existed there. The presence of a church in the past is also confirmed by the informants, thanks to whom a list of coastal toponyms in the considered area was compiled (*Традиционна морска култура* 2009, 128).

The origin of the name *Aya Galini* is indeed very interesting. There are several competing explanations of its etymology.

- 1. The Greek Orthodox Church says that *Agia Galini* (*St. Galini*) was martyred in Corinth in the 3rd century AD, and that her feast day is celebrated on April 16.
- 3. The popular belief (as in our case) is that the name comes from the phrase 'Aei Galini' ('eternal peace, tranquillity'), because the port is always calm and peaceful. The last explanation coincides with a local tradition for appeasing the stormy sea, told by Trifon Trifonov. He assumes that the name comes from an old pagan custom: during strong and prolonged storms, the wives of the fishermen from Sozopol used to throw a handful of earth into the sea from the shore of the bay and say 'Na Galine!' ('Shut up!'). Later, with the spread of the Christian faith, the name was transformed into 'Agalini', the pagan custom was erased and the name became St. Agalina and a 'new parecclesion was built on the northern shore of the bay dedicated to that saint, the foundations of which are still well-pre-



I. 6. Cape Agalina

served today' (Трифонов 2007, 6).

**Agalina Peak** (88 m above sea level). A small elevation in the western part of the Agalina Peninsula.

**Budzhaka** (in Turkish: *bucak* – corner). A peninsula south of Sozopol Fig. I. 4).

**Cape Hristos**. The most south-eastern craggy promontory of the Budzhaka Peninsula. Its name is associated with that of a church existing there in the past. There is no information on where exactly this church was located. The other name of the cape is *Baglar Burnu*, meaning 'the cape with the vineyards'.

**Danchov Bair** (107 m above sea level). A hilltop to the south of St. Elijah Peak. Its name is found only on a Bulgarian topographical map from 1937.

**Drakusaya**. An elevation lying 10 km to the south-west of Sozopol and to the south of St. Elijah Peak.

**Hristos**. A large and convenient bay situated to the southwest of St. Stephan Bay.

**Kara Toprak**. Of Turkish origin, meaning 'black soil'. A locality 7 km to the south of Sozopol.

**Kavatsite**. From the Turkish *kavak*, a poplar. A large bay 5 km to the south of Sozopol, the western shore of which is overgrown with poplars.

**Kolokita** (Vardarach, Kaba Burnu). The northernmost cape of the Budzhaka Peninsula (*Традиционна морска култура 2009, 128*).

**Kuku Bair** (137 m above sea level). A southernmost ridge top starting from the peak of St. Elijah and unfolding in parallel to the bay of Cape Hristos.

**Likovuna**. A range of hills 2 km to the south of Drakusaya.

**Logatero Bair**. A hill 6 km to the south-southeast of Sozopol.

**Mapi**. A locality 7 km to the southwest of Sozopol at the foot of Sharlan Bair.

**Monopetra**. Μονόπετρα (From the Greek μόνος, alone and πέτρα, a stone). A lonely rock in the sea, delineating in the south-east the end of the bay at the Kavatsite locality and in the northwest the beginning of the



I. 4. The Budzhaka peninsula

Agalina Peninsula.

**Palamarya**. Παλαμάρι means a thick ship's rope. This is the cape with which the Hristos Bay ends in a south-westerly direction.

**Patehni**. A small bay at the northwest coast of the Agalina Peninsula. **Saint Elijah** (In Bulgarian Sveti Iliya) (111 m above sea level). A hill situated 4 km to the south of Sozopol, the name of which is associated with the eponymous parecclesion that existed there until the beginning of the 20th century. Papayonanidis says that 'here the view is panoramic, the horizon is vast, and Sozopol looks like a small island below the viewer's feet. In this place, a chapel of the Prophet Elijah rises, now on the verge of collapsing'.

**Saint Marina**. A small valley situated in the northern foot of the hill of St. Elijah. Its name is related to the parecclesion (chapel) of the same name located there. Papayonanidis writes the following about this place: "On the back of this elevation, beyond a small field closed to the west, there is a small hollow called St. Marina, separated by a streamlet, where a religious celebration takes place every year on July 17. A parecclesion of the same name is situated in this place, and next to it – a holy well (Bulgarian *ayazmo* from the Greek  $\alpha\gamma(\alpha\sigma\mu\alpha)$ ). Near the *ayazmo* is an old elm tree, on the branches of which, according to an ancient custom, fever sufferers hang pieces of their clothes in the hope that St. Marina will cure their affliction. This is where the phrase 'Looks like St. Marina's tree' originates; it was used to emphasise the likeness of one's patterned clothing to the decorated tree of St. Marina." (*Παηαμομαδμε 2004*, 22).

**Saint Stephen**. A bay situated at the southeast end of the Budzhaka Peninsula, whose name is associated with the homonymous parecclesion (chapel) located there. There is no information on where exactly this temple was located. In a drawing made by the Shkorpil brothers, a Christian church with a cross is marked on the shore where the bay cuts most deeply into the land. In another book, I described a small island in the bay of St. Stefan (*Xpucmos* 2021, 144 – 148). To the north of the bay is a locality named **Kakokateva** (Κακοκατέβα) (κακός – bad; κατεβαίνω – I descend). It is a collective name for the several small bays and cliffs in this area. The

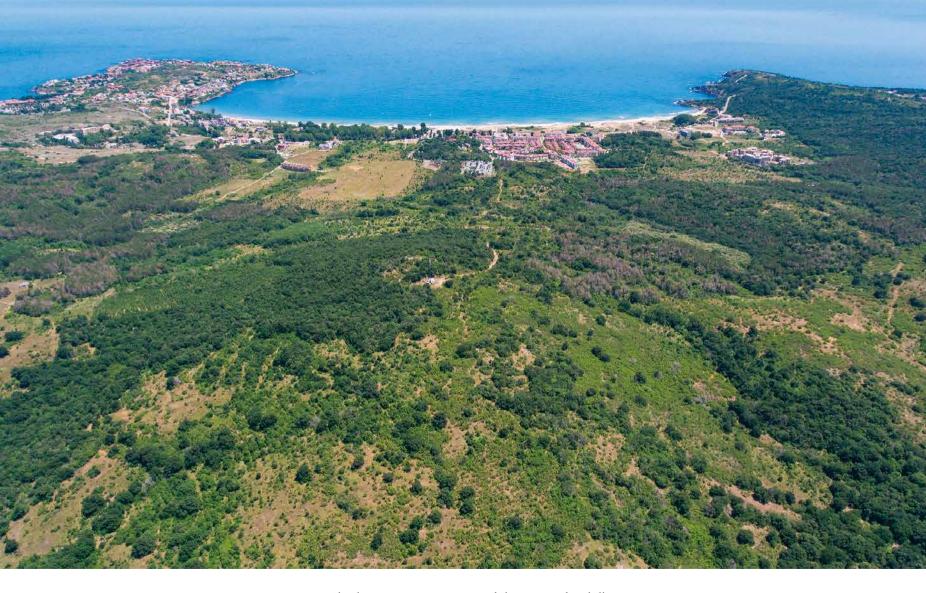
seacoast there is steep and high, and from there there is a striking panoramic view of the wonderful fjords in the sea below. To the south of the bay of St. Stephan is the small rocky promontory called Chervenka. Today the mentioned island is a relatively flat rock with a maximum area of 1900 sq. m. It is situated at a height of about 10 m and northeast/southwest oriented. A cultural layer is observed on an area of 300 sq. m. The rock is separated from the mainland by a narrow isthmus 5 to 20 m wide. The islet is accessible in calm seas. On this newly formed island there is a patch of land with scarce humus layer preserved on an area of up to 100 sq. m. Here clearly seen is a cultural layer up to 0.20 m thick, which abounds in sherds of Hellenistic building ceramics, Corinthian type, dated to the end of the 4th century BC. Right in the middle of this preserved area, in the late 2020, I found a spread layer of mortar and a few dressed stones that were probably part of a destroyed structure. Whether this structure has anything to do with the vanished parecclesion is difficult to answer. The closest archaeological site on land at the Bay of St. Stefan is a Greek mansion from the 3rd century BC studied by the Burgas archaeologist Yoto Valeriev (Basepues 2021, 568-571); this will be commented on in the sixth chapter of the book.

**Sharlan Bair** (126 m above sea level). A small rise to the west of Kavatsite Bay. A site called Drakusa Kale is noted by the Shkorpil brothers in a drawing (Fig. I. 5).

**Solenki**. The name of this locality to the southeast of Kara Toprak, is associated with the salinity of the soil there.

**Sulinarya.** A bay situated to the south-west of the bay of Hristos and bounded by the Palamarya Cape in the northeast. The name comes from Greek and means 'a tube'. There was a spring there, which supplied the Sozopolitans with fresh water for centuries.

**Tsuvalu**. A bay and its coast, locked between Cape Kolokita to the north and Cape St. Stephen to the south (*Традиционна морска култура* 2009, 128).



I. S. Sharlan Bair mountaintop and the surrounding hills

## WRITTEN AND CARTOGRAPHIC SOURCES ABOUT THE BAGLAR BAY

From the first half of the 17th century to the end of the 18th century both the bay of Cape Hristos and the eponymous port are were known under the name of *Baglar*, a Turkish word which translates as 'vineyards' (*Белянски*, *Лезина*, *Суперанская* 1997). Under this form, it appears in written records of Turkish, West European and Russian travellers and diplomats. It is also found on several geographical maps. At the same time, Cape Hristos retains its old Christian name, although it is often mentioned under the said Turkish word for vineyards.

#### II.1. Written sources

The earliest written record I know of the bay and the port of the same name is from 1634. It is the work of the Dominican Emiddio Dortelli D'Ascoli, prefect of Caffa (a city on the Crimean peninsula founded by the Genoese in 1266). In his desire to 'measure' the circumference of the Black Sea, he collected information from different sources and compiled his list of ports (only those on the west coast being recorded here). According to N. N. Pimenov's translation into Russian made in 1902, the ports listed were as follows: '... sailing along the coast of Romelia and starting from Constantinople, we find Omidia, 50 miles from Om. to Gnada – the same [distance], from G. to Athànata – 45 miles, from A. to Christos – 15 miles, from Ch. to Sisopolii – 10 miles, from S. to Poros – 10 miles, from P. to Misseuvrio – 18 miles, from M. to Emona – 18 miles, from Em. to Varna – 60 miles, from V. to Balcich – 18 miles, from B. to Caurna – 10 miles, from C. to Chielevria – the same, from Ch. to Bancalia – 50 miles...'. Regarding Cape Hristos the translator added the following note: 'The bay is also

called Karaki; this is just a small place opened to the north, wholly deserted, but with nice beaches, on which small ships land. That is why d'Ascoli mentions it' (Описаніе Чёрнаго моря и Татаріи 1902, 104). The mention of vessels is related to the possibility of them being pulled onto the beach, which means that it could have been done in the section between Cape Palamarya and Monopetra. It is likely that in this area there were facilities called slipways. The slipway is a flat ramp cut into the natural rock or land that is slightly sloping towards the sea for moving vessels to and from the water (*Ginalis 2014, 63*). The slope of the slipway was achieved by layers of sand and clay, on top of which wooden beams were laid, forming horizontal sleepers on the ramp. As the ships had to be towed and lowered in a controlled manner without being damaged, the wooden material was laid in a uniform grid of longitudinal and transverse beams.

The name Karaki for the bay was hardly related to the landing there of large commercial or military three-masted sailing ships used in the 16th – 17th centuries and called 'karaka' (in Spanish *carraca* – *Yohes* 1995). It is more likely that behind the toponym we should see the modern name of the Kavatsite Bay (Karaka – Kavaka – Kavatsi).

Evliya Çelebi, the most famous Ottoman author who lived and worked in the 17th century, did not miss to comment on the area. At the end of 1668, he travelled along the coast of the Black Sea and via Ahtopol and Vasiliko (today Tsarevo) he reached Yambol, from where he went back to Edirne and via the White Sea, Macedonia, Thessaly, Attica and the Peloponnese ended his trip in Crete (Υελεβα 1972, 41). Describing the fortress of Vasilikoz Burgas (the fortress of Tsarevo), Evliya Çelebi notes that he passed by four bays of the Black Sea coast, namely Ziyarina (in Strashimir Dimitrov's opinion, probably the misspelled name of Cape Zeytun Burnu, today Maslen Nos), Atliman (Atliman near the town of Kiten, Burgas region), Küprü Altı Liman (The bay of Primorsko, Burgas region, which was once called Kyupriya), Baglar liman (according to Str. Dimitrov, literally meaning 'The bay with the vineyards'; he considers it to be one of the bays to the south of Sozopol, where the town's vineyards are situated). The next coastal destination was 'the fortress of Sözebolu' (Sozopol). Ev-

liya Çelebi mentions Baglar Liman in the context of the other bays which means that it had impressed him as a convenient place for landing vessels. The archaeological and historical studies of the other bays confirm that they were used as harbour zones in different historical periods (Щерионов 1989, 108 – 109).

The information on the Black Sea coast collected by Count P. Tolstoy refers to the 1707 – 1714 period (Tolcmoŭ 2006, 89 – 90). He writes the following, '...from this river (Ro – that is the Ropotamo, I.H.) to the place named Hrest, where there used to be a monastery, which is now deserted. It is convenient to sail 13 Italian miles with the westerly wind (maestro); there is a small harbour there, and four or five ships can anchor there and many bastiments can fit in; as to the large ships of war they can conveniently be tied with a thick rope to a post on the shore, as anchoring is impossible, for here the bottom of the sea is stony, and it is safe from all winds with the exception of two. It is the east (levant) and south-east (sirocco) winds that blew the ships from this port into the sea. There is no settlement here'.

The stony seabed of which the Russian count writes is probably part of the two large underwater reefs. One is outside the bay at the great depth of 26 m. The other reef, on which many anchors are found caught in the rocks, is at a depth of up to 15 m, starting from Mono Petra and extending towards Cape Hristos.

The Austrian Wenzel von Brognard also mentions the area to the south of Sozopol and in 1786 he wrote: 'From this peak the coast extends for a distance of 9 miles to Sezobol wooded and hilly, without any village, or any other remarkable place, except for the bay of Baglar Altı, which lies just in the middle, and where fleet ships winter sometimes when they are buffeted by storms and cannot return to their usual bases'.

The translator of this excerpt Petar Nikov says he does not know such a name on the maps from this period, but he assumes that it is identical with the name Kavak (the bay at the Kavatsite campsite, to the south of Cape Hristos, I.H.) found on an English map where Cape Baghlar is marked in the neighbourhood ( $Hu\kappaos\ 1932,\ 15$ ). Commenting on Brognard's report, Shtelian Shterionov writes that it is not difficult to localise this bay if one

knows the toponymy of the area (Щерионов 1989, 109). He recalls that the old name of the Kolokita Peninsula (more precisely Budzhaka, I.H.), at the base of which the mentioned bay is located, was Baglar. Shterionov supports P. Nikov's localisation of the Baglar Bay and disputes A. Kuzev's assumption that the bay of the cited name is identical to Karahas Bay (Кузев 1969, 30). Actually, Karahas is the Karaki Bay mentioned in the Russian translator's comment on the list of the Black Sea ports compiled by Emiddio D'Ascoli.

Stoyan Raychevski mentions the bay under the name of Baglar Altı, defining it as a 'small pier' located between Küprü Altı (Primorsko) and Sozopol (Райчевски 1997, 97).

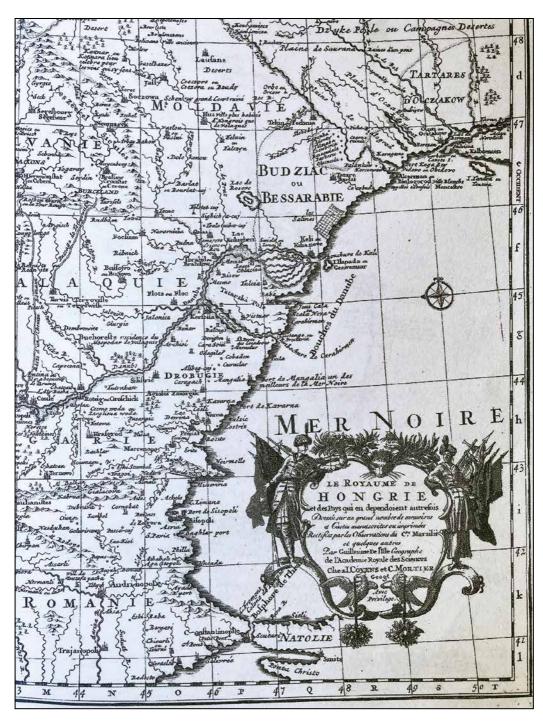
The Baglar port in the form Baglar Altek (i.e. Baglar Altı) is mentioned also by Colonel Georg Eneholm. He says that the port was located following the one at the mouth of the Ropotami (Ropotamo) River and could accommodate a small number of flat ships. Georg Eneholm, who accompanied the Russian troops during the tenth Russo-Turkish war of 1828 – 1829, provided brief descriptions of the coastal areas and ports. (Энегольм 1930).

#### II.2. Port Baglar on the 18th – 19th century West European maps

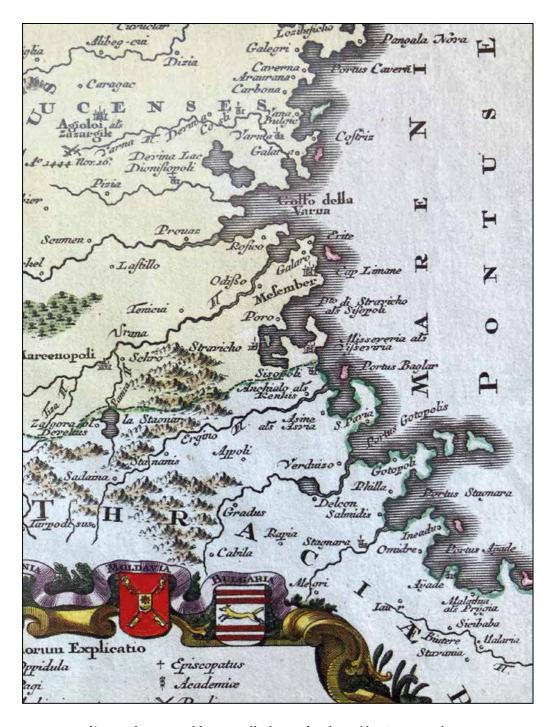
The harbour zone at Cape Hristos is marked on several West European maps from the 18th century as *Port Baglar, Portus Baglar, Baglar portus* and *Bagtar port*.

The oldest map bearing the mentioned name I was able to find was the work of the French cartographer Guillaume de Lille from 1703. The map is entitled 'New and accurate map of the Kingdom of Hungary' (Collection of Dr. Simeon Simov in the Central State Archives, Sofia KFM 35, 862 /1). The bay and the port of the same name are located immediately to the south of Sozopol under the name *Baghlar port* (Fig. II. 1).

Some time after 1730, in his map of 'Transylvania, Moldavia, Wallachia and Bulgaria' Georg Matheus Zoeter, a German engraver, cartographer and publisher from Augsburg, also marked 'Portus Baglar' as a large



II. 1. 'New and correct map of the Kingdom of Hungary' by Guillaume de Lille. 1703



II. 2. Map of 'Transylvania, Moldavia, Wallachia and Bulgaria' by Georg Matheus Zoeter. After 1730

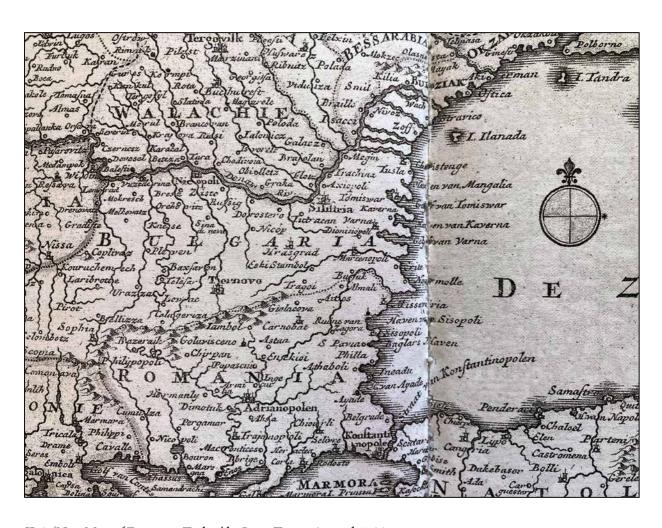
bay next to 'Sizopoli' and to the north of a large peninsula called S. Pavia (Българските земи в Европейската картографска традиция 2008, 191/192) (Fig. II. 2).

Next in time is the map of the Dutch publisher Isaac Tirion called 'New Map of European Turkey'. It was drawn up sometime ca 1733. The bay/cove we are interested in is marked as Baglars Caven and it is situated to the north of 'Ineada' and south of 'Sisopoli' (Fig. II. 3).

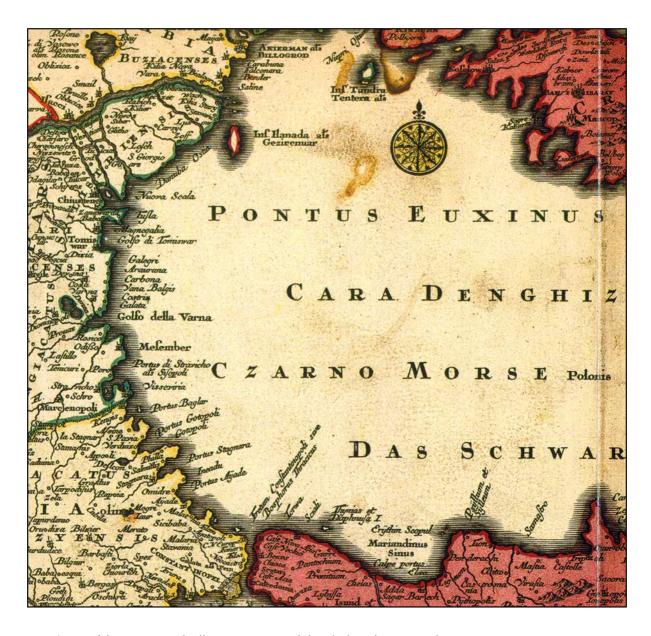
On another map of Georg Matheus Zoeter from 1740 entitled 'Map of the Crimea with all the provinces around the Black and Azov Seas' the port is again recorded as 'Portus Baglar'. Judging by the map, the harbour area is situated between 'Portus Gotopoli' (the port of Ahtopol) and 'Portus di Stravicho ats Sizopoli' (the port of Stravicho and Sozopol). The localisation of Portus Baglar immediately next to Sozopol is beyond doubt due to the fact that the bay, respectively the harbour zone, is to the south of Sizopoli (Fig. II. 4).

Chronologically following is the map of 'Asia Minor, the Black Sea and the Sea of Azov' issued in 1743 by the German mathematician, historian and cartographer from Augsburg Johann Matthias Hase (Ευλιαρικμία βεμοιεμικα καρποιραφικά πραθυμμα 2008, 193/194) (Fig. II. 5). Unlike the previous map, this one stands out with greater accuracy in the localisation of the settlements, harbours and peninsulas. The bay next to Cape Hristos is marked as 'Baglar portus'. The peninsula of 'S. Pavia' seems to have been situated next to this bay. Comparatively easy is to localise the peninsula bearing the name of St. Paul thanks to some notes found in the travelogues of Evliya Çelebi and Jean Nicolas Belen.

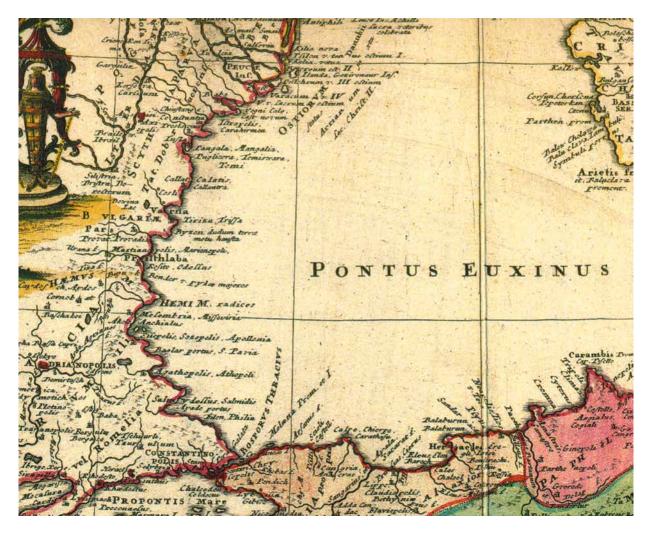
Evliya Çelebi, after describing in his travelogue the town of Midiye (present Kıyıköy) on the Black Sea, wrote the following: 'From there (Midiye, I. H.) we went west again, parallel to the coast of the Black Sea, and we came to *Ayapavaya* Bay. There is a village there of three hundred houses and a chapel. The subaşı of the village is from the Bostanci corps, but whether the village is a waqf or a ziamet – it has not been preserved in my memory. Opposite this place, about nine miles away in the sea, is the island of Ine (today Iğneada, Türkiye, I. H.; Челеби 1972, 40).



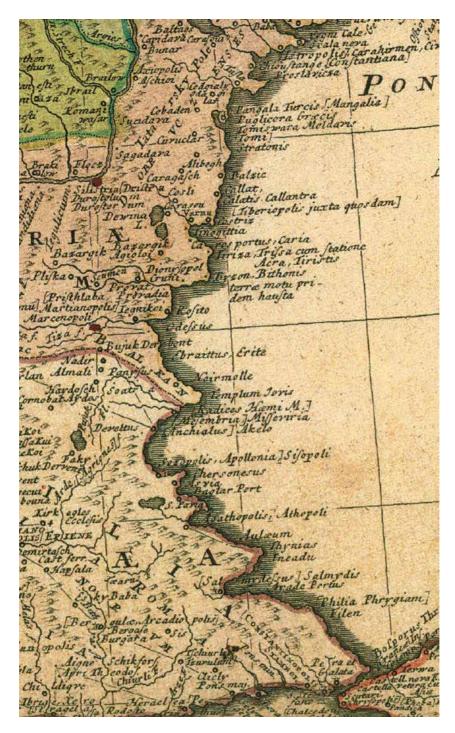
II. 3. 'New Map of European Turkey' by Isaac Tirion. Around 1733



II. 4. 'Map of the Crimea with all provinces around the Black and Azov Seas' by Georg Matheus Zoeter. 1740



II. 5. 'Asia Minor, the Black Sea and the Sea of Azov' by Johann Matthias Hase. 1743



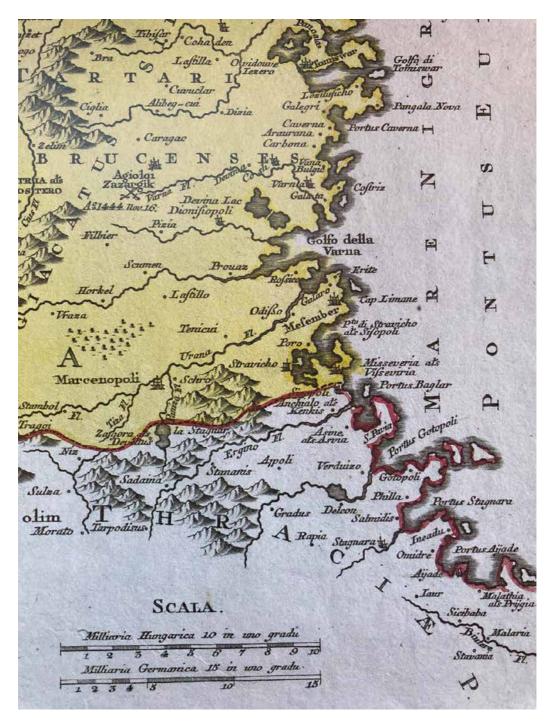
II. 6. Map of the 'Kingdoms of Hungary, Croatia, Dalmatia, Bosnia, Serbia, Bulgaria' by Johann Matthias Hase. 1744

The French cartographer Jean (Jacques) Nicolas Belen (1703 – 1772), who was a specialist in marine cartography, between 1737 and 1772 compiled and published numerous marine atlases and separate maps, including those of America, Africa (Guiana), The British Isles, Corsica, the Adriatic coast and the Peloponnese, etc. In a lesser-known description of the Black Sea coast from 1738, he says the following: 'Three leagues from Midiye is the small river *Aya Pauli sun*, whose name is Greek and means the river of St. Paul. I believe that the ancient Develt was located in this area. This river is navigable and is located at the starting point of a bay, which is called *Ineada Limani*' (*Todoposa 1987, 134*). In conclusion, we can assume that the peninsula of St. Paul (Bulgarian Sveti Pavel), as well as the bay and the river bearing the same saint's name were situated in the area of the present-day town of Iğneada, Turkey, or more precisely at Cape Iğneada Burnu.

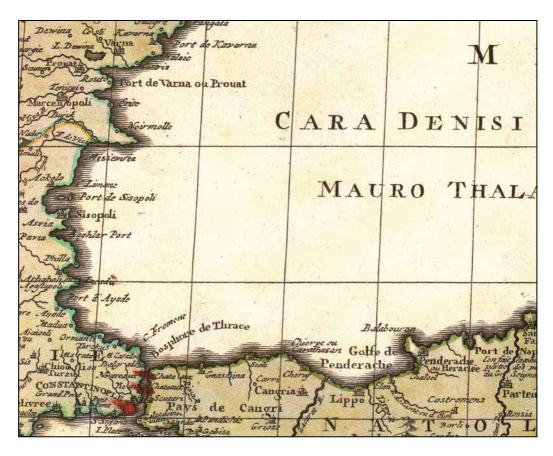
On Johann Hase's map *Sizopolis* (Apollonia) and its isles, *Anhialus* and *Mesembria* are marked to the north of *Baglar portus*.

In 1744, Johann Matthias Hase published the map of the 'Kingdoms of Hungary, Croatia, Dalmatia, Bosnia, Serbia, Bulgaria'. On this map the bay under study is again marked this time under the name *Bagtar port* (Εδλιεαρςκυμμε 3εμμ ε Εεροπεŭςκαμμα καρμποεραφςκα μραθυμμα 2008, 321/322; Fig. II. 6). It is placed to the north of the settlement and peninsula of *S. Pavia* and south of *Sizopolis* but due to an obvious cartographic error, the settlement of *Chersonesus*, by many historians located at the mouth of the Ropotamo River (de Boer, Stronk. 2003, 55–58; ΛαзαροΒ 2009, 99 – 100) is here placed to the north of *Bagtar port*. Beyond *Sizopolis*, the settlements in the direction of the 'Balkan' Mountain (Stara Planina), are listed in correct order.

Concerning the representation of the bay on the maps to the south of Sozopol, we should note a map by Tobias Conrad Lotter entitled 'New and accurate map of Transylvania, Moldavia, Wallachia and Bulgaria'. The map was created after 1770 (Fig. II. 7). The bay next to Kavatsite is noted as *Portus Baglar*. Again, its location conforms to the peninsula of *S. Pavia* to the south; *Sizopolis* on the land and *Misseveria* to the north. The image of a large island, apparently a misrepresentation of one of the Sozopol islands is featured in the bay.



II. 7. 'New and accurate map of Transylvania, Moldavia, Wallachia and Bulgaria' by Tobias Conrad Lotter. Sfter 1770



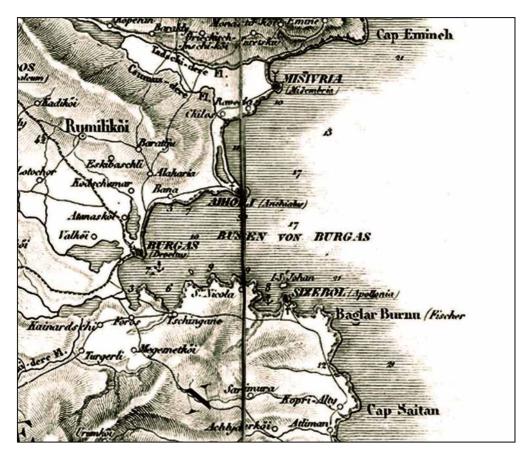
II. 8. 'New Map of Little Tartary or Tavria, Showing the Boundaries of the Empress of Russia and the Emperor of the Turks' by Jan Elwe and D. Langeveld. 1787

The last map issued in the 18th century that I would comment on is the work of the Dutch publisher and bookseller from Amsterdam Jan Elwe and his compatriot D. Langeveld (Ευλιαρικμία 3εμα β Εβροπεŭικαμα καρμοσραφικα μραθυμμα 2008, 213/214) (Fig. II. 8). Actually, I present here a fragment of what is called "A New Map of Little Tartary or Tavria, showing the Boundaries of the Empress of Russia and the Emperor of the Turks." It was published in 1787. On this relatively detailed cartographic work we find Baghlar port just below the Budzhaka Peninsula and to the south of Sizopoli.

In the 19th century, the name of the bay does not occur any more. The old name *Baglar* is transferred to the southernmost cape of the Budzhaka Peninsula.

One of the late mentions of Cape Hristos under the name of Baglar Burnu is on an Austrian map of 1829 (Fig. II. 9). The name of the cape is recorded to the south of *Zisebol* (Apollonia) and north of *Cap Saitan* (apparently Cape Maslen Nos). The old land road connecting Sozopol and Ahtopol is marked near the sea shore.

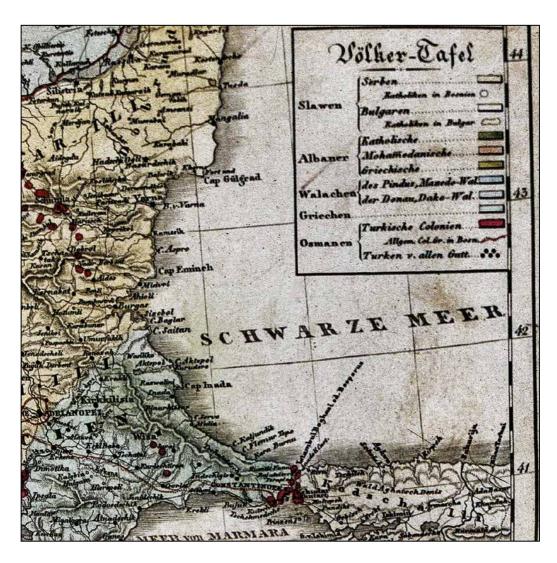
In 1847, the French geologist Ami Boué compiled an Ethnographic Map of the European part of the Ottoman State (Българските земи в Европейската картографска традиция 2008, 512). The map specifies



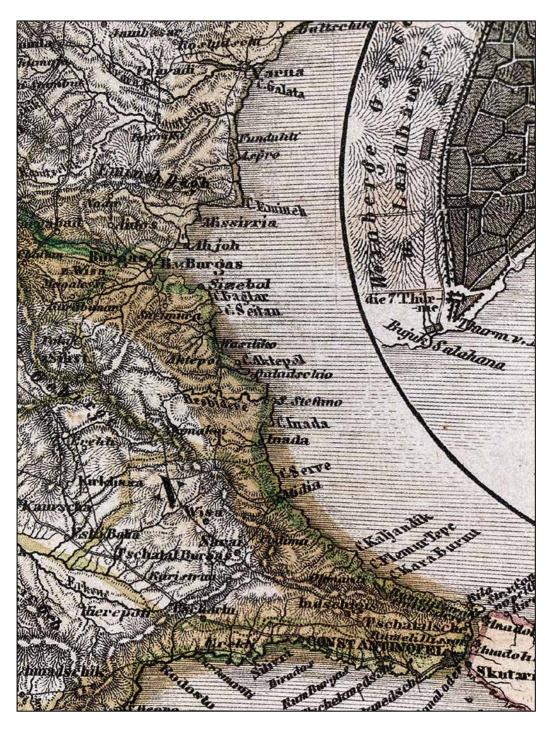
II. 9. An Austrian map from 1829. Detail

the location of Cape Baglar again between *Sizebol* and *Cape Saitan* (Fig. II. 10).

The last map I will mention is the work of Lieutenant L. Renner. It was compiled in 1850 and entitled "European Turkey: Rumelia, Bulgaria and Wallachia" (Fig. II. 11). In the southern part of the Burgas Bay, the town of *Sizebol* and the capes Baglar (Cape Hristos) and Seitan (Cape Maslen Nos) are marked successively from north to south.



II. 10. 'Ethnographic Map of the European part of the Ottoman State' by Ami Boué. 1847



II.11. 'European Turkey: Rumelia, Bulgaria and Wallachia' by L. Renner. 1850

# HARBOURS AND HARBOUR ZONES ALONG THE WEST PONTOS IN ANTIQUITY AND THE MIDDLE AGES. THE HARBOURS OF APOLLONIA/SOZOPOL

#### III.1. Harbours (ports) - harbour zone

A port in the sense of the modern regulatory documents is considered to be any place protected against wind and waves by a natural shelter or artificial facilities, where ships can anchor or dock at a wharf, and where there is an established, according to the laws of the country, port authority (*Иванова 2014*). Every modern port has a so-called port area, which includes the land of the port within certain boundaries. Parallel to this land area, the so-called harbour basin/zone bounded by internal breakwaters is developing. Every modern port after the 19th century has an outer port (*avant-port*) (the water area of the port, locked between the outer and inner breakwaters), roadstead (the sheltered stretch of water near the entrance to the port in which ships can safely ride at anchor) and a fairway (the navigable safe channel for the ships in the harbour).

Coastal zones have been used as natural thoroughfares since at least prehistoric times.

Concerning the ancient and medieval ports, it is generally accepted to write that they were places where ships could seek shelter (refuge). According to Alkiviadis Ginalis the concept of a 'shelter' should include almost the same modern components listed above: suitable places for the ships to anchor in, convenient places to haul the vessels ashore, facilities for loading and unloading the cargo and places for the passengers to embark and disembark the ship, structures such as access channels, breakwaters,

wharves/piers, warehouses for the storage of goods and equipment, ship shelters and slipways, buildings accommodating the crews of long-distance sailing vessels.

Today, it is accepted that ancient harbours should be studied in wider regional frameworks using an interdisciplinary methodology (*Carayon*, 2008; *Blackman and Lentini*, 2010). The great variety of types of harbours, their location and appearance were dependant on the geographical position and conditions of navigation dictated by the wind and wave climate. The variety of contexts studied over the past 20 years has revealed some striking patterns. Many processes including distance from the present-day coastline, position relative to present-day sea level and geomorphology, are important in explaining how they had survived in the geologic record.

Nick Marriner, Christophe Morhange, Clément Flaux and Nicolas Carayon consider six types of ancient harbours. These are: harbours sunken today but described in myths such as Atlantis and the biblical floods in the Black Sea; harbours raised as a result of seismic activity; harbours left landlocked; eroded harbours such as Carthage and Caesarea Maritima; lagoonal harbours (*Marriner, Morhange, Flaux, Carayon 2017, 382 – 403*).

As I already wrote in a previous study, the ancient ideas and conceptual apparatus concerning the large harbours in the Mediterranean and partly in the Black Sea region largely include the same elements listed above ( $Xpucmos\ 2018, 40-51$ ).

According to Mihail Lazarov, the ancient Greeks used two terms for a port: όρμος (hormos) and λιμήν (limen). The term όρμος mentioned already by Homer and the lexicographer Hesychius (II., XVII, 401; Hesychius, ad uerbum; Suidas, O, 604-605) is derived from the analysis of the preserved written information. In M. Lazarov's opinion, the word means a harbour, but also a neck ornament in the figurative sense of a necklace. Based on the shape of the necklace, it is assumed that this term refers to round-shaped bays protected from the unfavourable winds (Λα3αροβ 2009, 87). In fact, this is roughly the prevailing shape of most of the smaller bays/coves along the western coast of the Black Sea. The entrance of this type of harbours seems to have been too narrow and oriented in a direc-

tion different from the direction of the wind prevailing in the area. It offers the ships a relatively safe shelter. Here we can also talk about the so-called  $\lambda\iota\mu\dot{\eta}\nu$ , a term, which means a place where ships are drawn ashore. By the way, the practice of hauling small vessels ashore has been preserved to this day in most bays. It is another matter that larger ships did not enter these bays, but stood at anchor in front of the sea capes.

Along with όρμος, there are several other types of natural harbours, designated by appropriate terms. One of them is υφορμος, used for the port of Tyrisis (now Cape Kaliakra). This is a natural harbour – a natural basin that is less sheltered from the winds, providing more limited protection, therefore used only during the good season. According to M. Lazarov, some additional qualifications are also found, such as λιμην αυτοφυης – natural harbour; λιμην ορυκτος – a hollowed harbour or, more precisely, an artificial basin; λιμην χυτος – a harbour shaped with embankments (breakwaters, sea moles); λιμην κλειστος – a closed harbour, in the sense that it has a narrow entrance that can easily be blocked with a chain, and also ευλιμενος, 'having a good harbour' (Λαзαροβ 2009, 85 – 93; Λюбеноβ 2015, 186).

With the development of shipping and harbour facilities during the Roman era, the term 'port' came into use. It derives from the Latin *portus* and means 'opening, channel, shelter, refuge'. In the Oxford English Dictionary, a port is defined as a place on the coast where ships can moor in a shelter, especially protected from stormy water by wharves, piers and other artificial structures. This safe place can be natural or man-made. As a result, the term 'port' can often be ambiguous when referring to Antiquity because it covers a plethora of different berthing and landing sites, including offshore anchorages, in addition to various mooring installations and technologies (*Ginalis 2014, 10-14*).

In Bulgarian historiography, the topic of the ancient and medieval harbours/ports was the occasion for intense analyzes at the end of the 20th century.

According to Bozhidar Dimitrov and Atanas Orachev, every harbour, regardless of its size, performs two main functions – to ensure the protec-

tion of the harbour basin from dangerous winds and to allow the loading or unloading of ships moored there, as well as the storage for a longer or shorter time of imported or exported goods ( $\Delta u \mu u m po B$ , Opaue B 1982, 1-11). While the second function did not create particularly great difficulties due to the relatively small volumes of goods exchanged during Antiquity, ensuring the protection of the harbours was a serious problem for the ancient engineering practice.

The Bulgarian researchers assume that there were mainly three types of harbours in Antiquity:

#### I. Natural harbours

Their protection from the dangerous winds stimulating strong waves was secured by natural obstacles – islands, peninsulas, capes, reefs, so for this reason the harbour basin was situated on the leeward side. According to Dimitrov and Orachev, the presence of a harbour in this case is evidenced by the accumulations of transport pottery and anchor material. It is also assumed, based on the researchers' direct observations that in many cases the listed materials covered the bottom of the basin, especially if the harbour had been in use for a longer period.

#### II. Harbours with man-made facilities

Although somewhat controversial as an interpretation of the water area of present-day Bulgaria, the protection of the basin was achieved by means of constructed artificial facilities, and in some cases the berthing place of the ships and the storage area for the goods were also protected. 'Certain' traces of such facilities have been found in the Gulf of Varna in the Lazuren Bryag locality, in the main (southern) harbour of Apollonia and Karabizia (near Cape Galata).

#### III. Harbours of refuge

Small harbour basins, in ancient times sheltered from the dangerous wind blowing at a certain moment can be referred to as harbours-refuges. So far, no remains of ancient settlements have been found in the immediate vicinity of these harbours. Dimitrov and Orachev, relying on their personal experience, found very weak archaeological traces (a few anchors

and pottery fragments) on the seabed of these harbours (even of those that have not been visited by underwater sports lovers). Here, the quantitative method is also controversial due to the fact that such a thesis requires numerous underwater surveys at different times of the year and over several seasons. In my opinion, the question of the localisation of settlements beyond the water area of the ports is an open topic, which also depends on the intensity of the archaeological research.

In his dissertation work, Preslav Peev also dwells on the problematics. According to him, a harbour (or the port) includes the harbour basin, terminal structures such as wharves, piers, docks, port warehouses (stores) and infrastructure – roads, rivers and canals. The harbour basin itself is a water area protected from the sea waves. Very often these were simply water areas well or not so well protected from the sea waves, often without any artificial facilities. Besides, it was not at all necessary that the existence of a harbour be tied to a settlement, just as a settlement located on the seashore does not necessarily have a harbour ( $\Pi eee~2014$ ). Harbours are divided into three groups: natural, with infrastructure and temporary or harbours of refuge. The first group is defined as the most ancient, and the earliest similar ones in the Eastern Mediterranean date back to prehistoric times and for sure at least to the Late Bronze Age. Natural harbours were used up to and including the Middle Ages, and in the cases when the Bulgarian coast is meant even during the Revival.

In my attempt at tracing the development of late antique coastal sites in the province of Hemimont, I identified the following types of harbours (*Xpucmos* 2018, 44):

- Harbours serving cities.
- Harbours serving smaller fortifications.
- Harbours (refuges) remote from settlement units or from non-localised ones.

Yordan Lyubenov offers another terminology related to the 'harbour zone' designation ( $\Lambda \omega \delta \epsilon \mu \sigma \delta 2015$ , 184-193). The concept of 'zones' used gives perhaps the most accurate idea of the nature and organization of the coastal harbour activity from Antiquity to the present day. Already at their

creation, they represent a complex system of interconnected components of the loading and unloading business. In Antiquity, harbours had almost no technical infrastructure beyond a bridging facility from land to cargo. That is why the Ancient harbour zones are the most diverse in terms of their exploitation. The examination of the available sources shows that they began to be mentioned as anchorages protected from the winds, reaching the most convenient places suitable even for the wintering of ships (hormos and limen). It is important to emphasize, according to Lyubenov, that even when underdeveloped these zones continued to exist for millennia (from the onset of the Greek colonization along the West Pontos to the beginning of the period after the Liberation of Bulgaria) regardless of their specific name.

The construction of harbour facilities along the Black Sea coast should have followed well-established maritime traditions typical of the ancient world. In the case of large ancient cities, the harbour structures probably included large stone piers, seawalls of large stone blocks, breakwaters, etc. As such, one can consider the southern port at Anchialos, for example, the detailed research of which, combined with modern dating methods by the Bulgarian archaeologist Sergei Torbatov is yet to be published. Stone quays were found at Akra and Hrisosotira near Chernomorets.

The second method of construction of harbour facilities, according to Y. Lyubenov, was mainly of wooden material shaped like stakes driven into the seabed, to which planks (most often wooden grates) were nailed for access to the boats. It seems that this method began to be used in Antiquity, persisted in the Middle Ages and even until the end of the 19th and the beginning of the 20th centuries (Varna and Burgas ports).

To date, summarising, I can offer the following consistent classification regarding the range of seaports on the western Black Sea coast:

- 1. Harbour zone or harbour basin. It includes a geographically defined water area (bays) suitable for berthing of vessels for a short or long period. In this zone there is access to the coast or to artificial facilities built for loading and unloading activities or as temporary shelter from sea storms).
  - 2. Harbour structures in the water. These are places where facilities for

unloading and loading the vessels were built. Most often these are wooden structures – the so-called piers, which, given the impermanence of the material from which they were built, have hardly survived over the historical periods.

3. Harbour structures on the land in the immediate vicinity of the harbour or of residential, economic or religious buildings whose functioning was dependent on the sea communications.

#### III.2. The harbours of Apollonia Pontica

It is generally accepted that the berthing places of ships from different historical periods can be determined with a great deal of certainty thanks to two methods.

The first method, as already mentioned, is related to the mapping of the accumulations of anchors on the seabed, the so-called anchorages. It is assumed that these were the traditional moorings of ships that, for various reasons, had lost part of their anchors. Over a long historical span of several centuries, a certain saturation of the bottom with ship objects occurred, which is an indication of a specific tradition in shipping.

The second method to localise the ancient harbours is more complex. It is related to the analysis of geographical data in the water area of sea promontories and islands. It is also important here to take into account the sea level rise during different historical periods, i.e. through mapping of the land-water position (see an overview of the most recent literature on the issue in Порожанов 2012, 256).

Information about the existence of several harbours of Apollonia Pontica in the Pre-Roman era is derived from a well-known epigraphic monument, dated to the first half of the 2nd century BC (*IGBulg*, II, 388 bis). It is a long and very detailed laudatory decree voted by the Apollonian people in honour of the sister city of Histria and one of its prominent citizens – Hegesagoros, son of Monimos. He became famous as the commander-in-chief of the allied fleet, who assisted the Apollonians in their war against their northern neighbours, the Megarian colony of Mesambria, at that time a regional rival of Apollonia.

It is explicitly mentioned in the decree that Hegesagoros defended not only the city and the surrounding settlements of Apollonia but also its harbours ('...our relatives and friends, loyal to our people, sent warships and soldiers to help, led by Hegesagoros, son of Monimos, – a navarchos empowered with full rights and a man of great merit, who arrived on the spot, defended the city, the lands and the harbours with our help and the help of our allies, and then with our help and the help of the other allies he took by force the fortress of Anchialos,.....').

What are these harbours and where were they located? Here epigraphy gives way again to archaeology.

It is known that the first and oldest harbour of the city was located in the water area to the west of the island of St. St. Kyrikos and Julita. It was the anchorage place in the harbour of the pre-Greek Thracian settlement from the Late Bronze Age (Ποροжанов 1989, 6–20; Ποροжанов 2012, 263). The largest number of stone anchors with holes was recovered from the sea floor there, all dating from the end of the 2nd to around the beginning of the 1st millennium BC. According to K. Porozhanov, lead stocks with a hole for a bolt were also found to the west of the mentioned island, in the water area between the small lighthouse called 'Migalkata' and the island, which means that the harbour was used during the Hellenistic era as well.

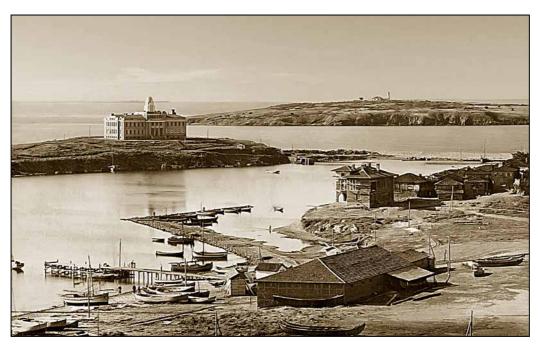
Here I will adduce the information of B. Dimitrov, who believes that judging by the configuration of the ancient coastline, one of the harbours of Apollonia was apparently in the basin to the west of the ancient island covering today's Sts. Kyrikos and Julita island, the Sozopol peninsula and the sand spit between them (Aumumpos 2009, 93). The harbour basin was 3 km long and 2 km wide and could receive 200 – 300 of merchantmen at the same time. Hundreds of stone anchors and lead anchor stocks, as well as thousands of amphora fragments (the universal transport containers of Antiquity) broken during sailing, dated to the 7th–1st centuries BC found during underwater archaeological research at the floor of this basin prove that it was here that one of the harbours of Apollonia Pontica was situated. The port must have included a rather large area on the coast where the warehouses storing imported and exported goods, slipways for repairing

the ships, and for the construction of new ones, were located. The uninhabited coast of the Sozopol Peninsula from the beginning of the Tsarski Plazh place, i.e. Royal Beach featured the ideal location for these harbour installations. B. Dimitrov notes that the piers of Sozopol and its ship-repair and ship-building slipways were located on this coast until the construction of the modern port in 1927 (Fig. III. 1-2).

Specific data on the location of the main city harbour are provided by the rescue archaeological surveys in the so-called Fisherman's Port today situated between the island of St. Kyrikos and the Skamni Peninsula. In essence, they complement Dimitrov's hypothesis with precisely localised underwater finds in a clear context. In the spring of 2020, archaeologists from the Centre for Underwater Archeology in Sozopol carried out a survey that has long been planned given the reports over the years of numerous accidental finds recovered from the sea floor ( $\Delta umumpos\ u\ \partial p$ . 2021).

At a depth of -4.9/-5.1 m to -5.5/-5.6 m, especially in square Z of the composed square grid, a layer was traced, which was highly saturated with archaeological finds from Antiquity. These were fragments and almost whole tableware and kitchenware, amphorae, clay lamps, fragments of pithos, etc. The layer had the nature of a harbour accumulation and indicated that the surveyed site was part of the ancient harbour of Apollonia. Clearly traced was the stratigraphic sequence of accumulation of materials from the Archaic period to the Late Antiquity, a span of over 1000 years. The earliest finds recovered during the exploration of the harbour accumulation date back to ca. 600 BC. According to underwater archaeologists, from a chronological point of view, the largest amount of materials belongs to the Archaic and Classical periods (6th – 5th centuries BC), with a decline in the 4th century BC, particularly after the middle of the century and the Hellenistic and Roman/Late Roman periods which are significantly more modestly presented. The drinking vessels, which are the most numerous category of tableware, are a significant indicator of that.

Transport amphorae are assumed to largely repeat the same pattern. Again, the Archaic and Classical periods are best evidenced, but there are also a large number of finds from the first half of the 4th century BC, when,





 $III.1-III.2.\,St.\,Kyrikos\,Island$  and the port at the beginning of the 20th century

for example, the three discovered amphorae from Heraklion with englyphic seals are dated to. The impression remains of a sharp decline during the last three to four decades of the 4th and the first half of the 3rd century BC. The ceramic collection also includes a relatively large number of cooking ware – pots (chytra), most often with lids, and more open shallow forms (lopas). They reinforce the impression of the utilitarian character of the complex.

The main conclusions based on the survey of Square Z show that this part of the Sozopol harbour was not dredged. This means that the stratigraphy has not been disturbed and fully represents the historical development from the end of the 7th century BC until the present days. The fact that no remains of prehistoric settlements were found within the scope of the researched area is also significant.

Making sense of the results requires a comprehensive review of the data yielded by the archaeological surveys undertaken by the Centre for Underwater Archaeology in the 1980s and 1990s taking into consideration the dredging and construction activities in the port of Sozopol over the last hundred years. The researchers propose an important historical reconstruction of the harbour of Sozopol. They convincingly assume that during the various historical periods it was accessible for larger ships only from the north, where there was a very narrow entrance only 12 - 14 m wide. This entrance, today blocked by a breakwater, connecting the island to the mainland, was near the island of St. St. Kyrikos and Julita. The naturally deepest part of the Sozopol harbour, reaching -8.3 m was immediately next to the entrance. The historical harbour occupied almost the entire width of the water area between the island and Cape Skamni. After the entrance, the sea bottom gradually rose in a south-westerly direction to about -3m, with depths between -3.6 m and -4.5 m being the best for secure anchoring of larger vessels. The harbour did not have an entrance from the south that could be used by vessels with more than one m draft due to the presence of shoals along the line between the southern end of the island and the mainland. Recalling the colleagues' research results, I should mention that in the fall of 2022, the surveys of the large harbour of

Apollonia at the island of St. Kyrikos continue; they are carried out by the same team and it is quite natural to expect new interesting results.

According to many researchers, the second harbour or rather the harbour zone of Apollonia should be sought in the water area between the Sozopol peninsula and the island of St. John (Bulgarian Sveti Ivan). Judging by the hundreds of underwater finds, this area was undoubtedly used since the beginning of the 1st millennium BC to the middle of the 2nd century BC. In my opinion, above all, the question here is about the several ship piers, marked by stone stocks anchorages at a depth of between 14 and 20 m. Their locations are known. This is the water area of Cape Skamni, the Palikari reef, the reefs between Cape Skamni and the island (Димитров, Порожанов, Орачев 1982, 447 – 450). During the Roman era, the harbour zone to the north of Apollonia and in the waters of the island of St. John continued to be used, and the evidence for this is the discovery of lead stocks in the indicated areas.

The researchers opine, although not well argued, that a sure marker for the existence of a harbour on the south coast of St. John Island is the accumulation of lead-wooden anchor stocks in the water area off the south coast of the island. Unfortunately, the ceramic material found on the sea floor has been again distributed in private collections and is unavailable for analysis. It is assumed that the anchors were lost from ships arriving for loading and unloading, and not from ships hiding there, because the island, due to its shape and location, did not really offer any kind of shelter, and besides, only 100 m away the huge Sozopol Bay used to offer a perfect protection because of its natural and artificial barriers. The absence of man-made facilities indicates that loading and unloading operations were carried out as in the harbour at the Palikari Reef. Such was the situation in the period between the 5th and 3rd centuries BC, when the sea trade of the nearby ancient settlement (in this case Apollonia) reached its highest achievements and the harbours near the city itself were not able to receive the arriving ships and goods. Therefore the researchers assume that the nearby uninhabited island had to have been used as a storage base. It is mistakenly assumed that the territory of the island of St. John lacks cultural remains from Antiquity.

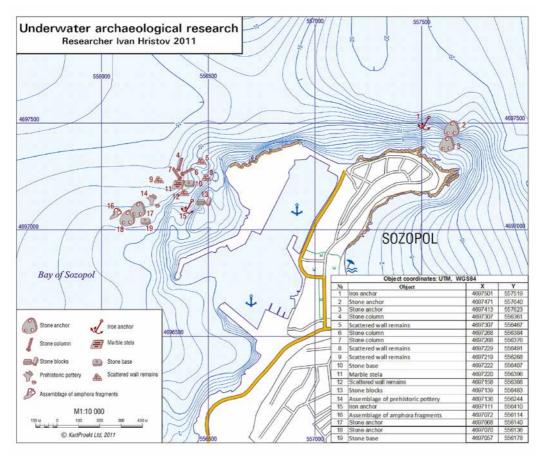
In my opinion, the anchorages and the pottery finds in the southern waters of the island of St. John rather mark the direction and approach of ships navigating to the main harbour of Apollonia located at the island of St. Kyrikos. All finds are an integral part of the harbour zone that served the city for thousands of years. As for the island of St. John two locations were convenient for mooring, considering the direction and the strength of the wind, namely on the southwest side, before Cape Saint Mina, and on a rather uncertain place the 'fjord' Ayazmoteli, where, according to the old fishermen of Sozopol, there is a spring of fresh and healing drinking water (*Xpucmos* 2021, 70).

The zone seems to have been extended to the west of the island of St. Kyrikos. Here the boundaries are not clear, but apparently ships used to anchor outside the supposed range of the sheltered harbour between the island and the city. Proof of this is the results of the underwater research I conducted in 2011 (*Xpucmos* 2012, 33 – 48; *Xpucmos* 2021, 97 – 101). They have been commented on several times, so I will dwell here only on the most important ones.

The main surveys took place in the area of the so-called 'breakwaters' – alleged underwater structures defined as such in the 1980s. The results yielded by the efforts of the divers allowed two conditional zones with specific discoveries to be clearly outlined in this part of the water area of St. Kyrikos: a western with a stone anchorage and eastern with concentration of architectural details, part of supposedly flooded land (Fig. III. 3).

To the south of the zone of concentration of worked stone material an anchorage was recorded of five stone anchors with two or three holes and one anchor with a groove in the middle. The anchors are generally dated to the Late Bronze and Early Iron Ages, but given their very conservative nature in shape and material, they can refer also to later periods (Fig. III. 4).

The question of the western extension of the harbour zone of Apollonia proved to be particularly relevant in the course of the archaeological investigations of the Hrisosotira Peninsula, located only 3,5 km to the west of the island of St. Kyrikos. Here a suburban area of the polis ( $\Pi \rho o \acute{\alpha} \sigma \tau \epsilon i o v$ )



III. 3. Map of the 2011 archaeological survey conducted by the NHM team in the area of St. Kyrikos Island

that functioned during the Archaic, Classical and Hellenistic eras has been researched for nine archaeological seasons (*Hristov 2023 – in print*). This suburb had occupied an area of several tens of decares and depended on the direct sea communications in the relatively quiet and wind-sheltered zone between the city and the peninsula.

If I have to summarize what has been said so far I would say that all anchorages outside the main harbour of Apollonia mark the directions of its traffic and the zone for the ships waiting to get a berth to load and unload in the harbour itself. The listed anchorages formed something of an extension of the port, but without providing adequate structures for loading and



III. 4. Stone anchors from the water area of St. Kyrikos Island. Researched by Ivan Hristov in 2011

unloading activities. All places for anchoring beyond the eastern waters of the island of St. Kyrikos can be identified as roadsteads. A roadstead is a protected anchoring area outside the harbour (*Ginalis 2014, 19*).

Let's get back to the topic of the several harbours of Apollonia (Sozopol). For Late Antiquity, the hypothesis is supported by the data preserved partially in an anonymous Byzantine periplus dated to the second half of the 6th century (Anonym. Peripl. Pont. Eux.78.15r21 – 15r 25/ed. Diller/). It says that the former Apollonia Pontica / Magna, which 'is now called Sozopolis, has two large harbours' (ἀπολλωνίαν πόλιν τὴν νῦν Σωζόπολιν λεγομένην ἔχουσαν καὶ λιμένας μεγέλος δύο).

According to the above-cited text, we should think of two types of harbours – those that served the city and its nearest satellite settlements and those that connected the city with more distant settlements along the entire south-western Black Sea coast politically and economically linked with Sozopol.

The information on the existence of two harbours can also be interpreted differently. In a previous book, I recalled Flora Karagianni's thesis that in the Mediterranean and the Pontos there is the phenomenon of the existence of more than one harbour in each city (*Karagianni 2013, 25 – 26; Xpucmos 2018, 292 – 294*). This can be considered normal for Constantinople, in which more than six harbours were constructed in Late Antiquity, located in the region of the Golden Horn and the Sea of Marmara.

Other cities with two harbours, according to the researcher, were Limenas, Christoupolis (now Kavala), Sozopolis and Mesemvria. She also notes that one of the problems in the study of the medieval ports is that their function was documented either as military or commercial. The question of whether merchantmen and warships were served in the same way by the civil harbours, in more cases simply cannot be answered. The idea is suggested, that in the case of the existence of two harbours in one city the first must have answered the commercial needs, and the second – the military ones. In Limenas (Island of Thasos), for example, the 'closed' harbour is characterized as a military one and the 'open' harbour as commercial. In the specific case of Sozopol, it is difficult to distinguish the function

of either of the so-called 'two harbours' simply because we don't have any remains of harbour installations on land or under water.

So where should we look for the alleged 'second' harbour of the ancient city? It is obvious that it was impossible a port to be constructed on the eastern side of the Skamni peninsula, since the cove between the old town and the Akrotiri peninsula (also called Harmanite) is directly exposed to all the dangerous winds of the Black Sea. The next so-called Rayski zaliv (Paradise Bay) is also too small and exposed to the north and northeast winds. Despite the recorded anchor finds in it, I believe that it does not correspond to the idea of an area where a large harbour would have existed. To the south, the only possibility remains that the well-protected bay next to the Budzhaka peninsula was part of the large harbour zone of the ancient polis.

#### III. 3 The medieval port of Sozopol

According to Dimitar Dimitrov, the most detailed information about the medieval port of Sozopol is contained in the specific navigational documents from the 14th and 15th centuries, namely portolans and portolan maps (Dimitrov 2021, 63 – 76; Fig. III. 5).

D. Dimitrov points to two anonymous 14th century portolans in which Sozopol is defined as a 'big town' (χώρα μεγάλη,Città grande) with a 'good port' (πόρτο καλὸ,). The written sources also indicate the mooring depth of the harbour – 4-5 orgia (between 7.6 and 9.5 m).

Actually, we get quite accurate information about the medieval port of Sozopol from the so-called Leiden portolan, dated to the 16th century, but probably based on a protograph from the previous century (*Opaues, Pycuhos 1988, 76–91*). It says that 'Sozopoli is a good harbour and there are two islands in front [of it]. The large island is named Agios Ioannis [St. John], and the other Agios Kyrikos. And the good/nice harbour is from the side of the little island and the mainland and the entry is from north-northwest. And if you wish to enter from the middle (side) of the large island, keep a distance after the small island three ploresia (late medieval Italian unit of measurement, I.H.) you should give the little island's shoal a berth of



III. 5. The medieval port of Sozopol (after D. Dimitrov)



III. 6. Medieval anchors in the water area of St. John (Ivan) Island

three ploresia. And from there you sail along the coast for one *ploresia* and six *orgia* and drop anchor at a depth of four or five *orgia* (about 1.5 m, I.H.).

It is clearly noted in the portolan that the port was in the area of the modern city and more precisely from the side of the 'small island', that is, the island of St. Kyrikos. In the 19th and early 20th centuries the contemporaries of Papayoanidis used to call the island by this name ( $\Pi$ anaŭoahuduc 2004, 18-19). It is implied from the text that there were different approaches to the harbour. One of them was from the Big Island (St. John), that is, sailing from the east during the Late Middle Ages, the ship had to pass between the island and the Skamni peninsula, turn southwest and only then reach the harbour. It looks like the passage between the island of St. Kyrikos and the modern town in the 15th -16th centuries was already silted.

On the other hand, the complex comparative analysis of the data yielded by the portolans from the indicated centuries reveals that in the Middle Ages the harbour configuration of Sozopol was marked by three important spatial areas – the Skamni peninsula, the island of St. Kyrikos and the island of St. John (Fig. III.6). By all accounts, the comparison of the archaeological and geomorphological data on the navigation conditions in Antiquity with the information from the medieval portolans shows that in the 14th and 15th centuries there was continuity with the topographical elements of the harbour. According to Vasilev, this continuity was determined by the persistent genotypic characteristics of the water area along the coast of Apollonia / Sozopol. The development of the monastery complex on the island of St. John seems to have marked the northern boundary and the entryway of the city to the harbour (ἐις τὴν μποῦκα τοῦ πόρτου). However, all mooring data are primarily related to the water area of the smaller island of St. Kyrikos (Fig. III. 7 – 8).

Actually, the main mooring location in the harbour of Sozopol in the 14th – 15th centuries was closely related to the water area of St. Kyrikos Island, similar to that of the pre-Hellenic Thracian settlement from the Late Bronze Age and that of Apollonia Pontica from the 2nd century BC to the 3rd century AD.





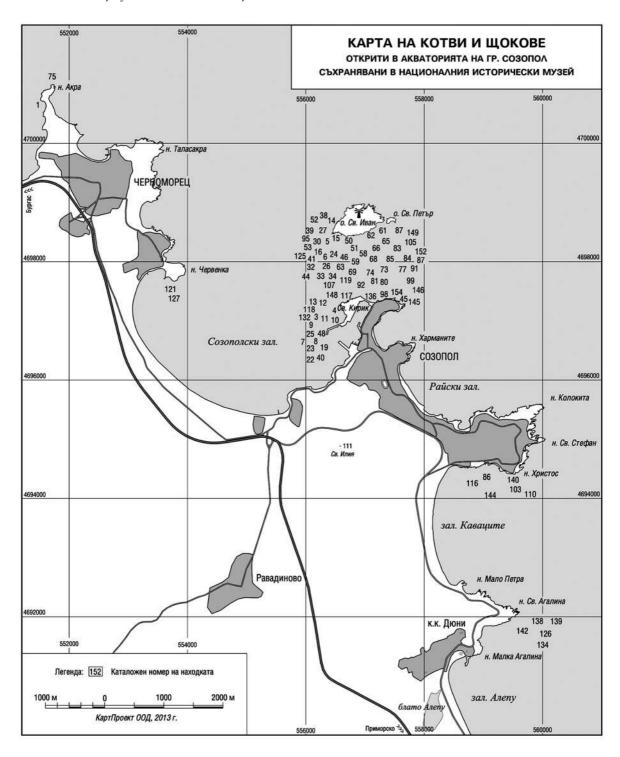
 $III.\ 7-8.\ Medieval\ anchors\ from\ the\ water\ area\ of\ the\ port\ of\ Sozopol.\ Stamenov\ private\ collection$ 

### HISTORY OF THE UNDERWATER SURVEYS IN THE BAY OF CAPE HRISTOS

Despite my repeated attempts to gather information about the planned underwater surveys conducted in the bay of Cape Hristos, I have not been able to come up with concrete data to refer to in writing a history of the research prior to the National History Museum expeditions in the summer and autumn of 2022. Notwithstanding this outcome, I will say that the NHM collection includes anchors and related objects found during amateur dives in the bay at Cape Hristos (often named Chayka – Христов 2013) (Fig. IV. 1).

The earliest anchor item listed in the NHM collection is a grooved lead stock (inv. no. HИМ 30747 – Христов 2013, 121) (Fig. IV. 2). The stock is of an elongated trapezoidal shape with a groove in the middle measuring 6 / 1 cm. The stock is 66 cm long, 10/4 cm wide and 5 cm thick. It weighs 26 kg. The stock belongs to the so-called movable lead stocks. Chronologically and constructively, this is the type of stocks that comes next after the stone stock of the typical wooden anchor. Despite the various options for fastening to the shank of the anchor proposed in the scholarly literature, the opinion prevails that the fastening to the shank of all stock types was done with a metal bolt that penetrated the drilled hole.

Kalin Porozhanov considers the opinion expressed in modern historiography that this type of stocks is a local Western Black Sea invention well argued, which is why they are called 'Greek-Thracian anchors' (Порожанов 2000, 95). K. Porozhanov refers to the terminology introduced by Gerhard Kapitän in 1986 (Kapitän 1986, 381–394). The statistics based on the NHM collection supports Porozhanov's working con-



IV. 1. Map of the discovered anchors and stocks in the area of Sozopol (after Ivan Hristov)



IV. 2. A grooved lead stock inv. № НИМ 30747)



IV. 3. Lead stock with a rectangular central box KB $\Pi$  16861)



IV. 4. Lead stock with an oval central box NHM)



IV. 5. A single-holed lead stock НИМ 30748)



IV. 6. A single-holed lead stock inv. No. HИМ 59014)



IV. 7. Lead 'collar' with three sectors KB $\Pi$  16863)

clusion that during the Roman era the local lead stocks, respectively the locally-built ships, dominated impressively along the Black Sea littoral (Порожанов 2000, 95).

The next item is a lead stock with a rectangular central box (KVP 16861) (Fig. IV. 3) and curved arms. It is well preserved; its total length is 1.66 m, the width of the arms is 10/5 cm, and their height is 15/8 cm. The central rectangular box has dimensions: 30/20 cm outer side and 24/13 cm inner side. The stock weighs 73 kg. The anchor stock stored in NHM belongs to the so-called fixed lead stocks. This type of stocks was particularly popular for all the seas on which Roman ships sailed after the 1st century AD (*Haldane 1986, 416–427*). They represent a massive body in the middle with a 'box' through which the wooden shank of the anchor was passed. The fixed lead stock is well studied in the case of Lake Nemi in Italy, which has become a classic example of ancient anchor researches (Ucelli 1950). The fixed stocks are dated from the beginning of the 2nd century BC until the end of the 3rd century AD (*Haldane 1984, 4, 13; Порожанов 2012, 262*).

The next find recovered from the bay is a lead stock with an oval central box ( $Xpucmos\ 2013,\ 136$ ) (Fig. IV. 4). It has curved arms, the ends of which are broken off and the cavity in which the wooden body lay is seen. The total length of the stock is 1.23 m, the width of the arms is 8/4 cm and their height is 12/3 cm. The box has the following dimensions: 22/13 cm outer side and 13/7 cm inner side. The stock weighs 72.5 kg

Next is a single-holed lead stock (NHM 30748) (Fig. IV. 5). It has an elongated diamond shape and a hole in the centre with a diameter of 3.4 cm. Above the central hole there is a crack. Dimensions of the sto4k: length – 64 cm, width – 9.5 cm, thickness – 3.6 cm. Weight – 15 kg (*Xpucmos* 2013, 139).

Another lead single-holed stock was found in the bay at Cape Hristos (NHM 59014, *Xpucmos* 2013, 156) (Fig. IV. 6). It is of a curved shape, a rectangular cross-section and a central hole with a diameter of 2 cm. Diagonal notches are noticed on both sides of the stock. Dimensions: length – 8.5 cm, width – 9 cm, thickness – 3.5 cm. Weight – 21 kg.

The last object recorded in the museum collection is a lead 'collar' with

three sectors (KVP 16863; *Xpucmos 2013, 159*) (Fig. IV. 7). It is a rectangular box with bevelled short sides, the sectors being separated by two wedges with a triangular shape. A thickening is visible on the upper part of one of the wedges. Total length of the object 91 cm; width 16 cm; wall thickness 1.7 cm; height 10 cm. The three sectors of the 'collar' measure 23/13 cm, 21/13 cm and 32 /13 cm. The item weighs 50.5 kg.

A similar type of items served to fasten the arms of the wooden-lead anchor to the shank. It features a lead rectangular box with three openings. The openings are angled differently, complying with the position of the anchor shank and the wooden arms. Lead 'collars' are associated chronologically with the spread of lead stocks with a central rectangular or oval box. They are part of precisely this type of 'Roman' anchors; therefore we date them to the 2nd century BC until the end of the 3rd century AD.

Bozhidar Dimitrov and Atanas Orachev define the harbour at Cape Hristos as a harbour of refuge (Δμμμπροβ, Οραμεβ 1982, 9) (Fig. IV. 8). In another publication, the Kavatsite Bay is identified as one of the two harbours of Apollonia along with those of Anhialos, the Sladki Kladentsi residential quarter of Burgas, the narrow passage connecting Lake Mandra with the sea, Atia, the Sozopol Bay, Maslen Nos, the Kiten southern bay and Ahtopol (Δμμμπροβ, Ποροжαμοβ, Οραμεβ 1982a, 440). In this group the researchers include also small harbour basins, sheltered in ancient times from the dangerous wind blowing at a certain time. Dimitrov and Orachev believe that no remains of ancient settlements in the imme-



IV. 8. Plan of the harbour at Cape Hristos (after B. Dimitrov, At. Orachev)

diate vicinity of these harbours have been discovered so far. Very weak archaeological traces (a few anchors and ceramic fragments) dating to Antiquity have been found on the seabed of the harbours (even on those not visited by underwater sports enthusiasts). The harbours in the bays of Vatrohi and Kendinar, at the village of Ravda and near Cape Cherni Nos are indicated as being similar to that at Cape Hristos. It is likely that those of the harbours, located not far from large ancient settlements, were used in periods of intensive commercial exchange as auxiliary ports or as seasonal markets.

Shtelian Shterionov includes the Baglar Altı port in the group of the so-called small harbours and harbour bays along the Southern Bulgarian Black Sea coast (*IIIepuonos 1989, 117*). According to Shterionov, these are convenient harbour bays, the main purpose of which is to provide reliable shelter for large ships. They have usually no piers and are not intended for trade. If however trade takes place, the goods traded are carried by boats to the very shore. In this type of harbours we have to include the small piers belonging to the pound nets (*talyans*) and to other fishing grounds. Only fish was exported from the piers with small-tonnage vessels, and goods needed by the fishermen were delivered. The harbours of this type were usually used for shelter and were important exclusively for cabotage shipping.

Tsonya Drazheva and Krastina Panayotova dwell on the bay and the coastal sites (Παнαŭοποβα, Δραжεβα 2003, 228). Examining the topic of non-urban settlement agglomerations in the immediate vicinity of the urban core of Apollonia, they mention an unfortified fishing settlement located to the 'south of Sozopol in the area between cape Hristos and the Chayka talyan'. The hypothesis is based on information published by B. Dimitrov, according to which stone anchors, lead stocks and ceramic vessels from the Bronze and Classical Ages were found in the bay (*Dimitrov 1987, 16*). When describing the results of the archaeological research of the Thracian fortresses along Medni Rid, it is explicitly mentioned that scuba divers have found in the Chayka Bay 'pottery shards, which by their workmanship and decoration are the same as the Early Iron Age pottery discov-

ered in the fortresses' (Венедиков, Димитров, Домарадски, Карайотов, Цанева 1976, 156).

Referring to B. Dimitrov, Martin Gyuzelev mentions many accidental finds in the bay related to the sea, such as a transport amphora and Attic black-glazed pottery dated within broad chronological span from the 4th century BC until the 15th century (*Гюзелев* 2009, 263).

In his attempt at presenting a classification of the underwater archaeological sites along the Bulgarian coast, Stiliyan Stanimirov includes the bay of Cape Hristos in the group of the submerged ports and harbour facilities (class B) and recalls the discovery of stone anchors used during the Bronze, Iron and Roman ages (*Stanimirov 2003, 1 – 34*).

In 2018, based on an analysis of all available data on finds from the bay at Cape Hristos, I considered the location of the harbour zone at the cape (*Xpucmos 2018, 305*). It was situated on the leeward side of the large peninsula in the area of the present-day Chayka pound net. The depth here reaches up to 12 m. On an area of 300 sq. m. a large assemblage of pottery fragments from different historical periods has been discovered. The Late Antiquity shards predominate. Over the years, whole vessels and clay late antique lamps have also been found. In 2015 I noticed at a depth of 8 m the keels of two ships with a beam thickness of 60–80 cm. Therefore I assumed that at Cape Hristos there was an area suitable for a ship to anchor in bad weather and a harbour that served an ancient settlement on the Budzhaka Peninsula.

According to Georgi Iliev, a long-term associate of NHM, while undertaking training dives in the bay, late antique ceramic lamps and pottery dating back to different historical periods were found (Fig. IV. 9). During one of his last dives in the bay, G. Iliev found a heavily fragmented iron anchor (Fig. IV. 10). It belongs to the so-called Y-shaped anchors, dating from the beginning of the 11th century judging by the published anchors from the Serçe Limani shipwreck (*VanDoorninck*, 2004, 189; *Kapitän* 1984, 33 – 44).

The Y-shaped anchors have straight arms, which are slightly sloping down so that they form an obtuse angle; the tips of the arms point upwards at a right angle. According to G. Kapitän, the obtuse angle of the arms of

the Y-shaped anchor testifies to the technological progress compared to the right angle documented in the earlier T-shaped anchors due to the fact that theoretically there is less chance that a Y-angled anchor will break as there is less stress on the connection points between the shank and the arms (Kapitän 1978, 271). Of interest is the fact that there are Y-shaped anchors dated to the 10th century, judging from the anchors found at Yenikapı 1 (Pulak, 2007, 132; Haldane 1990, 22).

Unfortunately, a large part of the ancient objects occurring underwater have been looted during recreational diving and scuba diving courses. Whole and fragmented vessels, lead stocks, stone and iron anchors still adorn private collections in the area (Fig. IV.11 – IV. 14).

The first organised surveys in the bay at Cape Hristos were conducted in the spring and summer of 2022.

In April 2022, a detailed survey using remote non-destructive methods was carried out within three days in the wa-



IV. 9. Georgi Iliev with accidentally found fragments of amphorae and an iron anchor in the bay near Kavatsite



IV. 10. Medieval anchor. A fragment



 $\it IV.\,11.$  Fragments of ceramic vessels and amphorae found in the bay at Cape Hristos



IV. 12. Completely preserved Herakleian amphora from the water area of Cape Hristos



*IV.* 13 – 14. Amphora fragments from Late Antiquity

ter area of the bay in front of the Kavatsite campsite – the Chayka talyan (pound net) – Cape Hristos, to the south of Sozopol. The survey was conducted by engineer Kiril Velkovski with the assistance of the Centre for Underwater Archeology in Sozopol. The explored area was approximately 542,000 sq. m (542 decares). The following methods and equipment were used: multibeam echo sounder – detailed bathymetry; side-scanning sonar as a visualisation system for acquiring information about the nature of the seabed and the presence or absence of objects of an artificial nature; supporting computer systems with relevant specialised software for collecting data for processing.

The research objectives set within the framework of an underwater expedition of the NHM are mainly related to:

- 1. Measurement and creation of a detailed bathymetric map of the surveyed area with a multibeam echo sounder.
  - 2. Scanning the area with high-frequency side-scanning sonar.
- 3. Construction of a detailed terrain model in the target area the waters of the research targeted area.

- 4. Creation of raster images mosaics with the texture of the seabed based on the side-scanning sonar data.
- 5. Identification of prospective bottom targets for the entire survey area that would have the potential to be artifacts from ships or shipwrecks.

A motor boat owned by the Centre for Underwater Archeology, adequately equipped to work with the planned methods of the complex, was used as a floating platform for the purposes of the said survey.

The accompanying geophysical investigations and underwater searches were conducted between June 16 and June 24, 2022 by a team of six divers. The so-called swimline (freeline) search method was applied in the survey. This method was successfully used in archaeological expeditions in the past, including by our team. In this particular case, the system relies on four-five divers spread out along a tape or marked rope and spaced at intervals of two metres equivalent to less than the limit of clear visibility, so as to achieve as complete coverage of the area as possible.

The coordinates of the research area as well as of the finds were taken from the GPS located on board the boat. Small buoys were used to mark the finds.

Six zones were surveyed at a depth of up to 19 m and a total area of 120 decares.

The underwater research of the bay at Cape Hristos by the National History Museum continues in the autumn of 2022 with funds provided by the Ministry of Culture of Bulgaria under a project won by the team. In September, the geophysical survey in the southern part of the bay was completed by engineer Kiril Velkovski. Underwater surveys were carried out in the area of the active pound net and the reef that starts from Cape Mono Petra.



 $\it IV.\,15.$  Preparation for departure with Ivan Lipchev's boat from the quay near Arkutino









IV. 16–21. The diving team at the first stage of the surveys







 $\it IV$ . 22–24. The diving team at the second stage of the surveys

## V

## RESULTS OF THE GEOPHYSICAL AND UNDERWATER SURVEYS CONDUCTED IN 2022 IN THE BAY AT CAPE HRISTOS

#### V.1. Results of the geophysical surveys

Observations and hypotheses based on the obtained data According to Kiril Velkovski, the following features are observed in the bathymetric terrain model:

The bay has a relatively diverse depth dynamics, starting from a shallow water zone of 1-2 m depth and reaching 18-23 m of depth in the central part (Fig. V. 1-2).

A crescent-shaped reef facing north extends 150-190 m southwards and at least 350 m eastwards in the water area off Cape Hristos. It probably continues further to the east. The reef itself is known to be about 1.5-2 m deep in its main part, with two single rocks visible even now above the surface of the sea. These circumstances imply that in the past the present reef was probably part of the mainland, which being subjected to abrasion was completely 'eaten up' by the waters during the inundation of the sea. The latest facts support the hypothesis that even in the not-too-distant past the reef around the cape was indeed land and formed a bay closed to the east thus allowing a view to the beach of the Kavatsite campsite (Fig. V. 3).

At an average depth of 8 m an elevation of the bottom in the bay at the Chayka Talyan restaurant forms something like a 'swelling' about 7.5 – 8 m high. At present, it is difficult to interpret this form due both to the scarcity of the data obtained through other methods and to the lack of a complete picture of the bay allowing the context to be analysed. This form however suggests some primary cause, either a deposit of material as a re-

sult of eddy currents or a remnant of some paleo-terrain form.

No other specific or prominent geo-relief forms are observed in the rest of the researched territory. Relatively speaking the seafloor deepens 'monotonously' starting from the 0.5-1 m deep surf zone and gaining depths up to 23 meters in the southeast direction.

An underwater reef about 600 m long makes an exception, stretching from the water area of Cape Malo Petra in the direction of Cape Hristos. The average width of the reef is ca 15 m. It is around this reef that anchors and anchor elements from different historical periods were discovered.

#### V.2. Results of the underwater surveys

Various objects related to shipping and loading and unloading activities in the bay were found during the summer and autumn underwater searches. The number of ceramic ware fragments was also relatively large.

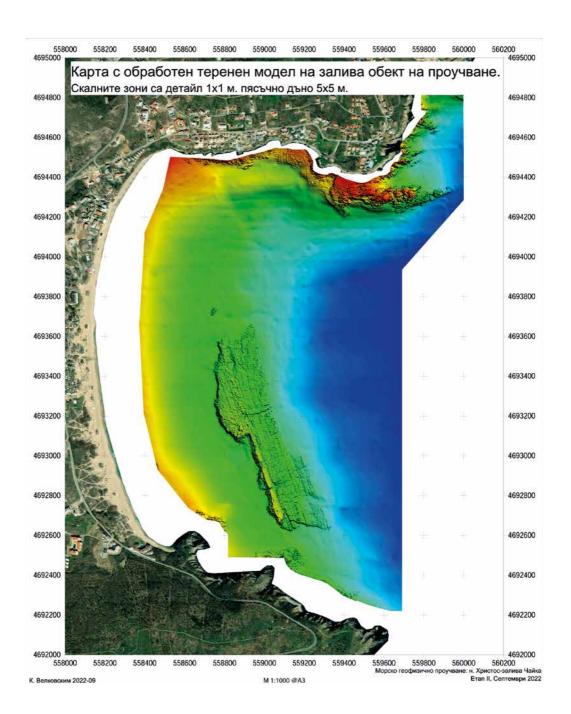
Of certain interest are the two stone anchors with two holes dated to the 1st millennium BC, a Roman lead removable stock and a large four-armed iron anchor from the 16th-17th century.

The earliest finds are the two two-holed stone anchors. The first of them was discovered near the northern shore of the bay. It features a trapezoidal porous limestone, with numerous cracks and chips along the periphery. The anchor measures 31/32 cm; diameter of the holes 5 cm; thickness of the stone block 8 cm (Fig. V. 4-V. 4a).

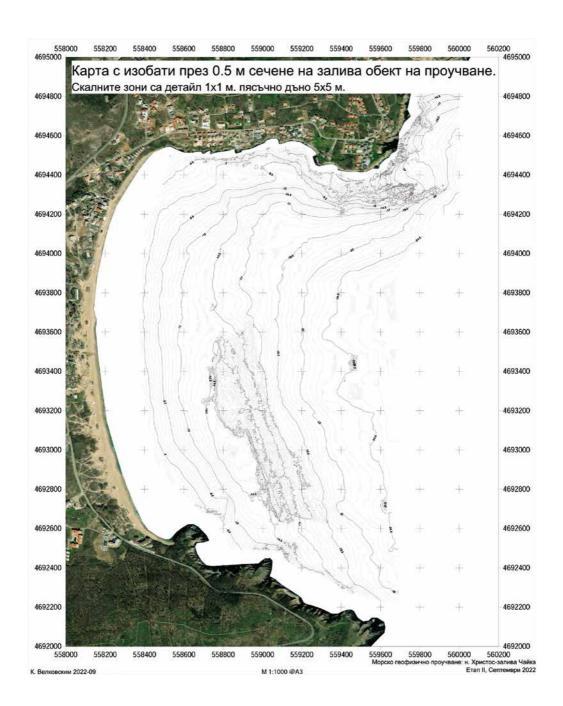
The second anchor was found at a depth of 14 m at the northwestern end of the underwater reef, which starts from the water area of Cape Malo Petra. Its dimensions are 34/24 cm; diameter of the holes 5 cm; maximum thickness of the block 8 cm (Fig. V. 5 - V.5a).

The researchers assume that the stone anchors are the oldest ship devices used both in the Mediterranean and the Black Sea.

Information about them appears on monuments in Egypt – the reliefs of the Tomb of Pharaoh Sahure at Abu Said, dated 3000 BC, in Phoenicia, dated 1900 BC (*Upham 1983, 4–5*). We also find information about them in the Iliad and Odyssey of the ancient Greek poet Homer (Hom. Il. I, 436; Hom. Od. IX, 137; XV, 498). The characters of the epic use the term 'eyne'



V. 1. Terrain model of the bay created by engineer Kiril Velkovski)



V. 2. Bathymetric chart of the bay created by engineer Kiril Velkovski)



V. 3. The reef in front of Cape Hristos

for anchor, which is actually the oldest name for an anchor in the ancient literature (Hom. Od XV, 497–498; Ποροжαнοв 1998, 114).

Anchors were used by ancient peoples as early as the Bronze Age. They are roughly worked solid stones with a varying number of holes that serve to tie the anchor rope and lodge additional wooden pointed plugs, the purpose of which is to hold the anchor on the bottom.

It is noteworthy that the stone anchors are not distinguished by great variety. What is the situation in the coastal waters of the Pontos (the Black Sea)? The stone anchors recovered from the Bulgarian Black Sea are generally dated from the 3rd – 2nd millennium BC. They were also used at the

beginning of the 1st millennium BC (Лазаров 2004, 19–30: Порожанов 2012, 262). There are other opinions concerning the use and dating of the stone anchors but generally they do not contradict the idea that they appeared in shipping before the introduction of the wooden two-armed anchor with a stock (Орачев 2007, 9–37). Of course, the stipulations concerning the context of finding as well the caution in dating also apply here. G. Kapitän calls them 'Thracian', referring to their distribution mainly in the southern part of the West Pontos, and predominantly in the water area of Sozopol (*Kapitän 1986*).

At a depth of 19 m, to the southeast of Cape Hristos, a stone weight was discovered measuring 16.5 cm preserved height; width 13 cm; thickness 6 cm. Its bottom part is broken off and an incised image is seen on one



V. 4-4a. Stone anchor on the northern shore of the bay



of the sides, probably the letter M. With some stipulation, we can interpret the find as a device for measuring depths (Fig. V. 6).

So far, the only stock discovered during the survey is from the Roman era; it is made of lead and is 60 cm long. Like the stocks in the NHM collection it also belongs to the group of the so-called removable single-holed stocks (Fig. V. 7 - V. 7a).

Among the particularly valuable finds retrieved from the bay is an iron T-shaped anchor lying at a depth of 9 m in the Chayka Talyan area and near the medieval monastery on the mainland. The anchor has a preserved length of 1.02 m, width 89 cm and thickness 12 cm (Fig. V. 7b - V. 7c). With some stipulation, the anchor can be dated on the border of Late Antiquity and the Middle Ages. According to G. Kapitän's classification, it belongs to type D, attributed to the 5th - 7th centuries (*Kapitän 1984, 33 – 44*). T-shaped anchors appeared in the middle of the 4th or the beginning of the 5th century and by the 7th century they were already the most common type. It may



*V.* 5-5a. Stone anchor discovered in the middle of the bay



be written that the use of T-shaped iron anchors was common throughout the Mediterranean, the Sea of Marmara and the Black Sea for a period of approximately 900 years, starting from the second half of the 4th century and continuing to the 13th century (*Eliyahu*, *Barkai*, *Goren*, *Eliaz*, *Kahanov*, *Ashkenazi* 2011, 236 – 237). At the beginning of the period they were present alongside the curved iron anchors, and from the 10th to the 11th century, Y-shaped anchors appeared, as seen in the case of the anchorage from the Serçe Limani shipwreck, dating from 1025 AD (*Van Doorninck*, 2004, 189). However, it is difficult to establish a detailed typological development. The next types of iron anchors refer to the Middle Ages.

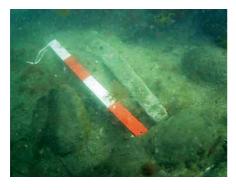
The first stage of the underwater surveys yielded two iron anchors, both found at a depth of 16 m by the northern end of the underwater reef, which stretches from Malo Petra towards Cape Hristos. The first anchor, probably a four-armed one is highly fragmented. Relatively well preserved is the other four-armed anchor with dimensions: average width of the shank 8 cm; diameter 25 cm and 50 cm long arms. The fluke itself, i.e. the end of the arms is 25 cm. The front part with the extension of the anchor is 35 cm, which transforms into the 1.10 m long shank. The estimated length of the entire anchor



V. 6. Depth sounding stone device ?)

is 2.50 m (Fig. V. 8 – V.8a).

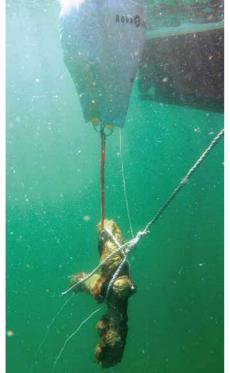
The second stage of the surveys undertaken in September yielded other two large iron anchors. They were found near the northern shore of the bay at a depth of 9 m. The anchors were partially exposed. The first anchor is three-armed with an exposed length of only 1 m (Fig. V. 9–V. 9a). Of the second anchor, only a massive fluke was seen on the seabed (Fig. V.10–V.10a). This type of anchors dates back to the 17th–18th centuries. A close parallel to the finds recorded in the bay at Cape Hristos are





V. 7-7a. Lead stock

V. 7b-7c. Iron late antique anchor





the iron anchors found in the water area of Constanta (*Dobre, Rusu 2019,* 143-158) and that of the Khortytsia Island in the Dnipro River (*Kobanis* 2021, 90-109).

The iron three- and four-armed anchors succeeded the massive twoarmed iron anchors (Byzantine type). The next stage in the development of the iron anchors began at the end of the 18th and the beginning of the 19th century when new models were created, for example, the British Ad-

## miralty anchors.

The fact must be taken into account that in recent years, in addition to the four iron anchors from the bay of Kavatsite, numerous other anchors have been found and removed from the seafloor. A large four-armed anchor is now kept on private property near the bay.

Fragmented ceramic vessels and amphorae from different historical periods (from the 6th century BC up to the 18th century) were found during the underwater research. They were recovered from work polygons at a depth of 6 to 10 m which cover the entire northern periphery of the bay to the south of the Hristos, Palamarya and Sulinarya localities (Fig. V.11-V.11a).

The earliest ceramic assemblage dates from the Archaic era. Part of a table amphora belonging to the so-called gray monochrome pottery was also found (Plate  $N^01$ )

That the bay was used during the Late Hellenistic period is attested by fragments of Koan amphora handles, dating back to 2nd-1st century BC (Plate No 2-3).

Synchronous with the Late Antique anchor described above is a single-wick clay lamp of the Asia Minor type with a relief image, probably produced in Ephesus (Fig. V. 7d - V. 7e). Near the lamp, a large assemblage of fragments of Late Antique vessels and amphorae was discovered.

The most characteristic are the amphora walls of Late Roman 1



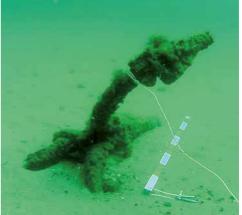
V. 8-8a. Iron four-armed anchor found in the middle of the bay

type, Late Roman C red-glazed Asia Minor bowls, local kitchen pottery. The fragments date from the 5th -6th centuries (Plate No 4-9).

Several ceramic weights for fishing nets, one of them probably for a vertical loom (Plate No 7) are very broadly attributed to Antiquity.

A large number of medieval amphora fragments were collected during the underwater surveys. A relatively fully preserved amphora of Günsenin 1 type with missing mouth and handles was retrieved from the bay. The amphora is of brownish-orange colour and preserved height of 38 cm (Fig. V.12 – V.12a; Plate No 10). This type of amphora dates back to the





V. 9–9a. Iron three-armed anchor discovered hear the northern shore of the bay





*V.* 10–10a. Part of a massive late antique anchor



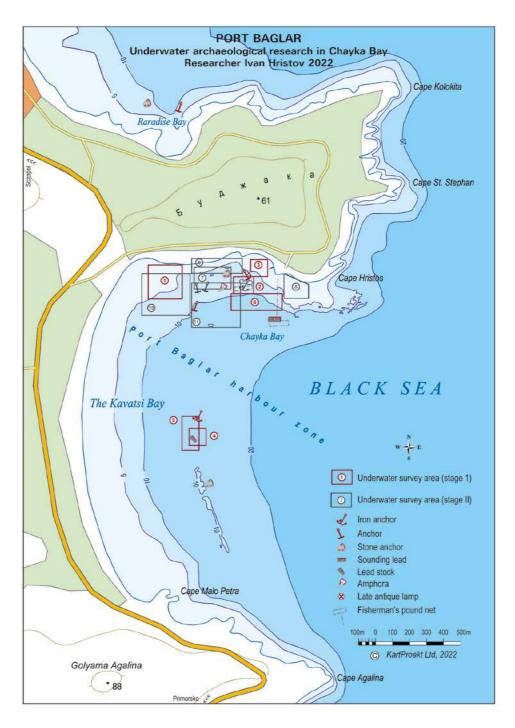
*V.* 7*d*–7*e*. Late antique clay lamp of the Asia Minor type



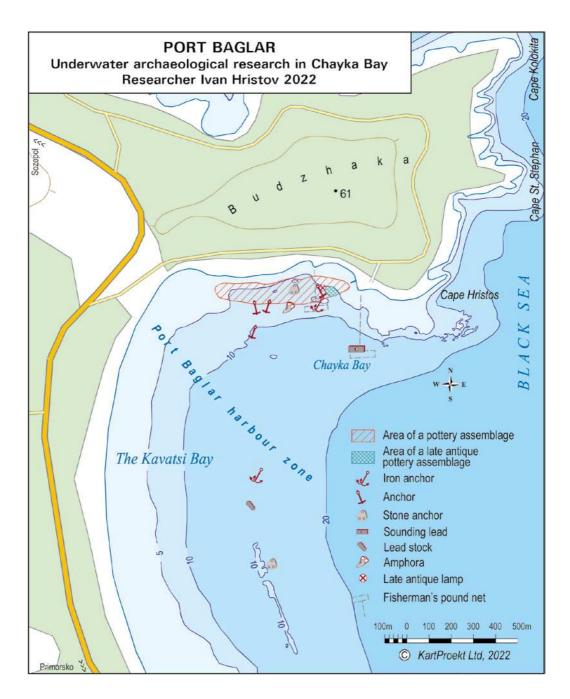
 $V.7g.\ Late\ antique\ lamp.\ Fragments$ 

10th – 11th centuries. Their production centre was probably Ganos and the islands in the Sea of Marmara. They are distributed in southern France, Italy, the Aegean and the Black Seas, the East Mediterranean and even in Russia (*Bjelajac 1989*, 111 – 113; Günsenin 1989, 269 – 271; Hayes 1992, 73 – 74 (Type 54); van Doorninck Jr. 1989, 253; Vroom 2014, 95).

There are numerous fragments, mostly handles with mouths of amphorae Günsenin type 3 (Fig. V. 13; plate No 11) This type of amphora



V. 11. Map of the underwater survey area



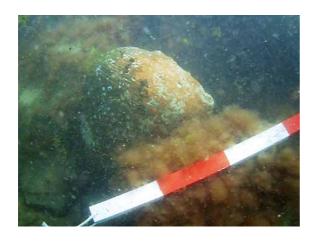
V. 11a. Map of the underwater researched area with a pottery assemblage

dates back to the end of the 12th – beginning of the 13th century (Günsenin 1990, pp. 28-30, Fig. 16 and plates XXXIX-LII; 2018, pp. 100-102, Fig. 9), as type 61 of J. (Hayes Hayes 1992, p. 76, Fig. 26 : 10-11), as type XXII and class 48 for Chersonese (Антонова и др. 1971, с. 93-94, фиг. 24; Романчук и др. 1995 г., табл. 34: 167, табл. 41: 171, табл. 43: 168, 170, 174, табл. 44: 169, 173). The Günsenin III type is also known as the Tartus amphora (Tanabe et al. 1988, pp. 34 – 40). They were probably produced in Central Greece (Chalcis?) and distributed in the Mediterranean, the Black Sea, Russia, Italy and Southern France.

Impressive is the Ottoman pottery from the 16th – 17th centuries found near the western shore and the current quay next to the Chayka Talyan at a depth of between 6 and 9 m. Whole and fragmented sanitary vessels were discovered, the so-called *ibriks* (Fig. V. 14 – V. 16; plate No 15 – 16). By their shape these vessels resemble jugs, except for the additional spout attached to the shoulder ( $\Pi_{\Lambda emhbob}$  2000, 84 – 90). They were distributed in all possessions of the Ottoman Empire in the 16th – 19th century period. They are usually used by the Muslims for the ritual cleansing before prayer. They spread massively into the lives of the Christian population as well. These fragments and the almost intact vessels as well as the dating of the mentioned iron anchor correspond to the information of the Austrian Wenzel von Brognard about the area to the south of Sozopol ( $Hu\kappa ob$  1932, 15, 31).

On completing the underwater surveys and the overall research of the coastline, a hypothesis was launched that the bay, in addition to being a 'refuge' during severe sea storms, was also used for loading and unloading activities related to the developed residential, economic and religious infrastructure. Two were the sites where primitive harbour installations known in later ages as piers or wharves were probably built. The first site was located at the foot of the medieval monastery next to the Chayka Talyan and the current concrete quay to the south of Cape Hristos.

The second site, where a pier and a slipway probably existed, was located at the beginning of the Kavatsite Beach on the coast of the Sulinarya Bay. There, until the onset of the 20th century, there was an iron pier entering the sea. The availability of abundant fresh water is one of the significant reasons to look here for a harbour.



V. 12–12a. Medieval amphora from the 10th century





V. 13. Medieval amphora from the 12th century









V. 14–16. Late medieval ceramic vessels, ibriks

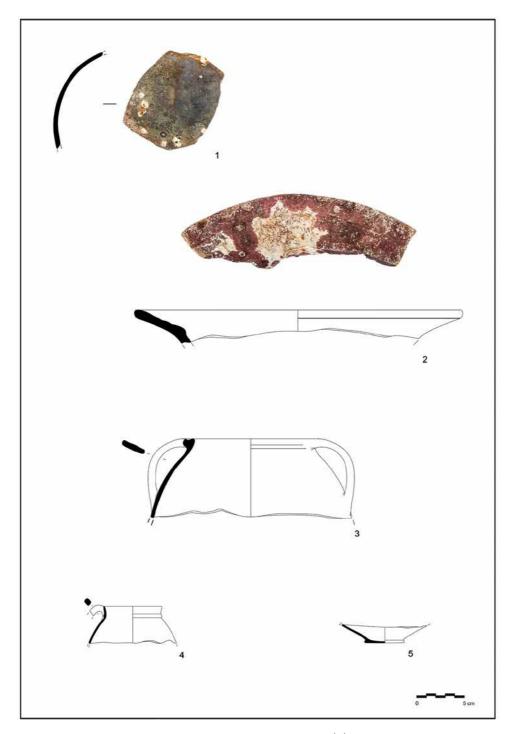
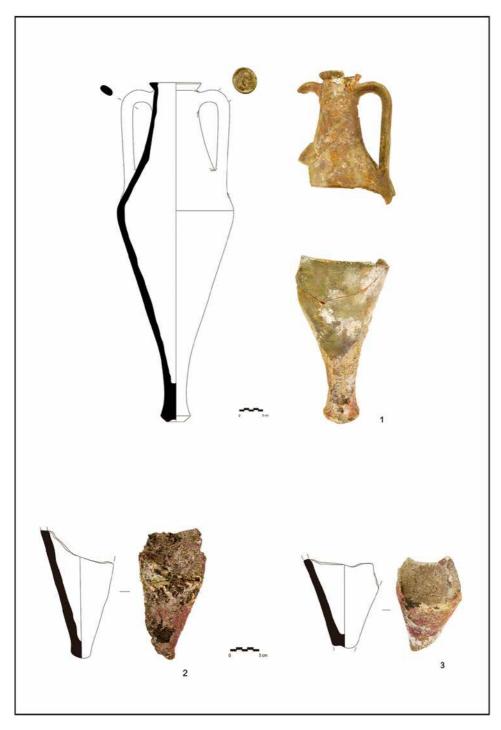


Plate 1. Ceramic fragments of an archaic amphora (1) and kitchen pottery from the Pre-Roman era (2–5)



 ${\it Plate 2. Fragments of Hellenistic amphorae from different centres}$ 

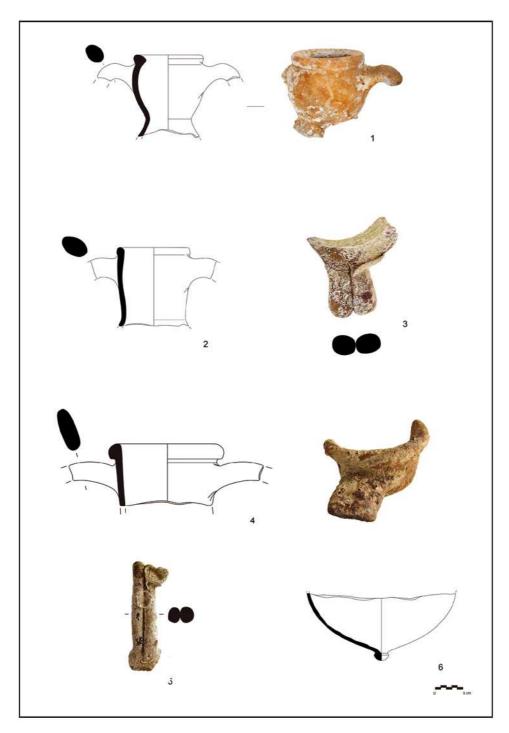


Plate 3. Fragments of amphorae from the Classical (Chios 1, 2, 4) and Late Hellenistic (Island of Kos 3-5-6) periods

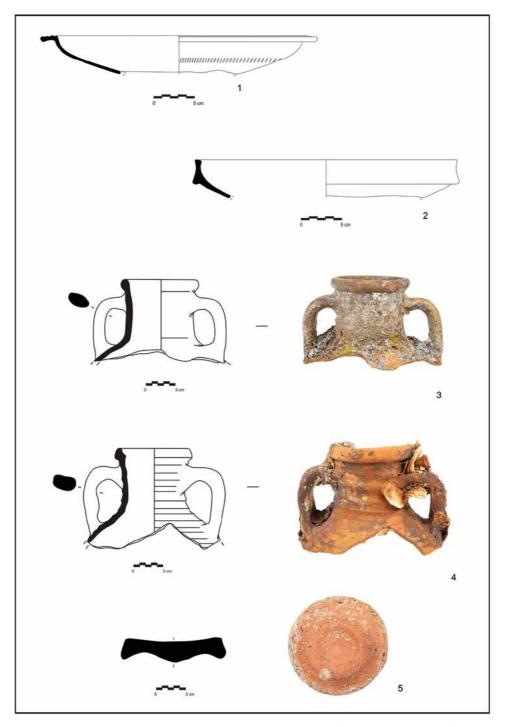


Plate 4. Fragments of Late Antique red-glazed bowls (1–2 Late Roman C) and mouths of Late Roman amphorae (Late Roman 1; 3–4)

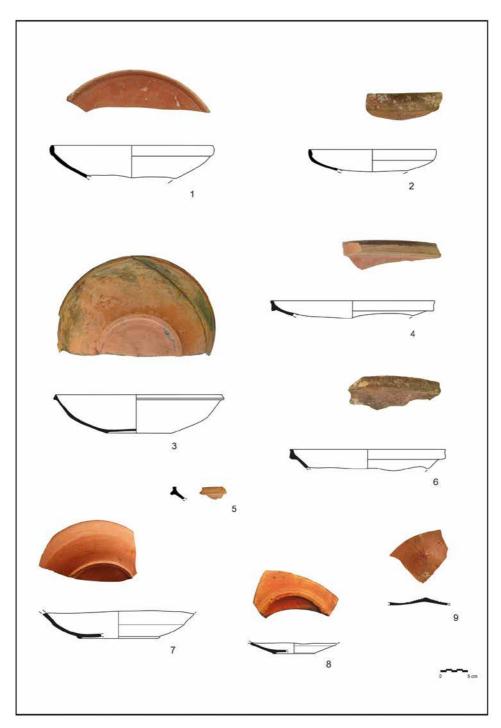


Plate 5. Fragments of late antique red-glazed bowls (Late Roman C)

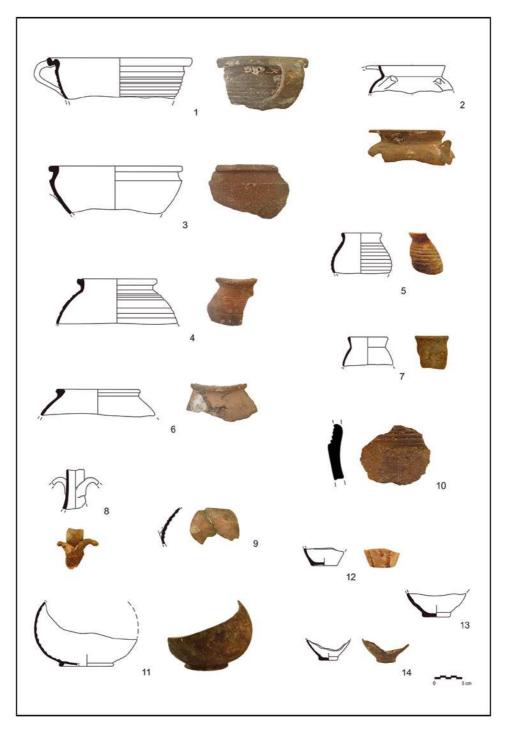


Plate 6. Fragments of Late Antique kitchen pottery

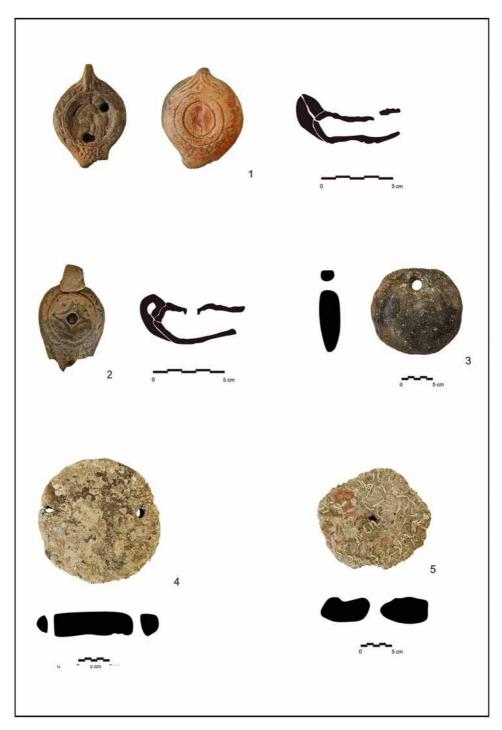


Plate 7. Late antique lamps (1 - origin in Ephesus; 2 - probable origin in North Africa) and ceramic fishing weights (3-5)

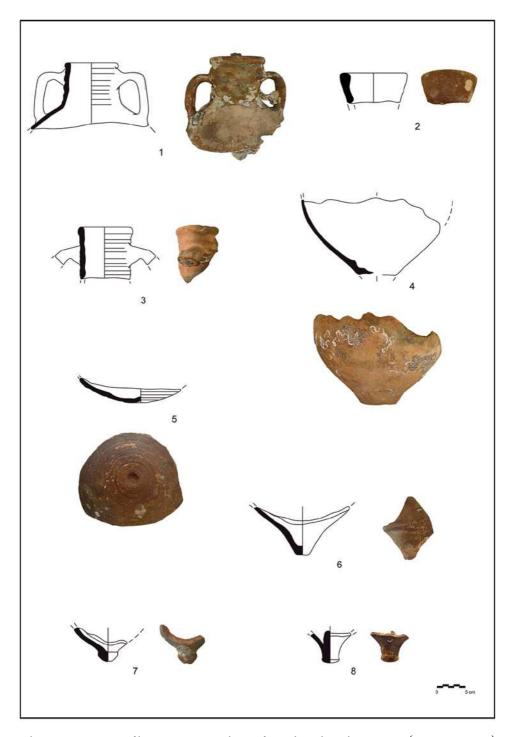
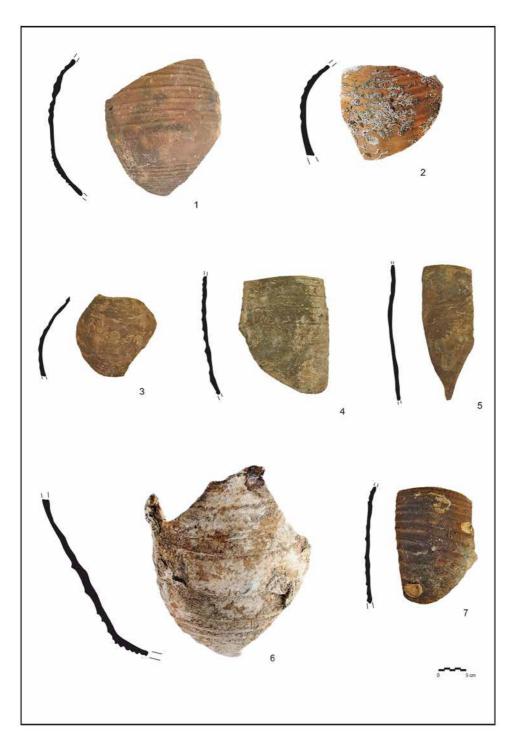


Plate 8. Fragments of late antique amphorae from the 5th-6th centuries (Late Roman 1)



 ${\it Plate 9. Fragments of late antique amphorae from the 5th-6th centuries}$ 

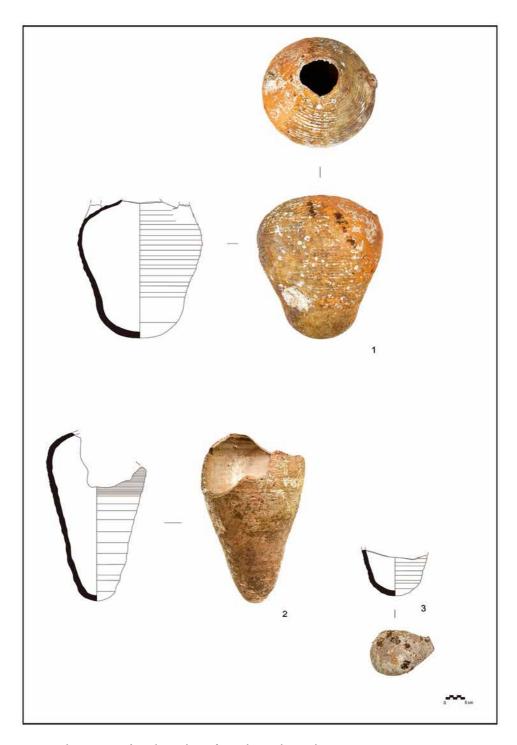
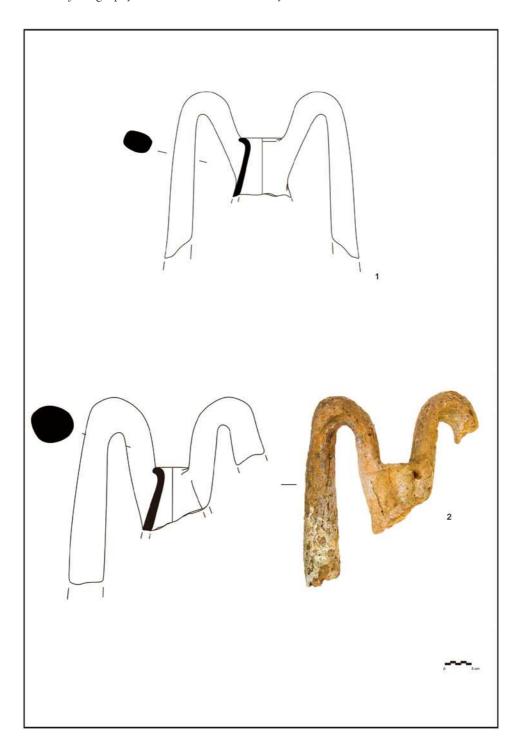


Plate 10. Medieval amphora from the 10th-11th centuries, type Günsenin 1



 $Plate\ 11.\ Handles\ of\ medieval\ amphorae\ from\ the\ 12th-13th\ centuries,\ type\ G\"unsenin\ 3$ 

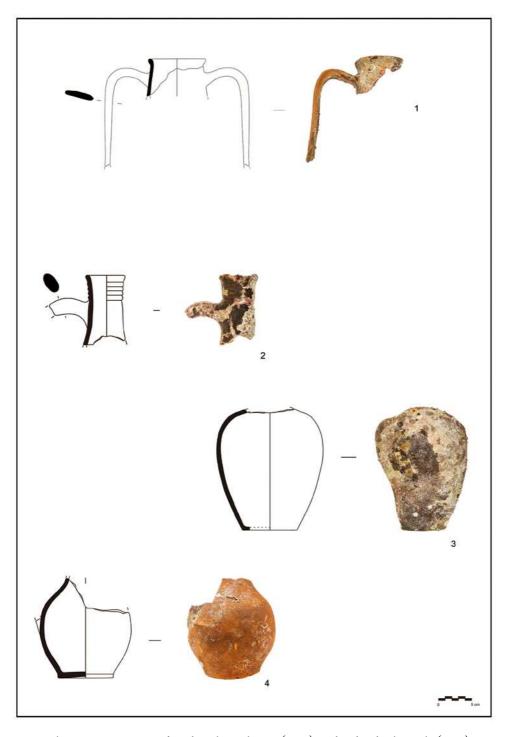


Plate 12. Fragments of medieval amphorae (1-2) and individual vessels (3-4)

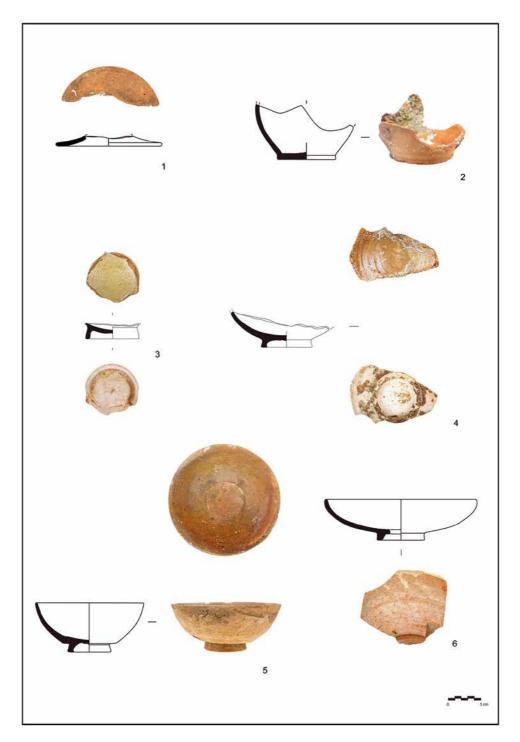


Plate 13. Fragments of medieval vessels from the 12th-14th centuries

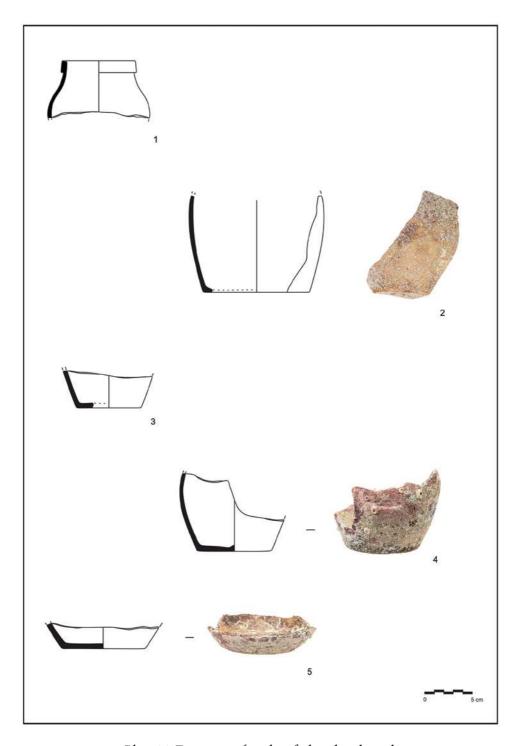
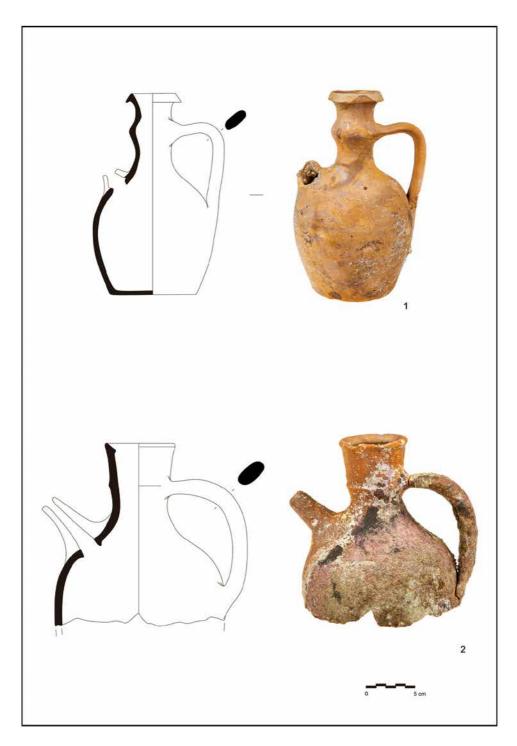


Plate 14. Fragments of unidentified medieval vessels



 ${\it Plate~15. Partially~preserved~late~medieval~vessels~from~the~17th-18th~centuries}$ 

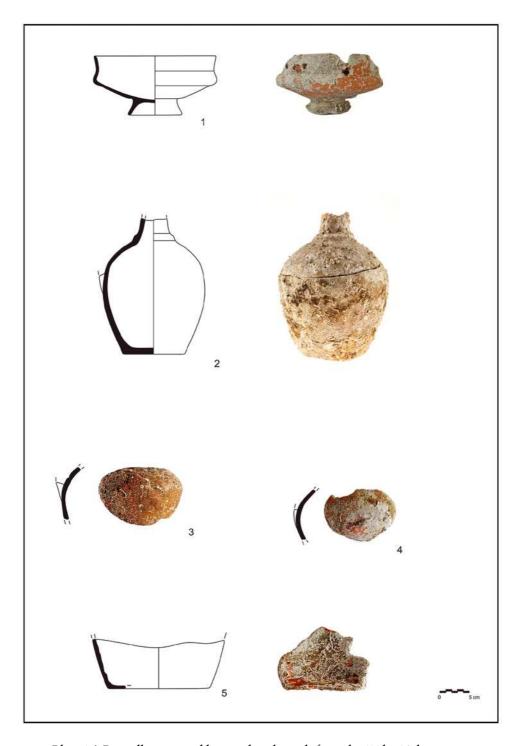


Plate 16. Partially preserved late medieval vessels from the 17th–18th centuries

## ARCHAEOLOGICAL RESEARCH IN THE HINTERLAND BETWEEN THE BUDZHAKA PENINSULA, CAPE AGALINA AND THE SHARLAN BAIR PEAK

This part of my research is influenced by the writings of A. Ginalis and Y. Karmon, which prompted me the studied micro-region to be divided into two designative models, namely the sea itself (respectively the water area of the bay termed as Foreland in the German literature and a coastal land called Hinterland (*Karmon 1985, 1–6; Ginalis 2014, 1–12; Peev. Ginalis 2020, 381–390*).

Hinterland is a German word meaning 'land behind' (city, harbour/port, etc.). In the English its use was first recorded in the 19th century ( $Douglas\ 2008,\ 9-22$ ). At the beginning the term was associated with a harbour/port area, where imported and exported goods were stored and transported. That is, an area 'behind' a sea coast or a river bank. More specifically, the hinterland is understood as the inner area, situated behind a port and under the control of a state or city/town, which possess the littoral. More generally speaking, hinterland can refer to a rural area economically tied to an urban catchment area. The size of the hinterland may depend on the geographical location or the ease, speed and cost of transport between the catchment area and the hinterland.

The hinterland can range from the very coastal installations, such as harbours/ports and other related coastal structures to its adjacent areas or even up to a whole region. A. Ginalis differentiates four types of a hinterland: the so-called local, districtal, regional and supraregional or continental (*Ginalis* 2014, 10-11).

While the district includes a whole small area surrounding the sea

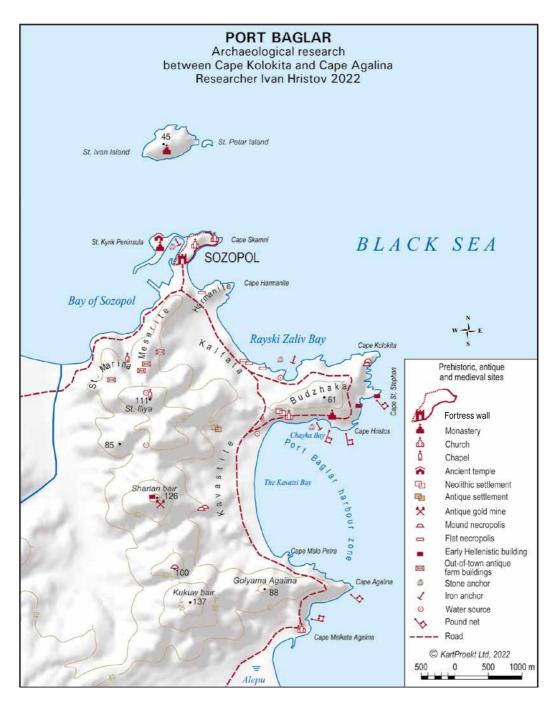
coast, the local hinterland refers to just a distinct sector within its immediate vicinity. This type of hinterland is the most common in the Mediterranean and the Black Sea, and particularly along the mainland coast. However, when considering some provinces and especially islands and peninsulas, the hinterland can include a larger region or even beyond.

While the hinterland refers to the region around the coastal site with its inland communication and social, political as well as economic activities in connection with the coast, Yehuda Karmon assumes for the local/districtal hinterland an extension of 20-30 km and for the regional hinterland usually an extension from 30-40 km up to maximum of 60-80 km depending on the coast (*Karmon 1985, 3*). Of course the pattern of the suggested models changed over time as well as the degree of their influence on the coastal installations.

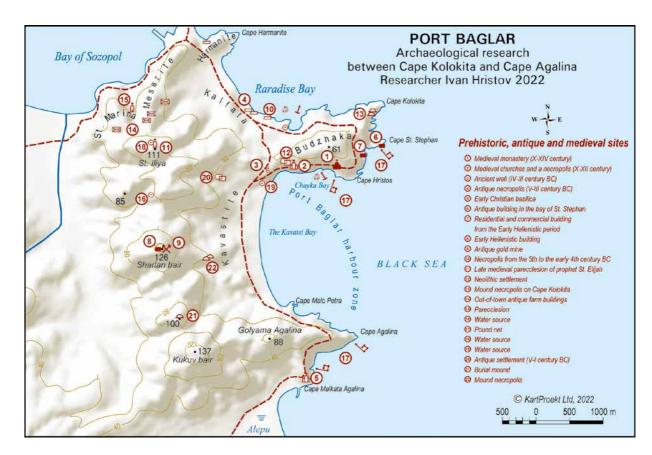
The hinterland around Cape Hristos includes as noted in Chapter 1 the territory to the south of Sozopol bound by the Budzhaka Peninsula to the north and Cape Golyama Agalina to the south. To the west the hinterland of the harbour zone is geographically delineated by the low ridge beginning from St. Elijah peak and extending to Kuku Bair to the south. The entire area of this researched site exceeds 10 sq. km (Fig. VI.1 – VI.2).

The territory would be divided into two zones. The first that I call 'coastal' is locked between the sea and the old road connecting Apollonia/Sozopol with the settlements to the south of it, namely Urdoviza and Ahtopol. The road that intersects the hinterland at Cape Hristos, according to the Shkorpil brothers went out of Sozopol, ran along the low 'skirts' of Peak Drakuza (Sharlan Bair, I.H.) and continuing along the eastern slopes of the hill, which connects St. Elijah Peak and Kuku Bair reached Agia Galini Peninsula. According to the Shkorpil brothers the road ran in parallel to the coast in the direction of Lake Alepu and Peak Andreya Bair (Шкорпил 1891, 126).

The first zone is situated mostly around the southern periphery of the Budzhaka Peninsula in the immediate closeness to the quietest part of the bay around Cape Hristos. Taking this specificity into consideration, we could think of a harbour/port hinterland.



VI. 1. Map of the hinterland south of Sozopol and location of the archaeological sites



VI. 2. Map of the hinterland south of Sozopol and location of the archaeological sites

The second zone extends to the west of the road and comprises two sub-zones. One covers primarily the low ridge between the mentioned peaks. The site on the Sharlan Bair peak occupies a central place here. The second sub-zone borders the mentioned heights to the west, and to the east it comprises the flat areas of the Mapite and Kavatsite localities (Fig. VI.3).

Monuments of different types and dates have been recorded in the hinterland under consideration. Remains of prehistoric settlements occur, as well as ancient necropolises, residential and economic structures from the Hellenistic era, an ancient mine and an ancient quarry for building material, medieval churches and a monastery. All of them were connected in one way or another to the sea.



VI. 3. The western periphery of the studied hinterland

Already at the end of the 19th century, the Shkorpil brothers defined the 'coastal region' between Sozopol and Cape Baglar-alti as an 'old burial place' (Шкорпил 1891, 125). In the course of the archaeological excavations that began here in the 19th century until the beginning of the 21st century, burial structures of different types were discovered on the Budzhaka peninsula (Fig. VI. 4). Their construction depended on the established reorganisation of the immediately adjacent territory of Apollonia towards the middle of the 5th century BC. Undoubtedly, it also affected the spatial development of the necropolis of the city and its expansion in the southeast direction, namely along the sandy strip in the Kalfata locality and later to the Paradise Bay (Bulgarian Rayski Zaliv) (Панайотова 2019, 328 – 333). At the beginning of the 4th century BC burial sites also appeared on the southern side of the Budzhaka peninsula - in the Kavatsite and Sulinarya localities. The formation of burial mound necropolises on the Budzhaka Peninsula, Cape Kolokita, in the areas of Mapite and the Sinetudias localities, where tombs were also built, belongs to the 4th - 3rdcenturies BC period.

According to Al. Baralis and M. Damyanov the best example of a detached mound necropolis in the vicinity of Apollonia is provided by Cape Kolokita, about 4 km to the south of the ancient city. The high rocky promontory is the most seaward part of the Budzhaka peninsula and remains far away from the main necropolis (*Баралис, Дамянов 2019, 286–288*).

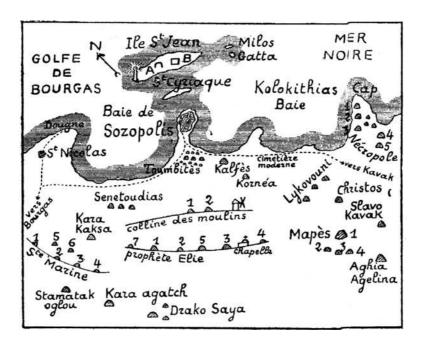


VI. 4. Excavated stone grave from the mound on Cape Kolokita

The data from Cape Kolokita illustrate the functioning of a representative necropolis within about a century – from the beginning of the 4th to the early 3rd century BC.

The appearance of the necropolis on Cape Kolokita slightly preceded the spread of the burial mounds throughout the city. They also developed on the other capes (St. Agalina), beyond Kolokita, on the heights around the city (Tumbite, St. Marina, St. Elijah, Elafotumba, etc. –  $\Gamma$   $\omega$  2009, 263-264), as well as along the roads (for example, the Smokinya locality). Some of them, like the mound Kisir Mihail Tepe, took on extraordinary dimensions and became inevitable benchmarks in the coastal landscape of the colony. With a diameter of 200 m and a height of 10 m, according to J.

Seure, the Kisir Mihail Tepe burial mound is among the most impressive burial mounds around the ancient colony (*Bapanuc 2019, 304 – 308*). It is located in the small coastal plain of Mapite, beyond Kavatsite (Fig. VI.5). The excavations carried out in 1904 by Alexander Degrand revealed the presence of an entrance passageway 4 m long, at the very southern side of the earth accumulation covering it. On both sides of the 1.30 m wide passageway there were walls built with massive blocks, 0.80 – 0.90 m thick. The western wall was 4.30 m high and the eastern one 3.20 m. The passageway led to a partition wall, against which the first grave was located. It was a cist grave, incorrectly identified as a sarcophagus, east-west orientated. Behind the partition wall there was a burial chamber with a rectangular shape, a length of 2.40 m, a width of 2.80 m and a height of 1.60 m.



VI. 5. Map of the archaeological sites in the Sozopol region after J. Seur

Another extremely interesting mound was excavated in 1904 by Al. Degrand; this is the mound in the Sinetudias locality, which he called Sinetudes, situated 4 km to the south of Sozopol, above the Kavatsite Bay and the Solenkite area, where remains of several already excavated mounds were recorded during the field surveys.

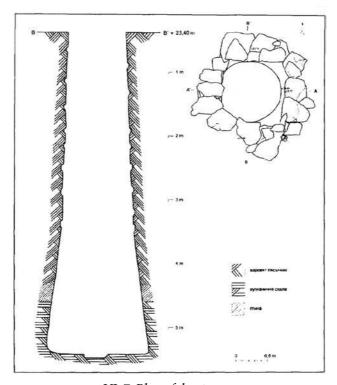
The appearance of monumental family burial complexes in areas that are relatively far from the main necropolis could be associated with individual out-of-town holdings/mansions ( $Damyanov\ 2012, 51-53; \Delta amshob\ 2017, 367$ ). According to the researchers, this phenomenon lasted until the first half of the 3rd century BC.

The remains of several buildings, which were probably part of non-urban residential and economic structures, were localised in the immediate vicinity of Cape Hristos. Evidence of the first such structure appeared in the course of the excavations of an ancient cistern in 2007 ( $\Pi$ empoba, Hedeb 2008, 327-331). The land property is located about 4 km to the south of Sozopol, on a south-west facing slope in the Kavatsite – Sulinarya localities. The land falls within the area of the ancient necropolis of Apollonia Pontica, judging by the data on facilities and finds. Since the antique layer was removed during modern interventions, the study also aims at recording possibly preserved burial facilities.

A cistern of a preserved depth of 5.30-5.40 m was unearthed in the northern half of one of the trial trenches. Its upper part was made from calcareous sandstone blocks with roughly worked faces in dry-stone masonry (Fig. VI. 6-7). Two dry-stone courses surrounding an approximately square opening  $(0.95 \times 0.95 \text{ m})$  had survived from it. The stonework rested directly on top of the bedrock into which the rest of the facility was dug. During the study of the facility, assemblages of pottery shards (transport amphorae, domestic and building ceramics) were found in different layers. Some of the amphorae found in it allow determining the date of the facility. The amphora with a mushroom-shaped mouth found in the lower part of the cistern points to the second half of the 4th or rather the beginning of the 3rd century BC as the *terminus ante quem* for the construction and the functioning of the cistern.



VI. 6. A restored ancient cistern in the southern part of the Budzhaka Peninsula



VI. 7. Plan of the cistern

As stated above, the site where the cistern was unearthed is considered part of the ancient necropolis of Apollonia. In fact, the data about the context in which it was found are few, since the ancient layer around it has been destroyed. Some guidance in this regard is provided by the nature of the cistern itself and the archaeological materials in it. Facilities of similar dimensions and construction method have not been found so far in the necropolis of Apollonia, and they are not characteristic of the necropolises of other poleis in Ancient Hellas. On the other hand, similar facilities were found and were even typical of the urban part of Apollonia. They are also an almost mandatory element for the settlements and farms located within the urban territories of the polis. The archaeological materials in the cistern, although found within the necropolis, suggest a domestic rather than funerary context. A number of necropolis-specific groups and categories of ceramic vessels are missing (e.g. black-glazed pottery). It is very likely that this section of the chora of Apollonia was part of a holding within which the cistern was also situated. This is confirmed by the favourable southern exposure of the slope on which the facility is located. The exact nature of the holding (small settlement, farm or agricultural plot) cannot be established due to the destroyed ancient layer. Somewhat in favour of the assumption are the parallel in-diggings possibly remains of raised beds in the southern part of the plot.

Another similar holding, a supposed farmstead or larger settlement is located one kilometer to the south-west of the one already described (Fig. VI. 8-8a).

A large assemblage of fragmented Classical and Hellenistic domestic and building ceramics has been recorded on an area of 10 decares situated on a terrace slightly sloping to the east and well protected by the surrounding hills. The amphora fragments predominate. A pithos was unearthed during the excavation work for laying an electric cable.

The finds in the area were buried under a thick dense layer of sand. The place is rich in groundwater. There is a well nearby.

A large assemblage of fragmented Classical and Hellenistic domestic and building ceramics has been recorded on an area of 10 decares situated



VI. 8-8a. Antique pythos uncovered in the southwestern periphery of the Budzhaka Peninsula

on a terrace slightly sloping to the east and well protected by the surrounding hills. The amphora fragments predominate. A pithos was unearthed during the excavation work for laying an electric cable.

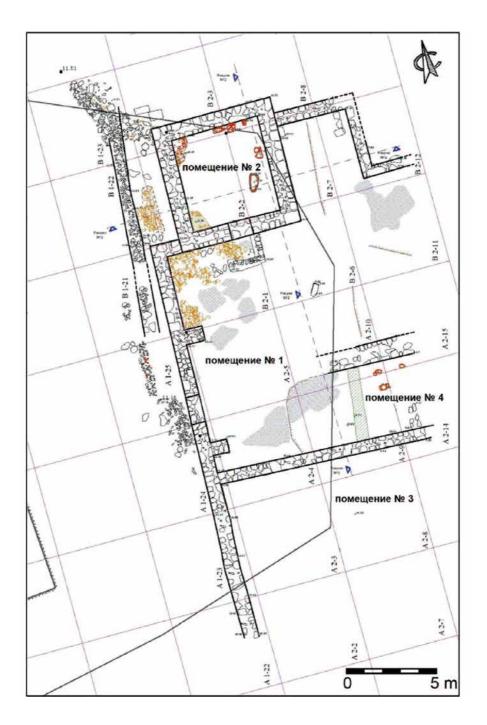
The finds in the area were buried under a thick dense layer of sand. The place is rich in groundwater. There is a well nearby.

The ancient farm next to the neighbouring bay of St. Stephan can be defined as a parallel to the described structures. The residential and economic structures of the non-urban territory of Apollonia Pontica are being researched archaeologically by Yoto Valeriev. A three-part building occupying an approximate area of 364 sq. m. and oriented along its longitudinal north-south axis was unearthed (Fig. VI.9 – 10). Its foundations were built of large quarry stones bound with mud. It had a wooden roof covered with tegulae and imbrices. Fish cookware, pans, lekanai, kitchen utensils, amphorae, fishing net weights were found in the residential room of the building, which has an entrance towards the sea in the south. Yoto Valeriev draws parallels between the complex and similar complexes locat-



VI. 9. Hellenistic residential and commercial complex on the bay of Ct. Stefan

ed in the sites Mesarite and St. Marina in the surroundings of Sozopol. He dates the functioning of the complex in the mid-4th – mid-3rd century BC (Banepues 2021, 570 – 571). Undoubtedly, the complex was connected to the sea, with the population presumably practising various fishing works carried out in a small harbour zone, probably of a private nature. Hypothetically, we can assume the presence of a talyan (pound net), a slipway for landing boats ashore, primitive coastal non-residential premises. We can also call this sites villae maritimae. It is generally accepted that such private harbours were associated with private residences in the waterfront (Blackman 1982, 188). Private harbours form a special type of harbour and usually occur in all periods (Classical, Hellenistic, Roman and Byzantine). From the 2nd to the 3rd century AD, villae maritimae dominate as private coastal establishments, while palace harbours appear after the 3rd century AD. A similar structure (villa maritima) from the Roman era on the western coast of the Black Sea has been studied in the Gulf of Foros (Николов 2015, 125). It is assumed that the Roman villa was built in the middle of



VI. 9 – VI. 10. Hellenistic residential and commercial complex on the bay of Ct. Stefan (after Y. Valeriev)

the 3rd century at the earliest and functioned until the 20s of the 4th century ( $Hu\kappa o \lambda o B 2014, 340 - 341$ ).

Other interesting features in the form of trenches are identified as traces of agricultural activities (Девлова 2017, 397 – 409). They were discovered during rescue excavations at various sites in the southern and southeastern part of the Budzhaka peninsula and are associated with the cultivation of vineyards in the surrounding of the polis (Fig. VI. 11).

As for these trenches (vine beds) they date the earliest use of vineyards in an area, which in the 17th century would be designated by the Turkish translation of this agricultural occupation associated with vine growing – Baglar, meaning vineyards.

Undoubtedly the most interesting antique site in the hinterland of the harbour zone at Cape Hristos is located on Sharlan Bair (VI.12). The fortification called by the Shkorpil brothers Drakuza Kale might have been located here (Fig. VI. 12a).

For the first time in 1992, Kr. Panayotova, D. Nedev and N. Drazhev recorded a Hellenistic site on the top. To the west of the triangulation sign there was an old pit filled with rubble and building ceramics and to the east of the sign was a pool of water of an oily colour, hence the name of the bay (from 'charlan', unrefined sunflower oil). In the northwestern part of the peak, the archaeologists noticed a dry-stone wall. They interpret the remains as a Hellenistic-era tower.

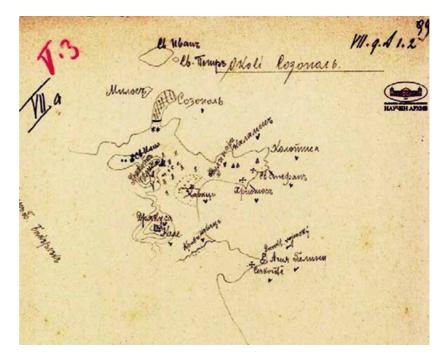
Fragments of Hellenistic building ceramics as well as completely worked building blocks were also photographed in 2022 (Fig. VI.12b). The site was badly damaged by looters' pits. The estimated area of the Hellenistic building is 100 sq. m. The most interesting structures on Mount Charlan Bair are open mines and an underground gallery cut into the rocks



VI. 11. Remains of vineyard beds (after P. Leshtakov)



VI. 12. Sharlan Bair hill top



VI. 12a. Plan of the location of the Drakusa Kale fortress after the Shkorpil Brothers



Fig. VI. 12b. Fragments of Hellenistic building ceramics

in the northeastern part of the peak (Figs. VI.12c, 12d, 12e, 12f). At the northern foot of the massif, dumps of ore lumps were photographed (Fig. VI.12g). The ore workings cover an area of 3000 sq. m.

Hydrothermal quartz veins oriented northwest-southeast – azimuth 120 – 140 degrees were noticed during the rounds. The samples taken here are from the so-called *vuggy silica* sponge-like formation typical of gold-bearing deposits. The hypothesis for the presence of a gold mine is also supported by the laboratory analyses. The question remains open as to what period the mine operated. If the Hellenistic building on the top was in some way connected to the mine, then we have certain benchmarks for a specific mining activity in the 3rd century BC. Ore developments are possible before and after this date. If future archaeological excavations prove the existence of a gold mine, this in itself would be an archaeological sensation and would provide new data on the development of the economic life of Apollonia Pontica.

What makes an impression related to the immediate vicinity of Cape Hristos and, accordingly, to the most wind-protected part of the bay, is the multitude of Christian churches, a supposed monastery and a necropolis that functioned between the 10th and the 12th centuries.

Two medieval churches studied by M. Daskalov and K. Trendafilova were located on a high rocky terrace, about 21-22 m above sea level in the Kavatsite – Sulinarya localities in the southeastern part of the Budzhaka peninsula ( $\Delta ackanobeta, Tpehdagunobeta 2009, 91-106$ ). The excavations conducted in 2004 uncovered an architectural complex of two Christian churches of a total area of just over 200 sq. m. joined on their long sides (Fig. VI. 13).

The data provided by the archaeological survey give reason to think of a complex of two time-successive Christian temples. The first has preserved dimensions: 13 m (west-east) and 10.50 m (north-south). Judging by the layout of the site, it refers to the type of tri-apse cross-domed churches with a narthex and free-standing pillars popular as architecture in the 10th century (Fig. VI. 14).

It was established that in a later stage of its functioning, the cross-

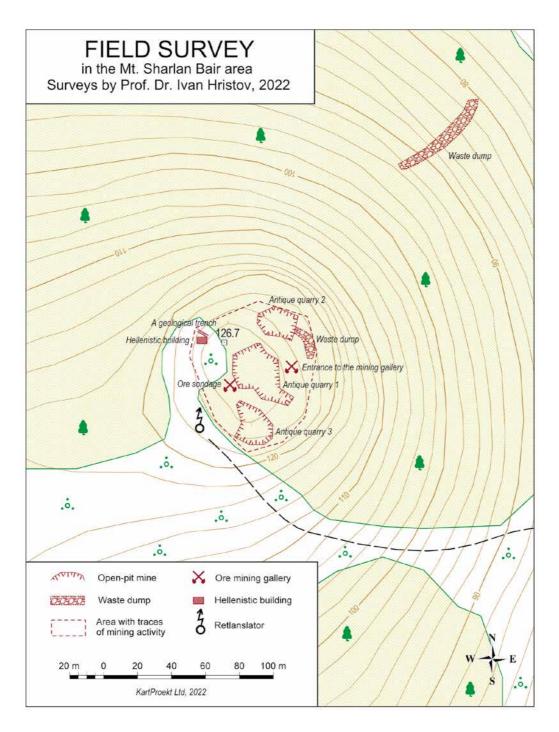


Fig. VI. 12c. Plan and boundaries of the ore workings on Mt Sharlan Bair



Fig. VI. 12d. A groove in the rocks purposed for cutting off stone blocks

Fig. VI. 12e. A groove in the rocks purposed for cutting off stone blocks



domed church underwent major repairs and a single-nave church was added to it. Considering its plan this is a one-nave church without a narthex. Besides, its axis has the same deviation. The external dimensions are: length -11 m, width -5 m. It is obvious that the church had acquired new functions arising from the necropolis developing around it.

The researchers of the churches note the fact that the large-scale construction nearby has destroyed the site's immediate environment. The supposed connection of the cross-domed church with a monastery complex could not be established due to the absence of data on the other structural elements. Although this statement is hasty because of the insufficient and incomplete archaeological research, the absence of data on settlement sites in the vicinity, inhabited synchronously with the temples, does not allow their interpretation as parish. On the other hand, the cross-domed church is representative enough to have been built and used only as a cem-



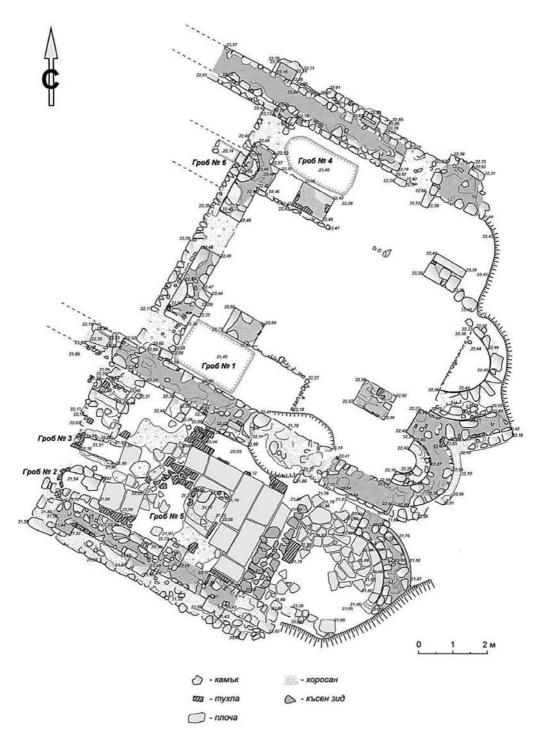
Fig. VI. 12f. Entrance to an ore gallery



Fig. VI. 12g. An ore dump at the north-eastern foot of Sharlan Bair



VI. 13. Foundations of a medieval church in the Solinariya locality



VI. 14. Plan of the researched churches after M. Daskalov, K. Trendafilova)

etery church, and the emergence of the necropolis was primarily connected with the reconstructions and the addition of the single-nave church in later times. In conclusion, the hypothesis is expressed that the temples in question were erected in the middle/second half of the 10th century and maintained for nearly 200 years by representatives of a noble Sozopolitan family (perhaps connected to the administrative and (or) spiritual elite of the city).

A newly-excavated site next to Cape Hristos appeared on the archaeological map in the summer of 2020 (Панайотова, Девлова, Крумова 2021, 1182 – 1186). It is about the site localised in Budzhaka, to the south of Via Pontica Street, in the immediate vicinity of Cape Hristos, on a high terrace above the sea shore and the bay of the Chayka Talyan. Funded by a private investor, the archaeological excavations were carried out in a territory intersected by the modern bypass road leading from Budzhaka to the Kavatsite campsite (Fig. VI.15). A large part of the studied area (the eastern, western and southern parts) is a steep terrain of collapsed rock with a different, but significant gradient towards the sea coast. In the central northern part of the site, structures have been excavated and documented, which give a good chronological idea of how the terrain immediately next to the repeatedly mentioned cape was being reclaimed.

Pottery kilns functioning in the 12th century also have been excavated. They were used to produce household and building ceramics. A round-shaped storage room with external size of  $3.40 \times 3.70$  m was unearthed next to the pottery kilns. The walls of the storage room were made of broken stones of different shapes and sizes in three courses. They were laid directly on the aligned friable rock. To the northeast and next to the stone structure an oval-shaped pit with dimensions of  $1 \times 0.90$  m was dug into the rock. The stone storage room and the pit are connected in a common structure. The pottery found in them belongs to the production of the ceramic complex, including numerous wasters.

In the course of the excavations Kr. Panayotova's team unearthed albeit not entirely, a two-part building. The excavated length of its foundations was situated to the north of and in close proximity to the pottery kilns.



VI. 15. Location of the researched structures at Cape Hristos

The preserved remains of the north, east and a small part of the west and south walls were built of broken stones bound with mud. The walls were two-faced, founded directly on the natural rock. The dimensions of the building were 8.09 m (east-west) and 7.35 m (north-south). The preserved maximum height of the northern wall was 0.80 m; there were two entrances in it, the western one being walled up with stones. The premises were covered with a tiled roof, part of which was found collapsed on the rock near the eastern wall. It is hypothesized that the building probably had an economic purpose – it might have been related to the ceramic production.

Additionally, in the course of the rescue archaeological survey, the foundations of retaining stone walls for terracing were uncovered. They were in the central northern part of the site, 2.35 m to the west of the foundations of the two-part building. Preserved were parts of three parallel walls with an east-west orientation and one north-south orientated wall, which connected the lower ones. Thus they formed three terraces of dif-

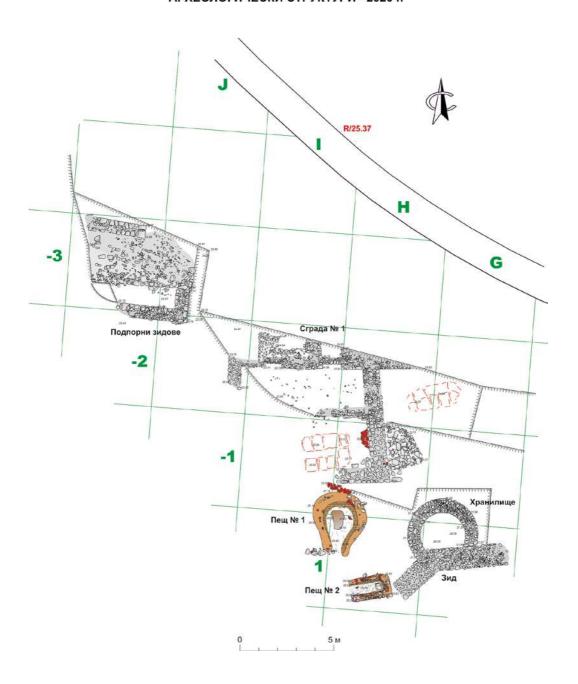
ferent widths (Fig. VI.16 – 17) and were probably built to strengthen the terrain and provide stability to buildings north of the farm complex (ruins of buildings with stone foundations can be seen on a property beyond the asphalt road).

Apart from the excavated remains of a building, terracing stone walls and pottery kilns, the archaeological research also yielded a variety of materials in the broad chronological range from the 4th to the 17th century. The most numerous are the objects used in everyday life: imported and local ceramic vessels – kitchen and household pottery, amphora containers, ceramic watering cans, strainers used in cheese-making, ceramic weights, iron tools, spindle whorles, fishing net weights and fishing hooks, etc. Redeposited parts of ceramic plumbing, roof tiles and architectural details are recorded as well. There are numerous finds of silver and bronze coins, jewellery such as silver and bronze finger rings, earrings, bracelets, buttons, bells, a steatite cross, belt buckle with an inscription, appliqués, etc., which give an idea of both the time of occupancy and the everyday life in this place.

The lead seals (molybdobullae), which vary in dating and images are very important when restoring the history of the region. The earliest lead seal, dating from the end of the 9th century, is that of Nicetas, imperial spatharios (Fig. VI.17) The seal of Sergios, anthypatos, patrikios and eparch refers to the last third of the 10th century. The seal of Ioannes, Metropolitan of Laodicea, is dated around the middle of the 11th century. Dated from the last third of the 11th century is the molybdobulla of Georgios Aplespharis, magistros. The seal of Ioannes Pantechnis, great steward (1170 – 1177) has also survived.

The concentration of lead seals (seven molybdobullae and five lead customs seals), the variety of book clasps and fittings give reason to assume that an archive repository and a library might have existed in the vicinity. According to the researchers, the discovered, albeit redeposited, fragments of floor and wall decoration of a public building (church?), architectural elements such as a massive marble threshold with traces of prolonged use, fragments of ceramic cladding, fragments of amphorae reused

## Археологически обект ПИ №№ 67800.8.625, 67800.8.626, 67800.8.127 - Созопол АРХЕОЛОГИЧЕСКИ СТРУКТУРИ - 2020 г.



VI. 16. Plan of researched structures at Cape Hristos (after Kr. Panayotova and P. Devlova)



VI. 17. Finds from the archaeological digs of the alleged medieval monastery (after Kr. Panayotova, P. Devlova)

to improve the acoustics of the walls as well as various appliqués suggest the existence in the past, probably to the north of the site, of a significant Christian centre.

The evidences for the development of the immediate surroundings, the intensive production activity, the luxurious imported ceramic ware, men's finger rings decorated with crosses, give reason to assume that the discovered complex of pottery kilns, remains of buildings and terracing belonged to a monastery that existed on this peninsula.

The archaeologists understand that the convenient location above a picturesque bay, the presence of fresh water in the immediate vicinity, the calm harbour and the abundance of seafood predestined the long-term use of the area. The results of the archaeological survey show that this part of Cape Hristos was inhabited since the onset of the 4th century. The mate-

rials up to the 9th century are individual finds – coins, belt buckles and single pottery fragments. The most intensive period of occupancy was from the 10th until the 14th century. It is reliably evidenced by the production installations and the remains of related buildings. The last stage spanning from the 15th to the 17th century is represented by single materials – fragments of various ceramic vessels and coins, jewellery, the latest of which date from the early Ottoman period and were probably related to the settlement of the Turks in the Sozopol region and the destruction of the Christian temples.

The researchers suggest that the excavated remains are part of Christ the Saviour monastery mentioned in a letter of Patriarch Theoleptus II from 1585 and a letter of Patriarch Neophytus II from 1609.

This assumption is too hasty given that the actual part of the monastery complex has not been fully studied yet. It seems that the place was actively used until the end of the 14th century. The materials from later periods are single stray finds that had ended up in the site under unclear circumstances.

Regarding the localisation of the monastery, which was actually a metochion of the island monastery of St. John the Prodromos there could be another explanation. In the letter of Patriarch Theoleptus II from 1585, the church of Christ the Saviour in Panormi is mentioned. According to Lambros Kamperidis, this church 'must have been located at the end of the peninsula of the same name (Hrisosotira-Hristosoteros) to the north of Sozopol'; Panormi means an always well-protected port *panormon*), usually shaped up by a high land jutting out into the sea (*Kamperidis 1993*).

Regardless of the problematic situation about the localization of Christ the Saviour metochion, it should be emphasized that in the vicinity of Cape Hristos a concentration of Christian temples has been recorded; their location is directly dependent on the geographical conditions (protected terrain from the north and northeast winds) that influenced the development of the harbour zone. Moreover, it is precisely at the foot of the researched sites that an underwater area is localised, which, due to the loading and unloading activities carried out there, is saturated with finds.

As it became clear in the previous chapter, not a small part of the amphora material corresponds directly to the time of functioning of the churches and the alleged monastery, i.e. the 10th – 13th century period.

In the context of discovering medieval structures and materials in the immediate vicinity of the quietest and most convenient area for (un)loading goods, it should be borne in mind that during the Byzantine era more and more religious buildings were equipped with landing stages. Religious complexes such as monasteries and their metochia owned such landing stages for the transportation of their goods and for other purposes of travelling (*Ginalis 2014, 21*).

As a comparison, I can point to the location of the metochia of the island monastery of St. John Prodromos near Sozopol. In a period of about 300 years, the metochia of the monastery were located at bays having direct contact with the sea. Such is the case with the monastery of St. Nicholas next to the church of the same name at the port of Chernomorets; the monastery of St. Paraskeva, situated on the Nakra Cape (Akra, note I. H. – Kamperidis 1993, 162; Христов 2021, 183), the medieval monastery of St. Kyrikos and Julitta on the island of the same name (*Xpucmos 2021*, 103 – 107), the monastery on the island of St. Anastasia (Карайотов), the monastery village next to Cape Chukalyata, the church of St. John near Ahtopol, probably also Christ the Saviour on the Hrisosotira peninsula, the located in Poros St. George monastery, known also as Katsinitsa (Xpucmos 2022, 93-98), the metochion of St. Anastasia monastery at Cape Chukalyata of the Metoha Peninsula (Христов 2022, 100 – 102), the small monastery on the island of St. Thomas Xpucmos 2021, 189-296), the church of St. Demetrios (Bulgarian Sv. Dimitar) at the mouth of the Ropotamo River (Xpucmos 2021, 198 - 200), the medieval parecclesion near Sarafovo (Вагалински 2021, 240 – 275).

The closest parallel exemplifying a geographical connection to the sea is the location of the basilica, which was destroyed during the construction of the large coastal tourist complex on Cape Malkata Agalina. The direct contact of the place is carried out through a pier located on the southern leeward side of the cape, where it functioned also as a pound net (talyan) in the past.

## Conclusion

The long history of use of this bay can be traced through the assessment of the results achieved during the underwater archaeological research in the water area of Cape Hristos in 2022, as well as through the analysis of the preserved objects accidentally found on and recovered from the seabed. The earliest items date to the beginning of the 1st millennium BC (stone anchors, amphora fragments from the Archaic period). Next in time are the pottery fragments and the lead anchor stocks, evidencing that ships used to dock there in the Classical, Hellenistic and Roman eras.

It is very likely that a harbour associated with Apollonia Pontica existed in the bay.

It has been hypothesized that the alleged 'second' harbour of the late antique Sozopol, mentioned in an anonymous 6th century periplus should be looked for in the waters of Cape Hristos. The hypothesis is based on the fact that it is impossible a port to have been built on the eastern side of the Skamni peninsula, since the small bay between the old town and the Akrotiri peninsula (Harmanite) is entirely exposed to all the dangerous winds of the Black Sea. The next so-called Rayski (Paradise) Bay is also too small and exposed to the north and northeast winds. Despite the recorded anchor finds in it, I believe that it did not correspond to the idea of an area where a large harbour would exist. Thus the only option that remains to the south is the well-protected bay at the Budzhaka peninsula.

The huge amount of fragmented 5th – 6th-century pottery discovered in the bay supports this hypothesis. 30% of the assemblage were produced along the Asia Minor coast and represent a characteristic type of Late Roman C red-glazed bowls. The many fragments of amphorae belong to the Late Roman 1 type. It is reasonable to hypothesize that the iron anchor

found belonged to a ship that had sank at a depth of 10 m in the northwestern part of the bay.

The waters of the cape are extremely rich in finds from the Middle Ages. These are mainly anchors from the 10th century and amphorae from the 11th – 13th centuries.

As mentioned, the name of the bay at Cape Hristos and of the port occurs in the form Baglar from the first half of the 17th century to the end of the 18th century. The finds of fragmented and almost whole vessels and iron anchors correspond in dating with the information provided by the Austrian Wenzel von Brognard about the area to the south of Sozopol.

For what reasons is then the bay marked on the maps and in narrative sources particularly within the chronological frame from the first half of the 17th century to the end of the 18th century?

First of all, it becomes quite evident from the brief description in the written sources and the map images that there was a port/facility in the Baglar Bay. This port was dependent on the Ottoman hegemony in the Black Sea for three hundred years, i.e. from the end of the 15th century until the opening of the sea to the European trade at the end of the 18th century (Kuhz 2006, 179 – 180). It is known that the middle of the 16th century (1538 – 1541) marked the consolidation of the Ottoman power in the lands adjacent to the Black Sea and its final transformation into a «Turkish lake». The access of foreign merchants was placed under the extreme control of the state and was almost eliminated, while the transportation of goods and people in the Black Sea basin was carried out by Ottoman ships. However, I admit that there were exceptions, and they could explain the appearance of the port to the south of Sozopol on Western European maps. Any information provided by European travellers and diplomats, who often acted as undercover spies, reached the leading cartographic centres of Western Europe. In support of this hypothesis are the mentioned reports of the prefect of Kaffa Dortelli D'Ascoli and Wenzel von Brognard. The latter specifically talks about 'fleet ships', i.e. warships from the fleet of the Ottoman Empire which 'wintered' in Baglar Bay. Until the conclusion of the treaty of Küçük Kaynarca (1774), the agricultural wealth of this region

flowed only to Istanbul, which explains Evliya Çelebi's words in his Seyahatname that 'The Black Sea is the source of all seas' (Кинг 2006, 183, note 7; Райчевска 2021, 92 – 112).

It is strange that after the conclusion of the Küçük Kaynarca peace treaty in 1774 between the Ottoman Empire and Russia, the port in Baglar Bay was not mentioned any more. Actually, it should have been mentioned, because after the said peace treaty, the Ottoman Empire allowed merchantmen sailing under the Russian flag to get beyond the Bosphorus and the Dardanelles. The European powers were also quick to take advantage of the rich resources of the Black Sea and, despite the reluctance of the Sublime Porte, a number of commercial agreements were concluded in 1828, effectively opening the Black Sea to foreign trade and investments; for this purpose its eastern and western littoral turned out to be attractive destinations. Probably, with the development of shipping at the end of the 18th century, the bay at the Budzhaka peninsula ceased to be actively used due to new harbours, for example, such as that in Chengene Skele bay near Burgas. The memory of the port to the south of Sozopol has survived through the name of Cape Hristos, marked as it became clear with the name Baglar Burnu.

The complex nature of the research undertaken in the area south of Sozopol also allows insight into the location of the monuments in the so-called hinterland of the bay at Cape Hristos. The total area of the researched territory is over 10 sq. km.

It turns out that various monuments are localised and partially explored in the area locked between the peaks of St. Elijah – Sharlan Bair – Kuku Bair and the Kavatsite Bay. Remains of prehistoric settlements, ancient necropoleis, residential and economic structures from the Hellenistic era, an open mine, an ancient quarry for building material, medieval churches and a monastery have been found there so far. All of them in one way or another were connected with the sea.

The use of the bay in Antiquity was probably related to the off-town coastal farm estates of wealthy residents of Apollonia. The pattern of building such structures is well attested at the Bay of St. Stefan and the northern

part of the Kavatsite locality below Charlan Bair.

A hypothesis is also launched that the bay, in addition to being a 'refuge' during strong sea storms, was also used for loading and unloading activities related to the developed residential, economic and religious infrastructures. Two probable sites are indicated where primitive harbour facilities known in later ages as piers/wharves were built. The first site was located at the foot of a medieval monastery next to the Chayka talyan and the current concrete quay to the south of Cape Hristos.

The second place, where a pier and a slipway probably also existed, was situated at the beginning of the Kavatsite Beach on the coast of Sulinaria Bay. The availability of abundant fresh water is one of the important reasons to look for a harbour here.

The book reports the fact that in the period from the 10th to the 12th century Christian temples, a supposed monastery and a necropolis functioned in the immediate vicinity of Cape Hristos and, accordingly, in the most wind-protected part of the bay.

In the context of discovering medieval structures and materials in the immediate vicinity of the quietest and most convenient area for unloading goods, it should be borne in mind that during the Byzantine era more and more church buildings were equipped with piers/wharves. Religious complexes such as monasteries and their metochia possessed such facilities for transportation of their goods and for other travelling purposes.

The information presented in the book marks the beginning of a full-fledged study of the water area of Cape Hristos and the subsequent archaeological excavations on land. After all, in archeology everything is penultimate.

## PORT BAGLAR

Археологически проучвания в акваторията на нос Христос и хинтерланда между носовете Колокита и Агалина до Созопол

## Иван Христов

Резюме

Настоящата книга е поредното мое изследване по морска археология за района на Западния Понт. То засяга акваторията на нос Христос до гр. Созопол и близкия хинтерланд на залива Каваци. Приемам, че въпросната акватория е важна пристанищна зона в непосредствена близост до големия античен и средновековен градски център. Значението и се определя от изключителните географски дадености:защитен от северните и североизточни ветрове залив, запазена добра дълбочина максимално до бреговата ивица. Заливът остава анонимен през Античността, но е част от пристанищната система на Аполония/Созопол и вероятно онова "второ" пристанище споменато от анонимен автор от VI век. През Късното Средновековие акваторията на нос Христос е отбелязана върху западноевропейски карти с името Port Baglar. Наличието на "порт" (пристанище) се потвърждава и от някои западноевропейски и руски пътешественици и дипломати.

Истинското значение на пристанищната зона на юг от Созопол се определя обаче от археологическите предмети открити под вода. В по-голяма си част те са извадени без контекст от морето. Съхранени са във фонда на Национален исторически музей и частни сбирки. Друг обем материали за щастие попадат в най-големия български музей след проведени две подводни експедиции в района през 2022 г. Именно резултатите от тези проучвания са в основата на изложението.

В структурно отношение книгата включва шест части. Освен резултатите от подводните огледи са разгледани и данните получени от геофизични проучвания извършени в акваторията на нос Христос през 2022 г. В книгата намира място и преглед на изворовия материал за морския район.

В две отделни глави е проследено развитието на пристанищната система на Аполония/Созопол, както и концентрацията на различни по вид и хронология археологически структури в хинтерланда разположен на запад от залива Каваци на площ от около 10 кв. км. Тук е търсена връзката между паметниците и морските комуникации.

Изследваният залив е разположен южно от гр. Созопол и ограничен от полуостров Буджака на север и нос Голяма Агалина на юг. Съгласно системата на регионалните таксономични единици при ландшафтното райониране на България, крайбрежната зона попада в междупланинската зонална област на Тракийската низина и юго-източните български ниски планини. Тя е част от Странджанска подобласт и по-конкретно Росенско-Медноридски ландшафтен район. Географско погледнато налице е ландшафтна територия, която се отличава със силна разчлененост на бреговата ивица, обширен залив с плажната ивица в м. Каваци, дюни и високи скалисти брегове около носовете Голяма и Малка Агалина.

Най-дългата част на залива при нос Христос е 2,5 км. Максималната дълбочина тук е около 20 м. Заливът е изключително добре защитен от северните и отчасти североизточни ветрове благодарение на издадения полуостров Буджака и неговите носове Колокита, Св. Стефан и Христос . Индикация до колко един залив е удобен и защитен от ветровете е разположението на традиционните за нашето Черноморие съоръжения за улов на риба- таляните. Тези съоръжения се изграждат в защитени от силните северни и североизточни ветрове зони. Според родения в Созопол учител и член на Гръцкото етнографско дружество К. Папайоанидис таляните се делят на две категории: за скумрия и за чироз. Първите, се изграждат през зимния сезон. Вторият вид таляни за чироз, се изграждат през пролетта

(април – май) и в проучвания район са били ситуирани при носовете Христос, Св. Стефан и Св. Галини. Според Ст. Райчевски пролетните таляни в залива до нос Христос са били два. Пролетни таляни е имало до нос Голяма Агалина и Малка Агалина. Твърде вероятно е местата на построяване на таляните да са били устойчиви назад във времето.

Всъщност запазената бреговата топонимия и хидронимията между посочените по-горе носове е благодарение на краеведските изследвания и информацията съхранена в картите от XIX и XX век.

През последните 150 г. наименованията на носовете и малките заливи в изследвана зона южно от гр. Созопол като цяло не са променени. В "История на Аполония Понтийска – Созопол" с автор К. Папайоанидис са поместени ценни сведения за топонимията както в града така и в близката околност. При преиздаването на книгата на гръцкия учител е приложен топонимичен каталог на най-често използваните регионални топоними, част от които са почти неизвестни за съвременните жители на Созопол. Вероятно гръцките имена на местности имат древен произход и се предавани през поколенията поне до началото на XX век.

Допълнение към списъка на местности южно от Созопол се явяват резултатите от теренните експедиции на Центъра за морска история и подводна археология н Созопол осъществени в периода 1979 – 2004 г. При тези експедиции е събран огромен топонимичен материал от живи информатори родом от крайбрежието. Изследователите акцентуват в своите проучвания на издирване и съхраняване на наименованията по бреговата ивица на местности и селища, в конкретния случай особено полезни в частта за гр. Созопол.

Името на залива при нос Христос и едноименен пристан се среща под формата Баглар от първата половина на XVII век до края на XVIII век. Името следва да преведе като "лозя, лозови масиви". Под тази си форма то е запазено в писмените сведения на турски, западноевропейски и руски пътешественици и дипломати. Откриваме го особено ясно и върху няколко географски карти като Port Baglar,

Portus Baglar, Baglar portus, Bagtar port от XVIII век. Какви са причините залива да бъде отбелязан върху картите и в изворите и то особенно в хронологическия отрязък от първата половина на XVII век до края на XVIII век? На първо място от краткото описание на извадките от писмените извори и картни изображения става ясно, че в залива Баглар е съществувало пристанище. Това пристанище е зависило от турската хегемония в Черно море, която продължава триста години от края на XV век до отварянето на морето за европейска търговия в края на XVIII век. Известно е, че средата на XVI в. (1538 – 1541 г.) бележи консолидацията на османската власт в земите, прилежащи към Черно море и неговото окончателно превръщане в "турско езеро". Достъпът на чуждестранните търговци е поставен под изключителен контрол и почти елиминиран, транспортирането на стоки и търговци в Черноморския басейн ставало с османски кораби. Допускам обаче, че има изключения и те са били в основата порта южно от Созопол да е отбелязан върху западноевропейските карти. Всякаква информация пристигаща от европейски пъшественици и дипломати, които често действали и като прикрити шпиони достигала до водещите картографски центрове на Западна Европа. В подкрепа на тази хипотеза са и споменатите сведения на префект на Кафа Дортели Д'Асколи и Венцел фон Броняр. При последният изрично се говори за т. нар. "флотски кораби", ще речи военни кораби от флота на Османската империя, които "презимували" при залива Баглар.

До сключването на договора от Кючюк Кайнарджа (1774 г.) земеделското богатство на този регион се стичало единствено в Истанбул, което обяснява думите на Евлия Челеби в неговото Seyahatname, че "Черно море е изворът на всички морета".

Странно е, че след сключването на мирния договор в Кючюк Кайнарджа през 1774 г. между Османската империя и Русия пристанището в залива Баглар не се споменава. А всъщност би трябвало защото след посочения мир Османската империя позволила на търговски кораби под руски флаг да плават отвъд Босфора и Дарданели-

те. Европейските сили също побързали да се възползват от богатите ресурси на Черно море и въпреки нежеланието на Високата порта, през 1828 г. били сключени редица търговски споразумения, които на практика отваряли Черно море напълно за чуждата търговия и инвестиции, за които източните и западните му брегове се оказали привлекателни дестинации. Вероятно с развитието корабоплаването в края на XVIII век залива до полуостров Буджака престава да бъде използван активно за сметка на нови пристани например като тези в залива Ченгене скеле в близост до дн. гр. Бургас. Споменът за пристана южно от Созопол се запазва върху наименованието на нос Христос – отбелязван както стана ясно с името Baglar burnu.

Въпреки многократните ми опити да събера информация за проведени официални подводни изследвания в залива до нос Христос не достигнах до конкретни данни, на които да се позова в изграждането на една история на проучванията преди експедицията на НИМ през лятото на 2022 г. Въпреки тази констатация ще припомня, че във фонда на НИМ се съхраняват котвени предмети открити при любителски гмуркания в залива до нос Христос (назоваван често с името Чайка).

Божидар Димитров и Атанас Орачев определят пристанището до нос Христос като пристанище убежище. В една друга публикация залива на Каваци е посочен като едно от деветте аполонийски пристанища наред с тези при Анхиало, кв. Сладки кладенци при Бургас, пролива съединяващ Мандренското езеро с морето, Атия, Созополския залив, Маслен нос, южния залив на Китен и Ахтопол. Към тази група изследователите включват неголеми пристанищни басейни, прикрити в древността от духащия в определен момент опасен вятър. Димитров и Орачев приемат, че в непосредствена близост до тези пристанища не са открити засега останки от антични селища. По тяхното дъно (дори и на тези, които не са посещавани от любителите на подводния спорт) са открити съвсем слаби археологически следи (по няколко котви и керамични фрагмента), датирани за Античността. Като сходни на пристана до нос Христос са посочени

пристанищата в залива Ватрохи, в залива Кендинар, при с. Равда и при Черни нос. Вероятно тези от тях, които се намират не много далеч от големи антични селища са били използувани в периоди на интензивен търговски обмен като спомагателни пристани или като сезонни тържища.

Щелиян Щерионов включва пристанището Баглар алтъ към групата на т. нар. малки пристанища и пристанищни заливи по Южното българско Черноморие. Това според Щерионов са удобни пристанищни заливи, чието главно предназначение е да предоставят надеждно укритие на големите кораби. Обикновено те са без скели и не са предназначени за търговия. Ако се осъществява търговия, стоките, с които се търгува, биват пренасяни с лодки до самия бряг. Към този вид пристанища трябва да отнесем малките кейове, принадлежащи на таляните и други риболовни места. От тях с малотонажни плавателни съдове се е изнасяло единствено риба, а се доставяли стоки, необходими за рибарите. Основно този тип пристанища са се използвали за укритие и имали значение изключително за каботажното корабоплаване.

Ц. Дражева и Кр. Панайотова обръщат внимание на залива и неговите крайбрежни обекти. Разглеждайки темата за извънградските селищни англомерации в непосредствена близост до градското ядро на Аполония те споменават неукрепено рибарско селище ситуирано "южно от Созопол в района между нос Христос и таляна Чайка". Хипотезата се базира на информация публикувана от Б. Димитров според, който в залива са открити каменни котви, оловни щокове, керамични съдове от Бронзовата и Класическа епоха.

В контекстът на описване на резултатите от проучването на тракийските крепости по Медни рид изрично се споменава, че леководолази са открити в залива Чайка "керамични фрагменти, които по изработка и украса са еднакви с керамиката от ранно желязната епоха от крепостите".

Позовавайки се на Б. Димитров М. Гюзелев споменава за множество случайни находки в залива свързани с морето като –амфорна

тара, атическа чернофирнисова керамика и съдове датирани в ширико хронологически граници от IV в. пр. Xp. до XV век.

През 2018 г. въз основа на анализ на всички запазени данни за находки от залива до нос Христос разгледах разположението на пристанищата зона до носа. На площ от 300 кв. м е открита голяма концентрация на фрагментирани керамични съдове от различни епохи. Преобладават фрагменти от Късноантичната епоха. През годините са се срещали и цели съдове и глинени късноантични лампи. На дълбочина 8 м забелязах през 2015 г. два кила на кораби с дебелина на гредите 60 – 80 см.

Според дългодишния сътрудник на НИМ Георги Илиев при тренировъчни гмуркания в залива са откривани късноантични керамични лампи и съдове датирани отново за различни исторически периоди. При едно от последните си гмуркания в залива Илиев открива силно фрагментирана желязна котва. Тя спада към т. нар Y-образни котви, датирани от началото на XI век. За съжаление една не малка част от древните паметници под вода са разграбени при любителски гмуркания и провеждани леководолазни курсове. Цели и фрагментирани съдове, оловни щокове, каменни и железни котви все още красят частни колекции в района.

Първите организирани проучвания в залива до нос Христос са проведени през лятото и есента на 2022 г. Те включват два вида недекструктивни изследвания: геофизични и огледи под вода.

Според Кирил Велковски в батиметричния теренен модел се наблюдават следните особености:

Залива има относително голяма динамика на дълбочините като се започне от плитководна зона с дълбочини от 1-2 метър и се стигне до 18-23 метра дълбочина в централната част. В зоната пред нос Христос съществува риф, който продължава на 150-190 метра на юг и поне 350 метра на изтока във формата на полумесец обърнат на север. Вероятно има още продължение на изток. Известно е, че самия риф в основната си част е с дълбочини около 1.5-2 м, като на 2 места има единични скали видими над повърхността на морето дори и сега.

Тези факти подсказва, че в миналото вероятно сегашния риф е бил част от сушата и по време на заливането на морето сухоземната част е била абразирана, т.е. напълно "изядена" от морето. Последните факти подсказват, че дори и в недалечно минало рифа около н. Христос е бил реално суша оформяйки затворен на изток залив с поглед към плажната ивица на къмпинг "Каваците".

В останалата част на проучената територия не се наблюдават специфични или изявени други гео-релефни форми. Дъното условно казано се удълбочава "монотонно" започвайки от прибойната зона с дълбочина  $0.5-1\,\mathrm{m}\,\mathrm{u}$  набирайки дълбочини до  $23\,\mathrm{mer}$  ра в югоизточна посока.

Изключение прави дълъг около 600 м подводен риф започваш от акваторията на нос Мало Петра в посока на нос Христос. Широчината на рифа е средно 15 м. Именно около този риф са откривани котви и котвени елементи от различни исторически периоди.

От резултатите от подводните археологически проучвания проведени в залива до нос Христос през 2022 г., както и анализа на запазените случайно намерени предмети под вода можем да проследим дългата история на използването на този залив. Открити са разнообразни предмети свързани с корабоплаване и товарно-разтоварни дейности в залива. Сравнително голям е и броя на фрагментите от керамични съдове. Твърде вероятно в залива да е съществувало пристанище свързано с Аполония Понтика.

Изказана е хипотезата, че в акваторията на нос Христос трябва да търсим предполагаемото "второ" пристанище на късноантичния Созопол, споменато в анонимен периплус от VI век. Първото пристанище за всички исторически периоди остава "заключено" между остров Св. Кирик и полуостров Скамни. Очевиден е факта, че на източната страна на полуостров Скамни е било невъзможно да се устрои пристанище, тъй като малкия залив между стария град и полуостров Акротири (Харманите) е съвършено открит за всички опасни ветрове в Черно море. На юг остава единствената възможност добре защитения залив до полуостров Буджака.

Интерес предизвикват две каменни котва с два отвора датирани за I хил. пр. Xр.; оловен подвижен щок от римската епоха; желязна късноантична котва; големи трироги и четирироги желязни котви от XVI-XVII век.

При подводните проучвани са открити фрагментирани керамични съдове и амфори от различни исторически периоди (VI в. пр. Xp. – XVIII сл. Xp). Те са събрани в работни полигони на дълбочина от 6 до 10 метра които обхващат целята северна периферия на залива южно от местностите Христос, Паламаря, Сулинаря.

Най-ранния керамичен материал е от Архаичната епоха. Открита е част от настолна амфора от т. нар. сива монохромна керамика.

Използването на залива през Късната Елинистическа епоха е засвидетелствано от храгменти от дръжки на амфори произведени на о-в Кос. през II-I в. пр. Xp.

Фрагменти от червенолакови паници датират присъствието на плавателни съдове в периода V-VI век. Те са синхронни като използване с фрагментите от късноантични амфори. Голямо е количеството на фрагменти от средновековни амфори от X-XIII век.

Прави впечатление намирането на керамика от Османския период XVI–XVII век в близост до западния бряг и сегашния кей до талян Чайка на дълбочина между 6 и 9 м. Открити са цели и фрагментирани хигиенни съдове –т. нар. ибрици. Тези съдове наподобяват формата на каните, но имат допълнително прилепен към пещите чучур. Разпространение са във всички владения на Османската империя в периода XVI–XIX век. Използват се за ритуално измиване на мюсулманите преди молитва. Навлизат масово в бита и на християнското население. Тези фрагменти и почти цели съдове, споменатата желязна котва като датировка кореспондират със сведенията на австриеца Венцел фон Броняр за района южно от Созопол.

Хинтерландът до нос Христос включва както е отбелязано в глава I територията разположена южно от гр. Созопол и ограничена от полуостров Буджака на север и нос Голяма Агалина на юг. На запад от морето хинтерландът на пристанищната зона е обособена географ-

ски от ниския рид започващ от връх св. Илия и достигащ до Куку баир на юг. Общата площ на тази изследвана територия надхвърля 10 кв. км.

Тази територия трябва да бъде разделена на две зони.

Първата зона бих нарекъл крайбрежна и е заключена между морето и трасето на стария път свързащ Аполония/Созопол със селищата на юг от града като Урдовиза и Ахтопол. Пътят, който пресича хинтерланда до нос Христос според братя Шкорпил е излизал от Созопол, преминавал е ниските "отлози" на връх Дракуза (Шарлан баир б. И. Х.) и по източните склонове на рида свързваш връх Св. Илия и Куку баир е достигал полуостров "Агия Галини". От там според изследователите пътя в близост до морето е продължавал към езерото Алепу и връх Андрея баир.

Първата зона е съсредоточена преди всичко около южната периферия на полуостров Буджака в непосредствена близост до най-тихата част на залива около нос Христос. По тази причина можем да пишем за пристанищен хинтерланд.

Втората зона се разпростира на запад от трасето на пътя и обхваща две под зони. Едната покрива преди всичко ниския рид между споменатите върхове. Средищно място тук играе обекта на връх Шарлан баир. Втората подзона граничи на запад със споменатите височини, а на изток обхваща равните площи на местностите Мапите и Каваци.

Комплексният характер на проучванията в района южно от гр. Созопол предлага и поглед върху разположението на паметници в т. нар. хинтерланд на залива до нос Христос. Оказва се, че в зоната заключена между върховете Св. Илия – Шарлан баир – Куку баир и залива Каваци са локализирани и частично проучени разнообразни паметници. Срещат се: останки от праисторически селища, антични некрополи, жилищни и стопански структури от Елинистическата епоха, древна кариера, антична кариера за добив на строителен материал, средновековни църкви и манастир. Всички те са имали връзка с морето по един или друг начин.

Използването на залива през Античността вероятно е свързано с

наличието на брега на крайградски стопански имения на богати аполонийци. Моделът на изграждане на такива структури е добре засвидетелстван до залива Св. Стефан и югозападната част на полуостров Буджака под връх Шарлан баир. Изказана е хипотезата, че залива освен като "убежище" при силни морски бури е бил използван и за товаро-разтоварни дейности свързани с развитата жилищна, стопанска и религиозна инфраструктура. Посочени са две вероятни местата на които са били построени примитивни пристанищни съоръжения познати през по-късни епохи като скели. Първото място е било ситуирано в подножието на проучвания средновековен манастир до талян Чайка и сегашния бетонен кей южно от нос Христос.

Второто място при което вероятно също е съществувала скеля и хелинги е било разположено в началото на плажа Каваци на брега на залива Сулинария. Тук една от важните причини да се търси пристан е наличието на обилна сладководна вода.

Безспорно най-интересния античен обект в хинтерланда на пристанищната зона до нос Христос е разположен на връх Шарлан баир . Вероятно тук е разположено т. нар. от братя Шкорпил "Дракуса кале" . За първи път през 1992 г. Кр. Панайотова, Д. Недев и Н. Дражев регистрират на върха елинистически обект. Западно от триангулачния знак се вижда стар изкоп, изпълнен с ломени камъни и строителна керамика. В северозападната част на върха археолозите са забелязали зид на суха фуга. Те интерпретират останките като кула от Елинистическа епоха .

Фрагменти от елинистическа строителна керамика, както и цялостно обработени блокове за градеж са заснети и през 2022 г. Обектът е силно пострадал от иманярски изкопи. Предполагаемата площ на елинистическата постройка е 100 кв м. Най-интересните паметници на връх Шарлан баир са открити рудници и малка скална галерия изсечена в скалите от североизточната част на върха. В северното подножие на масива са заснети отвали от рудни късове. Рудните разработки обхващ площ от 8 дка.

При обходите са забелязани хидротермални кварцови жили ориентирани северозапад – югоизток – азимут 120 – 140 градуса. Тук взетите проби са от т. нар. въги селикас (vuggy silica) характерни за орудявания където има злато. Хипотезата за наличието на рудник за добиване на злато намира подкрепа и от лабораторните анализи. Остава открит въпроса в какъв период е функционирал рудника. Ако елинистичската постройка на върха е била свързана по някакъв начин с рудника, то имаме сигурни репери за специфична рударска дейност за III в. пр. Хр. Възможни са рудни разработки преди и след тази дата. Ако бъдещите археологически разкопки докажат наличието на рудник за добив на злато, то това само по себе си би било археологическа сензация и би поднесло нови данни за развитието на икономическия живот на Аполония Понтика.

В книгата е отчетен факта, че в най-близката околност на нос Христос и съответно най-защитената от ветрове част на залива са функционирали християнски храмове, предполагаем манастир и некропол в периода X–XII век.

В контекста на откриване на средновековни структури и материали в непосредствена близост до най-тихата и удобна зона за разтоварване на стоки трябва да се има предвид, че през византийската епоха все повече църковна сгради са били оборудвани с пристани. Религиозни комплекси като например манастирите и техните метоси са притежавали кейове за транспортиране на техните стоки и други пътуващи цели.

Изнесената в книгата информация поставя началото на пълноценно изследване на акваторията на нос Христос и последвали археологически разкопки на сушата. В крайна сметка в археологията всичко е предпоследно.

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