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# ANCIENT GREEK COLONIES IN THE BLACK SEA

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# PATRAEUS - CIMMERIS - ACHILLEION

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# A. PATRAEUS

by A. P. Abramov

# DESCRIPTION OF THE MONUMENT

Patraeus site of the settlement (Garkusha 1 settlement) is situated in the north shore of Tamanskiy gulf and on the west outskirts of modern village Garkusha (Temryukskiy rajon, Krasnodarskiy krai). There are some stratums: from the late bronze - early iron period to the late Middle Ages with single chronological break between late bronze - early iron period and the ancient period.

At this place Tamanskiy gulf shore is laying on the west-east line with insignificant deviation to the north. Besides one section in the central part of the monument shores are abrupt. The monument's relief has two sublimities. The first of them is the "battery" fortress with truncated pyramid form 70x100 size. It also has 6 m height above the surround territory and 10 m height above sea-level. The second is a flat hill –"Western Patraeus" settlement. At the moment the whole eastern part of the monument is situated inside Garkusha settlement.

The second feature of the monument's relief is a beam that was used as a drainpipe during strong rains. The beam takes its source to the east from mud volcano Kuk-Oba (Gorelaya mountain) and has its direction to the north-south. In 1 km. from the sea shore it direction changes to the south-east. Flowing into Tamanskiy gulf it divides the monument into two the western and the eastern parts. Cultural stratum of the monument has 1040 m of running length along the shore steeps.

Five roads run to the settlement from the north. Their traces were clearly fixed in the air photos.

Reduction which was clearly fixed on the west shore of the "West-Patraeus" settlement has artificial origin and seemed to be the remains of the bricks factory open pit which was fixed in the air photos of 1974 and has been closed before 1985. At the moment when expedition began its investigations. Bricks factory foundations are still existing in the western part of the monument. When the clay mining stopped the open pit was filled with litter and at the moment is using by inhabitants as a metal source. Factory sections have mainly destroyed cultural stratum in this part of the monument.

To fill the open pit up the soul was cut by bulldozers. As a result the remains of houses of the  $6^{\text{th}}-5^{\text{th}}$  B.C. were almost found on the surface (Abramov, 1994).

The top part of the factory foundation plate was used as a zero mark in vertically dimensions. Its height made up 696-700 mm above sea level of Tamanskiy gulf and depended on the weather conditions.

Contemporary monument division into districts could be introduced by the following scheme:

*I. The "battery" fortress* – truncated pyramid hill which size contented 100 m to the west-east line and 70 m to the north-south line. It has 10 m above sea level and 6 m above surround territory. Cultural stratum is about 7 m thick. The earliest period contained two fragments of grind choppers (middle bronze?).

The lower stratigraphical horizon includes two burials. One of them was distinguished by A. S. Bashkirov and the other during investigations executed in 2001 by V. O. Akimov. Outstock Funerals were found in a special position that was hardly connected with the burial ceremony. Every object is described in the section "The history of investigation of the monument" in detail.

The second chronological horizon determined by the pit and Aeolis, Chios and Red Lesbian amphora fragments of the end of the  $6^{th}$  - the beginning of the  $5^{th}$  B.C.

The third builder horizon consisted of the building remains of Hellenistic period –were described in works of A. S. Bashkirov, N. I. Sokolskiy and V. O. Akimov. Stone foundations were dug 5-7 cm inside the dark brown solidsoul loam. These constructions appeared in the first half of the  $3^{rd}$  B.C. and were demolished in conflagration in the 70 of the  $1^{st}$  B.C.

The forth building period was connected with the building of the fortress. Its raw walls 3,4 m thick were preserved to the height of 6 m which confirmed by excavations of A. S. Bashkirov and GPR photos (fig. 2). Rooms of the fortress have preserved in diseases of the 93-123 A.D., about the 251 A.D. and about the 341 A.D. It was determined by discovery complexes and fixed by two coin treasures. As usual the rooms succeed their planning. Building remains of the 810 A.D. in stone house building were fixed in works of N. I. Sokolskiy 1968-1870. The same remains concern to the later period with two levels of conflagration. It was fixed in the works of A. S. Bashkirov. Analyze of ceramic material from excavations of V. O. Akimov gave opportunities to suggest that the settlement continually existed at this place from the  $5^{\text{th}}$  B.C. to the  $13^{\text{th}}-14^{\text{th}}$  A.D.

The latest chronological period contained a single burial of the late medieval period.

The surface is being covered by turf at the moment and destroyed by numerous robbers pits. The shore part is demolished under the force of ecological factors.

*II. The Top town* (Western Patraeus settlement). A territory of an early ancient settlement. Was situated on the cape bordered from the south by contemporary shore steep. Its maximum height above sea level made up 7 m "The Top town" had its running length along the shore steep about 240 m and 150 m to the north-south line the whole area made up 1,26 hec. (Abramov, 2000, p. 7-10). Cultural stratum was not less than 3 m thick. In this section were distinguished cultural stratums from the third quarter of the 6<sup>th</sup> B.C. to the 15<sup>th</sup> A.D.

Ancient house building was displayed by remains of the raw walls 50-60 cm thick and had two orientation lines. The first one was oriented to the parts of the world the second building period has dimension from the south-north line to 14° to the east. In excavation 26

was distinguished an amphora warehouse of the second third of the 5<sup>th</sup> B.C. unique for Bospore.

B. G. Peters has followed up about 4 building periods of the raw housebuilding from the mid of the 6<sup>th</sup> B.C. to the end of the 5<sup>th</sup> B.C. The latest ancient building remains of the second half of the 4<sup>th</sup> B.C. were introduced by socle parts on stone foundations (it has not been found in previous chronological periods) Their orientation from the north-south to the southwest. Foundations contained some fragments of ancient amphoras of the second half of the 4<sup>th</sup> B.C. Two pits were fixed of the second half of the 3<sup>rd</sup> - the beginning of the 1<sup>st</sup> B.C. This data coincide with the lower stratum of the "battery" fortress. It is important to note the objects absence from the second quarter of the 1<sup>st</sup> B.C. to the 7<sup>th</sup> A.D. and investigated pits of the 8<sup>th</sup>-9<sup>th</sup> A.D., furnaces and pits of the 13<sup>th</sup>-14<sup>th</sup> A.D. A. A. Miller has distinguished two burials of the 8<sup>th</sup>-9<sup>th</sup> A.D. at the same place.

At the moment this section is not included into economical zone activity. Its western part was destroyed by the open pit and all top parts were mainly demolished during its filling. Earlier this section has been ploughed. The shore steep is destroying under the force of ecological factors and robber excavations.

*III. Western section.* Seemed to be a plain part of the monument with a light reducing from the north to the south and from the east to the west in the coastal part. This plain part is mainly ploughed at the moment. It has been ploughed in different periods and as cultural stratum here was about 1,2-1,4 m thick it is possible to suggest that it has been mainly destroyed in this section. This section bordered the "Top town" in the west, the shore steep in the south and the beam in the north-west. The whole area made up at least 10 hec. Works conducted on the shore line displayed that this section was included in economical zone of the settlement of the second half of the 6<sup>th</sup> - the beginning of the 3<sup>rd</sup> B.C. Several farmsteads of the 8<sup>th</sup>-9<sup>th</sup> and the 13<sup>th</sup>-14<sup>th</sup> were fixed here.

*IV "The Eastern town"*. This section in 560 m was spread along the sea shore. The greatest size made up 150 m along the north-south line. The whole square was about 10 hec. We have several difficulties in investigation of this part of the monument. In the north-east part it is completely occupied by CRM AO "Zaliv". It is possible to investigate the coastal part only. 60 m wide it is used as a litter dump. The north and north-east part is included into the living and economical zone of Garkusha village. The main part is occupied by countryside sections.

Mainly it seemed to be an economical zone of the settlement of Hellenistic period and the first centuries A.D. The remains of stone house building about 5 wineries and one furnace used for ceramics baking and numerous pits were situated there. Here is a huge difference in stratigraphical situation of the west and the east parts of "Western town".

On the east shore of the beam to the west from the battery were distinguished the remains of the late bronze period - early iron century settlement, three burials from the second quarter of the 5<sup>th</sup> to the second half of the 4<sup>th</sup> B.C., numerous economical pits of Hellenistic and Roman periods. In the coastal part were distinguished the remains of stone house building of the first centuries A.D. Doubtless that this section was included inside the settlement of the 13<sup>th</sup> - 14<sup>th</sup> centuries A.D.

To the east from the "battery" were distinguished the stratums of the Roman period only. Investigations of 1991 displayed that the whole territory was surrounded by the second ditch.

VI. The South section. It is the most investigated part of the monument. Its main part is occupied by the cattle breeding farm. A single excavation (in plane  $N_{\text{P}}$  63) distinguished a pit of the late bronze - early iron period and a ground crypt of the first centuries A.D. It is possible to make the conclusion that the territory of a ground necropolis occupied an area to the west, south and east from the farm 1,5 m father to the south from the "battery" and the "Top town". Grounds collapses connected with destruction of the burial chambers are always followed up here. Reconnaissance executed by Y. M. Paromov discovered lifting material from the third quarter of the 6<sup>th</sup> B.C. to the late medieval period.

*VII. "The Lower town"* a part of the monument flooding up by the waters of Tamanskiy gulf. At the moment it presents a wide shoal about 3,5 m depth. The farthest objects are situated 350 m from the shore. It is spread along the west-east line in about 1000 m. The west, south and east borders exact determination is the main problem of future discoveries. Cultural stratum absence is the main peculiarity of this part of the monument. It had obviously been destroyed under the force of ecological factors. The objects dug into the yellow solid-soul clay has only preserved. According to V. D. Blavatskiy Hermonassa had the same situation. He opposed this situation to a fine preserved cultural stratum in Fanagoriya surpassed by sand alluviums and shells about 0,65 m thick (Blavatskiy, 1958, p. 87-88; Blavatskiy, 1985, p. 223-224).

N. I. Sokolskiy determined the underwater part of Kepy settlement as a wide shoal 0,5-0,6 cm depth till the sharp reducing of the bottom in 500 m from the shore. The whole area of underwater part of the monument made up 8-9 hec. N. I. Sokolskiy suggested that cultural stratum was destroyed in this section as the wells were preserved (Sokolskiy, 1963, p. 96-98).

Thus, this situation connected with preserved cultural stratum absolutely coincide with situation in Kepy and Hermonassa.

The stone building foundations introduced the main group of distinguished objects. They seemed to be the stone socle layings preserved in one line as usual and sometimes consisted of several rooms. The walls were oriented to the north-south west-east line. The stones were dug into the solidsoul yellow clay. Ceramic fragments which were found on the unrolled stones level are datable to the second half of the 6<sup>th</sup> - the first third of the 3<sup>rd</sup> B.C. Besides that two wells were distinguished made of massive well trimmed blocks and one watercollector. To judge from the tile fragments coin treasures and ashlar blocks, domestic things, plummets and nails these objects were determined as buildings. 27 amphora warehouses, entire discoveries, ceramic accumulations and three coin treasures were fixed there (Taskaev, Osmanova, 2001; Abramov, Boldyrev, 2001).

Depth soundings executed by V. N. Taskaev about 1 km. from the shore didn't fix any terraces or big overfalls. GPR reconnaissanse fixed the solidsoul terrace 80 cm depth 40 m from the shore (Vasil'ev, 2000, f. 8-9).

An underwater part of the monument occupied an area of 30 hec. at least.

Considering that the Black sea level coincide with the world ocean level (Fedorov, 1982,

p. 151). The most intensive transgression is datable by the S-14 carbon between 2400-2250 before this time (about 410-260 B.C.). At that period water lifting speed was about 10-15 m in a year (Arelanov, Balabanov, Gey, Izmailov, Ostrovskiy, Skriba, Skryabina, p. 148-150).

# Restricted zone recommendations

This territory is occupied by the settlements and their economical zones from the late bronze period –early iron century to the late Middle ages. It occupies an area to the west from the winery section  $\mathbb{N}$  107 in plane. Excavations 28 and 29 ( $\mathbb{N}$  61-62 in plane) and also the spreading of lifting material determined the economical zone border. It turns to the northeast father and reaches the beam. On this section it is determined by the spread of lifting material. (more than 3 fragments in one sq. m). In the south part the restricted zone border ( $\mathbb{N}$ 111 in plane) determined by the lifting material compactness and existence of single objects of the first centuries A.D. that had been fixed during the building of the warehouse. ( $\mathbb{N}$  29 in plane) The western border of restricted zone determined by the objects distinguished in excavation XXIV ( $\mathbb{N}$  27 in plane) and excavations conducted by A. S. Bashkirov fixed the Roman necropolis ( $\mathbb{N}$  6 in plane).

On the Lower town territory - in the underwater part of the settlement the restricted zone border should lean on the land objects and spread along 300 m from the shore.

The restricted zone routine consists of conducting all ground works after archeological excavations.

Ground crypts of the first centuries A.D. and single farmsteads of different chronological periods were fixed outside this zone. That is why the works here should be conducted after archeological examination only.

# ANCIENT AUTHORS INFORMATION

Gekatey Miletskiy the author of the end of the 6<sup>th</sup> - the beginning of the 5<sup>th</sup> B.C. noticed in his "World description" in adaptation made by Stefan Byzantic (Jac. 214) St. Byz. "Patrasiy is a Pont town as Gikatey had said in the description of Asia".

Skilak-Kariandskiy of the second half of the 4<sup>th</sup> B.C. said "Sinds; after meots –Sind people; just they reached [the territory] outside [the lake shore]; and there are some Hellenistic towns like: Fanagora, Kepy, Sind harbour, Patus". This text has preserved in single manuscript only of the end of the 12<sup>th</sup> - the beginning of the 13<sup>th</sup>.

The most detailed description of the Asia part of Bospore was given in Strabon's "Geography". (XI, 2):

6. Then twenty stadies (from Kimmriyskiy settlement) to Ahill settlement and there was Ahill sanctuary. Here is the narrowest part of the Meotid mouth. It was about 20 stadies wide or a little bit more. On the opposite side of the shore Myrmekion and Parthenium settlements were situated (near Heracleion).

7. It has 90 stadies from the Satir monument. The monument seemed to be a tsar burial mound, brightly ruled on the Bospore territory.

8. Not far from here a Patraey settlement was situated, from which were 130 stadies to the Krokondamy village. This village formed a bound for the Kimmeriyskiy Bospore as the gulf near Myrmekion mouth was called. It covered a wide area from the narrow place near Ahill settlement and Myrmekion to Krokondamy and laid in front of her, on Pantikapey territory, near Akra village separated by 70 stadies of water journey.

### PROBLEMS OF LOCALIZATION

On the map of Pont Evksinskiy draw up by Abraham Ortelius in 1570 Patraeus was situated in the north-west part of Tamanskiy peninsula to the north from Fanagoriya. (This map was based on the information gathered by Strabon). The map is kept in the library of Melbourne university.

A. B. Ashik suggested that Patraeus was situated in the very east part of Tamanskiy gulf (Ashik, 1848, p.12-13; Ponachevnyi, 1891, p. 28). In 1874 in report made on the III<sup>rd</sup> archeological meeting I. E. Zabelin proposed to locate Patraeus near Tuzla cape (Ponachevnyi, 1891, p. 57). M. O. Ponachevnyi abstained from exact localization of Patraeus but suggested that it was situated near Fantalovskiy peninsula near Kuk-Oba mountain.

M. I. Rostovtsev abstained from exact localization of Patraeus (Rostovtsev, 1925, p. 301).

The first attempt to localize Patraeus on the north shore of contemporary Tamanskiy gulf at the place of Garkusha 1 settlement (archeological map of Tamanskiy peninsula draw up by Paromov Y. M.) was made by K. E. Grinevich. He based on the archeological map of K. K. Gerts (Grievich, 1926, p. 23) V. F. Gaydukevich agreed with this point of view (1949, p. 203-204).

In 1950 on the base of description given by Strabon A. S. Bashkirov suggested that localization of Patraeus coincides with Garkusha 1 settlement (Bashkirov, 1950, p. 143). Later this point of view became the scientist's conviction (Bashkirov, 1956).

In 1954 V. D. Blavatskiy proposed two variants of Patraeus localization: at the place of Garkusha 1 settlement or in the western coast of Fantalovskaya peninsula. (Blavatskiy, 1954, p. 20, 24, f. 2-3).

In 1966 N. I. Sokolskiy expressed his doubts and suggested that Patraeus was not situated at Garkusha 1 place because cultural stratum is absent there earlier the 1<sup>st</sup> B.C. Y. S. Krush-kol concerned the prosperity of Patraeus to the 3<sup>rd</sup>- the 1<sup>st</sup> B.C. (Krushkol, 1971, p. 125-126).

A. V. Balanovskiy and R. A. Struchalina so as A. A. Zavoykin (Zavoykin, 2000, p. 50) without any doubts agreed with the idea of K. E. Grinevich and A. S. Bashkirov (Balanovskiy, Struchalina, 1992, p. 10).

On the base of Klavdiy Ptolomey data V. G. Zubarev proposed to locate Fanagoriya (Zubarev, 1999, p. 129-130) near Garkusha 1 settlement and locate Patraeus at Zaporozhskaya I settlement (Zubarev, 1999, p. 132).

The truest way is to localize Patraeus on the west coast of Tamanskiy peninsula as Strabon indicated that the site of ancient settlement was situated outside Krakondomidskoe Lake (Tamanskiy gulf) (Zavoykin, 2000, p. 50).

Exact localization of the settlements noted by Strabon would be possible only after epigraphical sources' discoveries.

#### ABOUT THE MONUMENT'S INVESTIGATION

The first description of this monument was left by Lazorevskiy Y. M. (Lazorevskiy Y. M., 1861, p. 29). "There are two batteries in the same group: the first one is near Ruban's khutor straight above the estuary. Its square sides are about 30 fathom long and about 4 fathom high" (Paromov, 1993, p. 136). More detailed description of the monument were adduced in the summary made by Gerts K. K. (Gerts, 1870, p. 106-107) and in the map of Vojcehovskiy S. F. drown up in 1925-1927 (marked under № 14) (Paromov, 1992, pl. 1).

In 1926-1927 Bashkirov A. S. examined the monument (Bashkirov, 1927; Bashkirov, 1928; Bashkirov, № 165, p. 1; Bashkirov, 1950, p. 138). A huge burial ground was discovered to the west from the farmstead and it was partially robbed even at that time (Bashkirov, 1927, p.10-11; Sudarev, 1994, p.109).

In 1928 Bashkirov A. S. executed the first archeological excavations on the territory of Patraeus. They were conducted in the eastern part of "battery". The excavation seemed to be a line of three 5x5 m squares oriented to the west-east. Common square was 75 m. The height of the "battery" hill was about 10 m above sea-level. Cultural stratum was investigated to 6 m depth from the top part of the "battery".

It was noted that the bottom of the sea 60-80 m from the shore line was covered with significant pieces of ceramics and builder stone. That fact indicates the destroying phase of the ancient settlement and estimates that the half of the monument has been demolished by the sea. The monument existed in the chronological period from the 6<sup>th</sup>-5<sup>th</sup> B.C. to the 12<sup>th</sup>-13<sup>th</sup> A.D. (Bashkirov, 1950, p. 138-139).

The main object that was distinguished during the investigations seemed to be a raw fortification wall about 3 m thick. Its top part was made from the raw bricks 35x50 cm or 25x45 cm with 10-14 cm thick. The brick wall preserved to a maximum height of 50-63 cm.

The low part of the wall was wattle and daub and was followed up to 315 cm height, but its bottom has not been found. Inside the loamy part of the wall was distinguished a kind of socle 40 cm thick (Bashkirov, 1950, p. 139-140).

Two stone foundations were discovered perpendicularly to the wall on the masonry top line level. They were made from flagstone and were fixed through the 2-3 stone rows streaks filled with big pieces of ceramics and tile with petty stone. The author suggested the 7<sup>th</sup>-13<sup>th</sup> centuries A.D. date for these phases and complexes (Bashkirov, 1950, p. 141-142).

In 1930-1931 the expedition of GAIMK under the leadership of A. A. Miller conducted excavations at Patraeus. A plan of the monument was made during the excavation season as a lifting material was also collected. Probably a wine-make and some medieval burials were investigated to the west from the "battery". The main conclusions about the monument were formulated as follows: 1) a settlement concerned to a period of archaic Greek colonies was located in the west high part of the site of the ancient settlement; 2) a settlement of the classical and Hellenistic periods blocked the archaic settlement by its precipitation but did not go

through the borders; 3) the Roman settlement has spread along the whole site of the ancient settlement including the circle fortification (the "battery"); 4) a feudal medieval settlement, less than the Roman, was not situated close to the shore but went father contiguous in the north to the site of the ancient settlement and contented some material remains dated to the  $5^{\text{th}}$  - the  $1^{\text{st}}$  B.C. The remains of Tartar settlement could be clearly distinguished on two small hills to the north from the old pool (Miller, 1932, p. 67-68).

Two burials (1-2) were found in the shore steep in the west part of the monument. To judge from numismatics (a gold Byzantine coin sec. half 8 A.D.) and ceramics of saltavomayatskiy circle sec. half 8-9 A.D., they could be dated to the second half of the 8<sup>th</sup>-9<sup>th</sup> A.D. (Miller, 1932, p. 68-69; Sudarev, 1994, p. 114-115).

A winery of the 2<sup>nd</sup>-3<sup>rd</sup> A.D. was investigated besides that, three vessels and a part of a side press ground have preserved in it (Gaidukevich, 1958, p. 432-434, pl. 77-79).

In 1940 reconnaissance on the territory of the monument were executed by Fanagoriyskaya expedition under the leadership of V. D. Blavatskiy (Blavatskiy, 1940, p. 223, left).

In 1947 Bashkirov conducted reconnaissance at Patraeus (Bashkirov,  $N \ge 165$ ). He fixed a line of German trenches 5-10 m father from the shore line and a foundation pit at the place where in 1926-1927 a mill was situated (Bashkirov, 1950, pl. 5). The author determined the length of the monument along the shoreline as 250 m. From 1927 to 1947 the shoreline's destruction speed was from 5-6 to 8-10 m in 20 years. The author fixed some remains of the winery complex in the shore steep.

N. V. Anfimov gives us in his report the more detailed description of the stone walls made from crude stone and a winery, which was excavated later (Anfimov,  $N_{2}$  177, p. 48-49).

Excavations conducted at Patraeus were renewed in summer of 1948 under the leadership of A. S. Bashkirov. Cleaning of the 1928 section indicated that the objects had been distinguished earlier were utterly destroyed.

New squares were tacked on to the 1928 section from the south and the excavation became 16x5 m, as well as its whole territory occupied 80 sq. m.

Excavations conducted in 1948 exposed the wattle and daub fortification wall extension with raw brick streaks about 3 m thick (fig. 1). The top part, made from raw bricks was not uncovered in 1928 (Bashkirov, № 249, p. 19; Bashkirov, 1950, p. 146-147). Cultural stratum was investigated to 410 m over sea-level (or -290 from the contemporary zero mark).

A wide cultural phase from 375 to 510 cm thick was fixed to the west from fortification wall. The most important fact is that two medieval phases were fixed there. The first one surpassing pave G was introduced by the fire stratum 180 cm thick, where a white sea grass phase (the remains of the roof) has preserved above all. Entire single forms and numerous pieces of ceramics were fixed in the stratum. There was distinguished a socle part of the wall D which with A and B walls represented builder remains of the second low medieval stratum (Bashkirov, No 249, p. 19-22; Bashkirov, 1950, p. 147-149). To judge from the fragments of amphoras with "dugovidnye" hands this stratum is datable to the  $13^{th}-14^{th}$  A.D. (Bashkirov, 1950, pl. 26, p. 148; Yakobson, 1979, p. 111, pl. 69,1).

The second section excavated in 1948 was situated 100 m to the east from the "battery" fortress. A winery that had been fixed earlier in the shore steep was excavated at that place.

An excavation size was 6,7x7,2 m and occupied 48,2 sq. m. Five press grounds included in the winery complex were investigated there. All of them were located in 65 cm depth. They seemed to be cement mass of phases, a "lime mortar mixed with tiny ceramics crumble" and were 55 cm thick. At the bottom was found a road-metal line with a thick stratum of large-crushed burnt bricks and a stratum of liquid clay above it. 14 stratums of the winery reconstruction were followed up. Press grounds connected each other by the tube channels. In the west ground was distinguished a weight – stone block 1,35x1,75x0,65, about 1 t weight (Bashkirov, N 249, p. 23-32; Bashkirov, 1950, p. 149-156). The stratum surpassed the press grounds could be dated to the 2<sup>nd</sup>-3<sup>rd</sup> A.D.

A. S. Bashkirov has also fixed the remains of two wineries, but has not determined their location (Bashkirov, 1950, p. 155).

In 1949 the main work was connected with examination of the objects. They were situated in excavation I and were found in 1928 and 1949. In the south a new excavation bordered with the previous section and seemed to be a line of 4,5 squares oriented to the northsouth. The excavation was 22,5 m long with 5 m wide which made up 112,5 sq. m. The loamy fortification wall remains with a "tower lug" became the main object distinguished during the excavations. (Bashkirov,  $N^{\circ}$  374, p. 2-3; Bashkirov, 1957, p. 312-314). The discovery of a marble plate fragment with inscription of the 2<sup>nd</sup>-3<sup>rd</sup> century A.D., which was located in the medieval cultural phase became the most important event. (Bashkirov, 1957, p. 315, f. 15; Rozanova, 1958).

"Herring-bone" stone foundations were recovered inside the investigated section and contained streaks of big ceramic fragments which could be possibly dated to the  $12^{th}-13^{th}$  A.D. Also there was a wide fire stratum. Paves could be distinguished on two levels. (Bashkirov, No 374, p. 5-7; Bashkirov, 1957, p. 317-318).

In the square III on the level of 12-13 phases was found a burial (3). The skeleton position was stretch, without any stock. Oriented to the south-west. Absolutely clean coin with the second engraving on it which was found 10 m depth under the skull gave on opportunities to date the burial (Bashkirov,  $N \Im 374$ , p. 8; Bashkirov, 1957, p. 321, Krushkol, 1958, p. 14). The chronology of the burial determined by the one fact only –it has cut through the floor of the previous chronological period, i.d. it is datable to the  $13^{th}$ - $14^{th}$  centuries A.D. (Bashkirov,  $N \Im 374$ , p. 8) and most likely the burial belongs to the late Middle ages.

An ancient cultural stratum from 15 to 23 phases depth was fixed for the first time. Its main material consisted of the light ware narrow-necked amphoras fragments of the first centuries A.D. (Bashkirov, № 374, p. 11; Bashkirov, 1957, p. 234).

In 1949 excavations of the winery were continued (in the shore steep 100 m to the east from the "battery") at this time they took place in its east part, 20 m square, where three vessels had been distinguished earlier. They were constructed in the hollow. Their inside and outside walls were made of stone and blocked with lime solution with tiny ceramic pieces. Walls' size was 175x80x282. Two squares 4x4 with an area of 32 sq. m were tacked on to the north and east from investigated section later (Bashkirov,  $N_{\odot}$  374, p. 18; Bashkirov, 1957, p. 331-337).

The third section of 1949 work was the reconnaissance bore pit 4x4 (16 m square) lo-

cated at the masonry's erosion 28,5 m (48 m in report of 1957) to the south from the square III excavation I 1949. Thus the thick masonry and a conflagration stratum contained the remains of destroying building were discovered. A prominent place here was occupied by stigma on Bospore tiles: two fragments – $\Pi$ ANOHPO NEOKAE–could be possibly concerned to the first half of the 3<sup>rd</sup> century B.C. (Bashkirov, No 374, p. 15-16; Bashkirov, 1957, p. 337-340, pl. 40, 42).

In 1950 A. S. Bashkirov investigated the south coastal section of the "battery" fortress. An excavation consisted of 4 squares that spread to the north-south along the sea shore. Including 1949 investigations a new uncovered area made up 84 sq. m. Two medieval stratums were distinguished right there. The new objects were not fixed except the floor and two furnaces.

The remains of monumental stone wall A 1,32-1,34 wide, preserved to the height of 1,5 m were the main objects excavated during the investigations. The wall directed from the south -south-east to the north - north-west. The west shell of the wall was dropped into the trench on one block lower than the foundation of the east facade. Living farmsteads with cellars bordered the wall from the west and the east. A fire stratum was the lowest one from 1,5 to 2 m thick. In the small cellar was distinguished a warehouse included 20 amphora and two pithoi. In the big cellar was found a treasure consisted of the lower part of the pithoi with four vessels and lids and 84 bronze coins dated to the 70 years of the 1st century B.C. (The first Patraeus treasure of 1950). A bit lower the floor level was found a burial with two people inside. They laid in the stratum of ashes (4 and 5). The first skeleton was laying on the right side had cross legs and a head thrown back. The second skeleton was also laying on the right side his head was situated on the pelvis bones of the first skeleton. Near the neck of the second skeleton were found two breads made from white paste (Bashkirov, № 506, p. 12-17; Bashkirov, 1957, p. 354-355, f. 46). Scorch bones turned into ashes and skulls were crashed. Its important to note in the stratigraphical plan that the skeletons were distinguished under the wall A and couldn't be connected with a fire stratum.

In 1951 excavations were conducted in the area of four squares V-VIII bordered in the north with 1950 section. The common area of investigation occupied 100 sq. m.

Investigations of medieval part of cultural stratum situated 100-195 cm depth from the hill's surface displayed some remains of stone socles, obviously served as foundations of the raw walls. The author of excavations dated the level 8-13 A.D. (Bashkirov, N = 661, p. 3-12; Bashkirov, 1957, p. 361-369). Constructive peculiarities of 1951 layings differ them from the layings distinguished in 1928, 1948-1949 (absence of "herring-bone" laying and absence streaks of ceramics between the links).

In square V (the eastern square) were distinguished the socles of the masonry corner of the late ancient period and next to them was found a treasure consisted of 397 coins. They were found in a clearly preserved fragmented jug had a period from Savromat IV 261 A.D. to Riscuporid VI 341 A.D. data.

Lower were also investigated the remains of late Hellenistic stone walls' socles.

In the same year A. S. Bashkirov fixed some stratums of archaic period (Hios plumpnecked amphora and painting ceramics located 100-110(?) father to the west from the "battery". Cultural stratum was about 0,9-1,0 m thick (Bashkirov, 1957, p. 378).

In 1961 A. S. Bashkirov renewed excavations at Patraeus. Digs were conducted in the central part of the "battery" fortress. An excavation went father along the east-west line and included four squares 5x5 m. The whole area of the investigated section made up 175 sq. m. Before the work was begun A. S. Bashkirov had mainly destroyed cultural stratums of the monument trying to smooth out the surface with bulldozer (Bashkirov, No 2368, p. 11, p. 40).

During the digs conducted on the territory of the "battery" was fixed subsoil 3,2 m depth from the hill's surface, and also ancient and medieval stratums. Great attention was given to discovery of 32 black lacquer and red lacquer fragments of ceramics and two staters type Alekzander-Lisimah (the seventh Patraeus treasure?). In square "b" was found a chopper and marble fragments of horse's sculpture (Bashkirov, № 2386, p. 29; Bashkirov, Murygina, Nikonov, 1964, p. 244-245).

Besides that 30-40 m farther from the shore were fixed black figured and black lacquer fragments of ceramics (Bashkirov, Murygina, Nikonov, 1964, p. 245).

During the excavations in section II 100m to the west from the "battery" was distinguished a cultural stratum about 2,9 m thick. In contrast to the "battery" the main stratum was late ancient and didn't contain medieval material. (Bashkirov, № 2386, p. 40-47; Bashkirov, Murygina, Nikonov, 1964, p.248-249)

The third section of 1961-1962 works was situated 300 m to the east from the fortress hill and occupied an area of 16 sq. m. A single burial (5) 70 m depth was distinguished there. It contained fibula's debris (between edges) and a crashed plastic vessel (by the legs) (Bashkirov, Murygina, Nikonov, 1964, p. 248-249).

The most important shortcoming in these years investigations of the site of the settlement became the fact, that all A. S. Bashkirov's excavations seemed to be trenches and this brought down their scientific significance. The requirements of investigation of the ancient monument using wide areas has not been fulfilled. The great progress advanced in this direction by N. I. Sokol'skiy depended on changing of excavations' strategy.

In 1963 V. I. Goremykina smoothed out the shore steeps in the west part of the settlement and excavated a burial mound 400 m to the west from Patraeus. It was possible to fix there two main and one inlet burials (6-8) dated to the second half of  $3^{rd}$  - the first half of  $2^{nd}$ B.C. (Goremykina, No 2772; Sudarev, 1994, p. 109-111, pl. 1-2). Besides that the shore steeps were smoothed out in the east part of the monument at the place where archaic and classical settlement has existed.

In 1964 Tamanskaya expedition IA under the leadership of N. I. Sokolskiy began its excavations at Patraeus. A. S. Bashkirov has investigated an area about 800 sq. m (700 m from them on the "battery"). N. I. Sokolskiy suggested that the site of the settlement consisted of flat country and hilly parts ("battery"). The length of cultural stratum to the east from the fortress made up 200 m and it was about 2 m thick. In the west direction the picture wasn't so clear (Sokolskiy, N 2864, p. 62-63). On the "battery" cultural stratum had 9,6 m of maximum height above sea-level. The running length of the hill from the north-west to the south-east was about 72 m and from the south-west to the north-east about 100 m.

Excavations were conducted on the south-east edge of the hill and the whole area of in-

vestigations made up 130 sq. m. N. I. Sokolskiy detached 8 cultural stratums: 1) late Hellenistic; 2) the 2<sup>nd</sup>-1<sup>st</sup> B.C.; 3) the 1<sup>st</sup> A.D.; 4) the 2<sup>nd</sup> A.D.; 5) the 2<sup>nd</sup>-3<sup>rd</sup> A.D.; 6) the 3<sup>rd</sup> A.D.; 7)the 4<sup>th</sup> A.D.; 8) modern surface stratum.

The first one contained the remains of a rich house, which has been built on the solidsoul –dark brown solid clay. Raw walls had a stone foundation and one of the walls (11) was about 1,4 m wide. These stratigraphical facts coincide with the facts which were gotten in 1949-1950 by A. S. Bashkirov. Wall foundations went 5-10 cm down inside the solidsoul and it is absolutely corroborated by our investigations of 2001 (Sokolskiy, No 2864, p. 66). We had an opportunity to discover the size of raw bricks near the wall 12. They were 0,52x0,52x0,07 cm The fixed room was possibly 5,2 m wide.

N. I. Sokolskiy suggested that the house was built in the  $2^{nd}$  B.C. and in the  $1^{st}$  B.C. During the fortress building it was reconstructed and included into the fortress territory. It is more truthful at the moment to date the building of Hellenistic rooms which were standing on the solidsoul using tile's stigma –the first half of the  $3^{rd}$  B.C.

The most important discovery of 1964 was investigation of the fortress gates consisted of two pilons 6,7x1,9 m and made of standard raw bricks 52x52 with wood constructions between several brick lines. The gates were 3,65 cm wide. The raw laying of the gates was standing on the stone socle –double shelled stone laying with straight sides. An abrupt falling of the solidsoul in the east direction was noticed and it was suggested that there was a ditch in front of the wall.

V. P. Tolstikov proposed the reconstruction of this building which was unique for the whole Bospore archeology (Tolstikov, 1992, p. 46-50, f. 6).

The third stratum (in interpretation of N. I. Sokolskiy the second stratum of the fortress building) a fire stratum 0,5 m thick was recovered by the raw walls' destruction about 0,6 m thick. Conflagration could be possibly dated to the 1<sup>st</sup> A.D. (Sokolskiy, No 2864, p. 67-75). The most important fact is that the following stratums 4-7 have preserved direction of the streets. The latest stratum N. I. Sokolskiy dated to the 4<sup>th</sup> A.D.

In 1965 works were conducted in the East Patraeus excavation which was located 70 m to the east from the "battery" on the steep. In the east it bordered with A. S. Bashkirov excavation of 1949. The area of investigation made up 160 sq. m. Along the whole area the excavation was dug till the level of the solidsoul and the cultural stratum was about 1,8-2,2 m thick.

The lowest stratum -10-40 cm thick– consisted of brown loam with small golden including and ceramics of the 1<sup>st</sup> A.D. (Sokolskiy, No 3134, p. 50-51, 53) and the pave remains.

The second stratum -20-66 cm thick– yellow brown loam with ashes, coal and shells contained the remains of the room and a potter's furnace and three pithoi dug in the floor. It was dated to the  $2^{nd}$  A.D.

A furnace seemed to have a round form 315x295 cm. Its floor was based on the cut solidsoul. Its walls were made of raw bricks 52x47x8 cm. Forty cm of the walls were standing vertically and then had inside margin. A pillar of support was 80x80 square in the center. Tempering of the walls, floor and a pillar of support to the pink colour demonstrated that the furnace had been used for a long time. From one side was a pit used for heating, it had two walls broken up from the furnace. In the upper horizon of the pit three skulls possibly the heads cut off were fixed (9-11) (Sokolskiy, № 3134, p. 56-57).

Amphora fragments without any defective articles gave no opportunities to suggest the producing assortment (Sokolskiy, № 3134, p. 58). Later though R. A. Struchalina selected several amphora types of Patraeus producing (Balanovskiy, Struchalina, 1992, p. 20-25).

The third and the forth stratums connected with the same fragments of walls foundations dated to the 3<sup>rd</sup>-4<sup>th</sup> A.D. The fifth stratum could be dated to the 10<sup>th</sup>-11<sup>th</sup> A.D. on the base of amphora with "vysokopodnyatye" hands.

In 1965-1966 were conducted first excavations in the western part of the monument (Western Patraeus site of the settlement). The territory of investigations occupied 200 sq. m. They were situated in the section 450 m to the west from the "battery". Four cultural stratums were fixed: 1) the second half of the  $6^{th}$  - the beginning of the  $5^{th}$  B.C.; 2) the  $5^{th}$  B.C.; 3) medieval the  $8^{th}-9^{th}$  A.D.;. 4) contemporary. In the north-east this part of the settlement was restricted by the beam. Cultural stratum had about 100 m of running length to the north-south. It was about 1,4 m thick. The cultural stratum density was reducing to the west along the sea shore. Stratum 1 displayed some pits, a fireplace and paves consisted of amphora fragments. The objects of the second stratum were various: a round furnace which diameter was 2,2 m, substructions, paves made of amphora fragments and pits. A medieval stratum didn't contain building remains. A top cultural stratum displayed some traces of plough's tillage (Sokolskiy, Ne 3262, p. 69-77, f. 137). R. A. Struchalina suggested that it was an early ancient settlement dated from the middle of the  $6^{th}$  B.C. to the end of the  $5^{th}$  B.C. Was noticed an absence of pithoi and traces of handicrafts producing and also an absence of tile - inspite of it white sea grass was used (Sokolskiy, Ne 3262, p. 86).

All the works were stopped in 1967 and renewed the next year on the south-west corner of the "battery" fortress. During investigations in this section (1968-1970) was collected a very detailed information in stratigraphy of the monument. For the firs time these works occupied a wide area of 220 sq. m in 1968 and 125 sq. m in 1969-1970. The thickness of cultural stratum was about 3-4 m (Sokolskiy, № 3710, p. 79; Stuchalina, 1972, p. 45-55).

The first stratum was late Hellenistic. It consisted only of pavement made from crude stones. During its smoothing the material of the  $4^{th}-2^{nd}$  B.C. was found (Sokolskiy, No 4251, p. 54).

The most mighty and interesting stratum 2 consisted of a ditch, a bank, a huge substruction and fortification wall with rooms of  $1^{st}$  - the beginning of  $2^{nd}$  A.D. joined to it. The bank was built on the straight solidsoul surface. It was 10 m wide and its height has preserved to 2,2 m. The ditch was not completely investigated that is why it is very difficult to suggest its size. It was dug in the dark brown solidsoul loam which continually turned into the white eye clay and than into the clean yellow clay. Bank's stratigraphy gave a reverse picture –yellow clay stratum surpassed the ditch (Sokolskiy,  $N \ge 3710$ , p. 79-81).

The fortification wall was built on the top of the bank and its height has preserved to 1,2 m. The size of the raw bricks was standard 52x52x7/8 cm. In the bottom it was 3,6 cm wide and tapered in the top. The earliest amphora of the  $1^{st}-2^{nd}$  A.D. were discovered in the bank's cut and in its top horizon. The lowest stratum belongs to the wider chronological period from

the 4<sup>th</sup> to the beginning of the 1<sup>st</sup> B.C. N. I. Sokolskiy dated the building of fortification constructions not later than the end of the 1<sup>st</sup> B.C. (Sokolskiy, N 3710, p. 83).

A substruction bordered with the fortress in the east from inside part of it. It was partly followed up to the width of 9 m and then was lost. It was very difficult to follow up the border of the bank and substruction. A clay substruction was used as a foundation for rooms bordered in the east with fortification wall. A platform stood near fortification wall was 1,6 m thick and father 0,6-0,8 m. It consisted of brown clay with grey streaks. Inside of it there were frame laying made of raw bricks of standard size (Sokolskiy, N 4251, p. 55-56).

Room 1 was restricted by three walls and made up 4,6x3 m. Walls, 0,6-0,8 m thick, had a stone socle made from crude stone. In the north-east corner of the room was a pass 0,65 m wide decorated with the flat stone which formed a threshold. Above the socle line was a raw laying 1 brick thick with a standard size 52x52x7/8 cm. Walls were built closely by fortification wall. In room 1 were distinguished two floor levels and a streak of a sea grass –the remains of a falling roof. Using the complex of discoveries which were found in the south-west corner of the room it is possible to date its destruction as the beginning of the 2<sup>nd</sup> A.D. (Sokolskiy, No 3710, p. 86, pl. 206-207). Present chronology of the light ware narrownecked amphora type C doesn't contradict this data.

It is important to note the analogy in stratigraphical situation which was distinguished in the south-east and the south-west parts of investigated fortress. In its east and west parts was a cultural stratum of Hellenistic period. It could be partly destroyed in the west part when fortification buildings have being built. A huge amount of Hellenistic material contained in the lowest part of the bank and pavement doesn't confirm or disprove anything.

Stratum 2 in the west part of 1968 fortress synchronized with stratums 2 and 3 in the east part of the fortress (digs executed by N. I. Sokolskiy in 1964).

Stratum 3 about 0,6 m thick surpassed the remains of the rooms located in the first stratum. Building of the  $2^{nd}$  A.D. after destruction of the rooms repeated not only orientation, but also planning of the buildings (Sokolskiy, No 3710, p. 91-93), (Sokolskiy, No 4251, p. 59-60).

Stratum 4, about 1 m. thick was connected with numerous foundations and paves concerned to the late ancient period. Planning of the rooms has not almost been changing during 400 years. Also wide time breaks between stages of building were not fixed. Fortification wall became the base of the planning (Sokolskiy, No 3710, p. 95-97). Using the coins treasure we can determine the top data of the stratum as the middle of the  $3^{rd}$  A.D. - 251 A.D. (Sokolskiy, No 4251, p. 72).

It is important to note the discovery of a stone chopper fragment (late bronze period).

Stratum 5 ( $3^{rd}$  - beginning of the 4<sup>th</sup> A.D.) N. I. Sokolskiy noted the break in the process of building and some changes in the planning of inside fortress rooms. This stratum was 0,4-0,5 m thick (Sokolskiy, No 4251, p. 74).

Stratum 6 (0,8 m thick) on the base of red lacquer fragments and light ware amphoras could be dated to the 4<sup>th</sup> A.D. This stratum had full re-planning of inside rooms. Numerous remains of foundations were fixed there (Sokolskiy, N 4251, p. 75).

Stratum 4 (0,6 m thick) contained wall foundations and pithoi complexes with cut top parts: the result of the surface smoothing executed by A. S. Bashkirov in 1961 (Sokolskiy, №

3710, p. 103-104). The stratum was mainly destroyed. The top stratum could be dated to the  $8^{th}$ -10<sup>th</sup> A.D. (Sokolskiy, No 4251, p. 80, Struchalina, 1972, p. 54) or the  $6^{th}$ -10<sup>th</sup> A.D. (Balanovskiy, Struchalina, 1992, p. 17).

V. S. Dolgorukov and Y. M. Desyatchikov summed up the results of investigations (Dolgorukov, Desyatchikov, 1984, p. 86). The authors suggested that the most ancient settlement appeared in the third quarter of the  $6^{th}$  B.C. and existed till the second half of the  $5^{th}$  B.C. The traces of the settlement of the  $4^{th}$ - $3^{rd}$  B.C. have not been distinguished. Later the settlement moved up to the east. The remains of Hellenistic building had  $2^{nd}$ - $1^{st}$  B.C. data. The first destruction could be dated to the  $1^{st}$  B.C. and was connected with the first coins treasure. Building of the fortress concerned to the end of the  $1^{st}$  B.C. - the beginning of the  $1^{st}$  A.D. The second destruction of the fortress had happened during the conflagration could be dated to the beginning of the  $2^{nd}$  A.D. On the base of the third Patraeus treasure the third destruction befalled in the 251 A.D. Traditional chronology concerned the end of the ancient period to the 70 of the  $4^{th}$  A.D.

The second attempt to sum up all archeological material of that period was made by A. V. Balanovskiy and R. A. Struchalina (1992). The authors suggested that establishment of greek settlement could be dated to the 6<sup>th</sup> B.C. The settlement has been established by ionic greeks. The authors agreed with N. I. Sokolskiy that the settlement was ruined in the end of the 5 B.C. (Balanovskiy, Struchalina, 1992, p. 34-35).

The second destruction of the monument concerned to the time of Mitidat-Evpator (80 of the 1<sup>st</sup> B.C.) and connected with surpassing of Bospore revolt by Mitridat and activity of Neotolem. N. A. Frolova suggested that this surpassing could be dated to the 70 of the 1<sup>st</sup> B.C. on the base of the first Patraeus coins' treasure.

The second destruction of Patraeus was in the end of the  $1^{st}$  - beginning of the  $2^{nd}$  A.D. It is impossible to connect these events as the authors did with internal war of Mitridate VIII and Kotis I (Balanovskiy; Struchalina, 1992, p. 35-36).

We also have no opportunities to date the stratum of Patraeus destruction which had been fixed by A. S. Bashkirov to the second half of the  $6^{th}$  A.D. (Balanovskiy, Struchalina, p. 35-36).

V. F. Shelov – Covedyaev concerned the establishment of Patraeus to the second half of the 6<sup>th</sup> B.C. (Shelov-Kovedyaev, 1985, p. 51). E. A. Molev agreed with this chronology and suggested that panticapean took part in establishing of the town (Molev, 1997, p. 16-17).

In 1981 the town was examined by Y. M. Paromov. He drew up a plan of the monument on the base of the air photography (Paromov, 1993, p. 137).

In 1985 B. G. Peters began to investigate Patraeus. The works were conducted on two excavations. Excavation I consisted of three squares with a whole area of 60 sq. m. Excavation was situated 390 m to the west from the "battery" fortress. Two stratums of the 6<sup>th</sup>-5<sup>th</sup> B.C. and a round in plane pit of the 3<sup>rd</sup>-2<sup>nd</sup> B.C. were distinguished there. The second excavation was located on the "battery" and occupied 70 sq. m. A three chambered forge of the end of the 19 - beginning of the 20 was discovered in this section (Peters, No 10872, p. 1-38).

In 1986 were continued investigations in three sections. During further examination conducted in excavation 1 a forge of the 13<sup>th</sup>-14<sup>th</sup> A.D. was distinguished (Peters, № 11405, p. 40). In excavation III situated on the shore steep 100 m to the west from excavation I the shore steep was smoothed up. Excavation IV that occupied 20 sq. m was situated 310 m to the east from excavation 1 on the shore steep. Stone layings of the 4<sup>th</sup> A.D. and five cultural stratums were distinguished right there. Along the solidsoul clay was fixed a stratum of ashes. Chronological sparse of material was from the 3<sup>rd</sup> B.C. to the 4<sup>th</sup> A.D.

In 1987 B. G. Peters suggested that the monument occupied an area of 150 hec. And its running length along the shore steep was about 3,5 km. During 1987 excavation season investigations of the objects located in excavation 1 were continued. 100 m to the west from excavation 1 in excavation III an area of 50 sq. m was investigated. Cultural stratum was investigated to the depth of 1,2 m. Chronological sparse of material was from the 6<sup>th</sup>-5<sup>th</sup> B.C. to the 1<sup>st</sup> A.D. and the 8<sup>th</sup>-9<sup>th</sup> A.D. In excavation V which was situated 82 m to the east from excavation 1 on the shore steep in the area of 10 sq. m several stratums of the 6<sup>th</sup>-5<sup>th</sup> B.C. were discovered (Peters, Nº 12024).

In 1988 works were conducted in four sections. In excavation 1 which investigated area made up 230-240 sq. m. Excavation VI about 4 sq. m was situated 260 m to the north-west from the "battery" fixed cultural stratum about 0,8 m thick. Chronological sparse of material was from the 6<sup>th</sup>-5<sup>th</sup> B.C. to the 1<sup>st</sup> A.D. Excavation VII about 4 sq. m was situated 170 m to the north-east from the "battery". Cultural stratum was about 1,2 m thick. A medieval amphora hand that could be clearly distinguished was found among discoveries. Excavation VIII was situated 100 m to the west from the "battery". The whole area made up 25 sq. m. Cultural stratum was about 1,8 m thick. Chronological sparse of material was from the end of the 3<sup>rd</sup> B.C. to the end of the 4<sup>th</sup> A.D. (Peters, No 12643).

In 1989 excavations were begun in the central part of the monument and occupied wide areas. It was connected with the building of the rest home of "Vargashorskaya" mine. The works were conducted in three main sections.

Excavation IX was situated in the central part of the monument and occupied an area of 60 sq. m. Excavation was about 2,5 m depth. Cultural stratum was about 1,6 m thick. Four pits mainly of ordain period of the  $13^{\text{th}}-14^{\text{th}}$  A.D. were distinguished under it into the white - eye clay. In square 4 on the level of about 180 cm was found a burial contained Ionian lekythos of the middle of the  $5^{\text{th}}$  B.C. (Peters, No 13718; Sudarev, 1994, p. 111-112). It was the first burial of the middle of the  $5^{\text{th}}$  B.C. which was discovered on the territory of Patraeus (12).

Excavation X was situated in the central part of the monument and occupied an area of 50 sq. m. In excavation was fixed only littered cultural stratum of the end of the  $19^{th}$  - the beginning of the  $20^{th}$ , about 40 cm thick.

Excavations XI-XX were situated in the central part of the monument and seemed to be a line of squares following from the north-west to the south-east. They occupied an area of 375,5 sq. m. They contained cultural stratum about 1,6 m thick and several pits of the middle of the  $3^{rd}$  and  $13^{th}$ - $14^{th}$  A.D. (Peters, No 13718).

In front of excavation XI-XX 93 m from the shore in the depth of 17 m was discovered the first underwater amphora complex which was mistakenly indicated as a ship cargo. This complex consisted of one entire and two fragmented Thasian amphoras of the third quarter of the 5<sup>th</sup> B.C. and fragmented Chios amphora type ID-1 of the third quarter of the 5<sup>th</sup> B.C. This discovery for the first time gave materials of the "Lower town" of Patraeus (Peters, № 13718, p. 39, pl. 100, 101, 103).

Excavation XXI about 150 sq. m situated in the central part of the monument was marked but investigations were not begun.

Excavation XXII located 300 m to the west from excavation 1 on the shore steep displayed the smoothing of the shore steep and as early ancient of the  $5^{th}-4^{th}$  B.C. as medieval of the  $8^{th}-9^{th}$  A.D. material.

In 1990 investigations were conducted under the leadership of A. P. Abramov in three excavations.

Excavation XXI located in the west part of the monument 204 m from the "battery". It occupied an area of 61 sq. m. Cultural stratum in this section was about 1 m thick. Several objects were distinguished there: accumulations of stones and burnt clay. Among these material predominated fragments of the end of the  $2^{nd}-4^{th}$  A.D. Also were found single fragments of the end of the  $6^{th}$  - the beginning of the  $5^{th}$  B.C., the  $4^{th}$  - the beginning of the  $3^{rd}$  B.C. and the  $1^{st}-2^{nd}$  A.D.

Excavations XXII and XIII were investigated in the central part of the monument. Excavation XXII occupied an area of 325 sq. m and excavation XXIII -145 sq. m. The whole thickness of cultural stratum was not more than 1 m.

In this section were discovered first remains of the settlement of late bronze period early iron century (fig. 3). They formed a complex of pits which had their own stratigraphical peculiarities. At the top part they were filled with solidsoul ground. Discoveries of this chronological period consisted of: fragments of plastic and polished ceramics, bone instruments, bone arrow tip, flint and numerous animal bones (Abramov, Piunova, 1995, f. 10 and 13; Brandenberg, 1995).

The second chronological phase contained two burials dated to the second quarter of the 5<sup>th</sup> and the beginning of the 3<sup>rd</sup> B.C. (Sudarev, 1994, p. 111-114) (13-14).

The third chronological phase contained a ditch that seemed to be the second outside fortification line encircle economical complexes round the "battery" fortress (Abramov, 1994, p. 127-128, f. 1-2).

The forth period contained a single pit of the second half of the 8<sup>th</sup> A.D. Among individual discoveries should note a bronze buckle.

The fifth period -a settlement of the  $13^{th}-14^{th}$  A.D.– contained a rectangular in plane furnace and a huge ashes streak about 20 cm thick which fixed the time of its functioning.

Besides that were fixed the farmstead remains dated the end of the 19 - the beginning of the 20 century (Abramov, № 1541).

In 1990 during cleaning of foundation pit for constructing a living house situated 260 m to the north-east from the "battery" (excavation XXIV) was fixed a pit which contained a burial and ceramic complex of the middle of the 3<sup>rd</sup> A.D. (Levin, 1994, p. 65-83).

In the part of the monument flooding up by the waters of Tamanskiy gulf were distinguished five accumulations of ceramics (complex 1-5) dated from the end of the 6<sup>th</sup> to the middle of the 4<sup>th</sup> B.C. (Abramov, Sazonov, 1991, p. 68-76; Abramov, Sazonov, 1992, p. 147172). Among unique discoveries was found an amphora with stigma which had been made in Beotia.

In 1991 to excavation XXIII with the whole area of 145 sq. m several sections were tacked on. Cultural stratum about 1 m thick was fixed there and also the remains of rectangular forge of the 13<sup>th</sup>-14<sup>th</sup> A.D. and three pits of the same data. On the other squares it was possible to discover a burial (16) (Sudarev, 1994, pl. 2,g-d) and eight pits. One of them could be dated to the third quarter of the 3<sup>rd</sup> B.C. and the others were of the late bronze period or the early iron century. A herd that had formed in the period preceded the Greek colonization included horned cattle, a horse and a pig.

Excavation XXV of 1991 was situated in the central part of the monument and occupied an area of 60 sq. m. Cultural stratum about 1,2 m thick was laying on the solidsoul which like in other parts of the monument contented a dark brown plastic loam. In the top stratum a stone socle of the wall 60 cmthick was distinguished. Its construction included a stone of the secondary use, crude stone, big fragments of ceramics and tile. The layings were preserved till two lines and dated on the base of internal material by the 13<sup>th</sup>-14<sup>th</sup> A.D.

Lower 19 pits were distinguished. They could be divided into following chronological groups: late bronze-early iron period, the second half of the  $3^{rd}-2^{nd}$  B.C. and the first centuries A.D. It indicates that this section was a part of economical zone of the settlements of enumerates chronological periods (Abramov, No 16046).

In excavation XXV which was laid out 17 m to the west from excavation 1 where in 1985-1989 were distinguished the remains of the raw walls oriented to the north-south line dated to the end of the  $6^{th}$  - the beginning of the  $5^{th}$  B.C. and two pits. One of them contained a unique amphora warehouse of the second quarter of the  $5^{th}$  B.C. Although the pit cut through the raw walls of the earlier period we have no debts in their chronological data (Abramov, No 16046, p. 63-68; Abramov, 1994).

The last section of works conducted in 1991 was connected with water supply trench of "Vorgasherskaya" mine rest home. It was located 93 m to the north from the "battery". It contained 9 burials without stock, oriented to the south, possibly of the late medieval period (17-25). Cultural stratum was about 60 cm thick. It was a transferred contemporary stratum connected with building of the road which laid 20 m to the north. The main quantitative of ancient ceramics distinguished in this stratum dated to the 1<sup>st</sup> - the middle of the 3<sup>rd</sup> A.D. (Abramov,  $N_{0}$  16046; Sudarev, 1994).

In 1992 works were conducted in two sections: in excavation XXVIII situated on the shore steep 280 m from excavation 1 with an area of about 109 sq. m and in excavation XXIX situated on the shore steep 360 m to the west from excavation 1 with an area of 20 sq. m (Abramov,  $N_{0}$  17170). This section was investigated until 1997.

Excavation XXVIII had a rectangular form and consisted of 27 squares. They were spread along the shore line in 140,5 m. Middle width of investigated area was about 6 m. The whole area of investigations made up 800 sq. m.

This stratum consisted of a dark grey sandy loam humused in the top part about 0,8-1,2 m thick. It laid on the dark brown solidsoul loam and in its top part didn't contain any discoveries. Stratigraphical changes were not fixed in this stratum. It contained material from the first

half of the 6<sup>th</sup> B.C. to the 14<sup>th</sup> A.D. All the objects were fixed near by the solidsoul. Among these objects it is important to note the following:

Object 49 –a raw fence (Abramov,  $N \ge 20456$ , p. 25-26). The size of the bricks was different –60-65 cmwide and 46-70 cmlong. The raw bricks were bright yellow. Substruction was used as the basis of the fence. It seemed to be a narrowing in the bottom trapeziform trench filled with dark grey clay with ceramical includings. Fragments of Sinopian, Kolhidian, Koan amphoras distinguished in its bottom date this object within the second half of the 3<sup>rd</sup> - the beginning of the 1<sup>st</sup> B.C.

In the east part of excavation trenches about 1 m width and 30 cm dug into the solidsoul were distinguished (objects 55, 57, 61, 65,67). The light stripes were found as the solidsoul was smoothed up. They were filled with plastic yellow clay. The discoveries of ceramics and entire small stones were singular. These objects were determined as substructions. N. I. Sokolskiy suggested just this as though he had discovered the same objects 300 m to the east. (Sokolskiy No 3262, p. 76-77, f. 137; Paromov, 1993, No 7).

It is possible to suggest only the top data –no later than the second half of the  $4^{th}$  - the beginning of the  $3^{rd}$  B.C.– as this section was surpassed by the litter dump of that period.

It is important to describe the pits. Only one of them – object 47a could be dated within the end of the  $6^{th}$  - the beginning of the  $5^{th}$  B.C.; six of them (No 9, 11, 12, 15, 16) were of the end of the  $6^{th}$  - the beginning of the  $5^{th}$  B.C.; object 35 was of the second quarter of the  $5^{th}$  B.C.; six were dated within the second part of the  $5^{th}$  B.C.; object 37 was of 90-80 of the  $4^{th}$  B.C. and ten objects were of the second half of the  $4^{th}$  - the beginning of the  $3^{th}$  B.C. (No 10, 23, 24, 25a, 25b, 33, 52, 62, 63, 70). Object 71 could be dated to the second quarter of the  $1^{st}$  B.C. - the mid of the  $1^{st}$  A.D. Filling of the 60 pit was of the  $8^{th}-9^{th}$  A.D. and pits 43 and 50 of the  $13^{th}-14^{th}$  A.D.

It is important to note besides the objects enumerated above the neck and hand discoveries of Clazomenian amphoras of the second half of the  $6^{th}$  B.C. laid on the solidsoul (objects 3 and 5); a Chios amphora dug into the solidsoul of the late decades of the  $5^{th}$  B.C. (object 21); a big plastic pot, dug into the solidsoul (object 13) and a black pitched jug type "tmutorakanskiy" laid horizontal (object 29).

Objects  $\mathbb{N}_{2}$  19, 20, 28, 30, 31, 32, 34, 36, 40 –seemed to be a typical litter dump included big amphoras' fragments, animal bones, ashes streaks and pieces of burnt clay. This dump with different material concentration degree occupied an area of about 200 sq. m. Being 60-80 cmdepth from contemporary dayly surface this dump fixed the abolishment of active economical life of the settlement. To judge from the fragments recovered we can suggest that it was formed in the second half of the 4<sup>th</sup> - the beginning of the 3<sup>rd</sup> B.C.

It is important to take into consideration the following conclusions:

• This section was included in the economical activity zone of the settlement from the third quarter of the  $6^{th}$  B.C.;

• excavation fixed the exact border of the economical activity zone;

• in the second half of the 4<sup>th</sup> - the beginning of the 3<sup>rd</sup> B.C. the economical activity was stopped and a litter dump appeared at this place;

• we have no opportunities to include this section into the territory of the settlement of

any chronological period enumerated above;

• chronological analyze of the stratum discoveries surpassing all described objects displayed the chronology of distinguished objects;

• a huge amount of material and a special object (raw brick fence) make it possible to suggest that in the second half of the  $3^{rd}$ - the beginning of the  $1^{st}$  B.C. this section was situated closely by to the farmstead of the same period or any other construction outside the set-tlement's border;

• Remarkable to note the episodical character of the economical activity in the second quarter of the 1<sup>st</sup> B.C. - the mid of the 1<sup>st</sup> A.D. and also in 13-14 A.D.;

• From the mid of the 1<sup>st</sup> to the 4<sup>th</sup> A.D. any traces of economical activity were not fixed here;

• In 1994 a burial by the north braid of the square 14 was excavated. It didn't contain the stock, was oriented to the south and dated within the  $16^{\text{th}}-18^{\text{th}}$  A.D. It was 70 cmdepth from the daily surface. It indicates that a grey sandy loam phase had formed earlier (Abramov, No 18842, p. 30-31, pl. 3, 137, 146-148).

Cultural stratum filled with ceramic fragments and other discoveries was situated 70 m to the east from the objects that fixed the prossess of economical activity. It gives us full explanation of the "discovery ring" idea. A continualy decreasing cultural stratum existed outside the settlement and its "economical zone".

To analyze statistics of Lifting material it is important to discuss the following question: in what way the top phases material reflects the whole picture of the stratum. It is nessasary to compare statistics with the first two phases (40 cm depth from contemporary dayly surface).

Chronological groups	The whole Stratum qu.	%	Till 40 cm Quant.	%
600-550 B.C.	9	0,41	0	0
550-480 B.C.	519	23,71	84	18,10
480-400 B.C.	604	27,59	114	24,57
400-270 B.C.	672	30,69	116	25,00
270-63 B.C.	89	4,06	26	5,60
63 B.C 50 A.D.	31	1,42	11 -	2,37
50-250 A.D.	5	0,23,	4	0,86
400-63 B.C.	136	6,21	46	9,91
VIII-IX A.D.	78	3,56	39	8,41
X-XI A.D.	1	0,05	0	0
XII A.D.	. 1	0,05	1	0,22
XIII A.D.	42	1,92	23	4,96
In all:	2189	100,00	464	100,00

1122

On the base of statistics quote in the plate its obvious material of the top phases indicates chronological tendency of material contained in the stratum in whole as the percentage of material of the latest chronological groups was increasing.

# Collecting of Lifting material in 1992-1997

In 1992 and in 1995 in the section closely bordered with excavation XXVIII-XXIX (Paromov, 1993,  $N_{2}$  107) in the north were executed the two secondary collecting of Lifting material. It aimed to check the Lifting material gathered on the west part of Patraeus settlement.

1992 collecting was conducted in stripes 10 m long. (the distance between four supported wine pillars) Collectors had to find profiled and ornamented fragments only. This section has been ploughed and harrowed for the next three years.

In 1995 was conducted the secondary collecting and a new gathering system was also used. The material was collected on 4x5 sections. All ceramic fragments were collected and counted in an area of more than 1 sq. cm.

Comparing of results of the two years collections including chronologically important fragments is the following.

Chronological groups	Collecting of 1992 quant.	%	Collecting of 1995	%
600-550 B.C.	1	0,19	0	0
550-480 B.C.	63	12,06	33	5,37
480-400 B.C.	79	15,13	68	11,07
400-270 B.C.	149	28,54	190	30,94
270-63 B.C.	26	4,98	30	4,88
63 B.C 50 A.D.	22	4,21	10	1,63
50-250 A.D.	3	0,57	4	0,65
250-400 A.D.	0	0	0	0
400-63 B.C.	66	12,64	56	9,21
VIII-IX A.D.	27	5,17	154	25,08
X-XI A.D.	0	0	3	0,48
XII A.D.	1	0,19	0	0
XIII-XV A.D.	85	16,28	66	10,75
In all:	522	100,00	614	100,00

The sharp divergence of material percentage concerned to the 8<sup>th</sup>-9<sup>th</sup> centuries A.D. was a single difference between two collecting seasons. During collecting of the walls in 1995 this group of material rose extremely. All amphoras and pots walls are easily distinguished be-

cause they have engraved ornament and peculiar profile. During collecting of material in 1992 only ornamented and profiled fragments the main part of material of this time was not fixed.

In all cases of counting on the whole stratum in first two stratums the main group formed the material of the  $4^{th}$  - the first third of the  $3^{rd}$  B.C. The groups of earlier materials reducing of its percentage material.

In 1997 were renewed investigations on excavation III where were found the remains of the west fortification line of the settlement of the second half of the  $6^{th}$  - the  $1^{st}$  third of the  $3^{rd}$  B.C. and were continued till 1999. B. G. Peters has also suggested the existence of fortification ditch in this section (Peters,  $N \ge 11405$ , p. 25-27; Peters,  $N \ge 12024$  p. 50-54; Peters, 1988, p. 140). The excavation occupied an area of 63,5 sq. m and was situated near the shore steep. The surface was straight. Cultural stratum consisted of a grey dense loam humused in the top part 1 m thick. The stratum contained fragments of ceramics from the middle of the  $6^{th}$  B.C. to  $9^{th}$  A.D. This stratum could not be stratigraphically devided it had already been fixed in excavation 28-29. This stratum was surpassed by the dark brown solidsoul loam. In this stratum exactly was fixed a ditch 4 m followed up along the north-south line with a small deviation to the west. In its top part the ditch was 4 m wide and its depth has preserved to 1,56. The ditch was filled with a dark dense loam contained fragments of ceramics, pieces of burnt clay and animal bones. There were not litter traces and ashes streaks. The ditch was trapeziform and the form of the bottom was concave. This structure was hardly used as a floodgate as the settlement was safely protected by the beam in the north.

Doubtless that this structure streched out along the north-south line was connected with the beam. I.e. its a fair example of a cape fortififcation which was separated in the floor side by the ditch. All remains of stone and raw house building which had been distinguished earlier were situated in defence part with a wide area investigated behind the ditch (economical zone).

A preserved part of the Top town seemed to be a fortify part of the settlement of the second half the  $6^{th}$  - the first third of the  $3^{rd}$  B.C. Its running length along the shore steep was 240 m and along the north-south line 150 m. The part of the settlement was abolished during destroying of the shore line under the force of ecological factors. A preserved part of for-tification made up 1,26 hec.

The ditch contained material that could be possibly dated to the second half of the  $6^{th}$  - the  $1^{st}$  third of the 3rd B.C. that completely coincide with chronology of defended settlement. Its important to note that materials contained inside the ditch clearly fixed only the top chronological data.

The nearest analogy should be found among the monuments of Tamanskiy peninsula the same cape fortifications were distinguished during reconnaissance of Paromov Y. M. on the monuments: Vyshesteblievskaya 11, Starotitrovskaya 5, 15 and 17 (Rogov, 1999, p. 154-155). Strelka settlement could be added to this list. All these settlements were cape and bordered from the floor side by the ditch or the bank. The most important fact is that all the monuments were fixed the material of the 6<sup>th</sup> B.C. (Abramov, 2000, p. 7-10).

In 1997 the works were continued in excavation 26 where in 1991 was found amphoras

warehouse of the second third of the 5<sup>th</sup> B.C. The whole area of excavations made up 223 sq. m. Material of the second half of the  $6^{th}$  - the beginning  $5^{th}$  B.C. made up in this section 48,1% from the whole quantitative of the dated fragments.

Raw building walls were distinguished. One of them was oriented to the north-east and the other had 14 to the west. Several pits of the  $6^{th}-5^{th}$  B.C. and  $13^{th}-14^{th}$  A.D. were discovered.

In 2000-2001 investigations were conducted in excavation 35, 170 m to the north-west from excavation 1 azimuth 350. The excavation occupied an area of 150 sq. m and was oriented to the parts of the world. It was suggested that in this section was located a burial of the second half of the 6<sup>th</sup>-the first third of the 3<sup>rd</sup> B.C. The section was not completely investigated in whole. By this moment a furnace and four pits of the 13<sup>th</sup>-15<sup>th</sup> A.D. had been distinguished.

In 2001 Akimov V. O. executed investigations of the robbers excavation  $N_{2}$  33 on the «battery» in an area of 72 sq. m. Inside the solidsoul dark brown loam was fixed a burial (skull, edges, spinal without pelvis and long bones) and also the economical pit of the end of the 6<sup>th</sup> the beginning of the 5<sup>th</sup> B.C., the remains of the stone housebuilding of late Hellenistic period and some stratums of the Roman period. The most important was founding among the crumble material a huge amount of ceramical fragments which could be dated to the 5<sup>th</sup>-6<sup>th</sup> B.C. It had not been descovered at Patreus earlier.

The roads of ancient period that communicated between the site of the settlement and the nearest monuments were investigated by Y. M. Paromov (Paromov, 1998, p. 216-225).

From 1991 to 2001 on the underwater part of Patraeus on the territory of the Lower town has been working an underwater archeological expedition under the leadership of V. N. Taskaev. During this period in the central part of the monument 5,5 m from the shore was discovered a well (investigations of 1995). On the base of Mendian amphora nimbus which was found between the stones it could be dated to the  $5^{th}-4^{th}$  B.C. (Taskaev, Osmanova, 2001, pl. 24, p. 21-22). The object was investigated to the depth of 2,2 m. The main part of material was taken from the well by the robbers. The well was made from rectangular trimmed blocks laid directly on the solidsoul yellow clay. In the top part the well had 2,50x2, 45x2,30x2,10 m size.

The second object (complex  $N_{2}$  3) was investigated in 1993. It was situated 104 m from the shore in front of excavation 3. Water collector was made of massive lime blocks 2,65x2,08 m. It was filled with ceramics which could be dated within the mid of the 4<sup>th</sup> B.C. The blocks were laid on the solidsoul yellow clay. A part of the water collector preserved to the height of 76-81 cm.

The third object concerned to the gidrotechnic constructions was distinguished 94 m from the shore in the west part of the monument opposite excavation XXIX. This excavation was marked on this section to check the existence of cultural stratum opposite the well on the shore. Well's mouth was rectangular 1,21x1,12x108x0,98 m. The well was found in the depth of 1,6 m. A preserved part of the masonry made up 1,8 m. Basis of each wall was standing on rectangular oak beams 0,15x0,17 m (Taskaev, Osmanova, 2001, pl. 18-23).

The main peculiarity of the well's filling is the stratum which shows its functioning -a

number of entire and fragmented jugs. The top part of the well was ceramic litter consisted of fragmented ceramic tare. (Abramov, Sazonov, 1992; Paromov, 1993, p. 143, № 50).

Two groups of buildings with stone socles dug into a yellow solidsoul clay were distinguished (height of 1-2 lines) Sometimes rolled sea pebble were used.

Central group – A line of 8 buildings spread to the west-east line 140 m along the sea shore to the east from excavation V (1986).

*Building XI* was situated 9,8 m from the shore. Its size was 9,8x7,9 m. The walls were oriented to the parts of the world. It is possible to suggest that there were several rooms. Chronology of the amphora tare was the  $5^{th}$  - the beginning of the  $2^{nd}$  B.C. (Taskaev, Osmanova, 2001, pl. 13, p. 14-15).

*Building X* located to the west from building XI 11,5 m from the shore line. Its size was 8,7x7,5m. It was oriented to the parts of the world. Chronology of amphora material was the  $5^{\text{th}}$  - the beginning of the  $2^{\text{nd}}$  B.C. (Taskaev, Osmanova, 2001, pl. 12, p. 13-14).

A well of 1995 was situated near the north-west corner of the building X.

*Building 1 (1996)* was situated to the west from the well of 1995 and building X, 0,65 m from the shore in the depth of 0,30-0,65 m. Two rooms 12,0x6,8 m and 9,4x6,8 m were clearly fixed. Chronology of ceramical material within the second half of  $6^{th}-3^{rd}$  B.C. (Taskaev, Osmanova, pl. 13, p. 5-8).

*Building XII* was distinguished to the souht-west from building 1. One room was fixed. Its size was 7,8x5,4 m. It was oriented to the parts of the world. Chronology of ceramical material was the 5<sup>th</sup> - the beginning of the 3<sup>rd</sup> B.C. (Taskaev, Osmanova, 2001, pl. 13, p. 14-15).

*Building XIII (2000)* to the west from building XII 12,4 m from the shore. Its size was 12,0X10,4 m. The walls oriented to the parts of the world. Chronology of material was the end of  $6^{th}$ - $3^{rd}$  B.C. (Taskaev, Osmanova, 2001, pl. 15, p. 16).

*Building XIV (2000)* was distinguished to the west from building XIII 10 m from the shore. Its size -6,8x4,9. The walls oriented to the parts of the world. Chronology of material: the second half of the 6<sup>th</sup>-3<sup>rd</sup> B.C. (Taskaev, Osmanova, 2001, pl. 17, p. 17).

*Building XV (2000)* was distinguished 4,8 m to the north-west from building XIV. Its size 6,6x5,3 m. It was oriented to the parts of the world. Chronology of material the second half of the  $6^{th}$ - $3^{rd}$  B.C. (Taskaev, Osmanova, 2001, pl. 17, p. 17).

Building XVI located to the west from building XV.

Ceramical complex 27 bordered outside with the west of building XVI. It contained a pit 170 cm diameter located 130 cm depth from the water surface. The pit was filled with Red lesbian amphora fragments datable to the end of the 6<sup>th</sup> - the beginning of the 5<sup>th</sup> B.C., Chios and Protothasian amphoras and black lacquer oinochoe. This complex seemed to be *ceramical litter* of the end of the 6<sup>th</sup> - the beginning of the 5<sup>th</sup> B.C.

10 m to the south from buildings 1 and XII complex 16 was found. The pit contained ceramical litter included three Heracleian fragmented amphoras of the mid - the third quarter of the 4<sup>th</sup> B.C. Without stigma fragments.

20 m to the west from building XVI was distinguished a ceramical complex 17 contained entire Thasian and Chios (were gathered) amphoras of the last quarter of the 5<sup>th</sup> B.C. and

numerous fragments. Entire amphoras covered with pitch inside displayed an amphora warehous.

20 m to the north from building 16 a ceramical *complex 25* was distinguished. It contained two fragmented Heracleian amphoras of the mid –the third quarter of the  $4^{\text{th}}$  B.C.– *ceramical litter*.

Near the rooms XIV-XVI in 1998 the *forth Patraeus coin treasure* was discovered. It was located 30 m from the water edge 50 m depth. The treasure consisted of 9 silver cions. Six coins formed a clod, three were found as a cup (Abramov, Boldyrev, 2001, p. 143-144).

100 m to the south from building XI four accumulations of ceramics were found. The first of them was an amphora complex of the third quarter of the 5<sup>th</sup> B.C. It contained an entire Thasian amphora and fragmented Chios late thickened rim amphora (the third vessel concerned to the unknown producing centre) (Paromov, 1993, p. 141,  $N_{2}$  23). This object on the base of completely entire vessels could be distinguished as an amphora warehouse.

The second object: underwater complex 5 almost contained entire forms and could be dated to the second half of the 5<sup>th</sup> B.C. (Abramov, Sazonov, 1991, p. 68-76; Paromov, 1993, p. 142,  $N_{2}$  31). It was found in the depth of 1,7 m. It is very difficult to interpretize this object –possibly it could be an amphora warehouse or ceramical litter.

*Complex 6* was not investigated. A Heracleian amphora neck with relief stigma was lifted (Paromov, 1993, p. 142, № 32). The object was discovered in the depth of 1,8 m.

Complex 7 – a pit with ceramical litter contained only some fragments of Chios amphora of the second quarter of the 5<sup>th</sup> B.C. (Paromov, 1993, p. 142,  $N_{2}$  33). The object was distinguished 1,75 m depth.

• it is possible to suggest the east border of the Lower town was fixed by complex 5, building XI and ceramical complex that B.G. Peters found in 1989.

*Eastern group:* included three complexes.

Complex N 15 was the eastern and situated 200 m to the east from the "battery" fortress. 100 m from the shore, 14 m depth. This object contained a unique Rhodian amphora of the first half of the 1<sup>st</sup> A.D. dug into the yellow solidsoul clay till the lower part of its neck and fragmented ceramical material of the first half of the 3<sup>rd</sup> A.D. (Hesnard, fig. 1, 2-3, p. 73; Abramov, 1998, p. 16).

30 m to the east from the "battery" and 40 m from the shore in the depth of 70 cm from the water surface was found a pit 1,2 m diameter contained some fragments of ceramics – complex  $N_{2}$  21. In front of the south-east corner of the battery fortress 1,8 m from the shore in the depth of 50 cm was distinguished the same object –complex  $N_{2}$  20. Both of them contained only some fragments of Sinopian and Heracleian amphoras of the second half of the 4<sup>th</sup> - the first third of the 3<sup>rd</sup> B.C.

Western group: was discovered in front of and to the west from excavaton III, 1986, 1997-1999. It included ceramical complex  $N_{0}$  4 situated 10 m to the west from excavation in 6 m from the shore 0,2-0,4 m depth. It seemed to be a pit filled with big ceramical fragments. It was gathered to a nearly entire amphora (without venchik) grey ware Lesbian amphora and the main part till the mid of the body of Chios amphora and «half amphora» of the late last quarter of the 5<sup>th</sup> B.C. This object could be determined as *an amphora warehouse* (Paromov,

1993, p. 142, № 30).

Building VII was distinguished 18 m to the west from complex  $\mathbb{N}$  4. Masonries closely bordered with the water edge. Its size 13,2x9,2 m. The walls oriented to the parts of the world. Chronology of the fragments is the end of the 6<sup>th</sup>-3<sup>rd</sup> B.C. (Taskaev, Osmanova, 2001, pl. 9, p. 11-12).

*Building II* was distinguished 30 m to the south-west from building VII and 13 m from the shore 48-55 m depth. Its size 5,1x7,2 m. The walls oriented to the parts of the world. Chronology of distinguished amphora material is the end of the 5<sup>th</sup> - beginning of of the 3<sup>rd</sup> B.C. (Taskaev, Osmanova, 2001, pl. 4, p. 8-9).

*Building IX* was distinguished 24 m to the south from building II and 46 m from the shore. Its size 10,2x8,3 m. The walls oriented to the parts of the world. Chronology of distinguished amphora material is within the end of the  $6^{th}$  - beginning of of the  $3^{rd}$  B.C. (Taskaev, Osmanova, 2001, pl. 11, p. 12-13).

*Building III* was distinguished 10 m to the west from building II and 15 m from the shore 57-64 m depth. Its size 4,6x13,8 m. The walls oriented to the parts of the world. Chronology of distinguished amphora material is the second half of the  $6^{th}$  - beginning of of the  $3^{rd}$  B.C. (Taskaev, Osmanova, 2001, pl. 5, p. 9).

*Building VIII* was distinguished 20 m to the west from building IX and 25 m to the south from building III, 38 m from the shore. Its size 7,6x7,8 m. The walls oriented to the parts of the world. Chronology of distinguished amphora material is the end of the  $6^{th}$  - beginning of of the  $3^{rd}$  B.C. (Taskaev, Osmanova, 2001, pl. 12, p. 12-13).

Near building III was discovered the fifth Patraeus coin treasure. It consisted of three Kizik coins and one silver Panticapean coin. It was dated no later than the 480 B.C. (Abramov, Boldyrev, 2001, p. 144).

Building IV was distinguished 25 m to the south-west from building III and 19 m from the shore 62 cm depth. Its size 2,5x3,4 m. The walls oriented to the parts of the world. It is important to note the discovered set of the lead weights. Chronology of distinguished amphora material is the end of the  $6^{th}$  - beginning of of the  $3^{rd}$  B.C. (Taskaev, Osmanova, 2001, pl. 6, p. 9-10).

Near the building IV was distinguished the sixth Patraeus coin treasure. It consisted of eleven Fanagorian coins spread along the small territory. Suggested that it coinside to the ferst Patraeus coin treasure and is dateble to the 70 the 1<sup>st</sup> B.C. (Abramov, Boldyrev, 2001, p. 144).

Building V was distinguished 10 m to the south-west from building IV and 20 m from the shore 62-70 cm depth. Its size 5,1x7,2 m. One wall only preserved and oriented to the north-south 13,6 m long. A rectangular block 37x20x26 cm was fixed. Chronology of distinguished amphora material is the second half of the 6<sup>th</sup> - the 4<sup>th</sup> B.C. (Taskaev, Osmanova, 2001, pl. 7, p. 10-11).

*Building VI* was distinguished 10 m to the south-west from building V and 26,5 m from the shore 55-66 cm depth. Its size 9,2x9,4 m. The walls oriented to the parts of the world. Chronology of distinguished amphora material is the second half of the  $6^{th}$  - the gain of the  $4^{th}$ - $3^{rd}$  B.C. (Taskaev, Osmanova, 2001, pl. 8, p. 11).

40 m to the south from building V 1,1 m depth was distinguished an underwater *complex*  $N_2$  9 which contained 4 entire Heracleian amphoras and numerous fragments of Heracleian, Chios and Mendian amphoras and several vessels with unknown centre of production. Doubtless that it formed an *amphora warehouse*. It dated to the second quarter of the 4<sup>th</sup> B.C. (Paromov, 1993, p. 143, N<sub>2</sub> 51; Lomtadze forthcoming).

150 m to the west from complex  $\mathbb{N}_{2}$  9 and 85 m from the shore was discovered *complex*  $\mathbb{N}_{2}$  10, 1,28 m depth. Complex included fragmented material of the second half of the 4<sup>th</sup> - the first half of the 3<sup>rd</sup> B.C. (Paromov, 1993, p. 143,  $\mathbb{N}_{2}$  52). This object could be interpret as a ceramical litter.

90 m to the west from complex  $N_{2}$  10 - 96 m from the shore, 1,3 m depth and 15 m to the east from the stone well 8 was found Heracleian amphora without one leg of the second-third quarter of the 4<sup>th</sup> B.C. –*complex*  $N_{2}$  19– 2000.

30 m to the south from the well 8 were distinguished collapse of stone walls made of 9 rectangular blocks. 72 m to the south from the well 8 was distinguished a stone collapse and an amphora of unknown producing centre which is datable within the  $4^{\text{th}}-3^{\text{rd}}$  B.C. –*complex*  $N \ge 30$  (Taskaev, Osmanova, 2001, p. 35).

70 m to the south from complex  $N_{2}$  9 was distinguished *complex*  $N_{2}$  18 contained one entire Chios amphora of full size (20 1.) and three entire Chios "half amphora" (10 1.) and also numerous fragments of Thasian, Mendian and "rasdutoe gorlo" amphoras of the late last third of the 5<sup>th</sup> B.C.

20 m to the west from building 6 was distinguished a ceramic *complex*  $N_{2}$  11 which contained fragmented amphora material of the 4<sup>th</sup> - the first third of the 3<sup>rd</sup> B.C. and also a unique narrownecked Sinopian amphora of the 1<sup>st</sup> A.D. (Vnukov, 1994, f. 4). The existence of a coin treasure  $N_{2}$  6 and ceramical complex 11 in this section give us all opportunities to suggest that there also were some singular buildings of the 1<sup>st</sup> B.C. and the 1<sup>st</sup> A.D.

50 m to the north-west from building VI was distinguished *complex*  $N_{2}$  13 contained fragmented ceramic litter of the 4<sup>th</sup> - the first third of the 3<sup>rd</sup> B.C.

50 m to the west from complex No 13 was distinguished the same *complex* No 14 contained fragments of Sinopian ad Heracleian amphoras of the second half of the  $4^{th}$  - the first third of the  $3^{rd}$  B.C.

among described complexes in this group the western were 10, 11, 13 and 14 seemed to be ceramic litter and located in front of excavation 28 there was distinguished an economical zone of the settlement of the second half of the 6<sup>th</sup> - the first third of the 3<sup>rd</sup> B.C. It is possible to suggest that the western border of the Lower town in the second half of the 6<sup>th</sup> - the first third of the 3<sup>rd</sup> B.C. was situated 130 m to the west from excavation III. It was fixed by building VI and ceramic complexes № 9 and 18.

The South group – a number of complexes which fixed the south border of the Lower town. Complex  $\mathbb{N}_{2}$  18 is the western among them. It concerned to the west group as complexes  $\mathbb{N}_{2}$  5 and 7 described above concerned to the east group. A stone well 3 was distinguished straight between them opposite excavation 3 and building VII 100 m from the shore 1,42 m depth (Paromov, 1993, p. 142,  $\mathbb{N}_{2}$  29). 5 m to the west from the well 1,45 m depth was found a ceramic *complex*  $\mathbb{N}_{2}$  2 (Paromov, 1993, p. 142,  $\mathbb{N}_{2}$  28) consisted of Chios

straightnecked amphora and a number of forms with unknown center of production. This complex to judge from the Chios ceramics tare could be dated to the early late third f the 5<sup>th</sup> B.C. (Abramov, Sazonov, 1992, p. 151-156). This complex could be interpret as an *amphora warehouse*.

3 m to the north from the well was found *complex*  $N_{2}$  12 contained one straightnecked Chios halfamphora of the late last third of the 5<sup>th</sup> B.C. and a Mendian amphora of the same data (Abramov, 1993, pl. 10, IE 2, 2.16, 2.21; pl. 26, 2.92, 2.93). Possibly this object was an amphora warehouse, too.

In 2001 15 m to the west from the well was distinguished *complex*  $N_{22}$  contained some Chios amphora fragments of the third quarter of the 5<sup>th</sup> B.C. and some amphora fragments with "razdutoe gorlo". This object seemed to be the *ceramical litter*.

In 2001 30 m to the west from the well and 12 m from complex 22 was found complex  $N_2$  23. It contained two Chios and one Fasos amphoras and also numerous amphora fragments of other producing centres. Using the contenporary chronology of ceramics epigraphy of Thasos ond Heraclea Pontiyskaya it could be dated to the first two tenth of the 4<sup>th</sup> B.C.

In 1989 in front of excavation I investigated by B. G. Peters (1985-1989) 100 m from the shore 1,55 m depth was found an underwater *complex*  $N_2$  *1* contained a single protofasos fragmented amphora of the late third of the 6<sup>th</sup> B.C. and numerous fragments of Chios and Red Lesbian amphoras of the same chronological period. (Abramov, Sazonov, 1992, p. 148-151; Paromov, 1993, p. 141, No 18) This object could be interpret as *ceramical litter*.

Other underwater discoveries: its important to note the following items: stone drain fragment (Paromov, 1993, p. 140,  $\mathbb{N}$  11), stone plate with "tamgoobraznyi" signs (Paromov, 1993, p. 142,  $\mathbb{N}$  34), worked up stone block (Paromov, 1993, p. 142,  $\mathbb{N}$  35). To these objects should be added underwater complex  $\mathbb{N}$  24 contained undatable red clay kilik, and fragmented amphora of the 5<sup>th</sup>-6<sup>th</sup> A.D. (without leg and neck). This discovery is unique for Patraeus. Producing center was connected with the eastern coast of the Black sea (Yakobson, 1979, f. 2,3, p. 12, type 7). This object was distinguished 200 m from the shore line to the south from B. G. Peters excavation 1.

225 m to the south from the south west corner of the "battery" was found a neck of Bosporian pink ware amphora without roll traces of the second half of the  $2^{nd}$  - the first half of the  $3^{rd}$  A.D. (Abramov, 1993, pl. 57, 6.27).

It is also important to take into consideration the following:

- a single reliable criterion concerning the monument section to the territory of the settlement of definite chronological period is existence of building remains of that period
- amphora complexes were distinguished only on the territory of the settlement
- pits contained ceramic litter could be located as on the territory of the monument as on the territory of the economical zone, but not on the territory of the necropolis.
- The burial territory is not included in the territory of the settlement of this chronological period.

# Conclusions

• the Lower site of ancient settlement of Patraeus was in 440 m spread along the westeast line;

• an economical zone bordered with it was not less than 180 m long in the west and 300 m in the east.

• It is more difficult to determine the south border of the Lower town. On the base of reliable complexes it was situated 100-120 m from the contemporary border of the shore line. Stone collapses were fixed 282-284 m from the shore.

• Thus the minimum area of the Lower town made up 4,4 hec.

# Necropolis of the $5^{th}-4^{th}$ B.C.

Necropolis of this chronological period was distinguished only in the central part of the monument on the left east shore of the beam. The earliest burial was distinguished in the square 1, excavation XXI. It was 1,5 m depth from the contemporary surface. On the base of tiny ceramic fragments found on the skeleton level it is possible to suggest that the pit was 2,5 m long and 1,1 m wide. The burial had been partly destroyed. Thigh and tibial bones, pelvis parts and hand bones partially preserved from the skeleton. The burial was oriented to the north-east. The preserved part of the stock consisted of Chios amphora, bronze kiaf with a swallow head handle and black lacquer skifos in the legs. Black figured lykith in master Haymon style was near the head. Iron sword –from the right hand to the left hip. Two fragments of iron spear and bronze arrow tips were discovered. (18) The date of the burial should be roughly the second quarter of the 5<sup>th</sup> B.C. (Sudarev, 1994, p. 111-113).

A burial found in 1989 by B. G. Peters in excavation IX concerned to the mid of the 5th B.C. (Sudarev, 1994, p.111) (15). The skeleton position is straight, its head is laying to the north-east. A ionic lykith was found near the head, it determined the date of the burial. (No 19 in plane) (Peters, No 13718).

In 1990 in excavation XXI square 2 was distinguished a child's burial in the Sinopian amphora of the second half of the 4<sup>th</sup> B.C. The top part of the neck was missed (Sudarev, 1994, p. 113-114, pl. 1,a-b). Its neck was laying to the east with a small deviation to the south. The skeleton laid on the left side (17).

# Necropolis of the first centuries A.D.

#### Crypts

In 1992 was investigated the single construction of that kind. It was found in the north from the settlement, 570 m from the sea shore, 550 m to the north-west from excavation 1 (Sudarev, 1994, p. 114, pl. 5g, pl. 6) ( $\mathbb{N}$  63 in plane). An entrance chamber was 2,2 m long, 0,90-0,95 m wide. It was oriented to the south-east - north-west line. Its vertical walls were followed up in 3,87 m from the contemporary surface. In the north-west of the chamber wall a dromos filled with ground was distinguished. This dromos 1,8 m long had the same orienta-

tion as the chamber. The diameter of a round burial chamber was 3,5 m Investigations were begun in collapse, which had been formed after the burial chamber destruction. The object was investigated to 3,86 m depth from contemporary surface. Future investigations of the object are impossible because of the ground waters high level. The mine was filled with two stone sling kernels, fragments of the glass vessels, accumulations of the animal bones and a lower part (without leg) of the lightware amphora of the first centuries A.D. The data of the object is obviously the same. Such collapses had been fixed earlier to the west, east and south from the poultry farm. That is why it should be determined as a wide burial with constructions described above.

# The ground burial.

Only 300 m to the east from the battery a ground burial of the Roman period was distinguished. ( $\mathbb{N}$  6 in plane) In 1962 A. S. Bashkirov distinguished a burial 70 cm depth from contemporary surface. (6) Skeleton's position and orientation were not described. A bronze debris was found between the edges and also a smashed plastic pot in the legs (Bashkirov, Murygina, Nikonov, 1964, p. 248-249).

### The burials of murdered.

In 1965 during investigations of the pottery furnace dated to the  $2^{nd}-3^{rd}$  A.D. in the north part of the pit three skulls were discovered. Possibly the heads cut of (No 2 in plane) (12-14) (Sokolskiy, No 3134, p. 56-57).

In 1990 in the east part of the settlement 260 m to the north-east from the "battery" in excavation XXIV ( $\mathbb{N}$  27 in plane) a corn pit was distinguished. It contained ceramic complex of the mid 3<sup>rd</sup> A.D. (Levin, 1994, p. 65, pl. 2, pl. 10). On the 368 level was distinguished a grey clay stratum without discoveries and a burial under it. On the level of discovery the pit was 2 m in diameter. The buried was laid on the grey clay stratum the same stratum surpassed the burial. The skeleton was situated on the left side writhe along the south side of the pit. Its legs were bend in knees, feet were clasped to the pit's wall. Arms were bend in elbows, hands were near the face. A plastic pit was situated between the elbows and knees. Funeral was made inside the litter pit and could be connected with Patria destruction by Goth tribes in 251 A.D. (16) and with discoveries of three cut heads inside the pottery pit.

#### CONCLUSIONS

1

In the second quarter of the  $6^{th}$  B.C. an ancient settlement appeared at Patraeus. The settlement was divided into four parts. The Top town had a nearly triangular form. In the south it bordered with the shore steep, in the north-east with the beam and with the ditch in the west. Its area made up 1,4 hec. The remains of the raw and stone house building from the third quarter of the  $6^{th}$  B.C. to the second quarter of the  $4^{th}$  B.C. were distinguished there (fig. 4).

The "Lower town" was situated in the underwater part of monument. Houses with walls oriented to the parts of the world represent the architect remains. Two coin treasures of the second quarter of the 5<sup>th</sup> B.C. and numerous domestic items were distinguished in them. It occupied an area of about 15 hec.

The third part of the settlement is the Western economical zone that was spread in 260 m from the ditch along the shore steep. Its square was at least 10 hec. The main objects consisted of the economical pits and the trenches about 1 m wide, dug 25-30 cm into the solid-soul clay.

The forth part of the settlement is the Eastern economical zone. It was spread along the shore line in 400 m. A single economical pit discovered on the east shore of the beam is datable to the 520-480 B.C.

To judge from two coin treasures discovered the settlement was obviously partly demolished in the second quarter of the 5<sup>th</sup> B.C. Although, it reestablished rapidly and preserved its own structure. These events could be connected with Bospore State foundation and "skifian threat". Its important to take into consideration the activity of the Eastern coast of the Black sea tribes: zigov, achean and genishov. On the base of Chios amphoras it is possible to suggest that just at this time an ancient settlement near Torik was destroyed.

In the second half of the 5<sup>th</sup> B.C. situation was the same. It changed only during the last two tenths of the 5<sup>th</sup> B.C. Four amphora complexes of the same chronological period were found on the Lower town territory. The Top town didn't contain building remains of the first half of the 4<sup>th</sup> B.C. Spreading of ceramic material has not been changed.

In the second half of the 4<sup>th</sup> B.C. the Top town was mainly replaned. House masonries changed their orientation to the north-west and south-east.

In the first half of the  $3^{rd}$  B.C. the settlement changed its localization to the left shore of the beam (fig. 5). This event was dated on the base of pantikapean ceramic tile stigma. The earliest building remains were introduced by the stone walls dug into the 1,3 m thick solid-soul. The planning is still unknown.

786 m to the south-west from the main settlement a stone well and the stone laying remains were distinguished. Possibly, they were the parts of the farmstead of the  $3^{rd}$  - the beginning of the  $1^{st}$  B.C.

It is difficult to suggest the size of the settlement's economical zone. The settlement was destroyed during the conflagration of the 70 of the 1<sup>st</sup> B.C. in the end of Mitridat Evpator ruling. Two coin treasures and conflagration stratum confirm these events.

Complexes of the second quarter of the 1<sup>st</sup> B.C. - the mid of the 1<sup>st</sup> A.D. were not distinguished. The material dated to this period was spread along the whole territory of the monument.

In the first half of the 1<sup>st</sup> A.D. a fortress appeared in the east part of the monument (fig. 6). It was demolished in the end of the ancient period. The fortress was surrounded by economical zone (we know at least tree wineries and a pottery furnace datable to this period) Economical zone was defended by the second ditch.

# ABBREVIATIONS

- AGSP Antitchniye Gosudarstva Severnogo Pritchernomorya (Ancient States on the North Black Sea Littoral), M., 1984.
- AO Arkhologitcheskiye Otkrytiya (Archaeological Discoveries).
- GAIMK Gosudarstvennaya Akademiya Istorii Materialnoy Kultury (The State Academy of History of Material Culture).
- KSIA Kratkiye Soobsheniya Instituta Arkheologii (Short Reports of the Institute of Archaeology).
- KSIIMK Kratkiye Soobsheniya Instituta Istorii Materialnoy Kultury (Short Reports of the Institute of History of Material Culture).
- *MIA* Materialy I Issledovaniya po Arkheologii (Materials and Investigations on Archaeology).
- *NE* Numizmatika I Epigrafika (Numismatics and Epigraphy).
- *NIS* Numizmatika I Sfragistika (Numismatica and Sphragistics).
- *RA* Rossiyskaya Arkheologia (Russian Archaeology).
- SA Sovetskaya Arkheologiya (Soviet Archaeology).
- *VDI* Vestnik Drevney Istorii (The Journal of Ancient History).
- ZOAO Zapiski Odeccskogo Arkheologitcheskogo Obshestva (Notes of the Archaeological Society of Odessa).

# BIBLIOGRAPHY

# PATRAEUS

- Abramov A. P. Amfory VI-V B.C. iz Patreya (raskopki 1985-1986gg.) // Amphorae of the VI<sup>th</sup>-V<sup>th</sup>
  B.C. from Patraeus (excavations of 1985-1986). In: Drevnosti Kubani (materialy seminara) // The Kuban antiquities (the materials of seminar) Krasnodar, 1987.
- Abramov A. P. Fragmenty amfor Abder i Samosa iz Patreya // Abder and Samos amforae fragments from Patraeus. In: Drevnee proizvodstvo, remeslo i torgovlya po arheologicheskim dannym. Tezisy dokladov IV konferentsii molodyh uchenyh IA AN USSR // Ancient production, handicraft and trade on the base of archeological data. Reports' theses of the IVth conference of young scientists. M., 1988.
- Abramov A. P. Ekonomicheskie svyazi Patreya vtoroy poloviny VI nachala V B.C. // Economical connections of Patraeus in the second half of the VI<sup>th</sup> the begining of the V<sup>th</sup> B.C. In: Problemy arheologii Severnogo Prichernomor'ya (k stoletiyu osnovaniya Hersonskogo muzeya drevnostei) // Archeological problems of the North Prichernomorie (to the 100 of foundation of the Herson museum of antiquities. Herson, 1990.
- Abramov A. P. Raskopki 1990 g. v Patree. // Excavations of 1990 at Patraeus. In: Drevnosti Kubani (materialy nauchno-prakticheskoy konferentsii) // The Kuban antiquities (the materials of scientific-practical conference). Krasnodar, 1991.
- Abramov A. P. Novye dannye o torgovyh svyazyah Patreya v VI-V B.C. // New data about trade connections of Patraeus. In: Ocherki arheologii i istorii Bospora. // Bosporus archeology and history essays. M.

- Abramov A. P. Antichnye amfory. Periodizatsiya i hronologiya. // Ancient amphorae. Division into periods and chronology. In: Bosporskiy sbornik // Bosporan Collection. M., 1993, 3.
- Abramov A. P. Klassifikatsiya i periodizatsiya amfor vtoroy poloviny VI<sup>th</sup> pervoy poloviny V<sup>th</sup> B.C. (Classification and division into periods of amphorae of the second half of the VI<sup>th</sup> the first part of the V<sup>th</sup> B.C.) // RA, 1993, 3.
- Abramov A. P. Patrey, raskopki 1990-1991 gg. // Patraeus, excavations of 1990-1991. In: Bosporskiy sbornik // Bosporan articles. M., 1994, 4.
- Abramov A. P. Raskopki Patreyskogo gorodischa (Excavations of Pareus site of the settlement). // AO 1994, M., 1995.
- Abramov A. P. Raskopki Patreyskogo gorodischa (Excavations of Patreus site of the settlement). // AO 1995, M., 1996.
- Abramov A. P. Raboty Patreyskogo otryada Tamanskoy ekspeditsii (Works of Patraeus detachment of Tamanskaya expedition). // AO 1996, M., 1997.
- Abramov A. P. Raskopki Patreyskogo gorodischa (Excavations of Pareus site of the settlement). // AO 1997, M., 1999.
- Abramov A. P. Issledovaniya Patreya v 1998 g. // Patraeus investigations in 1998. In: Problemy istorii, filologii i kul'tury. // Historical, philological and cultural problems. Moskow-Magnitogorsk, 1999, vyp. VII.
- Abramov A. P. Gorodische Patrey. Periodizatsiya i topografiya // Patraeus site of the settlement. Division into periods and topography. In: Patrey. Materialy issledovaniya. // Patraeus. The materials of investigation. 1999, vyp. 1.
- Abramov A. P. Issledovaniya Patreya (Investigations of Patraeus). // AO 1998, M., 2000.
- Abramov A. P. Zapadnaya granitsa Patreya // The west boarder of Patraeus. In: Bosporskie drevnosti // Bosporan antiquities 2000, vyp. 3.
- Abramov A. P., Boldyrev S. I. Klady 1998 g. iz Patreya. // Treasures of 1998 from Patraeus. In: Bosporskiy fenomen: kolonizatsiya regi ona, formirovanie polisov, obrazovanie gosudarstva. Materialy mezhdunarodnoy nauchnoy konferentsii. // Bosporan phenomenon: colonozation of the region, policy foundations, and state establishment. The materials of international scientific conference. Part 1. Chast' 1. Spb., 2001.
- Abramov A. P., Paromov Y. M. Ranneantichnye poseleniya Tamanskogo poluostrova // Early ancient settlements of Tamanskiy peninsula. In: Bosporskiy sbornik // Bosporan collection. M., 1993, 2.
- Abramov A. P., Piunova S. S. Patrey. Raskopki 1990-1991 gg. Katalog vystavki (Patraeus. Excavations of 1990-1991. Exhibition catalogue), M., 1995.
- Abramov A. P., Sazonov Y. S. Kompleks amfor vtoroy chetverti V B.C. iz Patreya // Amphorae complexes of the second quarter of the V<sup>th</sup> B.C. In: Drevnosti Severnogo Kavkaza i Prichernomor'ya // The antiquities of the north Caucasus and Prichernomorie. M., 1991.
- Abramov A. P., Sazonov Y. S. Keramika trieh podvodnyh kompleksov Patreya // Ceramics from three Patraeus underwater complexes. In: Bosporskiy sbornik // Bosporan Collection. M., 1992, 1.
- Arelanov H. A., Balabanov I. P., Gey A. A., Izmaylov Y. A., Ostrovskiy A. B., Skriba S. I., Skryabina N. S. Metody i rezul'taty kartografirovaniya i geohronologicheskoy privyazki drevnih beregovyh liniy na sush i shel'fe Chernomorskogo poberezh'ya Kavkaza i Kerchnsko-Tamanskogo rayona // Methods and results of cartography and geochronological attach of shore line on land and shelf of the Caucasus Black Sea coast and Kerch Tamanskiy district. In: Kolebaniya urovney morey i okeanov za 1500 let // Vibrations of the sea and ocean levels in 1500 years. M., 1982.

Ashik A. B. Bosporskoye tsarstvo (The Bosporan state. Part II), Chast' II. Odessa, 1848.

- Balanovskiy A. V., Struchalina R. A. Ob ispol'zovanii materialov arheologicheskih raskopok. Metodicheskie recomendetsii (The usage of materials from archeological excavations. Methodical recommendations). Saratov, 1992.
- Bashkirov A. S. Novosti arheologicheskih issledovaniy za leto 1926 g. na Tamanskom poluostrove // Some new information about archeological investigations during the summer of 1926. In: Biulleteni Kerchinskoy Arheologicheskoy konferentsii // Reports of Kerch archeological conference. Kerch, 1926, № 1-6.
- Bashkirov A. S. Arheologicheskoe obsledovanie Tamanskogo poluostrova letom 1926g. // Archeological investigations of Tamanskiy peninsula in summer of 1926. In: Trudy etnografo-arheologicheskogo muzeya I Moskovskogo gosudarstvennogo Universiteta // Works of ethnographyarcheological museum of the first Moscow State University, 1927, № 3.
- Bashkirov A. S. Arheologicheskoe obsledovanie Tamanskogo poluostrova letom 1927g. // Archeological investigations of Tamanskiy peninsula in summer of 1927. In: Trudy sektsii arheologii RANION // Works of archeological section of RANION, 1928, III.
- Bashkirov A. S. Otchiet ob istoriko-arheologicheskih izyskaniyah na Tamanskom poluostrove letom 1948g. // The report of historical – archeological investigations conducted at Tamanskiy peninsula during the summer of 1948. In: Uchenye zapiski. Moskovskiy gorodskoy pedagogicheskiy institut im. Potemkina // Scientific articles. Moscow state pedegogical institute named after Potiemkin. 1950, t. XIII, vyp. 2.
- Bashkirov A. S. Istoriko-arheologicheskie izyskaniya na Tamanskom poluostrove v 1949-1951gg. (na territorii drevnego goroda Patreya) // Historical and archeological investigations at Tamanskiy peninsula in 1949-1951 (on the territory of ancient Patraeus town). In: Uchenye zapiski Yaroslavskogo gosudarstvennogo pedagogicheskogo instituta // Scientific articles of Yaroslavl state pedagogical institute Yaroslavl', 1957, vyp. XXII (XXXII).
- Bashkirov A. S. Taman': istoricheskiy ocherk (Taman': historical report) // Novyi Vostok, 1958, № 8.
- Bashkirov A. S. Iz istorii Patreya III-I B.C.: po materialam Tamanskoy arheologicheskoy ekspeditsii 1949-1951 gg. (From the history of Patraeus of the III<sup>rd</sup>-I<sup>st</sup> B.C.: on the base of materials of Tamanskaya archeological expedition). // ZOAO, 1967, 2 (35).
- Bashkirov A. S. Murygina N. F. Nikonov I. E. Otchiet o raskopkah drevnego goroda Patreya (1961-1962gg.) // The report about excavations of ancient Patraeus town (1961-1962). In: Problemy ekonomicheskogo i politicheskogo razvitiya stran Evropy. Uchenye zapiski Moskovskogo go-sudarstvennogo pedagogicheskogo instituta imeni V. I. Lenina // The problems of economical and political development of European countries. Scientific reports of Moscow state pedagogical institute named after V. I. Lenin. № 217, M., 1964.
- Blavatskiy V. D. Raskopki v Fanagorii v 1940g. (Excavations in Phanagoria in 1940). // VDI, 1941,1.

Blavatskiy V. D. Arhaicheskiy Bospor (The archaic Bosporus). // MIA, 1954, № 33.

- Blavatskiy V. D. O podvodnoy arheologii (About underwater archeology). // SA, 1958, 3.
- Blavatskiy V. D. Podvodnye arheologicheskie raboty na severnyh beregah Ponta // Underwater archeological works on the north shores of Pontus. In: Antichnaya arheologiya i istoriya // Ancient archeology and history. M., 1985.
- Bradenburg I. Klassifikatsiya i statisticheskiy analiz keramiki epohi pozdney bronzy rannego zheleznogo veka poseleniya Garkusha I (Tamanskiy poluostrov) // Classification and statistic analyze of ceramics of the late bronze – early iron period from the Garkusha I settlement. Taman Peninsula. In: Tezisy dokladov. I Moskovskaya Mezhvuzovskaya arheologitcheskaya kon-

ferentsiya // Theses of reports. The first Moscow students' archeological conference. M., 1995. Desyatchikov Y. M., Dolgorukov V. S. Patrey (Patraeus). // AGSP, 1984.

Dolgorukov V. S., Sokol'skiy N. I., Sorokina N. P., Struchalina R. A. Raboty Tamanskoy ekspeditsii (Works of Taman expedition). // AO – 1970, M., 1971.

Emets I. A., Peters B.G. Epigraficheskie materialy iz Patreya // Epigraphical materials from Patraeus. In: Drevnosti // Antiquities, 1992, 3.

- Frolova N. A. Monetnoe delo Bospora VI B.C. serediny IV A.D. v svete novyh issledovaniy // Bosporan monetary of the VI<sup>th</sup> B.C. - the middle of the IV<sup>th</sup> B.C. in the light of new investigations. In: Ocherki arheologii i istorii Bospora // Essays of Archaeology and History of Bosporus. M., 1992.
- Fiedorov P. B. Poslelednikovaya transgressiya Chernogo morya i problema izmeneniya urovnya okeana za poslednie 15000 let // Postglacial epogh Transgression of the Black sea and problems of ocean level changes in last 15000 years. In: Kolebaniya urovnya morey i okeanov za 15000 let. // Sea and ocean level changes in 15000 years, M.,

Frolova N. A. Monetnoe delo Bospora (seredina I B.C.-seredina IV A.D.) [Bosporan monetary (the middle of the I<sup>st</sup> B.C. – the middle of the IV<sup>th</sup> A.D.)], M., 1997, part II.

- Gaydukevich V. F. Bosporskoe tsarstvo (The Bosporan state) M.-L., 1949.
- Gaydukevich V. F. Vinodelie na Bospore (Bosporan wine-making). // MIA, 1958, № 85.
- Gerts K. K. Arheologicheskaya topografiya Tamanskogo poluostrova (Archeological topography of Taman Peninsula), M., 1870.
- Gerts K. K. Istoricheskiy obzor arheologicheskih issledovaniy na Tamanskom poluostrove s kontsa XVIII stoletiya do 1859g. (Historical outlook of archeological investigations on the territory of Taman peninsula from the end of XVIII c. to 1859). // Sob. soch. vyp. 2, Spb., 1898.

Golenko K. V. Monety iz sluchainyh nahodok v Patree, 1947-1950 (Coins from the casual findings at Patraeus, 1947-1950). // VDI, 1952, № 3.

- Golenko K. V. Klad (vtoroy) monet, naydennyi v 1951g. v Patree [Coins' treasure (the second), found in 1951 at Patraeus]. // SA, 1957, 2.
- Golenko K. V. Vtoroy Patreyskiy klad 1951g. (The second Patraeus treasure 1951). // NE, 1960, I.
- Golenko K. V. Monety iz sluchainyh nahodok v Patree v 1951g. (Coins from the casual findings at Patraeus in 1951). // NE, 1963, IV.
- Golenko K. V. Monety iz nahodok v Patree, 1961 (Coins from the findings at Patraeus, 1961). // NIS, 1968, 3.
- Golenko K. V. Tretiy Patreyskiy klad (1970) i nekotorye zamechaniya o bosporskoy monetnoy chekanke III B.C. [The third Patraeus treasure (1970) and some remarks on Bosporan coin mint]. // NE, 1978, XII.
- Grinevich K.E. Gorodischa Tamani. Opyt metodologii istoricheskoy nauki (Site of the settlments at Taman'. The experience in methodology of historical science). Sevastopol, 1926.
- Hesnard A. Imitations et raisonemnt arheologique a propos des amphores de Rhodes et de Cos.
- Ivanchik A. I., Peters B. G. Grecheskaya nadpis' iz raskopok Patreya v 1986g. (The Greek inscription from the excavations o Patraeus in 1986). // VDI, 1988, 2.

Krushkol Y. S. Raskopki drevnego Patreya 1949g. (Excavations of ancient Patraeus in 1949). // VDI, 1950, 2.

Krushkol Y. S. Raskopki drevnego Patreya v 1950g. (Excavations of ancient Patraeus in 1950). // VDI, 1951, 2.

Krushkol Y. S. Pervyi Patreiskiy klad 1950g. (The first Patraeus treasure 1950). // VDI, 1952, № 2.

- Krushkol Y. S. Monety s monogrammami iz Patreiskogo klada 1950g. (Some coins with monograms from the Patraeus treasure 1950). // VDI, 1952, № 3.
- Krushkol Y. S. Pervyi Patreiskiy klad 1950g. (The first Patraeus treasure 1950). // KSIIMK, 1956, vyp. 66.
- Krushkol Y. S. Monety iz raskopok Patreya 1949-1951 gg. (Coins from excavations of Patraeus 1949-1850). // VDI, 1958, 3.
- Krushkol Y. S. Drevnyaya Sindika (Ancient Sindic). M., 1971.
- Lazarevskiy Y. M. Kurgany Tamanskogo poluostrova (Burial mounds of Tamanskiy peninsula). // IAO, 1861, t. II.
- Levin I. S. Kompleks keramiki serediny III B.C. iz Patreya // (Ceramical complex of the middle of the III<sup>rd</sup> B.C. from Patraeus. In: Bosporskiy sbornik) // Bosporan Collection, 4, 1994.
- Lomtadze G. A. Nahodki iz neskol'kih kompleksov Patreya // Findings from several Patraeus complexes. In: Bosporskiy sbornik // Bosporan collection, 4, 1994.
- Lomtadze G. A. Gerakleiskie amfory iz podvodnyh kompleksov Patreiskogo gorodoscha // Heracleian amphorae from underwater complexes of Patraeus town. In: Tezisy dokladov. I Moskovskaya mezhvuzovskaya konferentsiya // Theses of reports. The first Moscow students' conference. Moscow, 1995.
- Miller A. A. Tamanskaya ekspeditsiya GAIMK v 1931g. (GAIMK Tamanskaya expedition in 1931). // Soobscheniya (Reports of) GAIMK, 1932, № 7-8.
- Molev E. A. Politicheskaya istoriya Bospora VI-IV B.C. (The political history of Bosporus of VI<sup>th</sup>-IV<sup>th</sup> B.C.), Nizhniy Novgorod, 1997.
- Nikonov I. E. Svetil'niki Patreya // Patraeus lamps. In: Problemy ekonomocheskogo i politicheskogo razvitiya stran Evropy. Uchenye zapiski Moskovskogo gosudarstvennogo pedagogicheskogo instituta imeni V. I. Lenina // The problems of economical and political development of European countries. Scientific reports of Moscow state pedagogical institute named after V. I. Lenin. M., 1964.
- Otchiet Imperatorskoy Arheologicheskoy komissii za 1870 i 1871g. (Report of imperial Archeological commision of 1870 and 1871), Spb., 1874.
- Osmanova S. R. Pod vodnye issledovaniya antichnyh gorodov Aziatskogo Bospora // Underwater investigations of ancient cities of Asian Bosporus. In: Tezisy dokladov. I Moskovskaya mezhvuzovskaya arheologicheskaya konferentsiya // Theses of reports. The first Moscow students' conference. M., 1995.
- Osmanova S. R. K istorii arheologicheskoy topografii zatóplennoy chasti gorodischa Patrey // To the history of archeological topogrophy of underwater part of Patraeus site of ancient settlement. In: II Moskovskaya mezhvuzovskaya arheologicheskaya konferentsiya. Tezisy dokladov. // 2<sup>nd</sup> Moscow students' archeological conference. M., 1998.
- Osmanova S. R. Arheologicheskie pamyatniki na zatoplennoy chasti Patreyskogo gorodischa // Archeological monuments of the underwater part of Patraeus town. In: Patrey. Materialy i issledovaniya // Patraeus. The materials and investigations. 1999, vyp. 1.
- Paromov Y. M. Ocherk istorii arheologo-topograficheskih issledovaniy Tamanskogo poluostrova // The historical report of archeological and topographical investigations of Tamanskiy peninsula. In: Bosporskiy sbornik // Bosporan Collection, M., 1992, 1.
- Paromov Y. M. Arhelogicheskaya karta Tamanskogo poluostrova (Archeological map of Taman Peninsula) (in INION RAN № 47103 on 1.10.1992), M., 1992, p. 122, № 14; p. 127, № 71, 72.
- Paromov Y. M. Arheologo-topograficheskiy plan Patreya // Archeological and topographical plan of

Patraeus. In: Bosporskiy sbornik // Bosporan Collection, 3, 1993.

- Paromov Y. M. Ahtanizovskaya "batareika" (ukreplennoe poselenie na Tamanskom poluostrove) // Ahtanizovskaya "batareika" (fortified settlement on Tamanskiy peninsula In: Bosporskiy sbornik // Bosporan Collection, 4, 1994.
- Paromov Y. M. Glavnye dorogi Tamanskogo poluostrova v antichnoe vremya // The main roads of Tamanskiy peninsula in ancient times. In: Drevnosti Bospora // Bospora antiquities, 1, 1998.
- Peters B. G. Raboty Patreiskoy ekspeditsii (Works of Patraeus expedition). // AO 1985, M., 1987.
- Peters B. G. Raskopki Patreya // Excavations at Patraeus. In: Drevnosti Kubani (materialy seminara) // The Kuban antiquities (seminar materials. Krasnodar, 1987.
- Peters B. G. Raskopki Patreya (Excavations at Patraeus). // AO 1986, M., 1988.
- Peters B. G. Issledovaniya Patreya // Investigations of Patraeus. In: I Kubanskaya arheologicheskaya konferentsiya. Tesisy dokladov // The first Kuban archeological conference. Theses of reports, Krasnodar, 1989.
- Peters B. G. Issledovaniya nizhnego sloya Patreya // Investigations of the lowest stratum of Patraeus settlement. In: Problemy issledovaniya antichnyh gorodov (tezisy) // Problems of the ancient towns' investigations (theses). M., 1989.
- Peters B. G. Ohrannye nauchnye raboty Patreiskoy ekspeditsii IA RAN USSR v 1988 g. // Restricted scientific works of Patraeus expedition IA RAS USSR in 1988. In: Novoe v metodike arheologicheskih rabot na novostroykah RSFSR // New methods of archeological works in erection of new buildings on the territory of Russia. M., 1989.
- Peters B. G. Itogi raboty Patriskoy ekspeditsii IA RAN USSR v 1985-1989 gg. // The results of works conducted by Patraeus expedition IA RAS USSR in 1985-1989. In: Drevnosti Kubani (Materialy nauchno-prakticheskoy konferentsii) // The Kuban antiquities (materials of scientific practical conference. Krasnodar, 1991.
- Peters B. G. Issledovaniya gorodischa Patrey v 1985-1989 gg. // Investigations of Patraeus settlement in 1985-1989. In: Materialy IV nauchnoy konferentsii // Materials of the IV<sup>th</sup> scientific conference, M., 1992.
- Peters B. G., Chuhina E.V. Steklyannye izdeliya iz raskopok Patreya (Glassware from Patraeus excavations). // RA, 4, 1994.
- Peters B. G., Chuhina E. V. Kostyanye izdeliya iz raskopok Patreya 1985-1989 gg. (Bonesware from Patraeus excavations of 1985-1989). // RA, 1995, 2.
- Ponachevnyi M. O. Geograficheskiy ocherk Bosforskogo tsarstva // Geographical sketch of Bospotian state. In: Kubanskiy sbornik. Trudy Kubanskogo oblastnogo statisticheskogo komiteta izdavaemye pod redaktsiey E. D. Felitsina // The Kuban articles. Works of the Kuban regional statistics comitee published under E. D. Felitsina t. II. Ekaterinodar, 1891.
- Rogov E. Y. Ukreplennye poseleniya Tamanskogo poluostrova // Fortified settlements of Tamanskiy peninsula. In: Bosporskiy fenomen: grecheskaya kul'tura na pereferii antichnogo mira // Bosporan phenomenon: the Greek culture on remote plots of ancient world, Spb., 1999.
- Rozanova N. P. Ellinskaya nadpis' iz raskopok Patreya 1949g. (Hellenistic inscription from Patraeus excavations). // SA, 1958, 2.

Rostovtsev M. I. Skifiya i Bospor (Scyithia and Bosporus), L., 1925.

- Shelov-Kovedyaev F. V. Istoriya Bospora VI-IV B.C. // History of Bosporus VI<sup>th</sup>-IV<sup>th</sup> B.C. In: Drevneishie gosudarstva na territorii USSR, 1984 // Ancient states on the territory of the USSR, 1984. M., 1985.
- Sokolskiy N. I. Kepy. Antichnyi gorod (The ancient city of Kepoi), M., 1963.

- Sokolskiy N. I. Raskopki v Severo-Zapadnoy chasti Tamanskogo poluostrova (Excavations in the north-west part of Tamanskiy peninsula). // AO 1965, M., 1966.
- Sokolskiy N. I. Issledovaniya severo-zapadnoy chasti Tamanskogo poluostrova (Investigations of the northwest part of Tamanskiy peninsula). // AO 1966, M., 1967.
- Sokolskiy N. I. O goncharnom proizvodstve v aziatskoy chasti Bospora (Pottery in the Asian part of Bospore). // KSIA, 1969, vyp. 116.
- Sokolskiy N. I. Vinodelie v aziatskoy chasti Bospora (Winemaking in the Asian part of Bosporus). // SA, 1970, 2.
- Sokolskiy N. I. Derevoobrabatyvaiuscheie remeslo v antichnyh gosudarstvah Severnogo Prichernomor'ya. (Woodworking craft in the ancient states of the north Prichernomorie), M., 1971.
- Sokolskiy N. I., Struchalina R. F. Raskopki Patreya (Excavations at Patraeus). // AO 1968, M., 1969.
- Sokolskiy N. I., Struchalina R. A., Golenko K. V. Tretiy Patreiskiy klad // The 3<sup>rd</sup> Patraeus' treasure. In: Antichnyi mir i arheologiya // Ancient world and archeology. Saratov, 1975, 2.
- Stepashkina D. Y. Novye dannye po istoricheskoy topografii poseleniya Garkusha I // Some new information in historical topography of Garkusha I settlement. In: Tezisy dokladov. I Moskovskaya mezhvuzovskaya arheologicheskaya konferentsiya // Theses of reports. The first Moscow students' conference. M., 1995.
- Struchalina R. A. Raskopki Patreya (Excavations at Patraeus). // AO 1969, M, 1970.
- Struchalina R. A. Patreiskie amfory // Patraeus amphorae. In: Tezisy dokladov, posvyaschennyh itogam polevyh arheologicheskih issledovaniy v 1970 g. v USSR (Arheologicheskaya sektsiya) // Theses of reports devoted to the results of archeological land investigations. Tbilisi, 1971.
- Struchalina R. A. Nekotorye itogi raskopok gorodischa Patrey // Some results of Patraeus settlement excavations. In: Antichnyi mir i arheologiya // Ancient world and archeology vyp. 1, Saratov, 1972.
- Struchalina R. A. Amfory patreiskogo proizvodstva // Amphorae of Patraeus production. In: Antichnyi mir i arheologiya // Ancient world and archeology, vyp. 2, Saratov, 1972.
- Struchalina R. A. Svetil'niki v forme golovy Silena iz Patreya // Lamps from Patraeus in form of Silen's head. In: Antichnyi mir i arheologiya // Ancient world and archeology, Saratov, 1977.
- Sudarev N. I. Pogrebeniya v rayone poseleniya Garkusha 1 (Patrey) // Burials in the district of Garkusha I settlement (Patraeus). In: Bosporskiy sbornik // Bosporan Collection, 4, 1994.
- Taskaev V. N. Itogi i perspektivy podvodnyh arheologicheskih issledovaniy v Tamanskom zalive // Results and advantages of underwater archeological nvestigations in Tamanskiy gulf. In: Bosporskiy sbornik // Bosporan Collection, 1, M., 1992.
- Taskaev V. N. Podvodnye issledovaniya v Tamanskom zalive (Underwater investigations in Tamanskiy gulf). // AO – 1994, M., 1995.
- Taskaev V. N. Podvodnye issledovaniya v Tamanskom zalive (Underwater investigations in Tamanskiy gulf). // AO – 1995, M., 1996.
- Taskaev V. N. Podvodnye issledovaniya v Tamanskom zalive (Underwater investigations in Tamanskiy gulf). // AO – 1996, Moscow, 1997.
- Taskaev V. N. Issledovanie stroitel'nyh ostatkov na zatoplennoy chasti gorodischa Paterey // Investigations of building remains in the underwater part of Patraeus settlement. In: II Moskovskaya mezhvuzovskaya arheologicheskaya konferentsiya. Tezisy dokladov // The second Moscow students archeological conference. These of reports. M., 1998.
- Taskaev V. N. Podvodnaya arheologiya i paleograficheskaya rekonstruktsiya drevnego Patreya // Underwater archeology and paleographical reconstruction of ancient Patraeus. In: Patrey. Materialy

i issledovaniya // Patraeus. Materials and investigations. 1999, vyp. 1.

- Taskaev V. N. Podvodnye issledovaniya na zatoplennoy chasti Nozhnego goroda Patreya // Underwater investigations of the Lowest part of Patraeus settlement. In: Problemy istorii, filologii i kul'tury // Problems of history, philology and culture. Moskva-Magnitogorsk, 1999, vyp. VII.
- Taskaev V. N. Podvodnye issledovaniya Patreya // Underwater investigations of Patraeus. In: VI chteniya pamyati professora V. D. Blavatskogo. // VI readings in honour of professor V. D. Blavatskiy. M., 1999.
- Taskaev V. N. Podvodnye isledovaniya na zatoplennoy chasti Nizhnego goroda Patreya (Underwater investigations of the Lowest part of Patraeus settlement). // AO 1998, M., 2000.
- Taskaev V. N., Osmanova S. R. Podvodnye issledovaniya v Tamanskom zalive. Istoriya i perspektiva razvitiya // Underwater investigations in Tamanskiy gulf. History and advantages. In: Izuchenie pamyatnikov morskoy arheologii // Investigation of the sea archeological monuments. Spb., 1995.
- Taskaev V. N., Osmanova S. R. Antichnyi Patrey. Itogi podvodnyh isledovaniy // Ancient Patraeus. Some results of underwater investigations. In: Patrey. Materialy i issledovaniya // Patraeus. Materials and investigations 2001, vyp. 3.
- Tolstikov V. P. Neizvestnye stranitsy istorii Bosporskogo tsarstva (The unknown pages of Bosporan state history) // Soobcheniya (Reports of) GMII. Vyp. 10, M., 1992.
- Tohtas'ev S. R. Iz onomastiki Severnogo Prichernomor'ya // The toponics of the North Black Sea. In: Problemy antichnogo istochnikovedeniya // Problems of ancient source study. M.-L., 1986.
- Vnukov S. Y. Sravnitel'nyi retrograficheskiy analiz sinopskoy amfornoy tary // Comparative retrographical analize of Sinopian amphorae package. In: Bosporskiy sbornik // Bosporan articles. M., 1994, 4.
- Yakobson A. L. Keramika i keramicheskoe proizvodstvo srednevekovoy Tavriki (Ceramics and pottery of the medieval Tavris), L., 1979.
- Zavoykin A. A. Pamyatnik Satira I na Aziatskom Bospore // The Satir I monument on the Asian Bosporus (Strab., XI,2,7). In: Drevnosti Bospora // Bosporan antiquities, 3, Moscow, 2000.
- Zubarev V. G. Aziatskiy Bospor (Taman poluostrov) po dannym antichnoy pis'mennoy traditsii // Asian Bosporus (Tamanskiy peninsula) on the base of ancient written tradition. In: Drevnosti Bospora // Bosporan antiquities, 2, Moscow, 1999.

#### REPORTS

- Abramov A. P. Otchiet o raskopkah v 1990 godu Patreyskoy ekspeditsii IA AN USSR (Report about excavations in 1990 conducted by Patraeus expedition). // Arhiv IA RAN, P-I, № 15441.
- Abramov A. P. Otchiet o raskopkah v 1991 godu Patreyskoy ekspeditsii IA RAN (Report about excavations in 1991 conducted by Patraeus expedition). // Arhiv IA RAN, P-I, № 16046.
- Abramov A. P. Otchiet o raskopkah v 1992 godu Patreyskogo otryada Tamanskoj ekspeditsii IA RAN (Report about excavations in 1992 conducted by Patraeus detachment of Tamanskaya expedition IA RAS). // Arhiv IA RAN, P-I, № 17170.
- Abramov A. P. Otchiet o raskopkah v 1993 godu Patreyskogo otryada Tamanskoy ekspeditsii IA RAN (Report about excavations in 1993 conducted by Patraeus detachment of Tamanskaya expedition IA RAS). // Arhiv IA RAN, P-I, № 18031.
- Abramov A. P. Otchiet o raskopkah v 1994 godu Patreyskogo otryada Tamanskoy ekspeditsii IA RAN (Report about excavations in 1994 conducted by Patraeus detachment of Tamanskaya expedi-

tion IA RAS). // Arhiv IA RAN, P-I, № 18842.

- Abramov A. P. Otchiet o raskopkah v 1995 godu Patreyskogo otryada Tamanskoy ekspeditsii IA RAN (Report about excavations in 1995 conducted by Patraeus detachment of Tamanskaya expedition IA RAS). // Arhiv IA RAN, P-I, № 19271.
- Abramov A. P. Otchiet o raskopkah v 1996 godu Patreyskogo otryada Tamanskoy ekspeditsii IA RAN (Report about excavations in 1996 conducted by Patraeus detachment of Tamanskaya expedition IA RAS). // Arhiv IA RAN, P-I, № 20456.
- Abramov A. P. Otchiet o raskopkah v 1997 godu Patreyskogo otryada Tamanskoy ekspeditsii IA RAN (Report about excavations in 1997 conducted by Patraeus detachment of Tamanskaya expedition IA RAS). // Arhiv IA RAN, P-I, № 19747.
- Abramov A. P. Otchiet o raskopkah v 1998 godu Patreyskogo otryada Tamanskoy ekspeditsii IA RAN (Report about excavations in 1998 conducted by Patraeus detachment of Tamanskaya expedition IA RAS). // Arhiv IA RAN, P-I, № 21106.
- Abramov A. P. Otchiet Patreyskogo otryada Tamanskoy ekspeditsii za 1999g. (Report about excavations of Patraeus detachment of Tamanskaya expedition in 1999). // Arhiv IA RAN, P-I, № (OPI, № 208).
- Abramov A. P. Otchiet Patreyskogo otryada Tamanskoy ekspeditsii IA RAN za 2000g. (Report about excavations of Patraeus detachment of Tamanskaya expedition in 2000). // Arhiv IA RAN, P-I, № (OPI, № 471).
- Anfimov N. V. Othiet ob arheologicheskih issledovaniyah v Krasnodarskom krae v 1947g. (Report about archeological investigations in Krasnodar region in 1947). // Arhiv IA RAN, P-I, № 177.
- Bashkirov A. S. Otchiet ob arheologicheskom issledovanii (razvedke) na Fantalovskom p/o (Tamanskiy p/o) letom 1947g. [Report about archeological investigations (reconnaissance) on Fantalov peninsula (Taman peninsula) in summer of 1947]. // Arhiv IA RAN, P-I, № 165.
- Bashkirov A. S. Otchiet ob izyskaniyah na Tamanskom p/o 1948 (Report about investigations Tamanskiy peninsula – 1948). // Arhiv IA RAN, P-I, № 249.
- Bashkirov A. S. Otchiet ob arheologicheskikh issledovaniyah na Tamanskom p/o gorodische Patrey 1949g. [Report about archeological investigations (reconnaissance) on (Taman peninsula) Patraeus settlement 1949]. // Arhiv IA RAN, P-I, № 374.
- Bashkirov A. S. Otchiet ob arheologicheskikh raskopkah na Tamanskom p/o 1950g. (Report about archeological excavations on Tamanskiy peninsula 1950). // Arhiv IA RAN, P-I, № 506.
- Bashkirov A. S. Otchiet ob istoriko-arheologicheskih izyskaniyah na Tamanskom p/o letom 1951g. na territorii g. Patreya (Report about historical archeological investigations on Tamanskiy peninsula in summer of 1951). // Arhiv IA RAN, P-I, № 661.
- Bashkirov A. S. Otchiet ob arheologicheskikh raskopkah na territorii drevnego goroda Patreya na Tamanskom p/o 1961g. (Report about archeological excavations on the territory of ancient Patraeus on Tamanskiy peninsula in summer of 1961). // Arhiv IA RAN, P-I, № 2386, 2386 a.
- Blavatskiy V. D. Otchiet o raskopkah v Fanagorii v 1940g. (Report about excavations in Fanagoria in 1940). // Arhiv IIMK RAN, F: 35. Op. 2-D. № 518-519, 1.236.
- Goremykina V. I. Otchiet ob arheologicheskih rabotah na Tamanskom poluostrove letom 1963g. v rayone Patreyskogo gorodischa (Report about archeological works on Tamanskiy peninsula near Patraeus settlement in summer of 1963). // Arhiv IA RAN, P-I, № 2772.
- Miller A. A. Otchiet (Report). // Arhiv IIMK, P-1, № 158, inv. 1210.
- Peters B. G. Raboty Patreiskoy ekspeditsii IA AN USSR v 1985g. (Archeological works of Patraeus expedition IA AN USSR in 1985). // Arhiv IA RAN, P-I, № 10872.

- Peters B. G. Otchiet o rabotah Patreiskoy ekspeditsii IA AN USSR v 1986g. (Report about archeological works of Patraeus expedition IA AN USSR in 1985). // Arhiv IA RAN, P-I, № 11405.
- Peters B. G. Otchiet ob issledovaniyah v 1987g. Patreiskoy ekspeditsii i Mihailovskogo otryada IA AN USSR v 1985g. (Report about investigations archeological works of Patraeus expedition IA AN USSR in 1985). // Arhiv IA RAN, P-I, № 12024.
- Peters B. G. Otchiet ob issledovaniyah Patreya v 1998g. (raboty Patreiskoy ekspeditsii IA RAN) [Report about Patraeus investigations in 1998 (works of Patraeus expedition IA RAS)]. // Arhiv IA RAN, № 12643.
- Peters B. G. Otchiet o Rabote Patreiskoy ekspeditsii IA AN USSR v 1989g. (Report about archeological works of Patraeus expedition IA AN USSR in 1989). // Arhiv IA RAN, P-I, № 13718.
- Sokol'skiy N. I. Otchiet o rabotah Tamanskoy ekspeditsii IA AN USSR v 1964g. (Report about archeological works of Tamanskaya expedition IA AN USSR in 1964). // Arhiv IA RAN, P-I, № 2864.
- Sokol'skiy N. I. Otchiet o rabotah Tamanskoy arheologicheskoy ekspeditsii IA AN USSR v 1965g. (Report about archeological works of Tamanskaya expedition IA AN USSR in 1965). // Arhiv IA RAN, P-I, № 3134.
- Sokol'skiy N. I. Otchiet o rabotah Tamanskoy ekspeditsii IA (Report about archeological works of Taman expedition IA). // Arhiv IA RAN, P-I, № 3262.
- Sokol'skiy N. I. Otchiet o rabotah Tamanskoy aeheologicheskoy ekspeditsii v 1968g. (Report about works of Taman archeological expedition in 1968). // Arhiv IA RAN, P-I, № 3710.
- Sokol'skiy N. I. Otchiet o raskopkah Tamanskoy ekspeditsii IA USSR v 1970g. (Reports about the excavations of Taman expedition IA USSR) // Arhiv IA RAN. P-I, № 4251.
- Taskaev V. N. Otchiet o rabote Tamanskogo podvodnogo arheologicheskogo otryada v 1991g. (Report about works of Tamanskiy underwater archeological detachment in 1991). // Arhiv IA RAN. P-I, № 16027, 42 l.
- Taskaev V. N. Otchiet o rabote Tamanskogo podvodnogo arheologicheskogo otryada v 1992g. (Report about works of Tamanskiy underwater archeological detachment in 1992). // Arhiv IA RAN. P-I, № 17293, 30 l.
- Taskaev V. N. Otchiet o rabote Tamanskogo podvodnogo arheologicheskogo otryada v 1993g. (Report about works of Tamanskiy underwater archeological detachment in 1993). // Arhiv IA RAN. P-I, № 17875, 67 l.
- Taskaev V. N. Otchiet o rabote Tamanskogo podvodnogo arheologicheskogo otryada v 1994g. (Report about works of Tamanskiy underwater archeological detachment in 1994). // Arhiv IA RAN. P-I, № 18948, 47 l.
- Taskaev V. N. Otchiet o rabote Tamanskogo podvodnogo arheologicheskogo otryada v 1995g. (Report about works of Tamanskiy underwater archeological detachment in 1995). // Arhiv IA RAN. P-I, № 19769, 30 l.
- Taskaev V. N. Otchiet o rabote Tamanskogo podvodnogo arheologicheskogo otryada v 1996g. (Report about works of Tamanskiy underwater archeological detachment in 1996). // Arhiv IA RAN. P-I, № 20265.
- Taskaev V. N. Otchiet o rabote Tamanskogo podvodnogo arheologicheskogo otryada v 1997g. (Report about works of Tamanskiy underwater archeological detachment in 1997). // Arhiv IA RAN. P-I, № 20833.
- Taskaev V. N. Otchiet o rabote Tamanskogo podvodnogo arheologicheskogo otryada v 1998g. (Report about works of Tamanskiy underwater archeological detachment in 1998). // Arhiv IA RAN. P-

I, № 21107.

- Taskaev V. N. Otchiet o rabote Tamanskogo podvodnogo arheologicheskogo otryada v 1999g. (Report about works of Tamanskiy underwater archeological detachment in 1999). // Arhiv IA RAN. P-I, № (OPI, № 95).
- Taskaev V. N. Otchiet o rabote Tamanskogo podvodnogo arheologicheskogo otryada v 2000g. (Report about works of Tamanskiy underwater archeological detachment in 2000). // Arhiv IA RAN. P-I, № (OPI № 132).
- Vasil'ev A. G. Otchiet po arheologicheskoy razvedke 2000 g. severno-zapadnoj chasti Tamanskogo zaliva. Krasnodarskiy krai (Report about archeological reconnaissance 2000 in the northwest part of Taman gulf. Krasnodar region). // OPI IA RAN.

#### BIBLIOGRAPHY

# B. CIMMERIS

- Desyatchikov Yu. M. 1989: K istorii Aziatskogo Kimmerika (To a history of Asian Cimmeris) // I Kubanskaya arkheologicheskaya konferentsiya (The 1st Kuban conference). Krasnodar, 1989.
- Desyatchikov Yu. M. 1993: Nekotorye problemy vnutribosporskoi kolonisatsii (Some problems of internal colonisation of Bosporus) // II Kubantskaya arkheologicheskaya konferentsiya. Krasnodar, 1993.
- Gajdukevich V. F. 1949: Bosporskoe tsarstvo (The Bosporan Kingdom), M.-L., 1949.
- Gratsianskaya L. I. 1989: "Geografiya" Strabona. Problemy istochnikovedeniya ("Geography" of Strabo: problems of researches of sources) // Drevneischie gosudarstva na territorii SSSR za 1986 god (The ancient states in territory of the USSR for 1986), M., 1989.
- Ivanchik A. I. 1988: O proiskhozhdenii "Kimmerijskoi toponimii Bospora (About an origin "Cimmerian" toponymiae of Bosporus) // Antichnaya Balkanistika (Ancient Balkanistika) 6. M., 1988.
- Paromov Ya. M. 2000: Skifskie pogrebeniya na Tamanskom poluostrove (Scythian tombs on the Taman peninsula) // Tamanskaya starina (Antiquities of Taman) 3. Sankt-Peterburg, 2000.
- Rostovtsev M. I. 1925: Skifiya i Bospor (Scythia and Bosporus), L., 1925.
- Tokhtasev S. R. 1984: Kimmerijskaya toponimiya (Cimmerian toponymiae) // Etnogenez narodov Balkan i Severnogo Prichernomorya (Ethnogenesis of the peoples of Balkan and the Black Sea Littoral) Moskva, 1984.
- Tokhtasev S. R. 1999, *in* Bosporskij fenomen. Materialy mezhdunarodnoi konferentsii (Bosporan Phenomenon. The Materials of the international conference), Sankt-Peterburg, 1999.
- Tokhtasev S. R. 1999a: Istochnikovedcheskie problemy istorii kimmerijtsev (Problems of researches of sources on Cimmerian history), Avtoreferat Diss. Sankt-Peterburg, 1999.
- Usacheva O. N., Koschelenko G. A. 1994: Ob odnoi zagadke bosporskoi istoriografii (About one riddle of Bosporan historiography) // RA. 1994. N 3.
- Veselov V. V. 1957: O "Kimmeriyskom vale" na Tamanskom poluostrove (About "Cimmerian shaft" on the Taman peninsula). // SA, 1957, N 3.
- Voytsekhovsky S. F. 1929: Opyt vosstanovlenya rel'efa Tamanskogo poluostrova primenitel'no k epokhe Strabona i pozdneishego vremeni (Experience of restoration of a relief of the Taman peninsula with reference to epoch Strabo and later time) // Zapiski Severo-Kavkazskogo obshchestva arkheologii, istorii i etnografii (Notes of the North Caucasian society of archaeology, history and ethnography). Rostov-na-Donu. 1929. III.
- Zavoykin A. A. 1997: Kimmerida polis na Kimmerijskom Bospore (Cimmeris polis on Cimmerian Bosporus) // Problemy istorii, filologii, kul'tury (Problems of a history, philology, culture), T. 4,

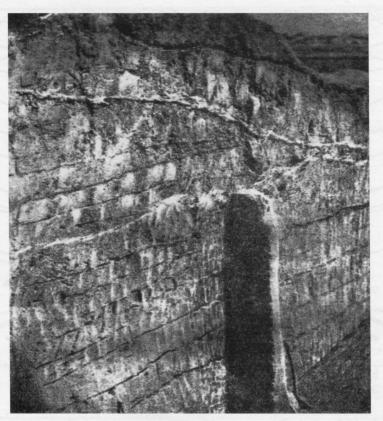


Fig. 1. Wall of the Fortress of the 1st century A.D.

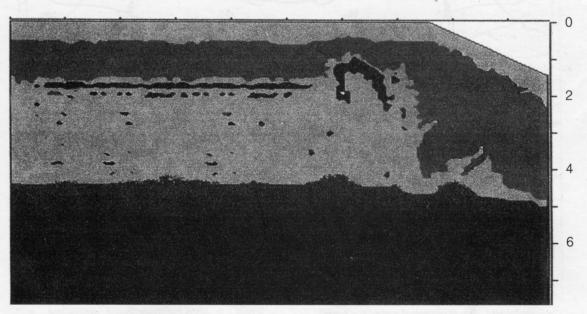
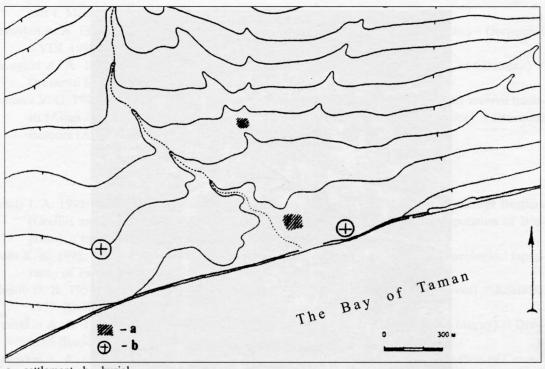
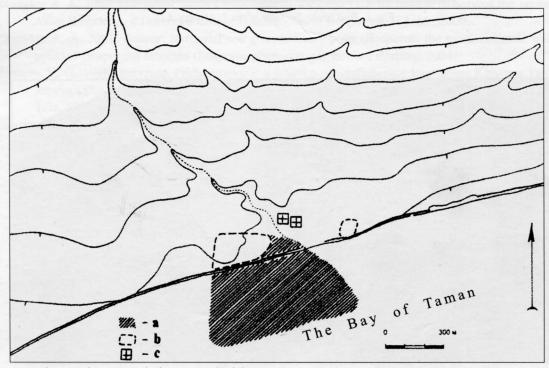


Fig. 2. Wall of the Fortress of the 1<sup>st</sup> century A.D. and the stratigrafical situation in the Fortress of "Batareyka" on based of the georadar data.



a - settlement, b - burial

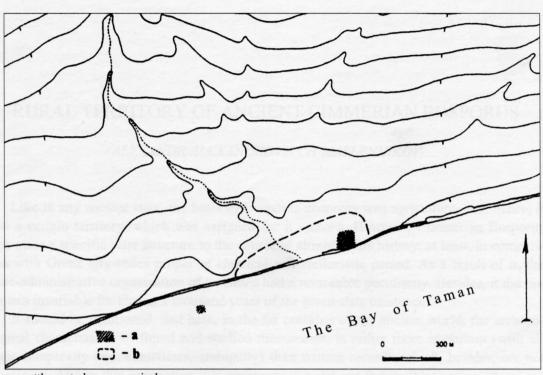
Fig. 3. Settlement of the Bronze Age.



a - settlement, b - economical zone, c - burial

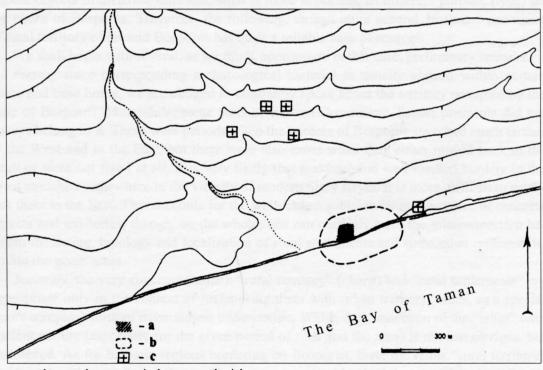
Fig. 4. Settlement of the middle of the 6<sup>th</sup> century - beginning of 3<sup>rd</sup> century B.C.





a - settlement, b - economical zone

Fig. 5. Settlement of the middle of 3<sup>rd</sup> century - beginning of 1<sup>st</sup> century B.C.



a - settlement, b - economical zone, c - burial

Fig. 6. Settlement of the 1<sup>st</sup>-4<sup>th</sup> centeries A.D.

1153