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A PUBLIC BUILDING OF THE $\mathbf{4}^{th}$ CENTURY BC ON THE PHANAGORIA ACROPOLIS*

Aleksei A. ZAVOYKIN**

* Araştırma makalesidir.

** Aleksey A. Zavoykin, Doctor of Historical Sciences, Senior Researcher in the Department of Classical Archaeology, Institute of Archaeology, Russian Academy of Sciences, Moscow, Russia, E-Posta: bospor@inbox.ru

ORCID: 0000-0002-1576-5802

Ç**evirmen:** Richard L. Bland, Museum of Natural & Cultural History University of Oregon, E-Posta: rbland@uoregon.edu

ORCID: 0000-0001-8439-5318

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Gönderim Tarihi: 05.07.2019 **Kabul Tarihi:** 02.10.2019 Abstract: The most interesting and important discoveries made during excavations at the Phanagoria acropolis ("The Upper City" excavation) in the last decade are connected with investigation of strata and structures of the second half of the 6th-first half of the 5th centuries BC, as well as with the end of the 2nd-first half of 1st centuries BC. This can be explained primarily by the fact that the strata of other periods have been more poorly preserved or not preserved at all. Preliminary remarks are given in this paper on materials of one interesting architectural complex of the first half of 4th century BC that was constructed on the place of a public building that burned down in the mid-5th century BC. Analysis of the remaining wall foundations allows us to determine the area of the building and its planning. On this basis it is possible to assume that the building had at least two floors. Its roof was tiled. The entrance to the building, adorned with a portico with two columns, was located on the east side. The house was enclosed on three sides (west, north, and east) by paved squares and a street, while on one side (south) it bordered on a large substantial structure whose function is obscure. It is also impossible now to draw conclusions on the functional purpose of the building (460), which was destroyed by a conflagration in 350s BC.

M.Ö. 4. YÜZYILDA PHANAGORIA ACROPOLIS'TE BİR KAMU BİNASI

Öz: Son on yılda Phanagoria akropolünde ("Yukarı Şehir" kazısı) yapılan kazılar sırasında yapılan en ilginç ve önemli keşifler MÖ 2. yy'ın son ve MÖ 1. yy'ın ilk yarısı ile birlikte MÖ 6. yy'ın ikinci yarısı ve MÖ 5. yy'ın ilk yarısının tabaka ve yapılarının incelenmesi ile bağlantılıdır. Bu öncelikle diğer dönemlerin tabakalarının daha zayıf olarak korunmuş olması veya hiç korunmamış olması ile açıklanabilir. Bu makalede, MÖ 5. yy'ın ortalarında yanan bir kamu binasının yerine inşa edilen, MÖ 4. yy'ın ilk yarısındaki ilginç bir mimari kompleksin malzemeleri üzerine ön açıklamalar verilmiştir. Kalan duvar temellerinin analizi, binanın alanını ve planlamasını belirlememizi sağlar. Bu temelde binanın en az iki katı olduğunu varsaymak mümkündür. Çatısı döşenmiştir. İki sütunlu bir revak ile bezenmiş binanın girişi doğu tarafındadır. Binanın bir tarafı (güney) işlevi belirsiz olan büyük bir önemli yapı ile çevriliyken üç tarafı (batı, kuzey ve doğu) taş döşemeli alan ve bir sokak ile çevrelenmiştir. Ayrıca, M.Ö. 350'lerde bir yangınla yıkılan binanın (460) fonksiyonel amacı hakkında sonuç çıkarmak da imkansızdır.

Over the last decade the most interesting and important discoveries made during excavations at the acropolis of Phanagoria ("The Upper City" excavation) are connected particularly with investigations of layers and architectural remains of the second half of the 6th-first half of the 5th centuries BC, as well as the end of the 2nd-1st half of the 1st century BC. This can be explained in first order by preservation of the relevant cultural remains, but also by the character of the events that led to their formation (the founding of the polis and establishment of its urban structure, the destruction of the most ancient structures in a fire of the mid-5th century BC, and construction of the royal residence of Mithridates Eupator and its destruction during the course of the Phanagoria uprising of 63 BC.¹

On the background of these bright discoveries the history of this region of the city appears dissonant in this period, which is justly considered the "Golden Age" of the Bosporus—the 4th century BC. And such a state of affairs is understandable. Here the cultural layer of the 3rd–end of the 2nd centuries was practically not preserved at all (it was apparently destroyed during the subsequent rebuilding of the area, including clearing and leveling of the area before construction of the "palace complex" at the end of the 2nd-beginning of the 1st centuries BC). In addition, comparatively little was preserved of the buildings of the previous century. In particular, these were not parts of buildings (or other features—pits, basins) that were buried relative to the level of their synchronous life on the surface. All surface, that is, most fundamental elements of architectural structures of the time of efflorescence were completely demolished and in the best case only traces of them remained.

All this makes extremely difficult the study of the history of the Phanagoria acropolis in this period when, one would think, its architectural design had reached its highest point. But this work is necessary. And in this article, we will examine the remains of one of the structures that occupied one of the main points in the public center of the city up to the middle of the 4th century BC.² The work presented to the reader is inevitably descriptive, "reporting" in nature. However, on the basis of the material examined more general questions are raised in it, to answer which, I hope will be possible in the near future, when all the data obtained as a result of many years of excavation in the "Upper City" of Phanagoria by the Phanagoria Expedition of the Institute of Archaeology (IA), Russian Academy of Sciences (RAS), will be analyzed.



Fig. 1. General view of the complex of structures (460, 474, 169–169a) in the middle part of the Western Area. View from W to SW.

² Briefly about this, see Zavoykin 2017.

¹ See, for example, Abramzon and Kuznetsov 2010; 2011; Zavoykin and Kuznetsov 2011; 2013; Kuznetsov and Zavoykin 2010; Kuznetsov 2011a; and others.



Fig. 2. General view from the south to the remains of building 460. View from the south.



Fig. 3. The same. View from the north.

Over the extent of several field sessions $(2004, 2005, 2010, and 2011)^3$ the Phanagoria Expedition of the IA RAS investigated the remains of a primary building (460) of the first half of the 4th century BC (Figs. 1–3). Several circumstances attract special interest in it. First, its very location (on the acropolis)-and considering the design characteristics of the feature-provides a basis for designating it a public building. Second, the rather poor preservation of the 4th century BC structural remains in the examined area should in general be taken into consideration-structures of the first half of this century are a great rarity here. Third, this building was a central element of the complex of structures that appeared on the acropolis at approximately the boundary of the 5th and 4th centuries BC. And finally, fourth, after the ruin of the building in a fire in the 50s of the 4th century BC⁴ this region of the acropolis underwent redevelopment, in the course of which the buildings were reoriented-strictly to cardinal directions-

⁴ Zavoykin and Monakhov 2012: 120.

whereas in the preceding period buildings were constructed with some deviation from them (NNW-SSE).

If we speak of the location of the building it is especially important to pay attention to the fact that the outer foundations of the walls lay precisely on the walls of the northern room of a public building (294) constructed as early as the second half of the 6th century BC and lost in a fire in the mid-5th century BC (Figs. 4 and 5),⁵ thus "inheriting" the traditional orientation. It would seem that this fact permits us to think about a certain succession of the diachronic buildings separated by approximately half a century. However, in my view, if the difference in their sizes and plans does not completely exclude the assumption of their possible functional continuity, it in any case does not provide a possibility for insisting on this (and rather inclines one to think of a fundamental difference in assignment of the two buildings).



Fig. 4. Buildings 294 and 460, stratigraphic cross section (along the western border of the Central Area).

³ The temporary gap is explained by the fact that the eastern part of the house was located on the western edge of the Central Area, and the western (approximately three-quarters of the building)—in the Western Area, investigations in which were begun only in 2006.

⁵ The stones of the foundation of the eastern wall (208) lie on the stone foundation of wall 294/1 (Figs. 19 and 20); the southern wall (460/2) is on the raw brick partitioning wall 294/3 (Fig. 4: 1 and 2); the partitioning wall 460/3—on the western raw brick wall 294/6; and the northern wall (460/4)—on the outer northern wall 294/4.

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Fig. 5. Masonry of the foundation 208 and layers of destroyed buildings 294 (below) and 460 (above).

In spite of the significant losses caused by the dismantling of the stone masonry of the above-ground part of the building's walls after its destruction and then, after many centuries, by numerous domestic pits, the plan of building 460 is established in general features quite reliably. Its was a square with sides approximately 10 x 10 m, the inner area of which was divided by partitioning walls into five rooms. The eastern partitioning wall (460/1), which passed from the north wall to the south, divided the eastern room (1) from a block of four rooms formed by the crossing of two partitioning walls (Fig. 6). The primary wall 460/5 along the axis W-E separated the interior expanse into northern and southern "compartments," while the narrow wall 460/3 along the N-S axis separated these two "compartments" into four rooms: northeast-room 2, northwest-room 3, southwest-room 4, and southeast-room 5 (Figs. 2, 3, 6, 7, 8). In favor of that, room 1 opened to the east is indicated by the fact that on the eastern foundation of the building (208), at an equal distance from the north and south ends of its masonry, were two retaining platforms of large limestone blocks, evidently intended for placement of columns. Also, indirectly favoring this is the character of the floor of this room, which is covered with fine gravel. If so, then it is evident that the entrance (or entrances) into the interior rooms of the building must have been located on this

same side, through a doorway (or doorways) in wall 460/1 (it was not preserved).

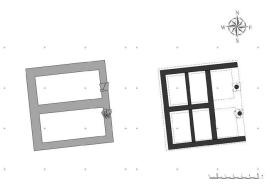


Fig. 6. Stages of construction of building 460 and reconstruction of its plan: a-foundations of the bearing walls; b-plan at the level of the socles.



Fig. 7. Interior rooms and masonry of the walls. View from the NNW.

Wall foundations. The surface parts of the outer walls were almost absent. The only exception is a small area at the south wall (460/2) that was preserved to a length of 6.15 m (Figs. 8 and 9). The most well-preserved part of this wall is adjacent to the SW corner of the building. Here the wall is represented by three rows of stones to a height of 0.65 m.⁶ The thickness of the wall (the socle) is 0.6 m and its foundation-0.8-0.85 m. It is formed of stones of Kerch limestone (shell rock) of various dimensions, including rather large blocks and small unformed stones filling the gaps between the larger ones.⁷ In the masonry of the foundation the stones have no traces of modification "in place," whereas in the socle roughly chipped blocks were hewn on

⁶ The upper mark on the masonry is -191–199 cm; bottom of foundation is -2.71 cm.

⁷ Their dimensions: 0.6–0.7 x 0.3–0.4 x 0.3–0.4 m.

two facades (Fig. 9). The masonry of the wall is irregular, without respect to the rows. The lower stones of the foundation are represented chiefly by roughly flaked large blocks placed in one row transverse to the masonry. There is no doubt that the upper part of the wall (as all the others) was constructed from raw mud bricks, which by the long side (0.48–0.50 m) were placed transverse to the masonry. (The thick rubble of adobe material burned in the fire filled the space within the rooms; see below).



Fig. 8. General view of building 460 from the outer SW corner.



Fig. 9. Western part of the south wall (460/2): foundation and socle of the masonry. View from the SE.

Of the remaining outer walls and partitioning wall 460/5, only their foundations remained. However, a huge flat stone⁸ was preserved *in situ* at the SW corner of the structure (Figs. 8 and 15), while all the remaining corners of the building were destroyed by later pits. Adjoining the corner stone on the north was the same large flat stone⁹ of the western exterior wall

(460/6), while farther to the north the masonry of its foundation drops (toward the slope of the hill) and changes in character (Fig. 16). Actually, regarding the northern part of the foundation of this wall, as well as the northern wall of the building (460/4) and the preserved part of the foundation of the partitioning wall separating rooms in the north and south sectors (460/5), it is difficult to speak of as masonry, since they are made up of different sizes of stones of various kinds haphazardly scattered and not showing signs of rows or faces. The strong impression is formed that the stones of these foundations filled trenches dug before their placement. A noticeable feature of these foundations is the presence in them of large unmodified chunks of heavy sandstone.¹⁰



Fig. 10. The southern part of building 460, below the layer of conflagration. The arrow indicates the masonry of wall 294/2. View from the NE.



Fig. 11. Remains of the north wall (460/4) of the building. View from the north.

¹⁰ Similar chunks weighing several hundred kilos were also found in the western part of the Central Area of the excavation, adjacent to building 460 (for example, see Fig. 40).

⁸ The dimensions of the stone: 1.4 x 0.9 x 0.15-0.25 m. The elevation of its upper plane: 2.61-2.69.

⁹ Its dimensions: 1.0 x 1.4 x 0.20 m.

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The length of the foundation of the western exterior wall, ending at the intersection of walls 460/2 and 460/4, is 7.6-7.8 m and the thickness, because of poor preservation, is determined approximately at about 1.1–1.2 m. The pavement (474) of the street or square adjoins it on the outside. The north wall (460/4) was destroyed at both ends by pits (Figs. 11 and 12). It was preserved for a length of 5.2 m, better on the eastern end, where its thickness amounts to 1.2 m.¹¹ In the lower part of its "masonry" are several large blocks of sandstone (for example, one of them had dimensions of 1.0 x 0.7 x 0.7 m); above are mainly stones of various kinds (shell stone, limestone, marble, and rolled and hewn volcanic stones) of medium and small dimensions. The foundation of the load-bearing partitioning wall 460/5 was recorded at 5.5 m in length (Figs. 13 and 16). It is fully preserved in the western half (here its thickness was traced to be 1.1-1.2 m), and in the eastern half, after the "intersection" with partitioning wall 460/3, a substantial part of the foundation was destroyed by a pit (381). The remains of the foundation east of the pit are poorly traced. They pass below the preserved stones of wall 460/1 and the gravel floor of room 1 adjoining it on the east (Fig. 14). It can only be suggested that the eastern end of the foundation 460/5 abutted on the masonry of foundation 208 (see below). In fact we were able to observe only a few of its stones, extending beyond the line of the eastern face of wall 460/1 and the quite visible stones of the masonry in the western border of the Central Area of the excavation (Fig. 5); however, in this area there was no success in recording its collapse. This is explained by the later removal of stones from the masonry.12



Fig. 12. The same in cross section. View from the east.



Fig. 13. Articulation of the masonry of the foundations of walls 460/3 and 5. View from the SW.

The stone base of wall 460/3, separating the interior space into western and eastern "compartments," is fundamentally different from the above-described foundations (Figs. 2 and 10). Its masonry, abutting the ends of the southern and northern exterior walls, has a length of 7.2 m, and a thickness of 0.35 m. The masonry, doubleplated without backfill, was formed of one row of small unmodified "flagstones," limestone, and small flattened cobbles. The upper surface of the masonry was preserved in original form.¹³ The base of the masonry lies at approximately 0.5 m above the base of the foundation of the outer south wall (460/2). The small width of the stone base of the wall inevitably leads to the conclusion that it was formed of mudbricks cut in half, since brick of the standard for Phanagoria dimensions (0.48-0.50 x 0.38-0.40 m)¹⁴ could not have been used here even with the stipulation of laying it

 $^{^{\}rm 11}$ The top elevation is 2.53 m; the base at the level of 3.43–3.48 m.

¹² In the 2005 profile of the western border of the Central Area, a test pit cutting through the layer of rubble of the building was quite visible in the cross section, going as far as the lower stones of the foundation, which were cleared in 2011.

¹³ It lies at a level of 2.38-2.56 m.

 $^{^{14}}$ Compare Kuznetsov 2010: 451: "The dimensions of the bricks vary. For example, at house no. 5 they measured 0.52 x 0.45 x 0.07 m, at house no. 9–0.46 x 0.42 x 0.05 m, and at house no. 6–0.57 x 0.42 x 0.07 m.

with the long side along the long axis of the wall. Said another way, wall 460/5 was only a light partition separating the adjacent rooms.

It is necessary to focus attention on the place where the stone masonry of wall 460/3 "articulates" with the foundation of partitioning wall 460/5 (Fig. 13). Strictly speaking, it is impossible to confidently identify the structure of the masonry where the masonry of 460/3 intersects foundation 460/5. Therefore, it seems more correct to speak of two segments of wall 460/3—northern (a) and southern (b), or even of two separate walls, with their ends (southern and northern, respectively) resting against wall 460/5.



Fig. 14. Remains of the eastern part of the foundation of wall 460/5 (at the edge of the Central and Western areas). View from the NE.



Fig. 15. Inner SW corner of room 5. View from the NE.

The eastern foundation (208) of the building, excavated in 2005, deserves a special word (Figs. 17–19). I will quote (with small ellipsis) its description in the report.

Masonry 208 was extended farther than in the previous season, and continues to the north. Its total length . . . is 8.1 m. At a distance of 2.35 m from its southern end the character of the masonry sharply changes: double-plated masonry of cobblestone is interrupted by masonry of dense shell stone. They are embedded in the wall, but are wider than the main wall (1.4–1.45, as opposed to 0.8 m). The shell stones form a kind of platform¹⁵ (this is the impression due to the smooth surface)... Its dimensions are 1.4 x 0.8 m. Above them were exactly the same stones, which were used in construction of pavement 207. North of this "platform" wall 208 of cobblestones again continues for a distance of 2.3 m. Two stones of pink marl were placed in two places on top of the cobblestones, leveling the surface of the wall. Then (that is, after 2.3 m) masonry 208 again is interrupted by a similar "platform" of large flattened blocks of dense shell stones.¹⁶... Its dimensions are 1.1 x 0.9 m. The "platform" consists of three blocks, one of which (on the east side) is somewhat lower than the other two. In order to level this difference small pieces of shell stone were placed above it. And again, north of this "platform" wall 208 continues for a distance of 1.8 m. Then it breaks off.¹⁷



Fig. 16. Interior of the SW corner of room 3. View from the NNE.

 ¹⁵ The elevation of the platform is 3.00–3.06 m.
¹⁶ The elevation of its stones is 3.10–3.21 m.

¹⁷ Kuznetsov 2006: 74.



Fig. 17. General view of the Central Area of the excavation. View from the SW.

The bottom stones of masonry 208 abut the stone foundation (294/1) of the previous structure (Figs. 19 and 20). Masonry of unmodified stone was formed, chiefly of rather large cobbles ("cobblestones") and limestone; smaller stones placed along the unmodified face of the masonry fill the gaps between the large ones.



Fig. 18. Foundation 208. View from the north.



Fig. 19. The same (below the western face is seen the edge of masonry 294/1, indicated by an arrow). View from the west.

Two "platforms," 2.3 m apart,¹⁸ attract special attention (Fig. 25). There is no doubt that these structural elements were specially built as supports designed for an increased load. Their position in the facade of the building directly attests to the fact that columns should have rested on them which supported beams (architraves) of the portico in front of the entrance, the outer ends of which, in such case, were probably fastened to the ledges (antae) of the southern and northern walls.



Fig. 20. Foundation 208, detail. View from the NW.

 $^{^{\}mbox{\tiny 18}}$ The same distance to the "platforms" from the ends of the masonry.

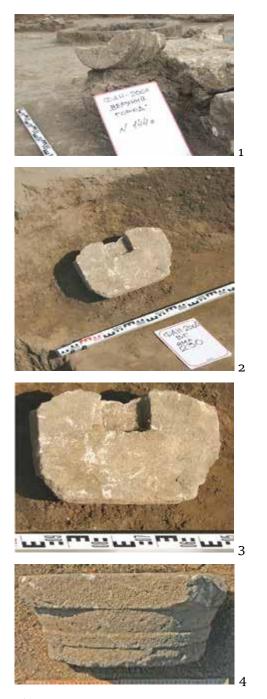


Fig. 21. Fragments of Doric capitals of columns. 1–next to the foundation of the building 144; 2– 4–in pit 230.

¹⁹ The elevation of the stones: a) -3.07–3.17; b) -3.26– 3.30; c) -3.06–3.12; d) -3.09–3.14; e) -3.21–3.29 m. Considering the unevenness of the "slump" of the stones, a calculated height close to the original should reach a level in the interval -3.10–3.20 m. In other words, the level of their surface is close to the surface of the platforms in foundation 208. Other examples of the use of "retaining platforms" under columns are also known at Phanagoria. In 2013–2014, at the south boundary of the Northern Area, a feature (670) that represented the bottom layer (the bedding) of the foundation of some structure oriented strictly along an eastwest line was examined. Its length was 16.9 m, its width 1.2 m. Almost everywhere one layer of stones was preserved. Stones were missing in places in the eastern half of the feature. Its western third was better preserved. Along the length of the foundation, at equal distance from each other, were five areas (670a-e) paved with stone-relatively large limestone blocks, rolled volcanic stones, and others. The stones had been placed in one, at times in two, layers. Their surface was even, partly horizontal¹⁹ and partly with slopes connected to the subsidence of the stones toward the later pits, as well as partial collapse of the northern side of the Central Area of the excavation, at the edge of which the feature was located. The dimensions of the platforms in plan²⁰ vary within the following framework: a) 2.05 x 1.3 m; b) 1.3 x 1.4 m; c) 1.3 x 1.4 m; d) 1.2 x 1.4 m; e) 1.22 x 1.5 m. The distances between the edges of the platforms amount (from east to west) to 1.7-1.8 m, 1.9 m, 1.9 m, and 2.0 m, and the average distance between their geometrical centers was about 3.2-3.4 m. These platforms "embedded" in the foundation evidently served as strengthening support for the colonnade of the structure.²¹



²⁰ The forms of the platforms are irregular in shape: one of them is subrectangular, two are close to oval, and two more are close to trapezoidal.

²¹ Its character is difficult to judge because of the isolation of the foundation. It is possible that these were propylaea, which formed on the north the entrance to the square, on which the public buildings of the acropolis were located.



Fig. 22. Plaster *in situ* at the eastern face of wall 460/1. 1-view from the top;2-view from the east (in the background, burned bricks in room 4).

We find another example in the structure at the western outskirts of the city, where part of a monumental building of the 3rd century BC was discovered. The front side of its masonry walls was formed of carefully hewn blocks of limestone without mortar. Platforms that served as support for the colonnades adjoined the outer facade of the eastern wall.²² The location and architecture gave reason to suppose in this structure had been a gymnasium or palaestra.²³

Discussions about the order of the eastern facade of building 460 are reminiscent of two finds made directly east of foundation 208. One of them was discovered in 2004 near the southern (interior) face of foundation wall 144d²⁴ (Fig. 21: 1). Half of a Doric capital of a column was found here, carved from Kerch limestone. The other half of the same (or, in any case, analogous) architectural feature was found in 2006 near the bottom of pit 320 which was opened in the same place (Fig. 21: 2–4). A square abacus (0.48 x 0.48 m) 8 cm in height.²⁵ A deep square hole (8 x 8 x 6 cm)

for attachment was carved on the upper plane. The ekhin was poorly profiled, the truncated conical, the entasis practically invisible (diameter above-0.43 m, below-0.39 m, height-6 cm). It is constricted by a relief belt ("strap")²⁶ 3.5 cm wide. The smooth cylindrical neck has a diameter of 0.37 m.²⁷ The total height of the capital is 0.22 m, the depth of the profile-4 cm.²⁸

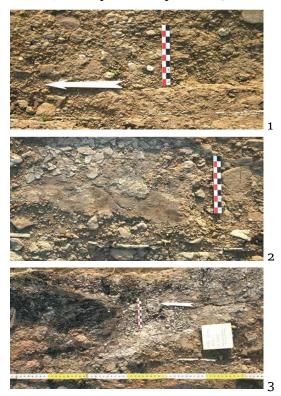


Fig. 23. Floors of room 1 (detail). 1—plaster *in situ* and pebble paving; 2—plaster *in situ* and fallen to the floor; 3—plaster fallen from the wall and the remains of burned wood from the structure of the ceiling.

²⁸ The closest analogy that I know is a capital of the first half of the 4th century BC from Kerch, published by A. V. Buiskikh (2009, 111, cat. 92).

²² Kobylina 1956: 29–32, Figs. 9–11.

 ²³ In two inscriptions from Phanagoria (CIRB 991, 4th century BC, and CIRB 983, second half of the 2nd century AD) a gymnasium is mentioned. Another inscription reports restoration in 220 AD of stoa after destruction caused by war (Kuznetsov 2007: 227-238).
²⁴ On the level of the upper surface of the lower row of stones; elevation on an architectural fragment–2.3-2.67 m.

²⁵ Unfortunately, it is necessary to point out that the dimensions of the architectural features are very approximate, based on a photograph, which, of course, inevitably involves the distortion of the true parameters. The find of 2006 (transfer inventory pit 320, no. 17a) was transferred to the Taman Museum Complex for storage (the Transfer Inventory of 2006, no. 197,

erroneously indicated: "Doric base under a column"). I don't have reliable information about the location of storage of the 2004 find.

²⁶ Only in one place on the fragment from pit 320 are two shallow incised lines separating the width of the strap into three zones, barely visible on the rough surface of the shell stone.

²⁷ The lower diameter, according to the proportions (5: 6) indicated by Vitruvius (III. 3, 12) for a column is no more than 15 feet, about 0.44 m. Consequently, the approximate height of the column (diameter x 9.5; Vitr. III. 3, 7) equals 4.22 m.

Of course, it is not possible to reliably assume that the fragments of the described architectural feature belong to the design of the eastern facade of building 460 and not to neighboring building 144, which was built in the middle of the 4th century BC²⁹ after building 460 perished. However, perhaps in favor of this it is possible to put forth an indirect argument. On the one hand, it is necessary to consider where the capital was found, at the bottom of foundation wall 144d. The fact is, there are good reasons to believe that the walls of building 144 opened by excavations represent a buried (semi-cellar) part of this structure.³⁰ In this case, the find that interests us could have fallen inside the building after it was destroyed either "from the side," as a foreign object in the fill of the basement, or as part of the construction of the building itself. But on the other hand, in the masonry of building 144 were reused stones originating from a structure that had clearly perished in a fire (which is indicated by traces of fire on individual stones), as well as fragments of architectural features (for example, the drum of a small column in masonry 144a).

Summing up the intermediate results, it should be noted that the dimensions of the buried parts of the bearing walls of building 460 suggest a substantial load on them. Here we see a construction technique well known in Phanagoria by the second half of the 6th century BC, when the buildings on the north side (that is, on the side of the hill slope of the upper terrace, toward which the surface descended) were reinforced with stone masonry at the base of the mud-brick walls that simultaneously performed the function of support walls, whereas the southern parts of these buildings were constructed of mud bricks placed directly on the ground.³¹ At the same time, the thickness of the foundations gives a basis for supposing that the structure had

two stories. It is especially important to consider that the thickness of the foundation of partitioning wall 460/5 leads to the idea that this wall was designed for a serious load, that is, was also load-bearing. Since the width of the interior space of the building was comparatively small, apparently the purpose of the capital wall separating its interior room into two parts was to ensure strength for supporting the second floor.

Destruction layer, interior. Building 460 perished in a very severe conflagration, as a result of which the inter-story floor and roof collapsed within and the charred mudbrick walls collapsed. It would seem that this is the ideal situation for studying the construction of the building, its structure, and the materials from which it was built. In actuality, it was not all so simple and not all the questions raised in the course of the investigation received satisfactory answers.

Rooms. As we found out, the interior of the building was divided into five rooms: room 1 opened to the east (bounded by the colonnade of the portico); farther to the west—rooms 2 and 5 (divided by longitudinal wall 460/5 and separated from rooms 3 and 4 by walls 460/3a, b); and the far western rooms 3 (on the north) and 4 (on the south), bounded by walls 460/3a, b, 460/2, 460/6, and 460/4.

²⁹ See Monakhov, Kuznetsova, and Zavoykin 2006: 302.

³⁰ In particular, supporting this notion is the preservation of the masonry, the carelessness, lack of facing

of the walls, and absence of traces of coating on the interior. See Kuznetsov 2011a: 120–121.

³¹ In this way, for example, the earliest in Phanagoria public building (300) was constructed. See Zavoykin and Kuznetsov 2011: 188–189.

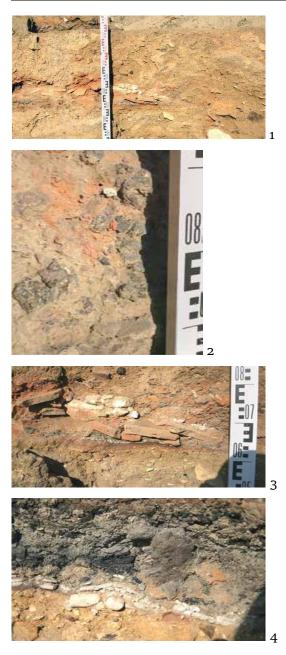


Fig. 24. The layers of destruction in room 1 (western boundary of the Central Area): 1– south half of the room; 2–tiles slagged in the fire; 3–tile roof collapse on the pebble floor; 4– pattern of destruction (1–pebble floor; 2– fallen plaster; 3–remains of wooden parts the ceiling).

Since the above-ground parts of the walls, as was said, were practically not preserved, it is rather difficult to precisely determined the useable area of the rooms. We will proceed from the fact that the thickness of the whole exterior walls of the building was the same as the preserved socle of the south wall, that is, 0.60–0.65 m. We also propose the same thickness for exterior east wall 460/1. We calculate the thickness of partitioning wall 460/5 as equal to the length of the standard mud brick (0.48-0.50 m), and partition 460/3half this value. Based on these assumptions, the approximate area of each room is: room 1-8 x 3.2 m (25.6 m²); room 2-4 x 2.2 m (8.8 m²); room 3-4 x 1.9 m (7.6 m²); room 4–3.1 x 1.9 m (5.9 m²); room 5– 3.1 x 2.2 m (6.8 m²).

Incidentally, it is necessary to make one reservation regarding the western and northern exterior walls and partitioning wall 460/5, the thickness of the foundation of which amounts to 1.10-1.20 m. The fact is that the same thickness of the stone foundation is known to us in the southern part of the public building of the preceding period (294), over the northern two rooms of which building 460 was placed (Figs. 4:1; 5:17, 19). Besides, this thick foundation (206)-designed for an mud-brick masonry wall at least two brick across³²-limits on the east only the two south rooms of the early construction, while the two north rooms on the same side were bounded by an mud-brick wall one brick thick, standing on a stone foundation 0.60-0.65 m thick (294/1, 33) above which lies foundation 208). The mud-brick masonry walls of the defensive structures of the acropolis, opened by excavations in 2016 at the steep descent from the upper plateau to the

 $^{^{32}}$ Or another combination of the position of the bricks in the masonry, for example: a brick crosswise + a brick longways + $\frac{1}{2}$ of a brick (0.48–50 + 0.38–40 + 0.19–20 m = 1.05–1.10 m without consideration of the thickness of the joints—the clay mortar between the bricks). Combinations were most probably alternated in the vertical rows of the masonry in order to cover

the seams and thereby provide strength to the structure as a whole.

³³ The stone foundation of partitioning wall 294/3, dividing north and south blocks of two rooms each, had the same thickness. The other mud-brick walls of the structure did not have stone foundations, their base lying directly on the ground.

lower, were equally thick.³⁴ It is appropriate to recall the instruction of Vitruvius, according to whom "... brick walls, if they are built of only two or three bricks, can bear more than one floor"³⁵ (I. 8, 17; trans. Th. A. Petrovsky). Thus, the calculation presented of the areas of the rooms is in no small degree approximate, since we are not able to explain why it was necessary to build the foundation almost twice as wide as the socle with a width of 0.60–0.65 m beneath it. In other words, the area of the interior rooms could have been less than the calculated values.

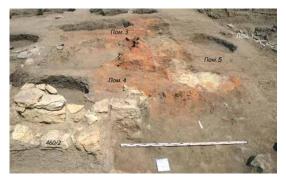


Fig. 25. Layer of burned area in the interior rooms. View from the south.



Fig. 26. The same. In the foreground (room 3) the remains of a burned wooden structure and the collapse of pottery over it, in the back (room 4)—rubble of burned bricks. View from the north.

In addition, the proposed reconstruction of the interior plan of the building (Fig. 6) has one fundamental problem. Since the above-ground part of the walls were practically not preserved, it is difficult to say

anything definite about the passages joining the rooms. At the same time, since it is evident that if there was one entryway into the interior and it was located in the center of wall 460/1, that is, in the opening between the columns of the portico of room 1, it in such case would be against the end of partitioning wall 460/5. Consequently, it must be assumed either the probability that the entrance was shifted, say, to the north relative to the central axis of the building, or to suppose that there were two entryways: one of them leading to the northern sector of the inner rooms, the other to the southern, which could have been connected with the other by interior passages. It is difficult to say which variant is more realistic.

The floors, ceilings, walls (structure of the fill). The problem that was raised, which has not received a satisfactory explanation, prompts one to the question of floors in the rooms. And we begin examination of the question with the most understandable. As was already said, to the eastern face of wall 460/1 "adjoins" a thin (0.5–0.7 cm) strip of vertically standing plaster (Fig. 22). This strip is the clear western boundary of the floor that covered the area of room 1. At the base of the floor lies a sandclay layer (to 2-3 cm thick), in which small (0.3-1.0 cm) sea pebbles are abundantly mixed, the upper horizon of which forms a compact surface (Fig. 23: 1).³⁶



Fig. 27. A Thasian amphora in a pile of broken pottery in room 3. View from the west.

³⁴ In the northeast "corner" of the western part of the upper plateau, separated from its eastern part by a deep ravine. See Kuznetsov 2018: Fig. 1.

 $^{^{\}rm 35}$ In this case, a Roman architect speaks precisely of mud brick.

³⁶ It is approximately 0.20 m above the upper level of the support platforms for the columns.

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Fig. 28. Pile of broken pottery over the remains of a burned wooden structure in a depression west of wall 460/3.

The structure of the destruction stratum on the floor can be traced very clearly (Figs. 4; 23:2, 3; 24). Directly on the floor lies a thin layer of plaster fallen from the wall, smashed into a multitude of small pieces (it was burned to an ashy-gray color as a result of the action of the fire). Then, there is the layer of the remains of the burned wooden structure of the ceiling (well expressed in the southern and northern parts of the room). Above, in the southern and middle part of the room is rubble of tiles (in the south it melted, slagged as a result of high temperature; Fig. 24: 2); in the northern part of the room pieces of tiles were absent. Finally, above the remains of the collapsed roof are the ruins of the fallen mud-brick walls, in the northern half burned to a brick-red color.

The situation with the floors in the interior of the rooms is more complicated. Properly, in rooms 2 and 5 we did not succeed in determining the structure of the destruction layer that covered the floor, therefore we were not able to reliably determine their surfaces. They were probably clay, and with the collapse on them of the burned brick walls the floors were calcinated to the same state as the walls that had fallen on them. Since we could not identify the organic remains of the ceiling,

then the surface we were interested in, not having any structural difference from the remains of the walls, remained unidentified. Based on the fact that the stone foundation of partitioning wall 460/3 was deepened relative to the surface of the floor, it is only possible to suppose that this surface approximately corresponds to the level of the upper stone masonry.³⁷

The complexity of determining the level of the floors in these rooms was also due to the fact that directly below them was a burned-out layer of an mud-brick building 294 that perished a century earlier.³⁸



Fig. 29. Imprints of burned boards in clay (after removal of wood charcoal). View NE.

The situation discovered in the western pair of rooms (3 and 4), in which traces of the action of a conflagration can be seen especially clearly, was different. Room 4 turned out to be completely littered with walls burned orange-red and in places calcined pieces and even whole bricks were preserved (Figs. 25 and 26).39 In the northern part of the shambles, close to wall 460/5, lay bricks on edge in three rows, at an angle to the horizon (the tilt of their plane from west to east about 45°).40 Under the rubble of burned mud bricks, and on top of stone masonry 460/3, a thin ashy-white crumbly layer was located-the burned remains of some organic (?) material in the form of powder (Figs. 30 and

³⁷ That is, approximately -2.45–2.49, which is 5–6 cm higher than the floor in room 1. However, this estimate is approximate and this difference can be ignored.

 $^{^{38}}$ In room 5, on the surface at 0.20–0.30 m below the bottom of masonry 460/3, wall 294/2 can be clearly seen (Fig. 10).

³⁹ The dimensions of the brick—0.40 x 0.48–0.50 m. ⁴⁰ Under them, in the NE corner of the room at the level of the ash layer, was a piece of the neck of a Heraclean amphora with the stamp of the magistratus Scythas, chronological group IIIA, which dates (Katz 2007: 429) to the end of the 60s of the 4th century BC (see Zavoykin and Monakhov 2012: 120).

31).⁴¹ It is notable that this layer did not lie horizontally: it seems to have lined a shallow "trench" that stretched from south to north along and west of wall 460/3 (see below).

In room 3 the array of calcined crushed mud bricks was smaller, and the bricks of the collapsed masonry were not distinguishable. But the structure of the underlying layer could be easily read. Under burned crushed mud bricks were preserved the remains of a charred wooden structure (Figs. 26, 28, and 29). From north to south, along the eastern face of wall 460/3 were traced two parallel timbers (or boards) 2.9-3.0 m long by 8-10 cm wide. Almost perpendicular to them, 3-5 cm to the west, lay the remains of 18 boards. The boards were preserved in length mainly to 0.25-0.50 m, and maximally (on a bridge between pits 428 and 435, which cut through the room) to more than 2 m. The width of the boards varies between 10 and 20 cm. They were mostly located close to one another, though two northern boards were shifted 2 and 7 cm. There can be no doubt that these are the remains of a single structure, in which transverse timbers held the boards together.

It is very important that the wooden structure was located at its eastern edge above the stones of foundation 460/3, on top of layer of compact gray clay that lay directly on the masonry. Deep imprints of the boards were preserved in the clay (Fig. 29).⁴² The boards of the structure had a pronounced slope to the west, toward a depression in the form of a trench (Figs. 28 and 31) that passed parallel to wall 460/3, in line with the trench in room 4 (foundation 460/5 separates them). On the bridge between the pits (48 and 435), where the layer was not disturbed, it was clearly seen that boards "lined" the sloping sides and bottom of this shallow trench and then go up to the stones of the eastern face of the west wall (460/6).



Fig. 30. The surface in the interior rooms (3 and 4) after the removal of the rubble of burned mud bricks. View from the SSE.



Fig. 31. General view of rooms 3 and 4 after removal of the burned layer. View from the SW.

On the wooden flooring of this trench lay a thick layer of burned crushed mud bricks, in the upper horizon of which were a pair of modified stones and a cluster of broken pottery, in which was an archaeologically whole⁴³ Thasian amphora of type II-B-1 in the classification of S. Yu. Monakhov,⁴⁴ with the stamp of group F1 of the 50s of the 4th century BC,⁴⁵ as well as the neck of a rare type of Mediterranean amphora with

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⁻⁻⁻⁻⁻

⁴¹ A small part of this layer along the south wall enters in room 5, which can serve as confirmation of the fact that here the floor was also located approximately at the level of the stone foundation of partition 460/3.

⁴² It is evident that the boards could have left such deep imprints only if the clay was still wet and plastic. After it dried this would not have been possible. Another variant of explanation proposes daubing the

boards with wet clay from below (compare Zavoykin and Monakhov 2012: 117, Note 3). In this case it must be supposed that we have a case of the remains of a inter-story floor and coated ceiling.

⁴³ Its leg was cut down by pit 435.

⁴⁴ Monakhov 2003: 76, Pl. 42.

⁴⁵ Garlan 1999: 50, 233, no. 675; Zavoykin and Monakhov 2012: 118, 119, Fig. 1: 2.

a complexly profiled rim,⁴⁶ and others (Figs. 27, 28, and 32).

Based on reconstruction of the two stories of the building, it can be proposed that the board structure was an element of the inter-story ceiling. But in such case, the boards smeared from below with clay, could turn out directly on the stones of the foundation of the wall only if mud-brick wall 460/3 itself fell flat, separating from the stone base before the ceiling collapsed. Such explanation of the situation does not look convincing.

V. D. Kuznetsov proposed other explanations in a field report.

One of the variants of reconstruction consists of the following: the structure was a wooden wall set on a small stone base. The boards of the wall were nailed to the beams lying on the masonry. However, such interpretation is possibly contradicted by the following circumstance. In the above-described space, between pit 428 and foundation pit 435, in which a layer in the room west of wall 460/3 was preserved, was discovered rubble consisting of broken amphorae, tiles, burned clay, and stones. Among the amphorae was a Thasian amphora with a stamp that is dated to 360-350 BC. This rubble lies on boards. If the interpretation of the boards as a wall is reliable, then the question arises, how did the rubble turn out on top of them? A variant of the explanation consists of the fact that at the wall was a cupboard with ceramics and other objects, which fell during the fire.47



Fig. 32. Finds from the layer of the fire in the rooms of building 460.

Unfortunately, neither this nor the other variant of interpretation can be accepted. First, judging by the location of the longitudinal beams, the "wall" could not stand on stones of the foundation, though it could perhaps be the "lining" of the eastern face of the wall that fell flat in a western direction. Second, as was said, between the boards and the ceramics there is a thick layer of burned crushed mud bricks. Third, it is difficult to accept the probability that large container vessels, tiles, and stones were stored in a "cupboard." Even if the boards and the ceramics were not separated by a layer of burnt crushed mud bricks, in order for the pieces of amphorae to appear above the remains of the back wall of a cupboard, it would have to have been located at the eastern face of wall 460/3 (in room 2) and collapse back during the catastrophe, on top of its foundation, and, again, only after the mud brick masonry of the wall on the stones was no longer there. . . .

⁴⁶ Zavoykin and Monakhov 2012: 117, 119, Fig. 1: 1.

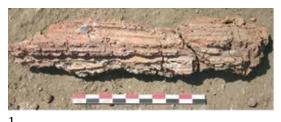
⁴⁷ Kuznetsov 2011b: 7.

Some attention should be allotted to the "trench" that was discovered within rooms 3 and 4, which passed to the west of the foundation of wall 460/3 and parallel to it. In room 3 its sides and bottom are lined with an ashy white layer (Figs. 30 and 31). In room 3 the sides and bottom are covered by boards. This unambiguously excludes the possibility that the feature being examined could be connected with some later intrusion into the layer. Also completely excluded is the probability of the origin of this depression in any connection with "subsidence" of soil over underlying depressions: investigation of the underlying layer does not permit such variant. It must be recognized that the depression in the surface of the "floor" within these two rooms at the moment of destruction of the building is a characteristic feature of them. Another question-for what purpose was this depression construction?

It must be acknowledged that the situation of destruction of the building revealed in rooms 3 and 4 cannot be reliably interpreted.

The last thing that needs to be mentioned, characterizing the structural remains of building 460, is the discovery of a relatively small number of fragments of burned clay coating that preserved the imprints of organic materials. It is the matter of two kinds of raw plant material that was used in the inter-story (overhead) floors as well as with construction of the roof.

Rather often with excavations, especially of buildings perished in a fire, are encountered fragments of burned clay bearing imprints of thatch (Fig. 33: 1–3). This affordable and convenient material was also widely used in the northern Black Sea region from earliest times.⁴⁸ Thatching, placed in several layers, was used alone as a hydro- and thermally insulating material with construction of roofs, and also as an element of a roof covered with tiles.49 Thus, in the roof of the gallery of the Athenian Long Walls (307-306 BC), on top of the wooden roof frame to which the laths of the purlins were fastened, was laid a "well cleaned" thatching (according to a text of the document of reconstruction, in two layers: one was laid along the purlins, between them, and on top of it, another one laid crosswise); this was covered with a layer of clay mixed with straw, on which Laconian tiles were placed.⁵⁰ Besides this, thatching could also be used in the interstory flooring (or as material in overhead structures).⁵¹ This is confirmed in particular by materials obtained through investigation of a court building of the time of Mithridates Eupator, which perished in a fire in 63 BC. There, in the burned out layer, the collapse of a wheat-filled Knidian amphora was successfully recorded in *situ*⁵² over a clay coating with imprints of thatching that fell along with the collapsed ceiling.





⁵⁰ See Caskey 1910: 301 (and inset between pp. 298–299); Hodge 1960: 63; Hellmann 2002: 283, Fig. 381 (according to the construction contract—IG II2, 463, 1. 61–71).

⁵¹ As it is still used in traditional adobe homes in village localities of the Kuban region.

⁵² See Garbuzov and Zavoykin 2015: 97, Fig. 1.

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⁴⁸ See Kryzhitskii 1982: 14 and Note 4. The researcher discusses reed roofs (possibly with clay screed) of semi-subterranean houses. Unfortunately, there is not any other information about roof construction or inter-story ceilings in this work.

⁴⁹ Thatching covered with clay was also used for constructing various kinds of fencing (for example, see Zavoykin, Kolesnikov, and Sudarev 2016: 150–152, Figs. 46 and 48.

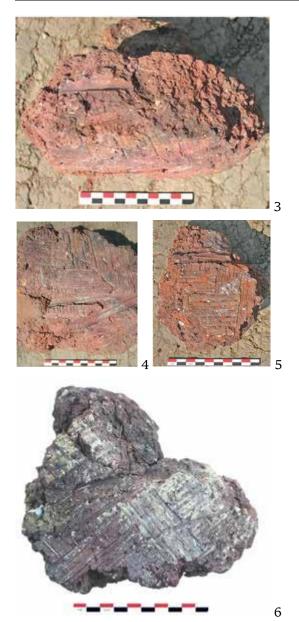


Fig. 33. Clay coating with traces of plant materials from the burned layer in the rooms of building 460.

Unfortunately, the absence of precise stratigraphic observations prevents the possibility of judging about the use of this material in the ceilings of building 460. It pays to note only two small features. It can be seen on one of the imprints that the thatching could have been connected in bundles using twisted rope (Fig. 33: 2).⁵³ On another piece of burnt clay, the imprint of thatching (on the lateral surface of the piece) is combined with an imprint of another raw plant material (Fig. 33: 3 and 4).

These stems of a grassy plant are substantially less in diameter than in the thatching, which left a rather deep grooved trace in the clay.⁵⁴ No impressions of nodes of a stem were noted anywhere in the flattened and shallow imprints of this plant (or the fibers derived from it) (Fig. 33: 4-6). It is more accurate to say, we have a case not just of the use of raw plant material, but rather with the use in construction of material prepared from it. It is clearly seen in the imprints in the clay that from the flattened grass stems (their fibers)⁵⁵ some kind of mats were woven, in which "zones" of several (up to 9) parallel stems are intertwined with the "zones" of stems running perpendicular to the first. As a result, the weaving formed a "checkerboard design" on the surface.

Examples of the use of weaving materials in Phanagoria are known.⁵⁶ However, it seems that for the first time their use in the construction of monumental structures has been reliably established. If thatching could be used as a material that by itself fulfilled a certain function (served as an insolation layer) or as a connecting frame in a clay mass, then it is evident that "mats" could serve for reinforcing surfaces (all the available fragments with imprints have a flat surface) and possibly for preparing them before applying a leveling "facial" coating.⁵⁷

⁵³ Compare a bundle of thatching bound by a rope on the plaster: Alekseeva 1997: 263, 330, Pl. 48: 5, 6 ("fragments of an adobe clay partition on the reed frame from buildings of the 2nd-first half of the 3rd centuries AD").

⁵⁴ Longitudinal plant fibers can be distinguished on its surface.

⁵⁵ Thickness of 2–3 to 5 mm.

⁵⁶ For example, in burial 46.80 in the "South City" for reinforcement of the sides of a grave (Zavoykin, Kolesnikov, and Sudarev 2016: 176, Fig. 76: 3); in the "House of the Grain Merchant" were the remains of woven "sacks," in which a harvest of wild vetch was stored (Zavoykin 2004: 53); in the "Upper City" the sides of rectangular pits (496, 494) of the last quarter of the 5th century BC were reinforced; and others. ⁵⁷ Of course, traces of it were never found.

Finds. The most chronologically significant finds have already been noted (Fig. 32), others are mentioned in a joint with S. Yu. Monakhov article.⁵⁸ Here just a few comments are appropriate.

In first order, the small number and poverty of composition of the items discovered is surprising. This clearly contrasts with the expected indicator: catastrophic destruction of an extraordinary building promised substantially richer finds. It is also curious that fragments of tiles are concentrated primarily within room 1, while in other rooms pieces of roof ceramics are single and isolated (they do not give the impression of roof collapses). This can possibly be explained by the poor preservation of the complex only by stretching. In large degree, this concerns the upper part of the layer of destruction, which was leveled during preparation of the area for construction of the "residence of Mithridates" at the end of the 2nd-beginning of the 1st centuries BC59-the roof should have collapsed within the building to the level of the inter-story floor, which had fallen on the ground floor before the mud-brick walls fell. Tiles were discovered in large number east of the entry into the building and in the area of the column supports. On the whole, this provides a serious basis for concluding that the roof of the building was covered with tile.

* * *

Thus, building 460, built on the location of a public building on the acropolis that perished in the middle of the 5th century BC approximately half a century later, was unusual for several reasons. It resembled a tower in its proportions, but of course it was not related to fortification of the

acropolis. The two-story (or more?) structure was comparatively small in plan (about 100 m^2), covered with a tile roof, with a portico on the east side does not resemble religious buildings, and has little in common with the best known types of civil structures. Of course, the problem of determining the functional association of public buildings revealed by excavations is among of the most difficult, often insoluble. For example, of the substantial number of public buildings identified as prytanea, S. Miller believes it is possible to speak more or less reliably of only six of them (in Dreros, Ephesus, Colophon, Magnesia on the Maeander, Morgantina, and Priene), despite the fact that their plans could vary substantially.60

Surprisingly, building 460 on the Phanagoria acropolis is at first glance somewhat similar to two-story residential homes of Classical-early Hellenistic time with halls ($\dot{\eta} \pi \rho o \sigma t \dot{\alpha} \varsigma$) going out into a courtyard,⁶¹ though it is obvious that the ordinary residential structure cannot be considered in the examined context.

It should be recognized that any conclusion on the assignment of this extraordinary building before all the other remains of architectural structures of this area of the city are studied will be premature. For further discussion, it makes sense to look at the location of the building more specifically, especially with consideration of the buildings surrounding it.

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⁵⁸ Zavoykin and Monakhov 2012: 117–120, Fig. 1. The composition of the container vessels (Chian with "conical toe," Heracleian, Thasian, Mendian amphorae), like fragments of Attic ceramics, do not provide additional information for refining the chronology of the complex: the wall of a closed red-figured vessel, the bottom of a bowl with the graffito "A," a fragment of a bottom of a "Bolsal" class bowl, a fragment of a rim and a handle of a one-handled bowl, and a small piece of the edge of a cup-kantharos with molded rim.

⁵⁹ If not earlier, if we take into consideration the destruction of the layer of Hellenistic time in the course of this work.

⁶⁰ Miller 1978: 93ff., 126–127; cf. 225–234 (Appendix C).

⁶¹ See, for example, Hoefner and Schwander 1994, Abb. 33 (Pireus); Abb. 64 (Olynthus); Abb. 176–177 (Abdera); Abb. 204 (Priene).

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Fig. 34. Pavement 207 and the upper part of foundation 208 (arrow indicates the edge of the stone of the northern support platform for a column). View from the west.

East. The stone pavement came close (207; Fig. 34) to the east side of the building (460). As V. D. Kuznetsov noted in the report for 2004, "The feature is very difficult to understand and interpret, since it either consists of several features or is one feature that has several construction periods."62 The investigator noted that the southern and western edges of the feature (forming the "southwest corner") are rather clearly recorded and supposes this is pavement of the plaza. The remaining boundaries of the feature are irregular. It is evident that the pavement was heavily damaged by later pits. One of them broke through the eastern part of the pavement. Judging by everything, the upper stones of the masonry of foundation 208 were also recorded as the western part of the feature, in the place where the support "platforms" were located, the surfaces of which were somewhat higher than the other stones of the masonry.⁶³

The recorded dimensions of the pavement are 5.6 x 7.55 m (W–E x N–S). As far as it is possible to judge, it had a general orientation from west to east (here the foundation pit of 144c interrupts it). In the south and west sections the pavement is composed of unmodified stones of both volcanic origin (including medium-sized boulders) and blocks of limestone and marl, and in the remaining part the surface is made up of small flat pieces and scraps of shell rock. It is this surface (to the NW of pit 197), "covering" the large stones to the west of it, that was supposedly taken for a pavement of the second construction period.⁶⁴



Fig. 35. Pavement 474, the area adjoining building 460. View from the NNW.



Fig. 36. Same, detail. View from the west.

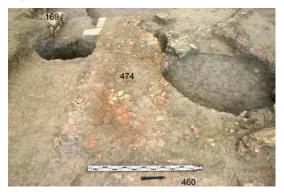


Fig. 37. Southern part of pavement 474. View from the east.

center of the western part of the feature of the first construction period.... Here it is seen that under the pavement lie some stones belonging, in all likelihood, to a feature of an earlier time."

⁶² Kuznetsov 2005: 15–16.

⁶³ In the report it is noted that in this place the surface was formed with larger stones. "The impression is such that here the pavement was formed of stones selected from the masonry (or masonries) of former times." "Stones were selected approximately in the

 $^{^{64}}$ Its thickness is about 0.15 m, the surface lies at a depth of -2.78–2.80 m.

This was confirmed later (in 2005) when, "after removal of the stones of the pavement, another layer of stones was discovered. They turned out to be merging into feature 208, which was also investigated during the 2004 season and determined to be masonry of a wall."⁶⁵

A pavement (474) was also located west of the building, but it had a different character (Figs. 35-37). Its surface was, as usual, broken through in many places by later pits, as a result of which the outline of the pavement had a rather bizarre form. Nevertheless, its southern and eastern borders were established quite precisely. They are determined by features 169a (see below) and 460/6, respectively (the western face of the foundation of the wall). The western and northern boundaries of the pavement could not be precisely determined. Almost abutting the northern part of the pavement is another pavement (472) formed of small cobbles and through which a monumental drain passed from west to east. Its blocks, made of Kerch shell rock, also passed along the surface of pavement 474, and the continuation was discovered (after a rupture in the drain line) farther to the east, now opposite the NW corner of building 460. The recorded length of the pavement from north to south amounts to 14.6 m, the maximum width 4.5 m.

Pavement 474 consists of two elements: an eastern (which abuts directly on building 460) and a western. Their surfaces lay at different levels, forming a step of 0.15-0.25 m, the edge of which was reinforced by medium sized (0.15 x 0.2 m, 0.2 x 0.25 m) stones placed on edge (Figs. 35 and 36). The material making up these two areas of pavement also differed. The surface of the eastern pavement was lined mostly with small pebbles (with the presence of pieces of pottery and individual small fragments of bones), and the western, with pottery

(chiefly of fragments of amphorae, including ones of rather large sizes).⁶⁶ The width of the eastern part of the pavement is about 0.7–0.8 m. It is reminiscent of a sidewalk that passed from south to north along the wall of the building and street. This was evidently a blind area that was to divert rain water from the wall of the building.

There is no doubt that the pavement was constructed simultaneously with building 460. It was placed on the square, which traditionally, at least from the first quarter of the 5th century BC, was subject to paving. In addition, for construction of early pavement (498) scarce in Phanagoria stone was used, in this case—cobbles, which probably speaks in favor of its extraordinary character.⁶⁷

North. A street leading from west to east also passed north of building 460. The earliest pavement (301) of this street discovered by excavations is dated to the first half of the 5th century BC. However, placement and orientation of the buildings of earlier times (300 and others) permit thinking that it was already functioning in the second half of the 6th century BC. The earlier-mentioned eastern section of the drain (487) undoubtedly passed along the street in the 4th century BC, though traces of pavement in this place have not been successfully discovered. And there, even farther to the east from it, was preserved a part of a stone pavement (209), the south edge of which stretches parallel to the north wall of building 460, almost in a line with the north face of its foundation (Fig. 38).

⁻⁻⁻⁻⁻

⁶⁵ Kuznetsov 2006: 74.

⁶⁶ Pebbles are also encountered here in the north end.⁶⁷ Incidentally, the fact should be considered, for example, that the main streets of Olbia, which were paved at public expense, were covered with broken

shards (probably taken from city landfills), whereas areas of the streets adjacent to private buildings (the arrangement of which was the responsibility of private persons) were often paved with stone of good quality (see Levi 1985: 115 ff).



Fig. 38. Pavement 209. View from the west.

Along the north side, the length of the pavement was traced for 9.1 m, the width from north to south—no less than 4.8 m.⁶⁸ "The pavement is composed of small and unmodified shell stone in one layer about 0.1 m thick. Pieces of shell stone were used rather abundantly. Occasional small stones of pink marl, rough stones, cobbles, and pieces of pottery are encountered. However, we emphasize again, the predominant material is shell stone, some stones of which were in a fire and burned to a pink color."⁶⁹

North of building 460 and across the street from it, the stone foundation of walls of a small templum in antis (675) was discovered in 2013; its dimensions about 5.9-6.0 x 4.5 m. V. D. Kuznetsov suggests in the report that the temple dates to the 5th century on the basis that its orientation along the cardinal directions is analogous to that which building 294 (and others) had, which were dated to this time (to the second quarter of the century).⁷⁰ This reason does not seem sufficient. As we saw, a building (460) of the first half of the 4th century BC has the same approximate orientation, having inherited it from a structure of the previous period. Moreover, the foundation of the temple lies on the same

⁷⁰ Kuznetsov 2014: 29–31.

horizon⁷¹ as that of the building. The structural stone, of which the foundation was composed, is generally similar to the material in the foundation of building 460, including the large piece of dense sandstone that was used as a corner stone (SW corner).



Fig. 39. Foundation of the feature 169 (Central Area). View from the NE.



Fig. 40. The same. View from the west.

All these, of course, are indirect arguments. Unfortunately, because of poor preservation of the feature,⁷² identifying the level of the floors of the temple and highlighting the finds connected with it were not successful. Therefore, it is possible only to indicate a *terminus post quem* date for the destruction of the building of mud bricks,⁷³ on the place of which a temple with the same orientation was built on

⁶⁸ Its surface lies at a depth of -2.89–3.09 m from the survey benchmark.

⁶⁹ Kuznetsov 2005: 16.

 $^{^{71}}$ The base of the masonry of the foundation at the level -3.10–3.17 m, the top mark of the stones -3.08–2.92 m.

⁷² Destroyed not only by the trench and pit in it with the excavations of I. E. Zabelin, but also by vats of a late ancient winery.

⁷³ Also probably a predecessor temple.

a stone foundation. Below the foundation, in a layer of destroyed adobe material (over the floor of an earlier construction), were found pieces of an amphora container: a toe of Chian with straight neck and the lower part of the body with a toe of Mendian. They both can be dated to the last third of the 5th century BC. With this, it is necessary to keep in mind that it is impossible to say with confidence that these materials belong to the period of life of the lower-lying structure.

<u>South</u>. Directly south of building 460, strictly parallel to the outer face of wall 460/2 and 0.53 m from it, was the foundation of feature (169–169a) with a genuinely enigmatic assignment and impressive dimensions.⁷⁴

It is necessary to say that both its eastern and western ends were destroyed by later pits, and the western also by a trench in the 19th century. Therefore, both its initial extent from west to east remained obscure, and the configuration of the feature as a whole also remains enigmatic. Up to present only the remains of the structure were preserved, stretched from west to east approximately 19.8 meters. Its width (N-S) was determined by the transverse dimensions of two elements: transverse measurement of the primary body of the foundation (169)-2.25-2.30 m + the width of the adobe "step" abutting its north face, the north face of which was formed by a row of carefully placed stones (169a)-1.15-1.20 m (Figs. 41 and 45).75 In total, based on this calculation the overall transverse dimension of the whole structure reaches about 3.4-3.5 m.

⁷⁴ As building 460, it was investigated in two steps: in 2003 was excavated its eastern part (in the Central Area—Figs. 39 and 40), in 2011–2012 its western part was opened (in the western part of the excavation).

⁷⁵ The length of this element is substantially less, only about 5.8 m: it stretches from a point slightly east of the SW corner of feature 460 to the west and is terminated by the trench of the 19th century.

⁷⁶ Small and medium-sized volcanic cobbles and crushed limestone predominate, along with a sub-stantial number of pink marl slabs: they were used



Fig. 41. Feature 169–169a (Western Area). View from the NW.



Fig. 42. Feature 169, faces of the middle part of the foundation: 1—north face (and SE corner of room 4 of building 460); 2—south face.

The base of the structure is irregular masonry composed of stones of various kinds and sizes.⁷⁶ Medium-sized stones were laid across the whole width without any system, without any selection, in a continuous layer (1 to 2 stones, depending on their sizes). And only the faces were formed otherwise: here the stones were laid with the flat sides along the south and north side of the masonry. The main structural feature of the formation of the faces was not just the fact that they were laid more carefully

basically for leveling the upper surface of the masonry (chiefly along the faces). Shell stones with carefully modified surfaces (especially in the face of the masonry 169a—Figs. 46 and 47) are represented by single (a few) specimens. On the whole, the composition of the material in masonry 169 is characteristic primarily for foundations and socles of structures of the 6th–5th centuries BC. However, such material was also used later, in the 4th century BC, for example, in masonries of walls of basements (686 and 678).

of comparatively large stones,⁷⁷ but also the fact that in the eastern part of the structure the stones of the face were placed in 2 to 3 rows (depending on the size and shape) and were raised above the general plane of the foundation in its middle part, forming a kind of "skirting" (Figs. 39, 42, and 43).⁷⁸ In relation to the western part of the feature, the edge of the eastern part formed a kind of "step" (if seen from the side of the faces),⁷⁹ the height of which reached 0.51–0.54 m from the bottom of the masonry (Fig. 42: 2).⁸⁰

This stone foundation served as the base for construction made of sterile yellow clay (its traced array is about half a meter thick—Figs. 1 and 41). The fact that no signs of masonry of adobe bricks or pieces of one were found here is to be especially emphasized. And this is very important to consider since there was no technological need for leveling the surface of the foundation in order to put on such a thick layer of clay.⁸¹



Fig. 43. Feature 169 and the south part of building 460 in profile (along the western edge of the Central Area). View from the east.

⁷⁹ V. D. Kuznetsov describes in the report a reduction in the level of the faces from east to west in more detail, speaking of two steps, noting also that the steps of the north and south faces "do not correspond to each other, that is, they are not symmetrical. In other words, these so-called 'steps' had some functional assignment: from the point of view of external appearance of the feature, its architectural appearance, this



Fig. 44. Western part of feature 169–169a (cut through by the corner of the 19th century trench) and pavement 474. View from the SW.

The northern face of feature 169 is adjoined by a band of the same sterile yellow clay, the northern edge of which was determined by a structure of stones (169a). Strictly speaking, the arrays of clay ruins of these two elements of the same structure are inseparable (Figs. 41 and 44). As the clay layer was excavated along the northern face of 169, a row of stones was revealed 1.15-1.20 from it, lying parallel to the stones of the northern face, the upper plane of which was approximately at the level of the bottom of its masonry (Figs. 44–46).⁸² The length of structure 169a was traced to 5.8 m. To the west, as was said, it terminates at the 19th century trench, and in the east, rising, disappears.

Masonry 169a was formed of modified blocks of shell stone,⁸³ excluding the eastern end, where cobbles or split stones had

raising of the faces did not have great significance" (Kuznetsov 2013: 8).

⁸⁰ In the eastern part of the foundation (near the western edge of the Central Area), directly in its composition, are large pieces (a compact group) of limestone (a cluster of such stone is to the east of 169, including those that fell into a pit, which cut through the feature). Certainly they (the lower part of feature 150) do not have a relationship to the structure and look like a foreign, later "insert" (thrown into the pit, or is this the base of some structure?).

⁸¹ A layer of clay of no more than a few centimeters was usually placed under a masonry of raw brick, and rather often a different clay than that from which the bricks were made, for example, extremely durable and gray-green in the dry state.

 $^{\rm 82}$ Both this and the other masonry drop from east to west.

 8_3 Their dimensions: 0.2 x 0.2 m; 0.35 x 0.25 m; 0.25 x 0.55 m, and the like.

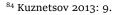
⁷⁷ For example, in the south face, in the vicinity of the "stair" (see below): $0.2 \times 0.25 \times 0.3$ m (cobble); $0.43 \times 0.44 \times 0.12$ m (marl stone); $0.53 \times 0.28 \times 0.18$ m (modified block of shell stone, possibly an architectural feature, on which a construction mark is visible).

 $^{^{78}}$ In 2003 the eastern part of the structure was interpreted as two masonries (walls) 0.7–0.8 m thick, between which were located stones of a "pavement" that was placed 0.10 m below the masonries. However, the researcher reasonably considered this feature a single wall (Kuznetsov 2004: 15).

been placed. Part of the blocks were set lengthwise on the masonry, part transverse (Fig. 46). All the stones were carefully aligned along the face. Slabs of pink marl were laid flatly on top of the stones of the masonry. This, as the only face of the masonry, clearly supports the idea that it served as "support and backing for the structure formed of clay." V. D. Kuznetsov, discussing the functional assignment of feature 169a, focuses attention on its following characteristics: "feature 169a is parallel to feature 169 and was attached to it end to end; the northern face was carefully made, with consideration of the fact that it would be seen; the total length of 169a is less than that of feature 169. . . . " 84 From this the correct conclusion was drawn about the subordinate significance of element 169a in relation to feature 169, to which it was built, and the assumption was made that 169a filled the role of a step to feature 169, which is interpreted as an altar.



Fig. 45. The stone foundation of feature 169. General view from the NW.



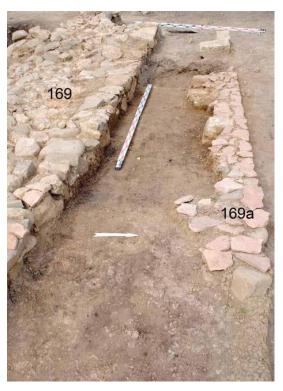


Fig. 46. Stone foundations of features 169–169a. View from the east.

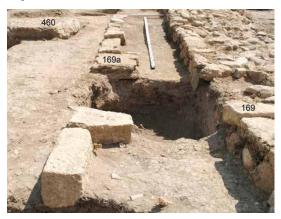


Fig. 47. Stone foundations of features 169–169a. View from the west.

It is necessary, however, to clarify. The northern face of 169a was simultaneously the southern boundary of the pavement of the square (474), the surface of which is level with the upper plane of the stones in the masonry or slightly above them (Figs. 37 and 44).⁸⁵ Therefore, to speak of a "step" is hardly possible. It is evident only

 85 This level also corresponds to the level of the bed of the stone foundation of the south wall of building 460.

that the adobe part of the structure rose above this level by some unknown extent, quite probably enclosing the stones of the north face of masonry 169. Thus, we do not have the necessary basis for the volumetric reconstruction of the structure being examined.86 V. D. Kuznetsov, in the report about excavations of 2003, wrote: "Such a broad wall is more characteristic for a defensive wall, which could not be in this place in the settlement" and noted that "... . taking into account the complexity of interpretation of the feature and its incomplete preservation, it is impossible to determine its functional assignment at the present moment."87 Unfortunately, it is impossible to say more about this even after the eastern part of the feature was investigated.

Of course, there is the possibility of clarifying its dating. Directly in the masonry of foundation 169 was found some quantity of ceramic fragments of various categories and groups, of which the most recent attracted our attention. These were fragments of rims of Chian amphorae with straight neck (or with "conical" toe), two toes of Thasian biconical amphorae, and a small fragment of the lower part of an Attic black-glazed cup of the "Bolsal" group (Fig. 48), which provide us a *terminus post quem* for the structure—last quarter of the 5th / boundary of the 5th–4th centuries BC.

* * *

In transitioning from the descriptive part of the work to attempts at interpretation of the examined architectural complex, the analysis of the archaeological context in the horizon of the first half of the 4th century BC should be expanded. But this work still waits to be done. While without it, syntheses of a broader plan will inevitably have a preliminary character. However, it

⁸⁶ The absence of additional materials does not permit endorsing a religious attribution to the feature. seems that such an attempt will not be useless and will later help more easily to find the necessary reference points.

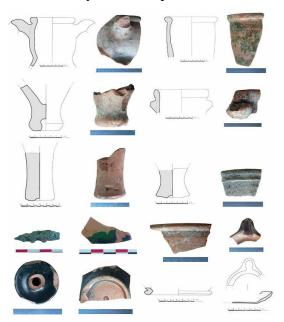


Fig. 48. Finds from the foundation of feature 169.

We will begin with chronological markers. While the date of destruction of building 460 is determined reliably by finds in the layer of its ruins (c. 360-350 BC, that is, the very end of the rule of Leukon I or the reign of Spartokos II), it is not possible to establish very precisely the time of construction. It is possible to say reliably only that the building itself and the structures of the complex synchronic to it were erected no earlier that the last quarter / end of the 5th century BC (that is, simultaneously or, in my view, more probably, after the southern outskirts of Phanagoria were destroyed at the end of the 5th century BC,⁸⁸ evidently due to the conquest of the polis by Satyros I).89 Another question-if later, then how much? The only complex of finds reliably dated to the moment of construction (of foundation 169)

⁸⁷ Kuznetsov 2004: 15.

⁸⁸ My confidence in this is based on the detailed study of the materials from the excavations of the "South

City," to which a separate work was devoted (Zavoykin 2004).

⁸⁹ If the finale of the autonomous minting of coins at Phanagoria is dated to the first decade or quarter of the 4th century BC, this, of course, should be moved to a decade or two later.

unfortunately does not provide any other chronological reference: a *terminus post quem* from the boundary of the 5th and 4th centuries or beginning of the 4 century BC.

Of course, it is possible to place doubt on this date if there is doubt in the synchronicity of the erection of building 460 and the construction of 169-169a. As we saw, the foundations of the building were set (and partially embedded) in the layer of destruction of the previous building, which survived to the middle of the 5th century BC. Here there is no layer separating these buildings. But indeed the layer of the second half of this century was not discovered anywhere in the huge area of the excavation, except in the depressions (pits and trench).90 The most natural explanation for this is the supposition-based on similar later attested facts from this area of the city-that all the structures of the second half of the 5th century BC and the layer that was formed as a result of their living and dying were destroyed⁹¹ as a result of subsequent reconstruction, which was preceded by total levelling of the place. Based on the absence of relevant materials, we will have to date this "reconstruction" approximately to no earlier than the boundary of the 5th and 4th centuries BC. And thus (even recognizing the fact that the materials contained in the structural complex characterize chiefly the time of its "closure" and not the time of construction), we inevitably conclude that the complex of the above-ground structures, with building 460 in the center, dates back to the boundary of the 5th/4th or beginning of the 4th centuries BC.

In the beginning of the article attention was focused not only on the fact that building 460 was erected on top of a public structure (294) destroyed approximately a half century earlier, but also on the fact that the new structure "inherited" the traditional orientation toward the cardinal points (with deviations) and even its walls were partially erected on the old masonry. This is hardly a simple "accident." It seems acceptable to raise again the question: did the new building also inherit the functional role of the preceding public structure with civil assignment?

Differences in the dimensions and plan of structure 460 from the building preceding it,⁹² which with a series of reconstructions functioned on this place in the second half of the 6th-first half of the 5th centuries BC, do not, in my view, make it possible to give a positive answer to the posed question. But in this case we should talk about some restructuring on the acropolis of the city. Guessing about its nature is useless: we have no sources providing the possibility of shedding light on this episode of the history of Phanagoria. But also, ignoring that this restructuring happened just at the time⁹³ of important changes in the life of the polis (including it in the emerging power of Spartocids)94 is hardly permissible.

Since, as was noted, the plan itself of both the early and later public structures cannot provide any reliable interpretation in functional regard, there remains only the attempt to rely based on the chronology of the features opened by excavations, to examine them in a historical context.

Thus, if a new stage in the life of the Phanagoria acropolis was not connected

⁹⁰ Zavoykin and Kuznetsov 2013: 165–168.

⁹¹ We, of course, cannot accept that in this period, when, as we know, life in the southern outskirts of the city was "in full swing" and even the defensive walls that protected this area were erected, the acropolis of Phanagoria was a "wasteland."

⁹² Public building 294 consisted initially of three, and later, of four rooms, extending from north to south (with deviation). In relation to the larger northern "block" of rooms (1 and 2), the smaller two southern

rooms (3 and 4) clearly occupied a subordinate position. In the temporally last floors of room 1, in its center, was a small adobe hearth-altar, beside which there was a broken protome of a female deity; the hearths in the south rooms correspond more to household assignment.

 $^{^{93}}$ Within the framework of archaeological dating, of course.

⁹⁴ See Zavoykin 2013: 174-176.

with the fact that the structures of this center of civil life of the polis were destroyed (as in the southern outskirts of the city),95 then is the "restructuring" revealed by the fact that civilian life itself changed after the inclusion of Phanagoria in the Bosporus state? What the essence of such changes consisted of can be formulated only in the most general way. The loss of independence resulted in usurpation by central authority of part of the sovereign rights and freedoms of the polis, as well as a tax burden and perhaps the need to provide a military contingent at the request of the Panticapaeum tyrant. It is most likely that compliance with the "new constitution" and loyalty to central authority in the state must have been locally monitored by representatives of the Spartocids. How exactly such control was carried out in the time of these rulers, we do not know.⁹⁶ But if we nevertheless speak of the institution of a "governorship," we should probably assume that in the early period of the history of Phanagoria, as part of the Bosporan state, the residence of the representative of central authority who controlled the situation not only in the territory of the Phanagorian polis, but also beyond its boundaries, could have been located exactly in this city.97

I am not at all trying to lead the reader to the idea that building 460 on the Phanagoria acropolis was the residence of such a "royal" representative. This is just an attempt to describe in general terms the historical context, synchronic with life of this architectural complex, which is being examined in the present work. We turn to it again, coming back to earth.

As was established earlier, the relatively small in plan building 460 (its dimensions are about 10 x 10 m within) in all probability was two-story. Its gabled (?) roof was covered with tiles. The entrance on the east side was formed as a two-columned portico, the ends of which flanked the protrusions (*antae*) of the north and south walls.⁹⁸ Even with the small height of the stories, considering the thickness of the inter-story floors and height of the roof, the total height of the structure reached no less than 7–8 m. Thus, the building, erected on a strong stone foundation, had the appearance of a kind of tower.

The plan of the building, it must be recognized, was quite unusual. It is not reminiscent of any known type of public building. In any case, this structure had a civic character, though, as was noted, it has certain similarity with two-story residential homes.⁹⁹

Paved areas abutted the east and west of the building, and the main street passed on the north, on the opposite side of which (directly opposite building 460) was a small *templum in antis*. The building was flanked on the south by some monumental structure of unexplained assignment.

And last. The building perished in a terrible fire between 360 and 350 AD. With consideration of the poor preservation of the architectural remains of this time, it is difficult to say reliably that this fire was purely local. But the impression is such. Not in construction 169–169a, nor in the pavements adjacent to the building ¹⁰⁰ of the squares and street, nor in the remains of the temple north of it—nowhere were clear traces of fire action noted. We will

⁹⁵ No traces of such events were found for all the years of excavations in the "Upper City."

⁹⁶ In any case, the bureaucratic apparatus, as far as epigraphic documents permit us to judge, developed in the Bosporus only in the first centuries AD.

⁹⁷ Just as in the first centuries AD, located here was the residence of the "governor of the island" (ὁ ἐπὶ τῆς νήσου – νησσάρχης).

⁹⁸ Since the northeast and southeast corners of the structure were destroyed by later pits, it is permissible in principle to think of a prostyle form of facade. However, this idea remains unsubstantiated.

⁹⁹ In distinction from building 460, these homes in residential quarters had a fenced yard in front of them and, in several cases, additional domestic structures in their vicinity.

¹⁰⁰ Besides pavement 209, "some hewn pieces of shell stone that were in the fire burned to pink" (Kuznetsov 2005: 16).

never learn the reason for the catastrophe that destroyed the public building on the acropolis of Phanagoria. It could have been purely domestic. Though it could have been something else. But it does not seem possible to speak of the probability of a total destruction (as happened here twice in the course of the first half of the 5th century BC).¹⁰¹

How in this regard can we not recall another fire on the Phanagoria acropolis that occurred in 63 BC?¹⁰² These two fires are separated by only half a meter of cultural layer and three centuries in the life of the public center in "the capital of the Asian Bosporans" (Strabo XI: 2: 10).

One way or another, soon after building 460 perished, a new stage of urban development in the history of the acropolis was begun, a distinctive feature of which is the strong orientation of the buildings according to the cardinal points.

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¹⁰¹ Neither materials from the excavations permit thinking in this direction, nor everything we know about the history of the Bosporus, in the middle of the 4th century BC, reaching a peak in its development and protecting the eastern lands from possible raids

of militant Maeotes (over which the Spartocids "reigned"), provide any basis for this.

¹⁰² About this, see Abramzon and Kuznetsov 2008: 184–194; 2010: 59–85; 2011: 64–94; 2015: 32–36.

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