

The Lower City and Sector NGS: history of research

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Olbia is located on the northern Black Sea coast on the right side of the Bug Estuary close to where the estuary merges with Dnieper. The topography of Olbia consists of three sections: the Upper City (42-43 m above the level of the estuary), the Lower City (10-12 m above the level of the estuary) and, connecting them, the Terraced City.

The Lower City is segmented rather equally by way of a plateau with a small, smooth downturn in the central part, the level of which today is on average 34 m above the level of the estuary. Over the past 2,000 years the water of the estuary has eroded away a strip of the Lower City, 170-290 m wide. As a result, this part of the city now measures ca. 3.4 hectares.¹

The cultural layers in the central and southern parts of the Lower City rest directly on the surface of the Novočernomorskij terrace, which can still be seen in several places in the Lower City.² The surface of this terrace is covered by a layer of quartz sand with oolites ca. 0.8 m thick, with a lower layer (nearly 0.3 m thick) of Maeotian clay, which is water-proof. The sand layer was covered by the cultural layer of the initial occupation (which can be especially well seen in Sector NGC).³ This was an almost black clayey-ashen layer with materials of the 6th-4th century BC. In its lowermost horizon are fragments of Chian bulging neck amphoras of the second half of the 6th to the early 5th century BC. Similar features were traced in layers of the 6th-5th century BC in the Upper City.

The northern third of the Lower City smoothly passes into the terraced part of the city. At the same time its surface slants to the east where the difference in height is nearly 5 m over approximately 30 m. Here the cultural layers, unlike in the central and southern parts of the Lower City, lay directly on the continental loess clay, in which neither building remains nor finds are located. The Novočernomorskij terrace did not reach this part of the city.

19TH CENTURY

Archaeological investigation of the Lower City began in the early 19th century when plans of Olbia were made by I.P. Blaramberg, P.I. Koeppen, I.S. Borislavskij, F.S. von Mucelja, I.M. Murav'ev-Apostol, A.S. Uvarov, K. Prudius and others.⁴ The remains of constructions in the southern part of the Lower City indicative of an ancient settlement, such as defensive walls and remains of so-called "water pipes", are depicted on the plans of Koeppen, Murav'ev-Apostol and Uvarov.⁵ Later, B.V. Farmakovskij investigated the zone along the coastal cliff, but he did not find remains of these "water pipes". Later research of the 1960s showed that they were, in fact, the remains of orthostat walls.⁶

Further research in the Lower City was connected with revealing its cultural layers. Thus, A.S. Uvarov opened a small excavation between the modern Sectors NGF and NG, as well as two trenches on the slopes leading down to the Lower City.⁷

In the 1870s, I.E. Zabelin and V.G. Tizengauzen opened small perpendicular trenches in the central part of the lower plateau, the remains of which can be seen even today. These trenches crossed a number of building remains and cultural

¹ Kryžickij 1985, 99.

² Farmakovskij 1913, 6, 7; Lejpunskaja 1971, 168-171; Šilik 1975, 68-70; Kryžickij 1984, 44-53.

³ Lejpunskaja 1971, 171.

⁴ Karasev 1956, 9-34; Tunkina 2002, 423-452.

⁵ Karasev 1956, 13, 20.

⁶ Kryžickij 1967, 132, 133; 1985, 18.

⁷ Uvarov 1851, 19th-century plan.

layers, but without providing any general picture. However, of interest is the find of a stepped stylobate of the 3rd-2nd century BC,⁸ as well as the remains of a contemporary street which ran parallel to the estuary.⁹ I believe that this stylobate belonged to a public or cult building.¹⁰ In the vicinity, wells of the Hellenistic period were excavated.¹¹ During the more recent excavations, no large buildings of public or cult purpose have been found in the Lower City.

B.V. FARMAKOVSKIJ (1909-1914)

Further research of the Lower City is connected with the name of B.V. Farmakovskij. Between 1909 and 1914 he studied its southern part. Here he opened Sector NGF (“the Lower City of Farmakovskij”) which yielded significant results. In this sector eight cultural layers were investigated, beginning with the 5th century BC. The remains of two great private houses of the Hellenistic period and houses of the first centuries AD were brought to light.¹² Simultaneously, Farmakovskij tried to investigate the flooded part of Olbia, and under his management the first measurements of the so-called quay were made.¹³

I.I. MEŠČANINOV (1930S)

In 1930, to the west of the present Sector NGS, two small prospecting trenches (Sector NR) were opened, in which the remains of Hellenistic stone walls were found.¹⁴ In the second half of the 1930s, Sector NG was opened to the north of Sector NGF. Here were found the remains of a defensive wall of the first centuries AD, private houses and a kiln which combined pottery making and perhaps bread baking at the same time.¹⁵ Supplementary examination of the water-supply system in Sector NGF was also carried out.¹⁶

V.V. LAPIN (1950S)

Following the above-mentioned investigations, the Lower City was not subjected to further study for a long time. Only at the end of the 1950s did V.V. Lapin pay attention to a number of wells in its southern part. His work allowed him to determine the lay-out of the southern edge of the plateau as well as the direction of some streets and their crossroads.¹⁷

S.D. KRYŽICKIJ AND COLLABORATORS (1960S-PRESENT)

In the 1960s, Sector NGC in the middle of the Lower City was excavated by B.V. Borisov, S.D. Kryžickij and N.A. Lejpunskaja. The excavation reached virgin soil, and thus a stratigraphy of the sector was devised. Here the continental clay layer was covered by the sand of the Novočernomorskij terrace over which cultural remains containing pottery of the 6th-5th century BC, accumulated during the initial stage of the colonists’ presence, have been revealed. Over this, the cultural layers of pre-Getic Olbia were found, with remains dating to the 4th-2nd century BC of the normal Olbian type of residential houses with basements and rooms above ground. The layer accumulated at the turn of our era appeared to be sterile. Over this layer were traced no less than three periods of post-Getic Olbia. During this time, the area was an

⁸ Arkas & Brun 1872, 412-414.

⁹ Kryžickij 1968, 145.

¹⁰ Kryžickij 1985, 20.

¹¹ Lapin 1960, 91-102.

¹² Farmakovskij 1913; 1914; 1916; 1918; Levi & Karasev 1955, 225; Kryžickij 1971, 77-87.

¹³ Farmakovskij 1915, 23.

¹⁴ Meščaninov 1931, 23-24.

¹⁵ Slavin 1940, 51; 1949, 8-17; 1952, 55; Levi & Karasev 1955, 239-241; Vetštejn 1958, 61-76; Kryžickij 1985, 140ff.

¹⁶ Karasev 1941, 129-139.

¹⁷ Lapin 1960, 91-102.

industrial suburb. The building remains of the 2nd to the early 3rd century AD were covered by extensive pavements of the first half to the middle of the 3rd century AD. They were followed by small constructions of the end of the 3rd to the first half of the 4th century AD, which existed, probably, until the third quarter of the 4th century AD.¹⁸

In 1965-1968 and 2001 excavations were conducted along the coastal cliff¹⁹ and in Sector NGS.²⁰ New data concerning the periodization and character of construction of the pre-Getic and especially Roman period were obtained, as well as knowledge of production in the area, based in particular on the finds of workshops processing metal and bone.

Besides the usual research on land, in addition attention was given to the destroyed and flooded parts of the Lower City. In 1961 the first underwater investigation was carried out, which led to the first representation of the topography of the flooded part of Olbia.²¹ K.K. Šilik developed a palaeogeographical plan of the Lower City.²² The final hydroarchaeological research in the flooded part of Olbia was carried out between 1971 and 1977.²³ As a result of these works, the height of the cultural layers in the flooded part of the Lower City was ascertained, the location of the eastern border and thus the area of the Lower City in antiquity was identified, the continuation of the Roman and pre-Getic defensive walls was traced, the possible place of the harbour and harbour constructions was established, and the location of the fish market was hypothesized.

Thus, by the middle of the 1980s, the southern half of the Lower City had been investigated to a much higher degree than the northern one, where, except for three trial trenches made in 1930, no further excavation had been conducted. It was, therefore, decided to continue excavation here. In addition, excavation in this area was urgent because of the advancing erosion of the coastal cliff.²⁴ Accordingly, in 1985 annual excavation in the northern half of the Lower City began.²⁵

SECTOR NGS (N.A. LEJPUNSKAJA)

The primary goal of the excavation was to understand the historical topography and the chronology of the cultural layers in relation to the general historical periodization and stratigraphy of Olbia. Naturally, this would involve the study of the structures of the northern part of the Lower City, its planning, architectural and chronological features, including the definition of the beginning and the termination of life in this territory. A particular issue became the search for the continuation of the northern defensive line, which was identified in the Upper City on top of the southern slope of the northern ravine.²⁶ Its continuation would logically be expected on the northern border of the area of excavation, which passes along this ravine. In favour of this location is also the fact that even today a slight deepening, going in a straight line from the Upper City to the northern border of Sector NGS, can be traced on the surface of the terraced part of the city.²⁷

In 1985 two prospecting trenches, situated at a distance of 110 m from each other and called NGS-Ju and NGS-S (Lower City North, southern and northern trench respectively) were opened.

During work in the southern trench (ca. 200 m²) remains of multi-layered pottery pavements of the Hellenistic period were opened, as well as extremely fragmentary building remains in the form of parts of rooms with mud brick walls. An exception to this type of construction were a small construction, most likely a cult structure, in the form of two limestone orthostats and a pavement of the 3rd-4th century AD and also the remains of a large ditch running north-south of the 1st-3rd century AD(?). It has been established that the Hellenistic layers in this area were no more than 1-1.5 m thick. Practically none were preserved *in situ*.

¹⁸ Kryžickij 1967, 131-133; 1968, 142-146; Lejpunskaja 1971, 168-171; 1988, 71-82; Kryžickij et al. 1994, 40-41.

¹⁹ Kryžickij 1967, 131-133; 1968, 142-146; 1971a, 175-179.

²⁰ Krapivina et al. 2002, 152-153.

²¹ Blavatskij 1962, 223-224.

²² Šilik 1975, 51-91.

²³ Kryžickij 1984, 36-65; Kryžickij 1989, 169-180.

²⁴ Kryžickij 2001, 20f.

²⁵ The director of the Olbian Expedition was S.D. Kryžickij; from 1996 V.V. Krapivina. The head of excavation in Sector NGS was N.A. Lejpunskaja assisted by T.L. Samojlova (1985-1997) and A.V. Karjaka (2000 till present). In different years, the following served as heads of individual squares of the sector: P.D. Diatroptov, V.I. Nazarčuk, A.V. Karjaka, N.A. Gavriljuk, and others.

²⁶ Farmakovskij 1926, 171ff.; Slavin 1940, 10-11; Kryžickij 1985, 91.

²⁷ In 2004-2005 in the northeastern part of the sector, layered foundations which may be connected with a northern defensive wall were investigated (Karjaka 2008, 163-180).

Very different results emerged from the northern trench, which in 1985 also amounted to nearly 200 m². Here, significant cultural layers with Hellenistic building remains were found, and in the surrounding area (and subsequently found across most of the sector) traces of a large landslide were discovered. Already in 1985, in a layer of the first centuries AD, directly under the humus, was found a pavement oriented north-south, probably connected with the ditch opened to the south. Subsequent excavation across the entire sector revealed various remains of the first centuries AD, such as rooms and fences, heaps of collapsed stone walls with no precise lay-out and destroyed pavements. Perhaps the most interesting finds dating to the 4th century AD, the latest period in Olbia,²⁸ are a child's burial in the eastern part of the trench²⁹ and two large drying furnaces to the north.³⁰

The results gained from the two trial trenches in 1985 made it clear that the area of the northern trial trench was the most promising; accordingly, excavation continued there in the following years. At the same time, the name "Sector NGS" was given to the entire sector. Excavation continues in the sector up to the present time.

In the first season, excavation of two Hellenistic houses, House I-1 (the initial name in the field documentation was NGS-2) and House II-7 (initial name NGS-1), placed on two terraces and divided by the Western Longitudinal Street with a drain running north-south was begun. The pavement of a courtyard, a small room at ground level and some basements of different building periods were excavated. This first excavation season demonstrated the potential of the site, and excavation was extended in all directions.

During 1986-1987, research of houses on the upper terrace (Northwestern Houseblock, House I-1) proceeded, and on the middle terrace the Northern and Western Houseblocks were investigated (Houses II-3, II-5 and II-7, initially numbered NGS-3, NGS-1 and House III-1, initially numbered NGS-5). In House II-7 a complex with an altar inside the house was opened. Two crossing streets, the Western Longitudinal and the Northern Transversal Streets were traced. At this point it became clear that the grid plan of the quarters of the northern part of the Lower City deviated slightly in relation to its orientation in other parts of the city.

During the following years, excavation of the houses of the Northern Houseblock (Houses II-3, II-4, II-5, II-6 and II-7) was completed. The excavation of rooms in the Western Houseblock (Houses III-1 and III-2) proceeded, and excavation of Houses IV-1 and IV-2 in the Central Houseblock (NGS-6 in the initial numbering), located to the south of the Northern Transversal Street, was initiated. Concerning the houses of the Western Houseblock (Houses III-1 and III-2), it was established that the three eastern rooms, one of which was entered from the Western Longitudinal Street, shared a common back wall, from which there was no entry to the rooms located to the west. This allowed us to assume a trading purpose of House III-2.

It was discovered that, further to the east, the East Longitudinal Street ran parallel to the Western Longitudinal Street, where the eastern part of House II was found.

Excavation of the Central Houseblock, in particular House IV-1, was also initiated. Here, two basements, which were amalgamated into a single basement in a later building period, were opened. The reorganization of the basements and the finds of late Hellenistic amphoras *in situ* have allowed us to specify the chronology of the latest building period to the mid- and late Hellenistic period in the northern part of the Lower City.³¹

An interesting discovery during this period of research was a large accumulation of yellow clay in the northern part of the excavation, blocking an ash layer, and heaps of stones with finds of the last quarter of the 4th century BC. This was followed to the south, and we believe that its accumulation is to be connected with a great fire, probably an event during the siege of Olbia by Zopyrion.³²

In following years the excavation area was expanded, mainly to the south. Necessitated by the rapid erosion of the coastal cliff, the eastern part of the sector above the estuary was simultaneously investigated. In addition, it was necessary to complete the study of a number of separate small areas where previous excavations had not reached the lowest cultural layers. These works revealed some fragmentary constructions of the Classical period. Unfortunately, these are imperfectly understood due to their poor state of preservation, as are other contemporary building remains excavated later.

²⁸ Kryžickij et al. 1994, 40-41.

²⁹ Lejpunskaja, in press.

³⁰ Lejpunskaja 1995, 39.

³¹ Lejpunskaja 1994, 61-62; Lejpun'ska 1999, 64-76.

³² Lejpun'ska 2001, 62.

By this time it had become clear that the site had undergone a catastrophic event at the beginning of the late Hellenistic period. It could be seen that in reorganizing the houses, the early Hellenistic basements were partially reconstructed, thereby reducing their area, or they went out of use. Above them, constructions of later building periods were erected. Moreover, practically across the entire sector rather serious deformations in the form of cracks, not just of basement walls but also of the ground, were noticed.

In 1990-1992 houses of the Western and Central Houseblock, Houses III-3, IV-1 and IV-2, were investigated. Inside House IV-1 remains of rooms of the Classical period, which were not connected with the Hellenistic house, were brought to light. The general lay-out of the Hellenistic house is certain. Moreover, in one of the eastern rooms of House IV-2 remains of the latest building period of the pre-Getic period were found: a large stone altar with a fence located above a collapsed Hellenistic basement.

As a result of works carried out during these years no less than four houseblocks were excavated: Northwestern (House I), Northern (House II), Western (House III) and Central (House IV). Later, the Southern Houseblock (House VI), limited by the Middle and Southern Transversal Streets and the Eastern Longitudinal Street, and one further house, House VII situated to the south, were opened (excavation has not yet been completed). The Eastern Houseblock (House V) has only partially been investigated, since the building remains were preserved in an extremely fragmentary state.

In 1993-1994 excavations were conducted in the area of the Western Houseblock (Houses III-1, III-2 and III-3), the Central Houseblock (Houses IV-1, IV-2, IV-3 and IV-4) and the Southern Houseblock (House VI-2). In the following years excavation reached virgin soil in a number of places.

During these two years of work, the northern parts of Houses VI-2 and VI-3 in the Southern Houseblock to the left of the Middle Transversal Street were excavated. House VI-2 had been radically reorganized in the late Hellenistic period; in particular, its western basement had been considerably reduced in size. In another basement of the house there was an open mill, unique in Olbia. Here, fragmentary remains of construction of the Classical period were revealed.

During research of one of the rooms of House IV-2 in the Central Houseblock, evidence of life in the late Hellenistic period was revealed, when, above a collapsed basement, a large furnace was exposed. In the same room an earlier altar was blocked. A similar picture was observed in other areas of the site.

We can distinguish three terraces on which the buildings were placed. The upper terrace, which reaches the eastern border before the southern continuation of the Western Longitudinal Street, houses the Western and Northwest Houseblocks. Below is the middle terrace, which has the largest area for house building. On it are the Southern, Central and Northern Houseblocks. The border between the middle and lower terrace is difficult to establish. Perhaps Houses IV-3 and IV-4 are situated on two different terraces; House IV-4 at least is on the lower one.

Excavation between 1995 and 1998 was concentrated in the area of the houses of the Southern Houseblock and of the eastern stretch of land along the estuary. One of the most interesting finds during these years was the detection in the eastern part of the excavation of a late Archaic earth-dwelling, the first one found in the Lower City. In 2004 the remains of a similar structure were uncovered.

In some areas of the site, excavation during these and later years reached virgin soil. As a result, fragmentary construction remains of the late Archaic and early Classical periods were disclosed in the forms of pits, mud brick fences in no longer extant rooms and separate parts of rooms. Ash layers with corresponding finds were also located. All this evidence testifies to the fact that this territory was intensively occupied in the 5th century and the beginning of the 4th century BC. However, the grid plan of the Classical construction clearly did not coincide with the Hellenistic one, even though the basic layout of the streets already existed.

During the same period, layered foundations, which previously were only known from the Upper City, were recorded for the first time in the Lower City. Later they were found at several locations within the sector.

In 1999 the houses of the northern part of the Southern Houseblock were revealed and their lay-out and borders defined. To the east of the Eastern Longitudinal Street (Eastern Houseblock, House V), fragments of two very badly preserved rooms were excavated. The entire eastern part of the sector has been extremely badly damaged due to the rising waters of the estuary and cliff erosion.

In 1999 the Southern Transversal Street, which delimited the southern quarter with Houses VI-1, VI-2 and VI-3, was excavated. Along it, oriented to the east, was a large stone drain. To the east it is crossed by the East Longitudinal Street; further west it continues in the unexcavated part of the site.

From 2000 onwards, except for small-scale supplementary examinations, work proceeded in two areas of the sector only: to the north and to the south of the buildings described above. To the north, the remains of the Hellenistic period were practically completely destroyed by a landslide, which also destroyed the defensive walls which the Northern House-

block adjoined. The study of the living blocks located to the south has just begun. Their study constitutes an independent element of research, falling outside the scope of the present publication.

Excavation of the Hellenistic layers of the Northern, Central and Southern Houseblocks has been completed. In the Northwestern and Western Houseblocks it has been partially completed. It is not anticipated that excavation will continue further west, since it is believed that this would lead to uncontrollable destruction of the terraced part of the city.