

The main stages of development of building activity in the Lower City

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From the very beginning, the study of Olbia has been concerned with the date of its foundation, its historical topography and the character of its buildings; all of which have prompted numerous discussions. The possible chronological framework for the foundation of the city is wide: from Eusebius' date of 645/644 BC³³ to the second half of the 6th century BC.³⁴ Now, the most widely-accepted date, based on the research conducted in the Upper City, especially in the Western Temenos, is the second quarter of the 6th century BC.³⁵ Archaic layers have been investigated most fully in the Upper City (Sectors AGD, JuzA, Eastern Temenos, R-25). Since this is where the most ancient cultural layers preserved *in situ* have been excavated, it is therefore logical to conclude that the chronological scheme is fundamentally connected with this part of Olbia.³⁶

THE ARCHAIC PERIOD

In the Lower City a slightly different picture can be observed. Excavations in 1938 on the upper terrace of Sector NGF,³⁷ located in the southern extremity of the Lower City, took place directly on the terraced slope.³⁸ According to the director of the excavation, E.I. Levi, remains dating from the middle of the 6th century BC until the current era were excavated.³⁹ No building remains were found, but part of a cultural layer covering an area of no more than 4 x 5 m was identified, which, in Levi's opinion, was preserved *in situ*.⁴⁰ It rested directly on virgin soil, but with a greater bias to the northeast (up to 2 m). According to Levi, this layer contained pottery, including a fragment of an Archaic terracotta, on the basis of which she dated the layer. Unfortunately, in the publication there is no full documentation of all the finds, in particular of the amphoras, which could help date the layer more precisely. Nevertheless, Levi dated it close to the middle of the 6th century BC and she assumed that this was the precise location of the earliest Greek settlement in Olbia.⁴¹

I have proposed that this site actually represents part of a dump, formed on the slope of the Terraced City.⁴² Moreover, the significant bias of the site to the northeast forces one to doubt that cultural layers in this area were preserved *in situ*, because during subsequent works in the Terraced City and in the Lower City it has been discovered that layers related to soil movement are very mixed, as this particular layer is. This phenomenon has been repeatedly encountered across the whole site, and in the excavation of Sector NGS it was particularly common in its eastern part. All the above leads us to doubt E.I. Levi's assumption of the existence of a settlement here already in the middle of the 6th century BC.

For a long time after the above-mentioned excavation, no Archaic materials, whether in the form of a cultural layer *in situ* or of building remains, were recovered in the Lower City, even though finds of the Archaic period occurred in

³³ Euseb. *Chron. Can.* P. 95b; Latyšev 1887, 38. Researchers now unanimously connect this date with the settlement on Berezan.

³⁴ Boltenko 1930, 35.

³⁵ Kryžickij & Rusjaeva 1999, 43-47.

³⁶ Kryžickij & Rusjaeva 1999, 45.

³⁷ Sector NGF = "the Lower City of Farmakovskij".

³⁸ The Archaic building remains revealed in two areas of the lower part of the Terraced City so closely adjoin the area of the Lower City that they should be considered as belonging to the latter (Levi 1941, 308; Kryžickij & Nazarčuk 1994, 99-106).

³⁹ Levi 1941, 316.

⁴⁰ Levi 1941, 308.

⁴¹ Levi 1941, 316.

⁴² Kryžickij 1971, 137; 1985, 62.

later layers, mostly in the form of fragments of early amphoras, such as Chian narrow-necked and occasionally early Ionian ones, as well as in the form of a small amount of East Greek and Attic pottery. Thus, it is necessary to note that in various locations of the Lower City, in Sector NGC and in underwater works,⁴³ research has identified the surface of the Novočernomorskij terraces, consisting of quartz sand with oolites, which arose 5,000–6,000 years ago and which rest upon a layer of Maeotian clay.⁴⁴ This stratigraphical picture has provided the basis for concluding that in the sand of the Novočernomorskij terrace, earth-dwellings could hardly be located (just like the earth-dwellings in the Upper City of Olbia and almost all other Classical cities on the northern Black Sea coast)⁴⁵, and as a consequence, that the development of this area occurred only in the beginning or the first half of the 5th century BC, at the time of the appearance of the above ground constructions.⁴⁶

However, further excavation has shown that in the areas where the Novočernomorskij terrace was absent (approximately the entire northern third of the Lower City and the adjoining terraced parts) development began not later than the last quarter of the 6th century BC. Thus, in Sector NGS, where the ancient surface was formed of clay, remains of earth-dwellings from the end of the 6th to the beginning of the 5th century BC have been found.⁴⁷ At the same time or slightly later, in the lower part of the Terraced City construction above ground was apparently already being conducted. So, single-chambered(?) constructions with pisé walls on stone socles of the last quarter of the 6th to the beginning of the 5th century BC have been excavated in the middle of the theatre-shaped slope of the Terraced City.⁴⁸ These are the earliest Archaic building remains constructed above ground and found *in situ* in this part of Olbia.

Thus, although neither a cultural layer of the Archaic period nor contemporary remains of monumental constructions have yet been found here *in situ*, we confidently propose that the beginning of the development of the Lower City took place not later than the last quarter of the 6th century BC.⁴⁹ However, there are grounds to assume that this process began slightly later here than in the Upper City.

We do not possess enough data to determine the lay-out and buildings in the Lower City during the Archaic period. We cannot even be sure that there were private houses at all. However, in those parts of the Lower City where there was no Novočernomorskij terrace there were apparently earth-dwellings and, on the slope, probably single-chambered dwellings.

THE CLASSICAL PERIOD

In the following stages, the building development of the Lower City as a whole coincided chronologically with that of the Upper City. In the Lower City, no Archaic layers (except for the previously-mentioned earth-dwellings) and no Classical or Roman layers are preserved. The remains of construction of the 5th–4th century BC revealed here are fragmentary, but nevertheless more comprehensive than the Archaic ones. They were excavated in the southern and northern parts of the Lower City, in Sectors NGF and, probably, in Sector NR, as well as under water.⁵⁰ In Sector NGS, building remains of this period consist of separate isolated basements or part thereof, remains of storage pits and remains of pavements. No complete building complex of this period has been revealed neither in the Lower City as a whole, nor in Sector NGS in particular. It is therefore difficult to judge the features of individual houses and changes in building quarters, and, more so, it is difficult to obtain a general plan of the Lower City. However, there is enough evidence to suggest that within the 5th–4th century BC the basic lay-out of this part of the city was created. It consisted of separate houseblocks located along streets and lanes. It is necessary to emphasize that almost all the excavated building remains of this time are found within the perimeters of later houses, though they do not repeat their lay-out.

⁴³ Kryžickij 1967, 131–133; 1968, 142–146; 1984, 49; Lejpunskaja 1971, 168–171.

⁴⁴ Lejpun'ska 1971, 171; Šilik 1975, 61–63; Kryžickij 1979, 120.

⁴⁵ Kryžickij 1982, 11; 1993, 41.

⁴⁶ Kryžickij 1979, 120; 1985, 67.

⁴⁷ Lejpunskaja & Samojlova 1995, 32–33.

⁴⁸ Kryžickij & Nazarčuk 1994, 99–106.

⁴⁹ However, it is necessary to note that a significant part of the Lower City is inaccessible due to flooding. Nonetheless, underwater research has established that the area of the Lower City which is now flooded constituted nearly 12 hectares in the 5th–4th century BC (Kryžickij 1984, 63).

⁵⁰ Meščaninov 1931, 23, 24; Kryžickij 1984, 51; 1985, 78.

The Lower City at this time was clearly already practically completely built up with mud brick houses having all of the basic features peculiar to Olbian houses. They had tiled roofs, courtyards and basements. Excavation has located a number of partly preserved rooms and especially basements, with *pisé* floors and low rounded fences in their corners (540, 691, 116, 207, 307, etc.),⁵¹ sometimes with altars (Basement 390). A significant proportion of the walls was founded upon virgin soil or on the ancient surface; occasionally they blocked the remains of earlier pits. Obviously, in the 5th century BC houses were constructed in practically undeveloped territory.

In Sector NGS, structures made entirely of mud bricks were constructed also. For example, a room was excavated with a *pisé* floor and a mud brick partition, which was founded on virgin soil (599 and 592). The partition was made from the usual Olbian flat mud bricks. The remains of a room with mud brick walls were excavated in the area of House II-3 in the Northern Houseblock, below the walls of a Hellenistic basement.

Structures with purposes other than living spaces can also be attributed to the Classical period. The earliest epigraphical reference to Olbia's harbour dates to the 5th century BC (*NO 2; IOSPE I², 20*). Results of underwater research allow us to mention that during this period the earliest warehouses were probably constructed.⁵² It is likely that the "old" fish market mentioned in the decree in honour of Protogenes (*IOSPE I², 32*) relates to the Classical (if not the Archaic) period. In any case, the results of the underwater investigations allow us to assume the existence of this market in the 5th-4th century BC in the northeast part of the Lower City.⁵³ No later than the 4th century BC, the northern defensive wall of the Lower City, dating to the 5th-4th century BC and which passed to the south of Sector NGS, was destroyed.⁵⁴ Thus, by this time the Lower City (as well as the Upper one) had obtained the urban lay-out typical for an ancient city. Despite the small quantity of actual building remains, the above-mentioned facts as well as finds of the 5th and 4th centuries BC indirectly testify to this. In terms of finds, a significant volume of material has come to light: fragments of amphoras, tablewares, kitchenwares and coarsewares, ornamental items such as terracottas, black-glossed, black-figured and red-figured pottery, coins, etc. This, and also the rather high quality of the design of the houses, testifies to an active life in this area of the city and its more or less high economic level. The population of the northern part of the Lower City at this time represented the middle class of the civil community of Olbia.

THE EARLY HELLENISTIC PERIOD

Not later than the last third of the 4th century BC, traces of an immense fire can be traced in the northwestern part of Sector NGS in the form of a deep layer of mud brick material, 1.3 m thick, with layers of ash of different thicknesses extending for more than 18 m east-west and nearly 6.5 m north-south. The upper level of this layer was covered with a cultural layer of grey clay containing Hellenistic materials. In the lower horizon of the ashy destruction layer, plentiful material of the 4th century BC, not later than its third quarter, prevailed. In the same layer heaps of cut stones and rubble were found, which implies that stone constructions dating to before the "incident", had been practically completely destroyed.

We may note that the fire was immense – it was not limited to the area of this mud brick layer, but extended further to the south and to the east. Traces have been revealed as far away as 50 m south of the northern border of Sector NGS. It is likely that the fire and the resulting destruction layer can be connected with the destruction of the defensive wall.

The mud brick layer suggests that the line of the defensive wall of the pre-Getic period, which has been brought to light in the Upper City (Northern Gate), continued along the northern border of Sector NGS. This assumption was proved by the excavation of 2005, when in the northeastern corner of the sector the remains of layered foundations were unearthed, the arrangement and character of which testify to their being part of a monumental construction. In Olbia, it was customary to construct the defensive wall of mud brick with a layered foundation under towers and curtain walls. Similar foundations of the same period have been revealed in excavations of the Western and Northern Gates in the Upper City.⁵⁵

⁵¹ Numbers of the building remains in accordance with the plan of Sector NGS.

⁵² Lejpunskaja 1979, 98; 1984a, 78; Kryžickij 1984, 61-63.

⁵³ Kryžickij 1984, 63

⁵⁴ Kryžickij 1984, 51.

⁵⁵ Kryžickij & Lejpunskaja 1988.

The traces of extensive fire of the third quarter to the end of the 4th century BC found in the area of the Western Gate and in Sector NGS, but not in other excavation sectors in the Upper and Lower City, give reason to assume that they can be connected, most likely, with the siege of Olbia by Alexander the Great's commander Zopyrion in 331 BC.⁵⁶ The very scale of the fire makes us believe that the defensive wall and towers had covered wooden galleries. In the houses, wood was used only for roofs and the floors over basements.

After this fire, Olbia entered a heyday of economic prosperity, which was reflected, in particular, in building activities.⁵⁷ In the Upper City, a comprehensive reorganization was carried out of the city's defensive works (Western and Northern Gates), the public and cult centres (Eastern Temenos and buildings around the Agora), and the living quarters (Sectors I, AGD, JuzA and the Central Quarter in area of the Agora). Similarly the living quarters in the Lower City were reconstructed (Sectors NGF, NG, NGC, NGS).

By this time, the network of the main streets of the Lower City was finally created. In both the Upper and Lower City, longitudinal streets nearly 500 m in length ran north to south.⁵⁸ In the Lower City their remains can be traced in several places. The northern section deviated 25-30 degrees to the east. Alongside it, some wells were brought to light.⁵⁹ Perpendicular to it, the longitudinal street was crossed by a number of streets which went from the harbour to the terraced part of the city, and which deviated in direction by the same 25-30 degrees. Thus, the lay-out of the Lower City was not entirely orthogonal. It combined elements with relatively straight angles with radial elements, and the size of the houseblocks was not standardized either.

There are no concrete data as to the existence in the Lower City of public buildings. We have already mentioned the possible existence of warehouses and a fish market mentioned in the decree in honour of Protogenes (*IOSPE I²*, 32) somewhere in the northeastern part, now flooded by the estuary.⁶⁰ We may also note that in the trenches made in the middle of the Lower City in the 1870s by I.E. Zabelin and V.G. Tizengauzen fragments of a stepped stylobate of the 3rd-2nd century BC were found in addition to the remains of a street of the same period, which ran parallel to the estuary. It can not be excluded that this stylobate belonged to a construction with a public or cult purpose.⁶¹

In the southern part of the Lower City were rich private houses with refined decor and a high standard of building technique. In particular, the rich peristyle houses of Sector NGF excavated at the beginning of the 20th century have been repeatedly described in the scholarly literature.⁶² These were dwellings of the particularly rich Olbiopolitai, who obviously belonged to the upper class of the polis; citizens like Kallinikos, Kallisthenes, Kanobos and Anthesterios,⁶³ or Protogenes and others, who are mentioned in the epigraphical record of Olbia (*IOSPE I²*, 25+31, 42, 24, 32).

The central part of the Lower City is much less intensely investigated, but, even though excavations in Sector NGC were scant, we may note that in terms of building construction there is greater affinity here with the northern part of the Lower City area than with the southern, because here also are excavated rooms with basements.⁶⁴

Houses of the northern part of the Lower City in Sector NGS differ notably from the rich houses of the southern part in terms of both size and lay-out. They were more modest than those in the southern part of the Lower City, but convenient enough and well arranged. In lay-out there is a certain standardization, obviously caused by the similar property and social status of their owners.

Owing to the presence of sub-soil waters and, in particular, springs, the level of water provision in the Lower City was higher than that in the Upper City. In the Upper City there were cisterns for the storage of water in the majority of the houses. In the Lower City, no such cisterns have been found yet, but wells were discovered in a number of places along the longitudinal street and in the houses in Sector NGF. In practically all streets there were stone gutters.

⁵⁶ Kryžickij & Lejpunskaja 1988, 21; Lejpunskaja 2001, 62.

⁵⁷ Kryžickij 1985, 87-132.

⁵⁸ Kryžickij 1985, 129.

⁵⁹ Lapin 1960; Kryžickij 1985, 128.

⁶⁰ Kryžickij 1984, 63.

⁶¹ Kryžickij 1985, 20.

⁶² Farmakovskij 1913; 1914; 1916; Kryžickij 1971, 77-87; 1985, 127; Kryžickij & Rusjaeva 1999, 186-188. There were probably further rich houses close to these in areas not yet excavated.

⁶³ Vinogradov 1984, 51-80.

⁶⁴ Kryžickij 1967, 131-133; 1968, 142-146; Lejpunskaja 1971, 168-171.

THE LATE HELLENISTIC PERIOD

The shape of the Lower City described above was preserved until the second half to the end of the 3rd century BC, when a further catastrophic event occurred. This time, unlike the fire in the last quarter of the 4th century BC, the event was spontaneous. In the northern part of the Lower City there was a landslide.⁶⁵ Its effect can be traced archaeologically in the form of numerous vertical cracks and deformed stone walls in the basements, the complete destruction of individual basements and horizontal cracks in the ground. The same, contemporary phenomena can be seen in other places across Olbia – in the area of the Western Gate⁶⁶ and in the middle of the Terraced City.⁶⁷

This catastrophic event had a significant impact on the inhabitants of the northern part of the Lower City, from which they hardly recovered before the Getic invasion occurred. Economic activities more or less ceased and the standard of living dropped considerably. The landslide marks a boundary in the development of construction in this part of city, after which new constructions were not made and only insignificant internal reorganizations or repairs were undertaken. In any case, the significant deformation of walls during this late building period implies that any new constructions would soon have become unstable once again. Nevertheless, the general lay-out of houseblocks and main streets was retained at least until the middle of the 1st century BC, the time of the Getic invasion of Olbia.

The date of the landslide coincides chronologically with a deep social and economic crisis in the Olbian polis (as well as in the poleis of the northern and western Black Sea coast, the Balkans and Asia Minor). In this connection we may recollect the descriptions of Olbia in the decrees of Anthesteria of the third quarter of the 3rd century BC⁶⁸ and of Protogenes of the fourth quarter of the 3rd century BC (*IOSPE I²*, 32) which mention altars which have fallen into decay and the necessity of repairing five towers, granaries, etc. In these decrees, we see how life in the polis was under attack or under threat of attack from barbarian tribes. The decree in honour of Neikeratos of the first two decades of the 2nd century BC testifies to a similar situation (*IOSPE I²*, 34).⁶⁹ The inscription mentioning Posideos found in House II-7 relates to the same period also.⁷⁰

During the last pre-Getic building period, from the middle of the 2nd to the middle of the 1st century BC, after a small interval possibly caused by Skiluros in the 150-140s, there was only insignificant and negligent reorganization. However, in Sector NGS the majority of the former houses had ceased to exist by this time, and new constructions practically disappear. In some of the remaining rooms, kilns and house altars were established. The establishment of the latter was probably connected with the character of life in the 2nd to the first half of the 1st century BC, when the dangers of barbarian attacks, general instability, a declining economy, the constant threat of famine, a reduction in trade and, last, the ruin of the city's sanctuaries led the inhabitants to search for divine protection through the inclusion of religious elements in their dwellings. By the time of the Getic invasion, life in the once relatively prosperous houses in the northern part of the Lower City of Olbia had practically ceased.⁷¹

⁶⁵ Olbia is located in a geologically unstable zone and, according to geologists, landslides could occur in Sector NGS even today.

⁶⁶ Kryžickij & Lejpunskaja 1988, 28-31.

⁶⁷ Kryžickij 1995, 18.

⁶⁸ Vinogradov 1984, 51-80; 1989, 180.

⁶⁹ Vinogradov 1989, 183-188.

⁷⁰ Lejpuns'ka 1990, 117-122.

⁷¹ In the Upper City, the layer of the 2nd-1st century BC was even more badly damaged than that in Sector NGS. The majority of constructions dating to the mid-2nd century BC ceased to exist in the second half of the 2nd century BC. Traces of decline are clearly visible: buildings in the Agora collapsed, temples and other constructions in the Temenos, such as the sanctuary's cistern, were destroyed and the public decrees and the statues, which were erected in the Agora, were destroyed too (Levi 1956, 113). In addition, some of the architectural details and statue bases from a sanctuary were used as building stones in the western defensive wall (Rusjaeva & Krapivina 1992, 17-33). By this time, the Western Gate of the defensive wall had lost its former shape (Kryžickij & Lejpunskaja 1988, 30). In the northwest and northern part of the Upper City, an industrial area grew up, where pottery kilns were concentrated (Kryžickij 1985, 131). In a small measure, some constructions of public purpose and some monumental structures were perhaps still preserved, but the majority of the private houses all across the city fell into decay. All this confirms the opinion that Olbia, as city, had been appreciably ruined before the invasion of the Getai as a result of an economic crisis and precarious military conditions (Levi 1956, 114).

THE ROMAN PERIOD

At the end of the 1st century BC and the beginning of the 1st century AD, new building activity began in the Lower City, when the northern part of the Lower City was gradually built up with structures of industrial purpose. The most active period was in the 2nd-3rd century AD, when Olbia, under the Severans, was part of the Roman provinces.

In the first centuries of our era, the southern part of the plateau was included in the reduced area of Roman Olbia, which was delimited to the north with a defensive wall, including about one third of the area of the Lower City. The central part of the Lower City, as well as the Upper City, became industrial suburbs at this time, although the functional purpose of the suburbs in the Upper and Lower City differed.

In the Upper City were the Agora, Temenos, inhabited quarters, large granaries, vine presses, forges for working metal, as well as small single-chambered constructions, altars, etc.⁷² In the suburb of the Upper City, funeral constructions were installed, in particular the Zeus kurgan and the Eurysibia and Aretas kurgan.⁷³

In the suburb of the Lower City, no major installations such as granaries or vine presses have been found. This part of the Olbian suburbs was investigated in Sectors NG, NGC and NGS and during salvage excavation along the coastal cliff. The installations here served a number of purposes: producing pottery⁷⁴ or metal, warehouses⁷⁵ and harbour installations.⁷⁶ In fact, the area was chaotically built up with small constructions. There are one- and two-chambered structures nearby which are the remains of metallurgical and ceramic production centres. The character of the finds testifies to a warehouse purpose for the greater part of the structures of the suburb; practically no household material was found.⁷⁷ In the middle of the Lower City (Sector NGC), the houses were blocked by immense pavements of the mid-3rd century AD.⁷⁸ In Sector NGS, such pavements were not traced.

Apart from the above-mentioned constructions, small round altars dedicated to industrial or agricultural deities were also installed in the Lower City during this period.

In the second half of the 3rd to the beginning of the 4th century AD small storage facilities appear again across the entire area of the suburb. However, they are badly damaged.⁷⁹ The only significant structure from this late period was preserved in the northernmost part of Sector NGS, close to the northern ravine. This is two large, most likely drying kilns, placed side by side and made of fine stones with traces of fire, and with small holes with ash near them.⁸⁰ At the moment of excavation, their foundation was in an inclined position, which occurred as a result of a landslide which came from the north.

It is necessary to state that during this period, the suburb had no resident population. The remains of burials, in particular, testify to this. One was a practically completely preserved burial of a child aged 2-3 years. The burial ceremony and the pottery demonstrate that the burial must be connected to people of the Černjakov culture of the second half of the 3rd century AD.⁸¹ The suburb in the Lower City ceased finally to exist simultaneously with the fading away of life in Roman Olbia.

⁷² Levi 1956, 52; 1958, 29-39; Slavin 1964, 218-219; Lejpunskaja 1978, 349, 350; 1980, 107; Krapivina 1993, 50-90.

⁷³ Kryžickij & Rusjaeva 1999, 250.

⁷⁴ Vetšejn 1958, 61-76.

⁷⁵ Lejpunskaja 1988, 80, 81.

⁷⁶ Kryžickij 1984, 60-63.

⁷⁷ Kryžickij 1985, 142; Lejpunskaja 1988, 74, 75, 80.

⁷⁸ Kryžickij 1967, 131; Lejpunskaja 1988, 77.

⁷⁹ Lejpunskaja 1988, 80-81.

⁸⁰ Lejpunskaja 1995, 39.

⁸¹ Lejpun'ska 2001, 66; 2006, 183-188.