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URBAN PLANNING WITH DIVINE PROTECTION? ON THE LOCATION OF (SUB-)URBAN SANCTUARIES IN OLBIA PONTICA IN THE ARCHAIC-CLASSICAL PERIOD

The present contribution introduces the most recent results of the research by a Ukrainian-German collaborative project which has been working in Olbia Pontica since 2014. It discusses an updated reconstruction of the urban planning developments in the 6th/5th centuries BC, which accounts for the new archaeological state of knowledge. Thereby, the academic focus is on the sacral topography of Olbia, which impressively indicates a comprehensive planning concept in the urbanisation process of the Milesian colony in the Late Archaic period.

Keywords: Lower Buh Region, Olbia Pontica, Archaic-Classical period, urban development, sacral topography.

Introduction

For a long time, the city development of the ancient Greek colony Olbia in the north-west of the Black Sea on the territory of today's Ukraine (Mykolaiv Oblast) was considered to be largely established. At the end of the 7th / beginning of the 6th century BC (Буйських 2013, с. 21-39), Milesian settlers founded a new settlement on the banks of the Hypanis (modern Buh). In Archaic-Classical times, it would develop into the most important political, economic and cultural centre in the whole region. According to previous scientific consensus, the inhabitants of Olbia initially concentrated on the so-called core city area, which they successively separated into public and private areas and, with time, designed representatively (fig. 1). Only in the 5th century BC, the city region was expanded beyond the actual limits of the core region by temporarily exploiting the area on the western outskirts in the sense of a suburb (*proasteion*) (Крыжицкий 1979, с. 119-124; Марченко 1982,

с. 131-135). A decisive reason for the temporary enhancement is not historically recorded. However, the research mainly postulated a causal connection (cf. Fornasier 2016, S. 85-97) with a massive reduction of the Olbian *chora* to only few rural settlements in the closer surroundings of the city from the first quarter of the 5th century BC onwards (on the Olbian *chora* cf.: Bujskich 2006a, p. 115-139; Bujskich, Bujskich 2013, S. 1-33). Since the 4th century BC, the life in the city was again focused on the now heavily fortified core city area while the *proasteion* was abandoned once more.

This reconstruction of the city development in Archaic-Classical times is, at a first glance, compellingly formulated and mainly based on decades-long and very excessive excavations in the central areas of Olbia, which unearthed a great amount of significant information. In contrast, the area of the so-called suburb was not a focus of the research up until only several years ago. The excavations in the west of Olbia, which have been conducted under the lead of Ukrainian researcher Yulia Ivanivna Kozub since the 1960s, mainly concentrated on the research of the Olbian necropolis in Roman times (summarising: Папанова 2006, с. 60-62). In the course of these excavations, settlement traces of the 5th century BC were unearthed, recognised as remains of the Olbian suburb and documented as such (Козуб 1979b, с. 3-34; Кузьмищев 2020, с. 61-76). However, they were not used as a starting point for specific analyses of the Olbian city development in Classical times.

Since 2014, a Ukrainian-German collaborative project¹ attends to this desideratum with the help of

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Fig. 1. Olbia Pontica. Core city. View from the south.

interdisciplinary analyses. In an ideal case, its goal is to add a substantiated reconstruction of the so-called suburb to the extensive state of research of the core city. On the one hand, first statements on the size of the suburb were supposed to be made non-invasively and on a large area with the help of geophysical prospecting; on the other hand, excavations were to be conducted specifically inside the area of investigation. In this manner, and in accordance with the goal, the project team tried to gain new expressive findings with which to review and possibly update the already known archaeological data in a direct comparison (summarising: Fornasier, Bujskich 2021, S. 203-227).

The results which could be obtained during the last seven years exceeded our expectations by far. Thus, we could locate an up to now unknown archaic fortification and verify a considerably earlier beginning of the settlement in the area of the so-called suburb. Furthermore, we could demonstrate an unmistakably more differentiated building history for the west of Olbia and, finally, it could be shown that a conscious divide in core city and suburb was obviously non-existent in the 6th/5th centuries BC.

All these results unequivocally show that up to now accepted theses on the early city development need to be reviewed, as they are no longer reconcilable with the current state of research. Quite the contrary: the new results of the Ukrainian-German collaborative project increasingly shift basic questions on ancient concepts of space into the “Olbian focus”. Now, the location of the early sanc-

tuaries within the city area play a crucial role in a reconstruction of city planning developments in this Milesian colony (fig. 2). In accordance with literary tradition (Plat. Leg. 778c) and above all in analogy to specific observations which were made in the research of Greek colonies in Magna Graecia, it is possible to outline a phenomenon for the early urban image of Olbia which is obviously characteristic for an ancient city founding far from home and which is based on the delimitation of the new settlement territory via sacral facilities. Ancient city planning "with divine protection" – since the fundamental study of F. de Polignac at the latest, this aspect is an essential part of on-topic discussions on colonial cities at the borders of the Greek inhabited world (de Polignac 1995). The extraordinarily great research conditions in Olbia made more detailed studies on this topic possible for the first time. Therefore, the Milesian colony on the banks of the Buh could become a case example in the future. The following remarks intend to illustrate this new significance of Olbia for the research on Greek colonisation.

The modified cityscape of Olbia Pontica in the Archaic-Classical period

When the Ukrainian-German collaborative project started work in 2014, its goals were initially clearly defined (Fornasier et al. 2017, S. 20-21; Fornasier, Bujskich 2021, S. 206). It was necessary to



Fig. 2. Olbia Pontica. Localisation of the (sub-)urban sanctuaries: 1 — western *temenos*; 2 — central *temenos*; 3 — southern *temenos*; 4 — sanctuary in the north-west of Olbia (excavated by Yu. I. Kozub); 5 — building complex in the excavation area II-1.

answer open questions on expansion, structural layout and chronologic classification of the so-called suburb in order to outline the city planning development of Olbia in Archaic-Classical times for the whole territory of the settlement. Whereas the core city had been the focus of intensive research for many decades, from an academic perspective, the

so-called suburb lived in the shadows within the context of the city formation, although its existence was considered to be ascertained since the 1960s.

Thanks to the excavations under the leadership of Yu. I. Kozub in the second half of the 20th century, at least some of the basic parameters were known before the start of the Ukrainian-German research

(Козуб 1979а, с. 316-325; Козуб 1979б, с. 3-34), even if the primary goal of the Ukrainian archaeologist was the Olbian necropolis of Roman times. Over 30 pit structures for living and economic purposes dating to the 5th/4th centuries BC could be unearthed since the 1960s. Against the representatively far more elaborated core city of the same time period, they were, from the beginning, interpreted as qualitatively inferior development – be it as a temporarily built suburb settlement which was not intent on sustainability or as a living area for socially lower population segments. Due to the limited archaeological findings and its rather random location in the terrain, further statements on the outline or the size of the suburb were not possible. This is why scientific literature very generally referred to an area of 10–15 ha without this data being based on tangible facts (Козуб 1979б, с. 7; Марченко 1982, с. 127).

Within only several years (2014–2021), the Ukrainian-German research project now succeeded in largely revising these established notions of the Olbian suburb and in outlining a new city planning development concept for the Milesian colony (extensively: Buiskikh, Fornasier forthcoming). Pivotal for a reassessment of the up to now suggested theses were the results of a large-area geophysical prospection in 2014 and 2017 (fig. 3). With its help, it was possible to, above all, localise a Late Archaic fortification in the west of Olbia (Patzelt, Waldhör 2021, S. 143-148; cf. Fornasier, Bujskich, Kuz'miščev 2018, S. 256-260). The magnetogram shows an anomaly more than 480 m long, which runs from north to south in a wide arch and ends in a valley which leads to the river bank, which is located approximately 15 m below. Archaeological check studies in the excavation area HEKP-7 confirm the finding to be an ancient rampart and moat system whose functional components show different states of preservation. The moat could be secured with an average width of 4.00–4.50 m and a depth of up to 2.30 m from the ancient surface level (2.48 m from today's surface level). It is irregularly stepped at an angle of about 40 degrees and is flattened at the bottom, which results in a trapezoid profile. In contrast, the rampart, which was formerly up to 4.10 m wide, could only be reconstructed by the planum (recently: Fornasier, Bujskich 2021, S. 213-218).

In this regard, the study of older excavation reports proved to be especially productive in a scientific way, since with their help — despite some disruptions in the terrain, mostly through modern disturbances — the complete course of the archa-

ic fortification can be traced. Thus, already in 2009, A. V. Ivchenko succeeded in unearthing a small portion of the moat within the excavation area Severnyi Mys 1. At that time, however, he could not recognise it as part of a demarcation line due to the small excavation area (Ивченко 2010, с. 17-18). Nevertheless, the honour of first discovery already belongs to B. V. Farmakovskiy, who came upon respective structures in the north of the Olbian core city in 1907 (Фармаковский 1910, с. 7). However, his careful interpretation of the archaeological findings was mostly rejected by research of the following decades. The new results of the Ukrainian-German research project now at least help his scientific foresight to gain its appropriate appreciation many decades later (Buiskikh, Fornasier forthcoming).

The spectacular evidence of an archaic fortification at the western border of the Olbian settlement territory is in more than one way of high importance for the reconstruction of Olbian city history, since up to now, archaeologically secured findings along the core city were seen as earliest remains of Late Classical-Hellenistic times (Крыжицкий 1986, с. 305; Крыжицкий, Лейпунская 1988, с. 10-32; Крыжицкий и др. 1999, с. 102-103). The mention of a city wall in Herodotus' *Histories* (Hdt. IV 78) was additionally accepted as another indication of a delimited territory already in the middle of the 5th century BC. Furthermore, it had a determining influence on the separation into a suburb and a core city and thereby also on the interpretation of the living structures of Classical times unearthed by Yu. Kozub (Козуб 1979б, с. 32). Nevertheless, there is still no *communis opinio* today on the question if the Greek historiographer refers to the Milesian colony at the banks of the Buh as he had seen it or if, in his Scythian logos, Herodotus describes as location for the Skyles episode a Greek city as it corresponds to the general imagination of his listeners (cf. e.g.: Kimball Armayor 1978, p. 45-62; West 2000, p. 15-34; Braund 2007, p. 59-61; West 2007, p. 79-91; Bäßler 2011, S. 103-140).

The rampart and moat system from the end of the 6th / beginning of the 5th century BC is not only the oldest archaeologically verifiable fortification in Olbia, but at the same time one of the earliest fortifications in the ancient settlement centres of the Northern Black Sea region in general (cf. Масленников 2003; Hüllden 2018, p. 106-107; Журавлев, Батасова, Шлотцауер 2019, с. 183-191; Hüllden 2020, S. 417-421). It semi-circularly closes the whole Olbian settlement territory to the west and at the same time unites — and this is the

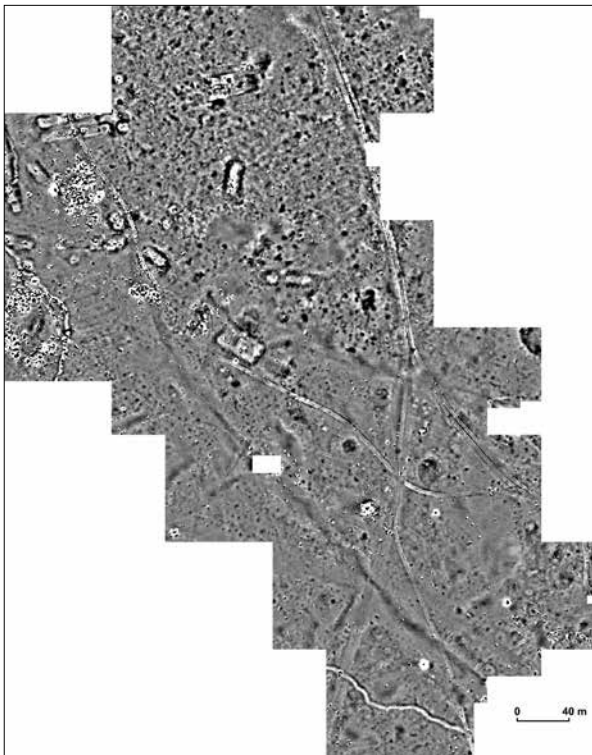


Fig. 3. Olbia Pontica. Magnetogram of the area west of the core city.

central new research aspect — the areas of the core city and the so-called suburb to one homogeneous settlement area of up to 70 ha. Up until its complete abandonment in the middle of the 4th century BC, the territory named suburb was no *proasteion* in the sense of Herodotus, but an integral part of the settlement area which was protected by the rampart and moat system. In contrast to the generally accepted scientific consensus of a successively grown city area which included the area of the so-called suburb during a few decades in the 5th century BC (e.g. Крыжицкий 1985, с. 63), we should assume a contrary settlement development, obviously methodical from Late Archaic times on, which only gradually led to the changes in land use of the individual areas of Olbia.

The results of the Ukrainian-German excavations in the area HEKP-4 along the so-called western street especially support this new research thesis. They impressively prove that the first archaeologically verifiable settlement activities along this important road can be dated already to the last quarter of the 6th century BC and therefore much earlier as assumed so far (extensively Kuzmishchev 2021, p. 185-202). The spectrum of finds unearthed in these deepened living and economic structures characteristic for Olbia in the Late Archaic times completely corresponds in its composition, quantity and quality to the findings of the

core city. Already Yu. I. Kozub (Козуб 1979а, с. 319) and S. D. Kryzhytskyi (Крыжицкий 1979, с. 121) could observe this on the basis of the then known objects from the 5th/4th centuries BC. The ceramic finds of the last quarter of the 6th century BC unearthed by us complete and at the same time enhance the assumptions made back then. Finally, the transition to ground-level buildings can be established in the representative areas along the western street for the 5th century BC (Kuzmishchev 2021, p. 193-201). Up to now, it was only known from the core city and for a long time counted as essential criterion for a distribution of the Olbian population according to social status within the urban area (cf. e.g. Марченко 1982, с. 135).

In sum, all currently known parameters speak more in favour of a genesis of Olbia in Archaic-Classical times since the last quarter of the 6th century BC at the latest, which specifically followed an urban planning design as opposed to an uncontrolled random development (Fornasier, Bujskich 2021, S. 218-220). In this, the area in the west seems to have been designated for living purposes, whereas in the eastern parts — in the central city areas — mostly structures with public or respectively sacred functions were located. The intensified representative development of these fundamental socio-politically relevant elements of a Greek *polis* since the end of the 6th century BC can therefore also be quoted as a simple explanation for the alleged qualitative descent between the two city areas.

Beyond that, the archaeological find in the west of Olbia probably enables a more detailed reconstruction of an ancient structural concept which was obviously used in the second half of the 6th century BC at the latest. Thus, the Olbian necropolis was located north-west and west of the city (recently: Buisikh, Ivchenko 2021, p. 155-184); from the beginning, it was outside of the Late Archaic fortification — even at a point in time when the rampart and moat system did not yet exist and the territory of the so-called suburb was mostly free of settlement. The noticeable separation of sepulchral and mundane areas can only be explained comprehensibly if the area west of the core city was already reserved for future cultivation and was consequently taken into consideration while creating new graves. This raises the question as to how such a free area could have been marked in Olbia in the second half of the 6th century BC. In answering this question, the location of the Olbian sanctuaries plays an important role.

On the location of Olbian sanctuaries

The migratory movements in Archaic times have been a subject of an intense academic dialogue for decades. Ever since the middle of the 1990s, research thereby focused, among other things, on the city planning characteristics of Greek *apoikia* in their early phase of existence using the example of lower Italian colonies (cf. de Polignac 1995; Mertens 2006). The thesis of a sacred protection of the current and also — anticipatory — the future settlement territory by a deliberate localisation of sanctuaries was accepted very soon and was further specified in the following years, especially in connection with the extra-urban sanctuaries in their role as communication spaces (cf. e.g. Fourrier 2013, p. 103-122; Sojc 2021, S. 75-94).

In Olbian research, this specific concept of space is also highly accepted, mainly in connection with the development of the *chora*. Thus, in the area of the Lower Buh, the limits of the agriculturally utilisable territory seem to have been first marked by extra-urban sanctuaries before over 100 settlements emerged within this planned area in the course of Archaic times (Буйских 2004, с. 10-11; Bujskich, Bujskich 2013, S. 28). The sanctuary for Achilles on the Cape Beikush is an example for the multifunctional meaning of these sacral zones in the North Pontic regions (Буйских 2002b, с. 21-32; Bujskich 2006b, S. 111-153). Beside the basic observations in connection with the *chora*, the circumstances in Olbia, which are very favourable for archaeological fieldwork, further enable additional studies on the sacral topography of a Greek Black Sea colony which has only recently been perceived as a decisive parameter for the reconstruction of a purposeful city planning of Olbia (Буйских 2021; Чистов 2021).

The research results of the Ukrainian-German project now enhance the current perception on the city planning development of Olbia to a special degree, in that they complement the findings of the up to now known early sanctuaries in the core city with two extraordinary structures in the west of the city. Above all, the newly discovered building complex in the current excavation area П-1 (see below) in the context of the Olbian sacral zones enables a new academic access to the question of their deliberate location within the cityscape, which is why the current level of knowledge shall first be shortly outlined:

Western temenos.

In the northern area of the Olbian upper city, there was a sacred zone for Apollon Ietros already in the late 7th / at the beginning of the 6th century

BC (fig. 2: 1). Depending on the respective reconstruction, it comprised up to 1 ha (summarised: Русяева 1991, с. 123-138; Rusyaeva 1994, p. 80-102; Русяева 2002, с. 8-20; Русяева 2006a, с. 226-246; Буйских 2015, с. 6-7; Буйских 2021, с. 688-689). Neither the location of the archaic *temenos* near the original northern border of the first settlement area, which virtually put the upper city under divine protection (on this, cf. also: Rousyaeva 2010, p. 66), nor the fact that the Olympic god in his epiclesis as healer was first to enter the Olbian pantheon is surprising in the context of Greek Black Sea colonies. The cult of Apollon Ietros is widely spread in the early Milesian colonies, which is why the question of a propagandised cult — deriving from Didyma — especially for these settlements in the Pontic region has come up several times in research (Ehrhardt 1983, S. 145; Ehrhardt 1989, S. 116; extensively: Ustinova 2009, p. 245-298; cf. also Herda 2016, p. 17-27).

Even if the cult district for Apollon Ietros was an inherent part of the sacral topography in Olbia from the beginning, its representative elaborations seem to have only been the focus of the city's community in Late Archaic times. The excavation team under the lead of A. S. Rusyaeva succeeded in unearthing remains of foundations of a building from the last quarter of the 6th century BC (Русяева 2002, с. 12-13; cf. on a possible predecessor building: Rousyaeva 2010, p. 69). With its basic measurements of 7.3 x 14.6 m and a reconstructed height of ca. 6—7 m up to the roof ridge, it was apparently constructed in the form of a small antae temple or a prostyle type with four columns (Kryzhitsky 1998, p. 15-34). The few architectural fragments which have been found in the surrounding *bothroi*, among others an acroterion, fragments of several sima, a Ionian capital and two bases of Ionic order, give furthermore rise to the assumption that this temple — provided that the individual elements came from the same building — belonged to the Ionic order of Asia Minor (Крыжицкий и др. 1999, с. 51-52; cf. Буйских 2002a, с. 87-98, esp. с. 92-93). Two further temple buildings, which cannot be assigned further, apparently also date to the last decade of the 6th century BC (summarising Bujskich 2021, p. 51-52) and again testify to a new comprehensive developmental stage in the Olbian process of becoming a city in this time.

Central temenos.

These prominent changes in the urban image could be also verified quite distinctively in the area of a nearby sacral zone in the central area of the upper city (fig. 2: 2). It was localised within the

settlement territory in the third/fourth quarter of the 6th century BC together with the agora and, in time, occupied an area of 0.35 ha (Буйских 2015, с. 6-7). According to the *communis opinio*, this so-called central (or respectively eastern) *temenos* is essentially, albeit naturally not conclusively, connected with the worship of Apollon Delphinios (cf. Русяева 1992, с. 41-46). However, whereas a first temple for Apollon was erected in the middle of the 5th century BC and another one for Zeus even only in the 4th century BC, this central *temenos* from Late Archaic-Early Classical times was rather modest at first. It contained a rectangular building with currently unknown function, a stone altar, *bothroi* with numerous dedications to Apollon Delphinios, Zeus and Athena and smaller depressions which were interpreted as pits for trees (sacred grove) (cf. overall: Капачев 1964, с. 27-49; Леви 1964, с. 5-26).

The representative elaboration of this sacred zone began much later in contrast to the western *temenos*; this reflects on the one hand the slow but continuous rise of the worship of Apollon Delphinios to the most important urban cult within the Olbian pantheon. On the other hand, and this needs to be emphasised in connection with the already mentioned changes in the last quarter of the 6th century BC, the conception of urban planning had obviously been designed anticipatorily from the beginning, and the structure of the area was large enough for future usage (cf. Rousyeva 2010, p. 67; Буйских 2021, с. 690). The now postulated and almost simultaneous processes in the dealings with the available settlement territory in the western part of Olbia are striking and make parallel phenomena of the same planning concept probable, with all due caution.

Southern temenos.

Fundamental changes in the usage of space could not only be verified in the northern part of the Olbian city area. In the 2000s, a Ukrainian research team could also excavate a Late Archaic sanctuary for Aphrodite in the south of the upper city in excavation area P-25 (fig. 2: 3). It had been built at a prominent position close to the slope inclining steeply towards the banks and was therefore visible over a long distance (Буйских 2015, с. 6-21; Буjskikh 2015, p. 222-250; Буjskikh 2021, p. 51-66). The excavations confirmed more than 30 settlement traces in the form of living structures deepened into the ground already since the second quarter of the 6th century BC. Therefore, it can be regarded as verified that large parts

of the upper city had already been used right from the beginning of its existence (Буйских 2021, с. 680). However, in the late 6th century BC, these buildings used for living and economic purposes were completely levelled, and a sacred district for Aphrodite was built on an area of initially 0.15 ha (Буйских 2015, с. 8; Буйских 2021, с. 689). In Hellenistic times, the sanctuary spanned an area of up to 0.5 ha.

The preserved structures (4.20 x 8.50 m) were built on a terrace-like area which had been especially levelled for the sacred building and can be reconstructed to a *templum in antis*, whose masonry originally was made up of a pedestal of limestone with rising walls of clay bricks. In a *bothros* located ca. 16 m south of the temple, there was — beside numerous graffiti with the name of Aphrodite — a great number of fragments from roof tiles and calypters. They were probably imported and belong to the Corinthian type. Such valuable roof tiles in Olbia of Archaic times could up to now only be verified exclusively in sacred zones, which suggests the assumption that at first, only sanctuaries were elaborated representationaly (Буйских 2015, с. 11; Буйских 2020, с. 45-58; Буjskikh 2021, p. 51-66). The special location of the *temenos* for Aphrodite at the southern edge of the upper city, which was visible already from afar, especially while arriving in a ship at the Hypanis, can be convincingly explained by the meaning of the goddess in Greek colonisation (Graeves 2004, p. 31; Буйских 2021, с. 689). Among the numerous epithets of this goddess, especially *Epilimena*, *Sozousa* or also *Eupolia* refer to her great meaning for the ancient sea travel (summarising: Eckert 2016). Therefore, an early Olbian sanctuary for Aphrodite seems almost mandatory.

All three sacred zones naturally demonstrate their specific developments within the Olbian municipal history — in comparison, all three share fundamental changes especially in the last quarter / at the end of the 6th century BC; their synchronicity and the concurrence of the basic characteristics are, with a high probability, no coincidence. Whereas in the north of the upper city, the earliest sanctuary for Apollon Ietros was now elaborated representatively, at the southern border, a *temenos* for Aphrodite and directly north of the agora another sacred zone, which mainly served the worship of Apollon Delphinios, were erected. Very noticeable within this context are the parallel developments in the western part of the city, where an early, not yet further assignable sanctuary could be excavated already in the 1960s. Yet another

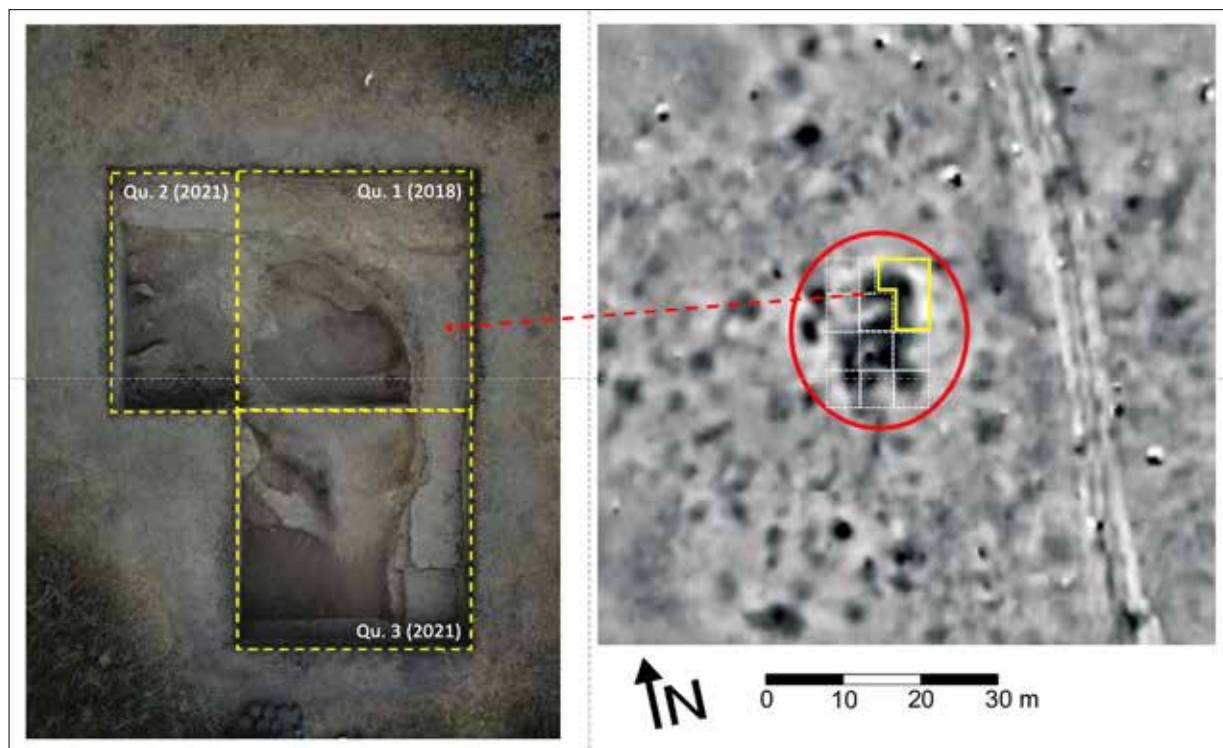


Fig. 4. Olbia Pontica. Area II-1. Explored part and magnetogram.

extraordinary building complex has been investigated in the south-west (area II-1) since 2018. The route of the archaic fortification, which can be reconstructed by the magnetogram, illustrates for both archaeological structures, whose genesis also dates to the last quarter of the 6th century BC, a location at the edge of the territory which had originally been designated for settlement purposes, since both objects are located near the (later) rampart and moat system. In addition, both building complexes show obvious concordances in the archaeological findings, which already suggest a comparable function — even if the research in area II-1 is not finished yet.

The sanctuary in the north-west of Olbia.

Immediately at the beginning of her research in the west of the core city, Yu. I. Kozub came across an extraordinary building complex, which until today differs in size and design from all other structures of the so-called suburb and to which the excavator ascribed a cultic role (Kozub 1975, c. 139-163) (fig. 2: 4). The building was erected in the last quarter of the 6th century BC and was repeatedly expanded during the course of time. At first, the building consisted only of a room with the size of ca. 15 m² in the form of an elongated rectangle which had been deepened into the natural soil for over 2 m. The entrance was probably in the east. According to the excavator, the walls featured a noticeable bending, which is why she supposed an originally vaulted roofing (Kozub 1975, c. 139).

In a second construction phase, the building complex was considerably enhanced. It now contained four rooms with an overall size of 42 m² and could be accessed from the north. Different floor levels, numerous depressions and smaller areas which were separated by bordures all in all testify of a differentiated usage of the individual rooms (Kozub 1975, c. 158-159). Up to now unique in the archaeological findings of the so-called suburb are the brick walls which could be documented on three sides of the central room with a height of up to 0.53 m. These walls consisted of seven horizontal lines of bricks with the standard measurement of 46 × 37 × 7.5 cm. The uppermost row formed the original border, according to Kozub, and probably carried wooden structures as a kind of pedestal (“retracted” ceiling?) (Kozub 1975, c. 141). This unusual building find confirmed the excavator in her conviction that she was dealing with one of the oldest sanctuaries in Olbia, which had obviously been used until the middle of the 5th century BC and was then deliberately abandoned (Kozub 1975, c. 163) — a fact which is remarkably consistent with the finding in area II-1.

According to the excavation report, the numerous finds contain not only terracotta fragments but also a high number of fragmented imported and local ceramics, among them Attic black- and red-figured bowls and skyphoi, fish plates, fragments of black-



Fig. 5. Olbia Pontica. Area II-1. General plan.

glazed ceramics with graffiti and finally a remarkable number of round and oval stones and shards from amphorae. Additionally, in room A, there was also found an accumulation of ash over 1.20 m

high on a separate area a little over 6.00 m², where many animal bones, 20 little dolphins and remains of locally produced clay lamps were found (cf. also Ekroth 2017, p. 42-43: “Saving sacred ash”).



Fig. 6. Olbia Pontica. Area II-1. Finds from the earliest strata of the floor: 1 — fragment of the rim of a Chian amphora, “swollen-neck”, early variant (III-A) — O-2018/II-1/696; 2 — amphora wall with *dipinto* — O-2018/II-1/698; 3 — fragment of Attic black-figured kylix — O-2018/II-1/705; 4 — handle fragment of a Chian amphora — O-2018/II-1/714; 5 — fragment of a bottom of a skyphos with the graffiti “AY...” — O-2018/II-1/706; 6 — processed astragal — O-2018/II-1/711; 7 — secondarily used handle of a red clay amphora from Lesbos — O-2018/II-1/710; 8 — fragment of the rim of a Chian amphora (III-A) — O-2021/II-1/747; 9 — handle fragment of a Clazomenian amphora — O-2021/II-1/750; 10 — fragment of Clazomenian table amphora of the Enman group — O-2021/II-1/770.

Overall, the Olbian researchers were aware of the fundamental meaning of the sanctuary examined by Kozub as a decentral sacral zone in Archaic times. However, its potential role as "boundary marker" of the early urban territory has not yet been addressed further. This aspect came to the fore abruptly with the localisation of the archaeological structure in the south-west of Olbia (area II-1) (fig. 2: 5). Its localisation in the area of the so-called suburb made it appear to be a counterpart to the complex excavated in the 1960s from the beginning. In the following, the currently known archaeological finding shall be presented more thoroughly for the first time.

The building complex in the excavation area II-1

The structure was first localised in 2017 by an extensive geomagnetic prospection (fig. 4). Due to its decentralised location, its remarkable size and finally its already demonstrated characteristics within the context of the early Olbian sanctuaries, it very soon became a focus of the Ukrainian-German collaborative project. Therefore, from the beginning, all signs pointed to an extraordinary finding which differed fundamentally from all other known structures on the territory of the so-called suburb by its measurements (ca. 10 × 20 m) alone. In an ideal case, it promised further insights into the early city development of Olbia in Archaic times. Already in 2018, the first researches started on an area of 5.00 × 5.00 m within the new excavation area II-1. In 2021, the investigated area was enhanced to all in all 75 m². Since there were no traces of archaeologically relevant structures to be found above ground, the specific localisation of this first excavation area took place with a geo-referenced magnetogram, whereby our focus was first on the north-eastern part of the object to be investigated.

The results of the excavation campaigns 2018 and 2021.

First evidence of scientifically significant findings came to light already after a short time. Thus, the contours of the structure in the natural soil could be verified already at a depth of 0.60 m below today's surface level. In addition, its arched shape corresponded directly with the results of the geomagnetic prospection. Only in the north-west, the delimitation is disrupted on a length of 1.20 m and a continuous route can only be evidenced at a depth of 0.85 m — a finding which could not yet be interpreted more closely. Our original assump-

tion that it was possibly the position of a former entrance area could not be verified in the excavation campaign in 2021 (fig. 5).

The internal dimensions of the structure, which is limited to the north and to the east, were excavated in 2018 and measured 3.50 m in east-west direction and 3.75 m in north-south direction. Further field research yielded that the lateral walls leading down were elaborated very unevenly in their whole height. This finding is indicative of a wall cladding which, however, is not preserved anywhere today. Furthermore, from a depth of —2.05 m to —2.17 m, a floor layer could be fixated which is inclined towards the middle of the quadrat 1 and which was composed of rammed clay up to 5.00 cm thick in the upper region, whereas the soil below it, equalising the irregularities in the natural soil, was again composed of the typical yellow clay levels containing ash. In the north-west of the quadrat 1 it was also possible to uncover remains of up to four further superimposed floor levels on a limited area. They had a thickness varying from 3.00—8.00 cm and testify to a longer and intensive period of usage for the building structure.

The find material from the lowest, earliest strata of the floor inside quadrat 1 is, among others, composed of numerous fragments of Chian and Thasian amphorae (O-2018/II-1/694–698, 714) (fig. 6: 1—2, 4) and an Attic black-figured kylix (O-2018/II-1/705) (fig. 6: 3); furthermore, there was the fragment of a bottom of a skyphos with the graffiti "AY..." (O-2018/II-1/706) (fig. 6: 5) and, finally, a secondarily used handle of a red clay amphora from Lesbos (O-2018/II-1/710) (fig. 6: 7) and a processed astragal (O-2018/II-1/711) (fig. 6: 6). In the excavation campaign in 2021, further ceramic fragments of Late Archaic times could be unearthed to the west in quadrat 2: among others from Chian and Clazomenian amphorae from the last third of the 6th century BC (O-2021/II-1/747–753) (fig. 6: 8—9), but also a wall shard of a chronologically earlier Clazomenian table amphora of the Enman group with the depiction of an octopus (one tentacle is preserved), which dates to the period between 540/530–520 BC (O-2021/II-1/770) (fig. 6: 10) (Буйских 2013, с. 77, 302, рис. 54). The datable findings from the floor layer all point to the last third of the 6th century BC and therefore to an existence of the unusual structure already in Late Archaic times.

Constructional elements of the former building structure in II-1 could be attested on the one hand already in its filling layers (—1.50 m) in the form of numerous fragmented clay bricks which

were preserved up to a size of 0.27 x 0.07 m and which testify to a formerly more complex architectural elaboration. On the other hand, an unusual clay construction consisting of different elements could be unearthed directly on top of the floor (fig. 7). It runs semi-circularly in the direction of the north-western edge of quadrat 1. Thus, there was first a rectangular structure measuring 0.57×0.75 m at 1.10 m from the eastern border of the quadrat in a depth of 1.80 m. A square pit ($0.35 \times 0.35 \times 0.15$ m) was depressed into this structure. The surface consisted of a dense light-yellow rammed clay with a thickness of 0.10 m; beneath that were other cultural layers which formed the core with the composition typical for II-1, which is why this structure is to be understood as a subsequent installation or renovation. This block-like object with its square depression, which is highly probable to have served for the storage of liquids which are no longer determinable, furthermore adjoins directly to the semi-circular bordure-like clay construction. Therefore, a functional connection of these two elements is probable.

On its surface, this “bordure” also consists of rammed clay with a thickness of up to 0.10 m which had been applied over a comparably high core of cultural layers of already known composition, albeit with virtually no find material. It measures 0.50—0.75 m in width, 0.25—0.35 m in height and was seated directly on top of the uppermost floor level. Together with the block-like structure, the “bordure” encloses an area of about 2.30×2.40 m which is inclined towards the middle up to a depth of —2.17 m and which is further enclosed by the actual walls of the building structure in the north-east. The area clearly enclosed by the “bordure” has been furnished with rammed clay as solid floor covering which leads to the impression of it being a small water basin. Further striking is the fact that at a distance of 1.75 m from the eastern edge of the section, there is a small canal of 0.55 m length with a diameter of 8.00 cm which runs through the “bordure” to this depression. Here, too, there seems to be a functional connection in that probably liquids could be led to the depression through this small canal from a yet unknown place farther south.

Our assumption of a longer utilisation phase of the building structure, which is based on the evidence of several floor levels and the fact that the “bordure” was obviously built in a later phase, is additionally supported by two further findings which were unearthed at the conclusion of the work in excavation area II-1 in 2018. Thus, after the removal

of the block-like structure in the east and the floor below it, a depression emerged which was deepened into the natural soil with a depth of 0.15 m and a diameter of 0.40 m (depression I) (fig. 5). The depression was filled with loose soil containing ash and red clay fragments of a storage vessel which was probably installed here once. Since dating find material could not be fixed, unfortunately the utilisation phase could not be chronologically determined more closely. However, due to the stratigraphic observations, at least a relative utilisation order can be evidenced in this area.

The oval depression II (fig. 5) in the north-western part of quadrat 1 revealed itself only after the removal of different floor levels. With a width of up to 1.70 m and a length of up to 0.70 m, this pit was deepened into the natural soil (—2.12 m to —2.67 m) directly east of the already mentioned disturbance, whereby the walls tapered inwards stair-like to the ground. The filling of the pit consisted of loose soil interspersed with ash, which is superimposed by a light-yellow clay level 4.00 cm thick at the upper edge of the pit. At a point in time that cannot be defined more closely, this clay level obviously sealed the pit which was no longer used and in addition served as a compensating layer for the floor now overlaying it. The few dating finds from the filling layer include rim fragments of so-called Proto-Thasian amphorae (O-2018/II-1/712–713) and a handle fragment of a Chian amphora from the third quarter of the 6th century BC (O-2018/II-1/714). Thereby, the stratigraphic and deriving relative chronological observations can at least rudimentarily be confirmed. Furthermore, after the conclusion of the actual research, a bronze arrowhead (O-2018/II-1/718) and a small bronze dolphin (O-2018/II-1/719) were unearthed. Finally, there was the skull of a puppy, which was probably put into the pit deliberately; the reduction on this special part of a dog’s body alone indicates that (cf. Молева 2002, с. 114). Above all, the fact that a respective dog skull was also found in a sacral building to the north, which was investigated by Yu. I. Kozub, is striking and also casts doubt on a coincidence of the find from the area II-1.

If the find spectrum of both depressions and of the individual floor layers already enabled a chronological classification of the building structure’s genesis into the last third of the 6th century BC, the archaeological findings also contained convincing indicators of its further duration of usage (fig. 8). The earth layers above the upper-



Fig. 7. Olbia Pontica. Area Π-1. Constructional elements on the floor in quadrat 1 (2018).

most floor, which mainly consisted of a very loose yellowish clay interspersed with ash and numerous pieces of charcoal, contained a multitude of

profiled fragments of amphorae of different provenance (O-2018/Π-1/587-612) (fig. 8: 1—4); furthermore, there were fragments of Attic black- and

red-figured ceramics (O-2018/Π-1/658–661. 347–348) (fig. 8: 6–10) and numerous grey smoothed vessels and kitchen ceramics. Those shards, which can be chronologically comprehended more closely, almost all date to the last quarter of the 6th / first half of the 5th century BC. The excavation campaign of 2021 unearthed further fragments of east Greek, Corinthian and Attic ceramics from the late 6th century BC and the fragment of a Late Archaic clay lamp of the open type (O-2021/Π-1/475) (fig. 8: 11) in the filling layers in quadrat 3. Numerous graffiti supplement the find spectrum from the area Π-1; however, due to their mostly very fragmented condition, they could not once be completed convincingly to a name or term (Русяева, Кузьмищев, Форнасьє 2021). Nevertheless, their unusually high quantity relative to the area of the building structure which has up to now been examined is already remarkable. All stratigraphic and chronological observations together verify that the building complex was abandoned and filled in the middle of the 5th century BC at the latest.

Two small terracotta fragments stand out within the small finds spectrum. The first one (O-2018/Π-1/686) (fig. 9: 1) originally belonged to a standing figure dressed in a *chiton*, the second one (O-2018/Π-1/687) (fig. 9: 2) to a statuette of a so-called sitting goddess of which a part of the throne and the feet of the figure have survived (on the terracotta statuettes from the Ukrainian-German excavations in short see: Shevchenko, Kuzmishchev, Fornasier, forthcoming). In addition, another terracotta fragment of a so-called sitting goddess could be unearthed approximately 30 cm higher in the filling layers. Preserved are an upper body wearing *chiton* and a head with the hair parted in the middle and a *stephane* with a *himation* draped over it (O-2018/Π-1/440) (fig. 9: 5). The only recognisable part of the throne itself is the backrest, only reaching up to the height of the shoulders; the lower part of it is broken off. The quality of the piece — especially in the elaboration of the face — and the commonly known type of the sitting goddess speak for it being an import from the Greek Mediterranean area which is to be dated into the outgoing 6th century BC. In close proximity, yet another terracotta fragment of a throne emerged, which originally also belonged to an enthroned goddess (O-2018/Π-1/441) (fig. 9: 3). Preserved is a part of the front of the throne which still carries traces of its production process (fingerprints) on its inside. Due to its poor state of preservation, a determination of its origin is impossible; only the proximity of the find to the fragment men-

tioned earlier would make us think of another import very cautiously.

Although the field research as of yet is limited, the noticeable quantity of terracotta statuettes, especially those of the so-called sitting goddess, is a first clear indicator of a previous cultic function of the building structure, even if more definite statements are not possible at the present moment. Analogous statuettes were found in numerous sacred and sepulchral contexts in the ancient world, and through this alone they testify to their versatile possibilities of usage. Also for lack of determining attributes, a dedication of the statuettes to a specific deity is undecidable, so that the only thing to mention here at the present moment is their relative accumulation (cf. Русяева 2006a, с. 358).

To the same extent extraordinary is the find of a profiled roof tile fragment of the Corinthian type (O-2018/Π-1/586) (fig. 9: 7). In 2021, yet another small, frameless fragment (O-2021/Π-1/703) (fig. 9: 8) could be added. Both objects serve as specific indicators of a representative elaboration and thereby a special meaning of the building structure in the area Π-1, since up to now roof tiles in Olbia during Archaic times could only be attested in sacred zones. Neither in the core city nor in the so-called suburbs respective objects were found in the early living and economic buildings (Буйських 2020; Буjskikh 2021). Similar is true for a fragmented miniature pedestal of a pillar made of local sandstone (O-2021/Π-1/274) (fig. 9: 6), which might originally have been a component of a votive offering and which again points to the special meaning of the find site (Буйських, Форнасьє, Кузьмищев forthcoming).

Another indicator of a sacred context in area Π-1 is the find of a small clay object which, due to its decor with dots and vertical incisions, reminds of the representation of a loaf of bread (O-2021/Π-1/774) (fig. 9: 9). In addition, two further, this time only fragmentarily preserved, specimens could be secured within quadrat 2 (O-2021/Π-1/698+744) (fig. 9: 10). Such clay (miniature) baked goods are known as votive offerings in great variation from many sanctuaries of the ancient world. They are mainly connected to the cult of Demeter, as e.g. the extensive study by A. Brumfield on the objects from the sanctuary of Demeter in Akrokorinth shows (Brumfield 1997, p. 147-172; cf. Ковальчук 2015, с. 115-116). The excavations there yielded close to 600 find objects, subdivided by Brumfield into seven types (Brumfield 1997, p. 149-155) — which date from the early 6th century BC to the 2nd century AD. Most of



Fig. 8. Olbia Pontica. Area II-1. Finds from the earth layers above the uppermost floor: 1 — fragment of the rim of a Corinthian amphora — O-2018/II-1/587; 2–4 — fragments of Chios amphorae, “swollen-neck”, early variant (III-A) — O-2018/II-1/591, 593, 607; 5 — fragments of a Milesian amphoriscus of the Fikellura style — O-2018/II-1/90; 6–7 — fragments of Attic black-figured ceramics — O-2018/II-1/658, 659; 8–10 — fragments of an Attic red-figured table amphora — O-2018/II-1/347, 348, 661; 11 — fragment of an open type Eastern Greek lamp — O-2018/II-1/475; 12 — fragment of a Corinthian miniature kotyla — O-2018/II-1/259.

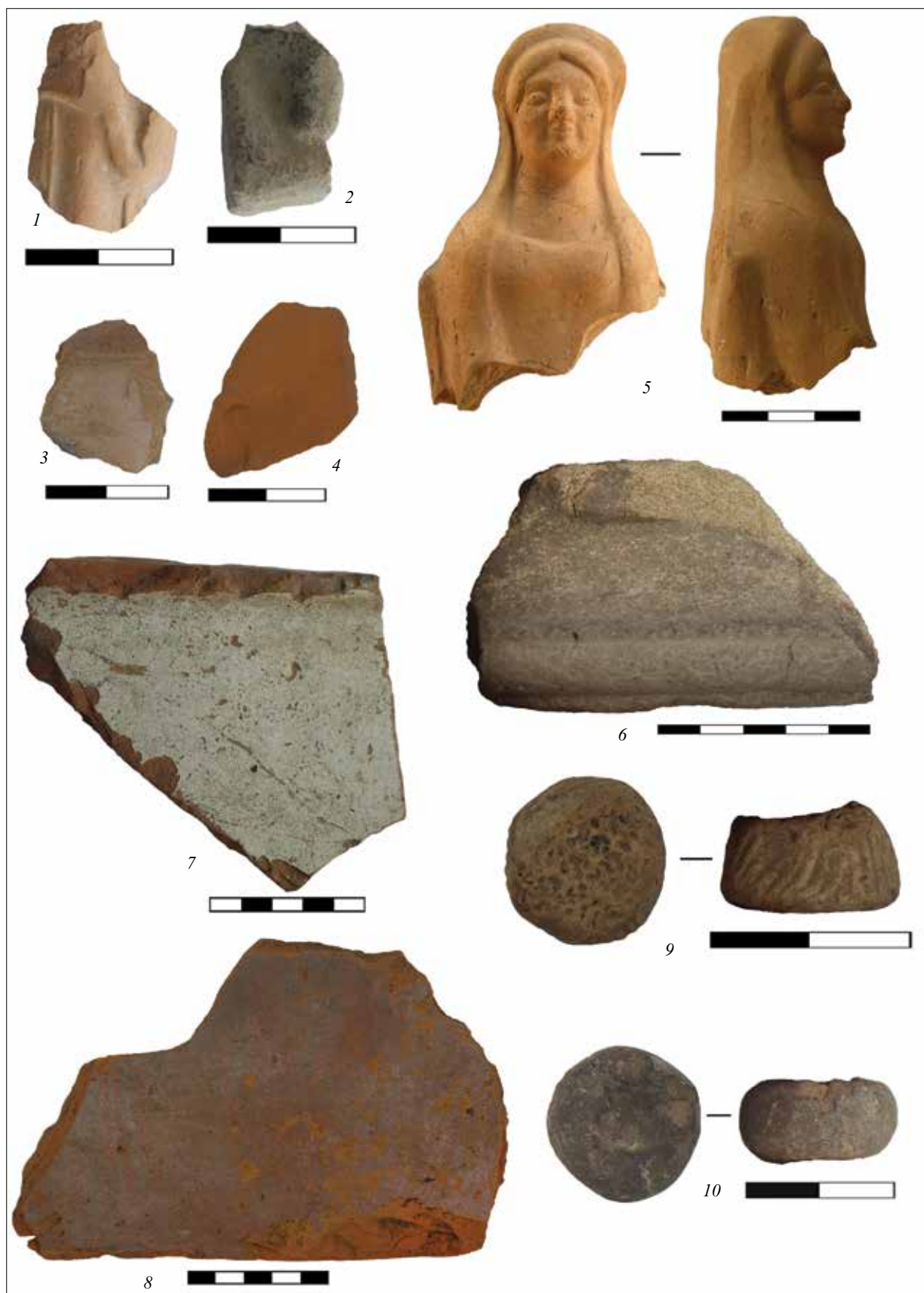


Fig. 9. Olbia Pontica. Area Π-1. Objects from the filling layers: 1–4 — terracotta fragments — O-2018/Π-1/686, 687, 441, O-2021/Π-1/148; 5 — terracotta statuette of a sitting goddess — O-2018/Π-1/440; 6 — fragment of the votive base of a column, sandstone — O-2021/Π-1/274; 7–8 — fragments of painted tiles — O-2018/Π-1/586, O-2021/Π-1/703; 9–10 — clay votive loaves of bread — O-2021/Π-1/774, 698.

the specimen can be chronologically classified to belong to the 6th/5th centuries BC.

In the North Pontic region, these so-called votive loaves of bread can be found not only in the Greek cities, but mainly in many rural settlements in their surroundings and in numerous settlements of Scythian times in the forest steppe zones where they are also understood as ritual items based on context. Thus, these clay “lepeszki” or respectively “khlebzy” were e.g. found in the settlements Motronyn, Bilsk, Liubotyn hill-forts or also in Orekhovaia Roshcha-2, where more than 100 specimens were verified in an ash layer of the first half of the 6th century (Пеляшенко 2016, с. 270-278). Within the specific Olbian finds, the finding of a votive loaf of bread in Yu. I. Kozub’s sanctuary (O-64/954) seems most mentionable. It represents another link of the chain of remarkably analogous finds and findings from these two structures in the so-called suburb, which again suggests also a functional correspondence of both places.

Directly above these filling layers (upper edge from north to south: —1.15 m) of the late 6th / first half of the 5th century, which were full of finds and well datable, runs a band of light-yellow firm clay. It also tapers to the south, is several centimetres thick and could be fixed mainly in quadrat 2. In all probability, it is the remains of former rising clay walls which tumbled to the inside after the building complex was abandoned in the middle of the 5th century BC at the latest and which therefore largely overlay the areas below (fig. 10). The extraordinary find of a dog skeleton (fig. 11) in the west of quadrat 2 (upper edge: —1.75 m), which lay *in situ* under these remains, amplifies the impression that the building complex was possibly deliberately abandoned and subsequently destroyed. Thus, directly in front of the animal’s jaw, virtually in its extension, there was a single bone of a big horned cattle (cow), whereas in its direct surroundings, there was a specimen of the bronze dolphin money (O-2021/II-1/783) (fig. 11: 3) and the fragment of an iron knife blade (O-2021/II-1/778) (fig. 11: 2). The combination of finds and the specific location of the objects in relationship to each other — especially the cow’s bone directly in front of the dog’s snout — raise doubts as to a randomness of the finding. Recalling the dog skull from depression II, which also lacks the character of a random find, we do have here another important indicator of the sacrifice or respectively the ritual burial of a dog. This indicates, as does the spectrum of small finds men-

tioned above, an extraordinary, probably cultic meaning of the building structure.

Ritual dog burials are known from numerous ancient sanctuaries in North Pontic cities. They can be verified in the archaeological findings either as *pars pro toto* or as complete skeletons and occur from the 5th century BC onwards at the latest. In Kytaia (Молева 2002, с. 114-121; Molev, Moleva 2010, p. 305-306) and in Nymphaion (Худяк 1962, с. 53), there were additionally sacral zones for Demeter, which suggests a special connection particularly to this chthonic deity. In Golubitskaya 2 on the Taman Peninsula, remains of overall 20 dog skeletons could be unearthed during the years 2007—2015. Due to their partly good state of preservation, they even enabled indications as to their breed (Журавлев, Саблин, Строчков 2016, p. 34-37). Although not all skeletal remains could be fixed in an unambiguously sacred context, the observations from e.g. pits 12, 27 or 32 unequivocally speak for respective sacrificial rites and can therefore be convincingly used as analogies for the Olbian findings.

For a long time, research recognised a Scythian influence in the context of the dog sacrifices in the North Pontic area. However, in her study on sacred manifestations in the Bosporan Kingdom, N. V. Moleva convincingly demonstrated an adoption of Greek cult practices into the Scythian context (Молева 2002, с. 114-115). This thesis is further supported by the fact that ritual dog burials are not an exclusively Pontic phenomenon but can also be found in many other regions of the ancient world.

Thus, the finds of several dog skeletons in the sanctuary of Demeter in Eleusis are of peculiar interest for a better understanding of the Olbian findings (Luce 2008, p. 292; cf. Носова 2013, с. 568-569). Above all, however, the evidence of a dog skeleton in a large pit together with votive offerings in the sanctuary of Torre di Satriano in Lucania or the remains of five dog skeletons in the sanctuary of Lavello in Basilicata can offer an interpretative approach for the archaeological findings in area II-1. For both lower Italian finds, the interpretation as ritual act linked to the abandonment of the respective sanctuaries has been suggested (summarising: De Grossi Mazzorin, Minniti 2006, p. 62-66). Therefore, the same possible interpretation is also open for the find situation in Olbia. In both cases in area II-1 — on the one hand in depression II (dog head) and on the other hand in the filling layers of the building complex (dog skeleton) — we also seem to deal with conscious animal sacrifice, which was

respectively offered shortly before the abandonment of the respective structure. This specific finding, which has a remarkable addition in the dog's head from Yu. I. Kozub's sanctuary mentioned above, clearly indicates the former special meaning of this area within the Olbian cult rites.

This thesis of a sacred function of the building structure in area II-1 is finally supported by two rectangular altar stones made of limestone². They have bowl-shaped depressions and small drainage grooves which make a chthonic usage probable. Both objects were directly depressed into the uppermost filling layers (layer IV, 0.50—0.83 m beneath today's surface level) and were embedded into a loose earth layer with dating ceramic material from the middle of the 5th century BC. This is why we can again state an abandonment of the original building structure in the middle of the 5th century BC at the latest.

In addition, it seems as if both altar stones, which belong to the variant Ia according to the typology by V. A. Papanova (Папанова 2006, с. 149), were not randomly brought to the filling layers, since — although tilted into each other — they lay directly on top of an area which was especially paved with rammed clay and two middle-sized stones. Directly north of this, there were also an undamaged red clay lekythos with parts of black coating in a standing position (O-2018/II-1/225) and fragments of other red clay vessels. These observations together imply that immediately after the abandonment of the building which was originally located here, a small sacred zone was established in its upper filling layers, which, due to its specific location, seems to have been created purposefully. Continuity of location as an expression of functional tradition or specifically as sign for uninterrupted cult practice would be a convincing explanation of the finding. Conversely, it would offer another basis for the interpretation of the unusual building structure in area II-1.

The building complex in area II-1 — a sanctuary for Demeter?

The question of what kind of city planning object was built in the south-west of the Olbian city territory in the last quarter of the 6th century BC cannot be scientifically answered with the contemporary level of excavations. Up to now, only about 20 % of the whole building structure could be examined, so that there is not enough basis data for a final determination of its function. Nevertheless, the archaeological

findings in combination with the characteristic composition of the small finds spectrum already speak very convincingly for the thesis of a sacred zone. The special location and the shown concordance with already known Olbian sanctuaries alone and the early dating of the building structure to the turn of the third to the fourth quarter of the 6th century BC are interesting. According to the current state of knowledge, at this point in time, only the areas along the western street were developed in a city planning way, whereas in the north-west of the area of investigation, Yu. I. Kozub's sanctuary had been built in analogy to the building complex in area II-1. This distribution of sacred zones within the Olbian settlement territory seems to be too regular to be random.

Beside the specific location and the early dating, the building complex also differs from all currently known houses in Olbia in its considerable size of about 10 × 20 m, which can be reconstructed on the basis of the geomagnetic prospection conducted in 2017. Although research in the quadrats 1—3 in the area II-1 is yet limited to the north-east of the structure, the results gained are expressive enough insofar as the anomaly in the magnetogram can doubtlessly be understood as a continuous constructive unity. The same is true for the currently known complex floor plan (bordure, basin?) and the representative elaboration (roof tile fragments) which up to now could also be verified for the archaic structures in Olbia exclusively in a sacred context.

Furthermore, the composition of the find spectrum indicates a special function of the building structure: already the unusual quantity of fragments of terracotta statues in relation to the small size of the investigation area so far is striking, and especially the motif of the so-called sitting goddess indicates a sacred context. Clay (miniature) baking goods in the form of loaves of bread additionally belong to the characteristic finds which could be unearthed in a large majority in Greek (and indigenous) sanctuaries as votive offerings. In this context, we should especially emphasise the clear signs of dog sacrifices which could be verified in numerous Greek sanctuaries throughout the ancient world and there unambiguously reveal a ritual character. Finally, the altar stones in the uppermost filling layers of the former pit structure — bearing in mind the complete find context in II-1 — with all cautiousness remind of a consciously chosen location based on the continuity of location and therefore function of the chronologically later ritual place.

Even if the archaeological finding in area II-1 therefore does not enable a final interpretation

² O-2018/II-1/211: 34.0 × 17,5 × 17,5 cm; O-2018/II-1/212: 33.5 × 25.0 × 18.0 cm.



Fig. 10. 1 — Olbia Pontica. Area II-1. Remains of clay walls in the filling layers. 2 — remains of clay walls in the western profile of quadrat 2.

and can be clarified only by the continuation of the Ukrainian-German excavations in the years to come, some final further aspects of the ques-

tion of the determination of the function shall be permitted at this point. If it was actually a sacredly used facility — which ancient deity could

it be assigned to? Would there be a way to generally verge on this question already at the present point in time on the basis of analogous ancient findings?

In fact, all currently known parameters could be brought in accordance with a sanctuary for the Greek goddess Demeter, whose worship in Olbia of the 6th century BC has been evidenced largely convincingly by the small find spectrum; however, neither a *temenos* nor a temple for her could be archaeologically verified within the city area (Русяева 1979, с. 37-71; summarising the cult of Demeter in Olbia: Русяева 2006b, с. 356-364). Thus, in his study on the cult of Demeter and Kore on Sicily and in Magna Graecia published in 1998, V. Hinz pointed out that sanctuaries for Demeter did not develop immediately at the time of the Greek colonisation, but in the most cities only in Late Archaic times, when said cities were already established (Hinz 1998, S. 20, 223–224). A. S. Rusyieva also does not see Demeter as a deity accompanying the colonisation, since she — in contrast to e.g. Apollon, Athena or Artemis — is never displayed with weapons (Русяева 2006b, с. 324). First and foremost, Demeter protects the agriculture of a community, which could establish a functioning supply and trade system only in a second step — after having founded a colony. The immense meaning the goddess was befitted during the course of time can also be deduced from the find spectrum of the Pontic colonies, according to A. S. Rusiaeva, since in virtually all residences, a multitude of votive offerings — especially terracotta statues — could be evidenced (Русяева 2006b, с. 325).

In addition, a location apart from the residential development — not isolated, but at the borders of the city — was also characteristic for sanctuaries of Demeter (Hinz 1998, S. 49-50; Schipporeit 2013, S. 245). This is an observation which can also be further confirmed in the Northern Black Sea area by the archaeological evidence in *Nymphaion* (Худяк 1952, с. 241). According to S. Guettel Cole, this specific choice of location in Greek colonial cities — as opposed to that in the *metropoleis* on the central Greek mainland — was not randomly prevalent, since the first were probably erected after a specific plan, at least in their beginning, whereas the central Greek cities are mostly marked by a grown genesis not based on original planning concepts (Guettel Cole 1994, p. 205 f.).

These three observations (which have been outlined mainly for the Magna Graecia) — genesis, location, planning concept of a colony — coin-

cide noticeably with the Olbian findings. Thus, the building complex was erected only at the verge of the third to the fourth quarter of the 6th century BC and therefore at least three generations after the actual foundation of Olbia — at a time when the agriculturally oriented settlements in Olbia's *chora* had gained increasing mercantile meaning for the city (cf. Vinogradov, Kryžickij 1995, S. 114-115). According to S. Th. Schipporeit (Schipporeit 2013, S. 247), the favoured choice of a peripheral location for a sacred area of Demeter could further be explained with the special meaning of sub-urban sanctuaries in general, which represented the relationship between city and *chora*, between urban and rural parts of a Greek *polis*. With this basic understanding of symbolic sacred topography, which is ultimately based on the theses by F. de Polignac (Polignac 1995), a localisation of a Demeter sanctuary at the outskirts of Olbia would be explainable and would form a solid starting point for future interpretations — also bearing in mind the dog sacrifices, the terracotta statuettes and the clay (miniature) baking goods in the small finds spectrum.

The fact that Demeter belonged to the Greek deities worshipped in the Olbian *polis* is documented — beside the archaeological evidence known for quite some time — also by literary tradition. Thus, in his *Scythian logos*, Herodotus (Hdt. IV 53) explicitly talks about a sanctuary for Demeter on the Cape Hippolaos beyond which the Borysthenites (e.g. Olbia) had settled. Research mainly identifies this location as today's Cape Stanislav at the right bank of the Dni-pro River's estuary where it coalesces with the Buh River's estuary, about 23 km from Olbia (Русяева 2006b, с. 356; recently summarised: Снытко 2021, с. 204-205). However, the sanctuary mentioned by Herodotus could not yet have been evidenced archaeologically, which is why it is supposed that the sacral site is today located beneath the water surface due to sea level fluctuations. On the basis of topographic considerations, a second thesis places the sanctuary of Demeter on today's Cape Bublikova, which is at a distance of about 14 km from Olbia and on which at least remains of Archaic *chora* settlements could be verified (Крыжицкий и др. 1989, с. 21 рис. 3; Крыжицкий, Буйских, Отрешко 1990, с. 38). However, a sacred area for the Eleusinian goddess has not yet been unearthed at this site.

On the one hand, the repeated worship of a Greek deity in urban, sub-urban or even extra-urban sanctuaries of a colonial city is not extraordinary and could, in the case of the Olbian *polis*, even testify of a prosperous process in a Greek



Fig. 11. Olbia Pontica. Area II-1. Burial of a dog and the finds discovered nearby. 1 — corrugated wall of a grey-glazed oinochoe — O-2021/II-1/760; 2 — fragment of an iron knife blade — O-2021/II-1/778; 3 — bronze dolphin — O-2021/II-1/783.

community and its constantly growing range of influence. Thus, the literary tradition would not be an argument against the thesis of a Demeter sanctuary in the south-west of the Olbian city region. On the other hand, the structure in area II-1 was abandoned no later than in the middle of the 5th century BC, whereas the sanctuary for Demeter on the Cape Hippolaos becomes first comprehensible for us through Herodotus' transmission and therefore precisely in this period. At a first glance, a conceptual connection of these two phenomena seems compelling: a spatial relocation of the cult site to the new borders of the Olbian influence which shifted far into the land by continuous ex-

pansion with the renewed goal of sacred protection. However, at the present time, this conclusion is scientifically not (yet) permissible. Apart from the still unexplained situation in area II-1, neither the existence of the sacral site in Herodotus could be archaeologically verified without a doubt, nor is there a consensus on the question if the historiographer from Asia Minor actually ever was at the banks of the Buh himself (cf. also: Fornasier, Bujskich forthcoming). His information, based on (alleged) personal inspection, is therefore only partly applicable for a decisive argument.

Finally, also the remarkable chronological congruency between the abandonment of the build-

ing complex in area II-1 and a votive graffito of the 5th century BC from Olbia could be quoted, on which a sanctuary for Demeter within the city region is first mentioned (Vinogradov, Kryžickij 1995, p. 114-115; Русяева 2006b, с. 360). If we accept a causal connection, it would be perceivable that with the progressing consolidation of the Olbian *polis*, the sacred topography of the city was successively restructured and elaborated representatively: the abandonment of early cult buildings which originally granted the sacred protection of the city region but lost their original meaning in the course of time due to mundane fortification systems — in favour of newly designed and advanced sacred zones. However, at the present, this is also another theoretical scenario in lack of a sufficient material basis, which at this point is solely meant to demonstrate the great potential of further research in area II-1.

Synthesis: A new phasing of Olbian urban development in the 6th/5th centuries BC

When the Ukrainian-German collaborative project started its work in Olbia in 2014, the investigation of the so-called suburb was the main goal of the conjoint tasks. Questions on the appearance of the suburb and on the chronological aspects had priority, as did a validation or respectively a review of the material findings in this area. The fact that now — eight years later — we are able to formulate basic thoughts on the development of Olbia in Archaic-Classical time and on the genesis of a Greek colony in general, which go far beyond the original goals, is very surprising and can be ascribed to the unique parameters and possibilities for research in the ancient archaeological monument at the banks of the Buh. The newly outlined results enable an actualisation of previous theses on the appearance of the urban planning of Olbia, whose basic reconstructions can no longer be completely brought in accordance with the now known archaeological situation. At the same time, they enable us to review former excavation finds in relevant detail and to evaluate them against the background of the current state of knowledge. The result of this work process is a new phasing of the urban development of Olbia in Archaic time, which can be outlined as follows (formulated here for the first time):

In a first phase — the **foundation phase** (ca. 620—580 BC) — the former inhabitants of Olbia focused specifically on the upper city, which offered perfect conditions for a first settlement due to its nat-

ural limits; they initially used up to two thirds of its area. One of the first characteristics of this Olbian foundation was first of all a sacral zone (so-called western *temenos*), which can be connected mainly with the cult of Apollon Ietros on the basis of the small finds spectrum and which marked the northern border of the first settlement with its location. This fact emphasises again the meaning of Apollon with his epiclesis as a healer for the Greek colonists, whose new home here at the coast of the Pontos Euxinos was also under a mighty divine protection right from the beginning. However, the contemporary installation of the earliest graves in the north-east of the upper city also unambiguously shows that the first inhabitants did not plan an extensively structured settlement which considered all areas of the later city region equally from the beginning. As was the case in the founding of nearby Borysthenes as the earliest Greek settlement in the north-western Black Sea region, a slow and careful procedure during the first phase of settlement seems to have been specifying, which obviously not (yet) included a spatial extension beyond the topographically limited core city. Nevertheless, the first colonists on the banks of the Buh could already draw back on the experiences of Borysthenes, which was founded a generation earlier, and use them for a more systematic structuring of their own new settlement area — a process which is representative for the city foundations of the second colonisation stage in the North Pontic region in general (cf. Fornasier 2016, S. 14-24).

This at first cautious process with a simultaneous option for a rapid transition to a systematic expansion of Olbia is characteristic for the second phase — the **consolidation phase** (ca. 580—525/500 BCE) — of the Milesian colony. Both near the western *temenos* and at the southern end of the upper city in the area of the eventual sanctuary for Aphrodite (Русяева 2006a; Буйских 2021), deepened structures for living and economic purposes could be verified, which by their regular location in the area alone make basic structuring elements probable for the second half of the 6th century BC at the latest (Крижицький, Русяева 1978; Буйских 2021, с. 681-682; Чистов 2021, с. 224). However, they are archaeologically tangible in the findings only in the following developmental stage in the form of specific streets. Even so, the mere fact that the upper city at that time was obviously not only structured for settlement in the surroundings of the western *temenos* but also up to their southern end point to extensive preparations for a transition from a first settlement towards the ac-

tual city. In contrast to previous research, which still assumed a slow expansion of the living regions over the available area, it now clearly shows that already at the end of the *consolidation phase*, the area was used extensively. In this manner, the inhabitants of Olbia have on the one hand shown foresight in the usage of the available area and on the other hand set the basic preconditions for the comprehensive changes in the Olbian settlement which took place in the period that followed.

The third phase — the actual **urbanisation process** (ca. 525—500/490 BC) — is ruled by an ancient spatial concept which could be recognised in detail only recently by a synthesis of the new results of the Ukrainian-German collaborative project with the already known state of research. It differed considerably from the previous phases of development. This special period of time in the late 6th century BC reveals itself more and more to be a “milestone” for our understanding of the Olbian process of becoming a city. Due to its clearly definable parameters, it could possibly become a specific case example for other Greek colonial cities in the future (cf. Чистов 2021, с. 220). Thanks to the extraordinarily good framework conditions in Olbia, whose territory has not been built over or used in any other way after antiquity, the basic process of its genesis can now be demonstrated for this Milesian colony, which obviously testifies to a stringent execution of urban principles of design which were established in advance.

The central element of this new city planning concept is the obviously methodical construction of a sacral topographic structure in the last quarter of the 6th century BC which — starting from the *temenos* for Apollon Ietros — defined anew the boundaries of the subsequent settlement territory in only a short time. Beside the erection of a first temple building for the hitherto most important deity in the Olbian pantheon in the western *temenos* (cf. Rousyaeva 2010, p. 69), a new sanctuary for Aphrodite emerged in the south of the upper city. The sacral building investigated by Yu. I. Kozub was built in the north-west of the so-called suburb, and finally the large building complex in excavation area II-1 in the south-west of Olbia was created. If we accept the thesis of a cultic role of the latter structure, the Olbian findings show the already mentioned general phenomenon of a sacral bordering of the territory designated for settlement. This directly expresses the obvious wish of the early Olbian population for divine protection of the new settlement borders. The sanctuaries which

were built in the west of Olbia beyond the already existing development unequivocally illustrate the anticipatory character of this action, which without a doubt focused on a future prosperous development of the own urban community — and correctly, as the further process of the urban history of Olbia in Classical-Hellenistic time proves. The sacral topography of Olbia is completed in Late Archaic time by the creation of the central (eastern) *temenos* for Apollon Delphinios immediately north of the likewise newly designed agora, even if a representative elaboration of the area only took place in the 5th century BC.

The new insights into the sacral topography of Olbia can be lined up with a chain of analogous findings from other Greek, mainly lower Italian-Sicilian colonies. Due to the especially favourable circumstances of preservation at the site and the possibilities of a diachronous view resulting from it, the urban development of the Milesian colony could also give direction to a new discussion on the characteristic parameters which obviously played an essential role in the foundation of a new settlement far from home. In this context, literary tradition impressively verifies that such deliberations are not a modern invention. Thus, Plato, in his theoretic writings on the foundation of an ideal city, expresses, among other things: (Plat. Leg. 778c, translation by R. G. Bury): “*The temples we must erect all round the marketplace, and in a circle round the whole city, on the highest spots, for the sake of ease in fencing them and of cleanliness*”. The actual reconstruction of Olbian sacral topography “reads” like the real execution of this line of thinking by the ancient philosopher.

However, not only the sanctuaries now characterised the Late Archaic city. Within the sacredly bordered territory, there was also a systematic street network (Буйских 2015, с. 18-19; Буйских 2021, с. 681-682, 694), which ultimately shaped the appearance of urban planning as a structuring element in the time that followed. Deepened living and economic structures emerged in the so-called suburb along the western street (Kuzmishchev 2021, p. 200), which — like the comparable structures in the area of the core city — were superseded successively by ground-level functional buildings. Finally, with the creation of the archaic rampart and moat fortification at the end of the 6th century BC, the most incisive change took place in the urban appearance of Olbia, which at that time covered a remarkable area of up to 70 ha. This fact shows again the anticipatory planning of the people responsible

for the urbanisation process in Late Archaic times, which kept open a multitude of different options for the further development of the city.

From today's point of view, this aspect inevitably leads to a paradigm shift in the Olbian research history, mainly concerning the question of the existence of a *proasteion* in the 5th century BC in which the Scythian army was encamped in the Skyles episode by Herodotus (Hdt. IV 78). The archaeological finding clearly evidences that the structures to the west of the core city were not a *proasteion* in the sense of the ancient historian. Quite the contrary: the respective area was an integral part of the settlement territory, which was first sacredly bordered and then functionally integrated into the city planning development concept of Archaic-Classical time. It was not until the 4th century BC that it was decided to abandon the rampart and moat system and the area up to the core city; a process which might be connected with the Zopyrion siege which is recorded in literature (cf. Buiskikh, Fornasier forthcoming). The coherent consequence deriving from these deliberations is a future actualisation of the previous terminology on Olbia, as a further usage of the term *proasteion* does not seem sensible any more. As a terminological pendant of the term "core city", firmly established in research, we should now rather use the term "western city", which lives up to the current archaeological findings.

A triggering momentum for the decision to reach the outlined city planning developmental level at the last quarter of the 6th century BC is unrecorded. However, it is very probable that the general framework for an economically and culturally striving community need to have been rated positively by the inhabitants if they decided on taking

this step. In this context, the erection of the rampart and moat system should not necessarily be understood as an expression of a conflict-laden relationship with the indigenous population but could be directly connected with the process of becoming a city and thereby could be seen as first great communal accomplishment of the Olbian population (cf. Cojocaru 2008, S. 13; Hüllden 2018, p. 100; Fornasier, Bujskich 2021, S. 219-220) — a direct comparison to the Magna Graecia seems to be academically gainful in this regard, too.

All in all, the statements made here can to a special degree illustrate the scientific added value of supra-regionally designed studies. The Greek advance into the Black Sea region is a comparably late phenomenon in the context of the so-called Great Greek Colonisation. In addition, the two main target areas of Greek migration movements — Magna Graecia and Pontos Euxeinos — have been academically reviewed largely isolated due to the special geopolitical situation during large parts of the 20th century. This is why sometimes different levels of knowledge on the respective other region are prevalent still today. Especially in connection with specific questions on the urban building genesis of new colonies which possess a general character beyond regional-specific aspects, the focus was up to now mainly on the foundations in Magna Graecia. However, how academically gainful the specific inclusion of the cities in the Black Sea region can be in this superordinate discourse is shown by the example of the Ukrainian-German excavations in the Milesian *apoikia* Olbia. We hope that the researches in one of the most important ancient archaeological monument of modern Ukraine, which have up to now been so successful, can be conducted in the same way in times to come.

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МІСЬКЕ ПЛАНУВАННЯ З БОЖЕСТВЕННИМ ЗАХИСТОМ? ПРО РОЗТАШУВАННЯ (ПРИ)МІСЬКИХ СВЯТИЛИЩ В ОЛЬВІЇ ПОНТІЙСЬКІЙ В АРХАЇЧНО-КЛАСИЧНИЙ ПЕРІОД

У статті представлені результати останніх досліджень спільного українсько-німецького проекту, що триває з 2014 р. у т. зв. передмісті давньогрецької колонії Ольвія Понтійська. Спочатку на першому плані були питання про зовнішній вигляд передмістя, а також визначення його хронологічних рамок. Після семи років ефективної дослідницької діяльності вже можна відповісти в цілому на фундаментальні питання про розвиток Ольвії в архаїчно-класичний період і генезис цієї грецької колонії. Запропоновано нову фазову модель міського розвитку в архаїчний період, яку поділено на три основні етапи. Якщо фаза заснування (близько 620—580 рр. до н.е.) і фаза консолідації (близько 580—525/500 рр. до н.е.) значною мірою узгоджуються із запропонованими до цього часу концепціями, то фаза урбанізаційного процесу (525—500/490 рр. до н.е.) здебільшого базується на основі новітніх досліджень. Процес створення міста в пізньоархаїчний період був зумовлений давньою просторовою традицією, центральним елементом якої є планування забудови, що визначалась сакральною топографією. Завдяки цілеспрямованому розташуванню давніх святилищ на запланованих кордонах поселення міська громада була, так би мовити, поставлена під божественний захист, таким чином, було гарантовано її процвітання. Разом із численними знахідками з грецьких апоїкій Великої Греції цей феномен, притаманний для генезису стародавніх колоній, також продемонстрований на берегах Понту Евксинського і зрештою, навіть потрапив у теоретичні твори Платона про заснування ідеального поліса (Plat. Leg. 778c). Нові археологічні знахідки також чітко доводять, що забудова на захід від центральної частини міста не була проаестеоном (передмістям) у сенсі античної традиції. Навпаки, відповідна територія з самого початку була функціонально інтегрована в концепцію розвитку архаїчно-класичної доби, тому українсько-німецька дослідницька група пропонує надалі використовувати термін «Західний район» для цієї античної території.

К е у в о р д с: Нижнє Побужжя, Ольвія Понтійська, архаїчно-класичний період, міське планування, сакральна топографія.

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