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TWO HALF-DUGOUTS FROM EXCAVATIONS ON BEREZAN ISLAND IN 2020

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The main results of a study of two semi-dugouts found during the excavations of a residential block to the west of temenos of Berezan settlement in 2020 are analyzed in the paper. Special attention is paid to the description of the layout and construction features of the complexes, and the analysis of the remains of material culture from their filling. The chronology of buildings and their relationship with the evolution of the architectural character of archaic Borysthenes are determined.

Both half-dugouts are found in the courtyard area of one of the blocks of Berezan settlement dated to the third quarter of the 6th century BCE and, despite the earlier creation, they fully correspond to the spatial orientation of the constructions of this block and the entire street network of this area. Stratigraphic and planigraphic observations, as well as a detailed analysis of the ceramic complex from the filling of half-dugouts, allow us to link their origin with the arrival in Borysthenes of the 'second' wave of colonists around 540 BCE, for whom they served as temporary constructions until construction of permanent dwellings. However, in contrast to most similar complexes, the described half-dugouts continued to exist next to ground-based constructions and for a long time (probably until the end of the 6th century BCE) were apparently used as utility rooms.

Keywords: *Borysthenes, archaic, half-dugout, planning*

Excavation unit 'T' (Temenos) is located in the central part of Berezan island. Laid in 1996 by V.V. Nazarov in the place of the shovel test pit S.M. Mazarati of 1984. Since 2005, it was studied by V.V. Krutilov. The untimely death of the long-time head of Berezan Archaeological Expedition and an excellent expert in classical antiquities directly during the fieldwork led to the appearance of a partially studied area of residential blocks to the west of Borysthenes temenos (Fig. 1.1). Completion of excavations of this excavation unit, having reached the level of cultural layers of archaic times and buried humus, became the main task of the season 2020[1].

From the level of the buried humus, two half-dugouts were discovered here. They were excavated in the courtyard area of one of the blocks of archaic Borysthenes,

[1] In 2020 archaeological expedition on the Berezan island was headed by O.I. Smyrnov.

located directly behind the western fence of the temple of Aphrodite temenos. According to the nomenclature of the street network created by D. Chistov (Fig. 1.2), this block is called 'E'. Its boundaries are set on two sides: from the northwest, it reaches 'D4' street, from the northeast, reaches 'P4' street[2]. The ditches of the half-dugouts are oriented in a line parallel to 'D4' street along the outer facades of the crude stone walls of the ground-based constructions, built at about the third quarter of the 6th century BCE.

The half-dugout № 275 (Fig. 2.1-2) is located parallel and almost close to the wall of the eastern facade of the ground-based crude stone building. In fact, there are two ditches with identical filling, which can give rise to two different space and layout models of the construction.

The north-eastern part of the half-dugout № 275a adjoins the deepening № 275b. On the plan, it has a rectangular shape with rounded corners, oriented along the line South-West – North-East. Dimensions of the inlet to the ditch: 2.10×2.77 m, bottom – 1.95×2.8 m, depth – 0.45 m. At the bottom, there are the remains of a flat, well-compacted earthen floor up to 0.03 m thick, in the central part of which there is a hole from the bearing post. A stone heap of two large rectangular blocks and a medium-sized crushed limestone was found on the floor near the south-western side of the ditch. The location of the blocks indicates that they stood on top of each other and collapsed at some point. This structure was probably some kind of stone table. Around the perimeter of the floor, along the three sides of the ditch, there are trenches 0.10-0.14 m wide and up to 0.10 m deep. The side of the south-western trench is in the form of a low subsoil selvage. It is possible that a similar selvage was located around the whole perimeter of the floor. Along the line of trenches in the two preserved corners of the construction, various forms of deepenings with the following dimensions 0.38-0.77×0.43-0.88 m and up to 0.08 m deep are studied. Another deepening in the center of the western trench in the projection on the adjacent side has a full-height vertical slit.

Thus, the dimensions of the internal usable area of the half-dugout were 1.73×2.23 m, which, taking into account the hypothetical location of the portable brazier and the central post, could provide space for a comfortable night for only one person. Therefore, it is most likely that this construction was used as a utility room, although residential purposes cannot be completely ruled out.

Trenches around the perimeter or along certain sides of the ditch is a rather rare phenomenon. Previously, they were discovered only accompanied by post pits with a diameter of 0.08-0.17 m along the ditch trace, where the pits themselves are interpreted as remains of a wooden frame of clay-wicker construction preventing the crumbling of the subsoil walls.

Similar trenches with post pits along the trace in rectangular half-dugouts are known to us only in two Berezan constructions: CC (hereinafter – construction complex) № 62, excavation unit 'O-Zakhidna' (O-Western)[3] and half-dugout № 51,

[2] Чистов Д. Вулиці архаїчного Борисфена // Емінак: науковий щоквартальник. 2021. № 1 (33). С. 103-104, рис. 1-2.

[3] Чистов Д.Е., Илина Ю.И., Еремеева А.А., Щербакова О.Е. Материалы Березанской (Нижнебугской) античной археологической экспедиции. Т. 3: Березанское поселение в исследованиях 2010-2014 годов. Санкт-Петербург: Изд-во Гос. Эрмитажа, 2021. С. 62, 74.

excavation unit 'T'[4]. Both complexes existed within the middle – the second half of the 6th century BCE.

They are also found in the rounded constructions of Berezan settlement of the beginning – the first half of the 6th century BCE: in half-dugouts № 58 excavation unit 'HSh' (Hrabizhnytskyi Shurf / Robber's Shovel Test Pit)[5] and CC № 27 excavation unit 'O-Zakhidna'[6]. Somewhat later, in the second half of the 6th – the first quarter of the 5th century BCE such technique was also used in the agricultural settlements of the Lower Buh region: Kutsurub-I (dig I, CC № 9)[7] and Luparevo-II (dig II, HD. (hereinafter – half-dugout) № 2)[8].

In some cases, clay-wicker walls were installed along the ground sides of the ditches only on post constructions without the use of trenches, as, for example, in the rectangular half-dugouts on Berezan of the beginning – the first half of the 6th century BCE (CC 73 and 78 of the excavation unit 'O-Zakhidna'[9]); the second – the third quarters of the 6th century BCE (half-dugout № 57 excavation unit 'O-Skhidna' (O-Eastern)[10]). They were also found in the settlements of the chora: Stara Bohdanivka-II (half-dugout № 16 dig III)[11], Kozyrka-IX (half-dugout of dig 1)[12], Shyroka Balka (half-dugout № 20 dig 4)[13], Chertovate-VII (half-dugout № 5 dig IX)[14], Kutsurub-I (CC № 1 dig I, CC №№ 16 and 19 digs II and III, half-dugout № 30)[15]].

Thus, on Berezan island of more than 340 studied complexes, the remains of clay-wicker constructions of the ditch inner walls in the form of bearing posts along the perimeter were found only in seven cases (and only in four cases the trenches were used); in agricultural settlements of the Lower Buh region, of more than 180 studied half-dugout, such remains were found in ten cases (in two cases the trenches were used). At the same time, the use of trenches without post pits along the trace was found for the first time in 2020, which allows us to rethink their purpose.

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[4] Крутилов В.В. Отчет о полевых исследованиях на Березанском античном поселении (участок «Т») в 2009 г. // The Scientific Archive of the Institute of Archeology, NAS of Ukraine. 2009. С. 10-12.

[5] Крутілов В.В., Смирнов О.І., Бондаренко Д.В. Розкопки античного поселення Борисфен (о. Березань) на ділянці «ГШ» // Археологічні дослідження в Україні 2013 р. Київ, 2014. С. 195.

[6] Чистов Д.Е., Зуев В.Ю., Ильина Ю.И., Каспаров А.К., Новоселова Н.Ю. Материалы Березанской (Нижнебугской) античной археологической экспедиции. Т. 2. Санкт-Петербург, 2012. С. 9-13.

[7] Марченко К.К., Доманский Я.В. Два поселения Нижнего Побужья архаического времени (опыт сравнительной характеристики материальной культуры памятников) // Stratum plus. 1999. № 3. С. 37.

[8] Виноградов Ю.А. Раскопки поздеархаического античного поселения Лупарево-2. Археологические исследования в Украине в 1978-1979 гг. // Тезисы докладов XVIII конференции ИА АН УССР. Днепропетровск, 1980. С. 105.

[9] Чистов Д.Е. Землянки архаической Березани // Північне Причорномор'я за античної доби (на пошану С.Д. Крижицького). Київ: Стародавній світ, 2017. С. 133.

[10] Чистов Д.Е. Архаические дома Березанского поселения: некоторые особенности жилого домостроительства // Емінак: науковий щоквартальник. 2016. № 4 (16). Спецвипуск: Forum Olbicum I. Пам'яті В.В. Крапівіної. С. 78.

[11] Марченко К.К., Доманский Я.В. Два поселения Нижнего Побужья… С. 31.

[12] Ганжа А.И. Раскопки поселения Козырка IX // Археологические открытия 1984 г. Москва: Наука, 1986. С. 226.

[13] Штительман Ф.М. Городища, поселения и могильники Бугского лимана VII-II вв. до н.э. Дис… канд. ист. наук. Киев, 1951 // The Scientific Archive of the Institute of Archeology, NAS of Ukraine. Ф. 12. № 312. С. 51-52.

[14] Крыжицкий С.Д., Буйских С.Б., Бураков А.В., Отрешко В.М. Сельская округа Ольвии. Киев: Наукова думка, 1989. С. 27.

[15] Марченко К.К., Доманский Я.В. Два поселения Нижнего Побужья… С. 57-58, 60.

It should be noted that the theory of the purpose of these trenches for the installation of the inner wall of the ditch is quite hypothetical because the role of the trenches in this construction is not clear enough. If there is a reinforced post frame and abut on the wall of the ditch, such construction had to stand quite securely even without a light deepening in the trench.

Of course, with half-dugout № 275a, it is impossible to deny completely the possibility of installing a certain kind of integral structure of the ditch inner walls coating directly into the trench with abut on its sides and subsoil selvage or installation of bearing posts of clay-wicker structure using footplates, although both techniques would be difficult to call rational. Installation of posts into the pits looks simpler, more practical, and secure. One way or another, the purpose of the trenches of half-dugout № 275a (and, taking into account the above-mentioned information, other similar complexes) for the installation of clay-wicker construction raises some doubts.

A peculiar feature of all half-dugouts with trenches along the perimeter is the absence of fireplaces and other elements typical of residential constructions. Therefore, it should be assumed that, if not all, but most of these complexes were of a utility nature (all four Berezan half-dugouts with trenches are interpreted as utility structures by the members of the excavations).

In view of the traditional absence of any traces of the ground-based structure of the walls of these deepened constructions, it is difficult to conclude about their purpose. However, it should be assumed that for non-residential constructions, such walls could have a fairly light construction, which, in fact, was a ground-based extension of the underground clay-wicker wall mounted on a post frame fixed in the trenches. Using of stiffening elements in the form of struts in the upper part is possible as well. Judging by the size of the fixed trenches, the width of such walls did not exceed 15 cm, and the wall itself, apparently, was not always closely adjacent to the natural side of the ditch. Here, during heavy rainfall, a certain amount of water seeped and flowed along the sides of the ditch. It is possible that the described trenches were used to collect this water and prevent its spread throughout the floor of the construction. This assumption can explain the presence of these trenches, both accompanied by post pits along the trace and without post pits, as, for example, in the half-dugout № 275a.

The deepening № 275b, attached from the north, has a rectangular shape with strongly rounded corners. Sloping walls smoothly turn into an uneven bottom. Dimensions of the inlet to the ditch: 2.48×3.92 m, bottom – 2.12×2.36 m, depth – up to 0.61 m. No traces of the interior are found here.

It seems that the deepening № 275b was a late addition, fitted into the wall of the half-dugout, partially destroying it together with part of the earthen floor. The reconstruction of the walls and the ceiling of such a complex also causes difficulties. Homogeneity of filling and orientation of ditches encourages to conclude about the synchronal use of both of them only at the final stage of their functioning. At the same time, we shouldn't completely exclude the two-chamber reconstruction of the plan of the studied half-dugout.

While studying the half-dugout № 275a a fairly large amount of material was disclosed, the vast majority of which (78.5%), traditionally, are the fragments of amphora containers of archaic exporting centers. Excluding amphorae containers,

164 fragments of pottery were found. The largest groups are the fragments of tableware of Attic (31.7%) and Eastern Greek origin (23.2%). The rather large quantity of kitchenware formed on a potter's wheel (15.2%) is noteworthy, although the pottery made without the help of a potter's wheel is only 6.1% (thus the ratio of kitchenware formed on a potter's wheel and handmade ware looks like 71.4% to 28.6%). Another 3% is Corinthian import and only one fragment (0.6%) is thick-walled household ceramics. Also noteworthy are: a fragment of an anthropomorphic terracotta in the form of a mythical creature's head, three ceramic and one lead spindle whorls, three votive offerings, a bronze dolphin, and a triangular socket arrowhead, as well as a flint produced item made of sandstone.

The latest finds, which may indicate the date of backfilling the ditch, include two fragments of the rims of Chios bulbous-necked amphorae of the early type of the last third of the 6th – the fourth quarter of the 5th century BCE[16], the foot of the 'protothassos' amphora of the 3-5 series of the end of the 6th – the first half of 5th century BCE[17], and the foot of the Thassos amphora, which is known to be imported into the Northern Black Sea region in the late 6th century BCE[18]. Among the tableware, in this regard, interesting are three rims and three feet of Attic kylixes type 'C' with a concave lip 525-450 BCE[19] and a fragment of Attic black-figure banded one-handler of 520-450 BCE[20]. To a certain extent, a fragment of Attic black-figure band-skyphos with the painting (shallow skyphos of Class K 2) 490-480 BCE[21], stands out from the general chronology, however, it is possible that it got into the backfill from later in time layers.

Also interesting find is a fragment of a striped bowl with traces of deformation, which is a local imitation of Eastern Greek pottery. Similar vessels were found during the excavations of the pottery kiln at the excavation unit 'HSh' on Berezan island near the half-dugout № 275a. This production is dated to the middle – the third quarter of the 6th century BCE and is associated with the early stage of the existence of the ground-based crude stone building of already urbanized settlement[22].

We should also pay attention to the above-mentioned stone heap at the bottom of the half-dugout, in which limestone quadras were used, similar to those from which the ground-based crude stone buildings were built and, apparently, the quadras are the remains of the used building material. This fact may indicate a period of synchronal use of the half-dugout and the adjacent ground-based construction.

The material from the deepening № 275b is more distinctive. 79.7% of it is the fragments of amphorae containers of archaic exporting centers. Excluding the latter, 327 fragments of pottery were found. The largest group includes Eastern Greek

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[16] Монахов С.Ю. Греческие амфоры в Причерноморье. Типология амфор ведущих центров-экспортеров товаров в керамической таре: Каталог-определитель. Москва; Саратов: «Киммерида»; Изд-во Саратовского унивеситета, 2003. Табл. 3-7.

[17] Монахов С.Ю. Греческие амфоры в Причерноморье… Табл. 24-25.

[18] Ibid. С. 76.

[19] Sparkes B.A., Talcott L. Black and Plain Pottery of the 6th, 5th and 4th Centuries B.C. // The Athenian Agora. Vol. XII. Princeton, 1970. P. 91, No 398-413.

[20] Ibid. P. 124-126, No 724-743.

[21] Moore M.B., Philippides M.Z.P. Attic Black-Figured Pottery. Princeton, N. Jersey, 1986 (The Athenian Agora. Vol. XXIII). No 1565.

[22] Бондаренко Д.В., Чистов Д.Е. «Квартал гончаров» (участок «ГШ») в системе настройки и в экономике архаического Борисфена // Stratum Plus. 2021. № 3. С. 239-242.

imports (39.1%), followed by the fragments of handmade pottery (24.2%). Plain tableware is 17.7%, and kitchenware formed on a potter's wheel is 7.3%, more than twice less. The same rate is Attic import, and another 1.5% is from Corinth. 2.8% of the material, excluding amphorae containers, is thick-walled household ceramics. The ratio of handmade ware and kitchenware formed on a potter's wheel looks like 23.3% to 76.7%, respectively. Also noteworthy are the finds of a fragment of terracotta, fishing ceramic sinkers, two votive offerings, a produced item made of the foot of a Lesvos gray clay amphora with a hole drilled in the center, astragalus with traces of processing, waste materials of bone-carving production, and four bronze dolphins.

In addition, interesting are the pottery fragments finds of the end of the 7th – the beginning of the 6th century BCE, in particular the thick-walled Ionian hemispherical bowl (Kalottenschalen) of Rosette Bowls type[23], the South Ionian vessel of the closed type of the MilA I – SiA I group[24], and the Aeolian dinos or krater of the 'London Dinos Group'[25]. Most of the finds from the complex can be dated to the second and third quarters of the 6th century BCE.

The latest material that may indicate the date of backfilling of the deepening includes an assemblage of late archaic containers: three rims of Chios bulbous-necked amphorae of the early type of the last third of the 6th – the fourth quarter of the 5th century BCE[26], the neck of the Thassos amphora of pithoid type of the end of the 6th – the first half of the 4th century BCE[27], two rims and a foot of 'protothassos' amphorae of the third-fifth series of the end of the 6th – the first half of the 5th century BCE[28]. The latest examples of tableware are represented by fragments of Klazomenai amphora of 'Knipovych' class with scaly decor on the body 530-500 BCE[29], the Attic stemmed dish of the convex and small type 525-480 BCE[30], Attic skyphos type 'A' 525-460 BCE[31], as well as four rims and two feet of Attic kylixes type 'C' with a concave lip 525-480 BCE[32].

Therefore, the whole body of material points out that deepened complex № 275, built within the middle – the third quarter of the 6th century BCE, for a certain period of time, coexisted with a nearby ground-based house and was backfilled in the last third or even at the turn of the 6th – 5th centuries BCE. Probably, at the early stage of its existence, it was only a ditch of a semi-dugout № 275a, and at the final stage, the whole complex (together with the attached deepening № 275b) formed the system of the courtyard of the city block and had, apparently, some utility (warehouse?) function.

The half-dugout № 277 (Fig. 2.3-4) was excavated to the north-east of the described above half-dugout along the eastern facade wall of the neighboring ground-based construction. Its ditch has a rectangular shape with rounded corners, oriented

[23] Буйских А.В. Архаическая расписная керамика из Борисфена (раскопки 1960-1980 гг.). Киев: ИА НАН Украины, 2019. С. 98, кат. 3.147-3.153.
[24] Ibid. С. 11, кат. 1.64-1.71.
[25] Ibid. С. 143.
[26] Монахов С.Ю. Греческие амфоры в Причерноморье… Табл. 3-4.
[27] Ibid. Табл. 34-39.
[28] Ibid. Табл. 24-25.
[29] Буйских А.В. Архаическая расписная керамика из Борисфена… С. 126, кат. 5.45-5.48.
[30] Sparkes B.A., Talcott L. Black and Plain Pottery… P. 140-141, No 966-985.
[31] Ibid. P. 84-85, No 334-342.
[32] Ibid. P. 91, No 398-412.

along the line South-West – North-East. In two opposite corners of the construction, there are utility pits (№ 278 and № 279), but the walls of the ditch in the area of their filling are not reinforced with anything. Such their arrangement may indicate the synchronal existence of these three objects, although this makes it somewhat difficult to understand the organization of the interior space of the half-dugout[33].

Dimensions of the ditch № 277 at the level of the inlet are 2.90×2.70 m, at the bottom – 2.85×2.60 m, and the depth is 0.72 m. The earthen floor, which has subsidence in the area of these pits, is partially preserved at the bottom, however, it is not directly traced in their area. The floor is two-layer, with a thickness of 1.2 and 3 cm, respectively. Probably, it was covered with a flooring made of grass wrack, pieces of which are quite common in the filling of the ditch. Three post pits are found at the bottom. Two of them are located in the western part of the ditch, one is in the center. Round limestone footplates were found at the bottom of the two pits. The entrance to the half-dugout was probably located in the south-eastern wall near the eastern corner of the ditch. The subsoil slipped-down step of an oval form was found there.

Thus, the internal usable area of the half-dugout, taking into account the located objects, was about 5 m^2. At the same time, the not quite rational arrangement of interior elements, in particular, utility and post pits, left an area for a comfortable stay overnight for only one person.

Utility pits have been investigated in the southern and northern corners of the ditch. They have a rounded shape in plan, their walls expand closer to the bottom. The dimensions of the inlet of the pit № 278 are 1.67×1.57 m, the bottom – 1.82×1.92 m, depth – 2.10 m. The dimensions of the pit № 279 at the inlet are 1.65×1.50 m, at the bottom – 1.91×1.91 m, depth – 2.11 m. Morphology and metric characteristics of pits № 278 and № 279 are almost identical, which may indicate the synchronicity of their construction, similar functional load, as well as the use of metric standards during their laying.

The material from the filling of half-dugout № 277 is not distinct. The main part of ceramics belongs to container amphorae (83.1%). Excluding the latter, 84 fragments of pottery were found. In contrast to the filling of the half-dugout № 275, the most numerous group includes the items of plain tableware (32.1%). Eastern Greek ware items are very close in number – 29.8%. 17.9% of the fragments belong to kitchenware formed on a potter's wheel, and 10.7% belong to handmade. Thus, the ratio of formed on a potter's wheel and handmade kitchenware looks like 62.5% to 37.5%, respectively. Another 7.1% of the fragments belong to Attic import samples and only 2.4% belong to thick-walled household vessels.

Most of the finds belong to the middle – the second half of the 6th century BCE. In particular, a small ceramic spindle whorl, an arrow-coin, and a produced item made of a stone luterius rim with a rectangular groove and a through drilled hole of the last quarter – the end of the 6th century BCE are worth noting[34].

The assemblage of profile fragments of amphorae from the complex is not distinct.

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[33] Otherwise, a half-dugout could have arisen in the area of two older household pits, and their location in the corners of the room was accidental.

[34] Чистов Д.Е., Зуев В.Ю., Ильина Ю.И., Каспаров А.К., Новоселова Н.Ю. Материалы Березанской (Нижнебугской) античной археологической экспедиции. Т. 2. Санкт-Петербург, 2012. С. 32, табл. 28.6; С. 37, табл. 91.16.

Among the imported tableware, the latest items include the profile of Corinthian light clay luterius of the collar rim form group of the end of the 6th – beginning of the 5th century BCE[35], a rim fragment of Ionian banded little cup of the last quarter of the 6th – beginning of the 5th century BCE[36], a rim fragment of Ionian banded bowl of the end of the 6th – beginning of the 5th century BCE[37], the foot of Ionian banded amphora of the end of the 6th – the third quarter of the 5th century BCE[38], Ionian open-type lamp with a through wick hole of 525-480 BCE[39], as well as a stem with a round foot of Attic black-glazed kylix type 'C' of 525-500 BCE[40].

Also interesting for object dating is the finding of a bowl fragment with traces of deformation, which is a local imitation of Ionian banded pottery and, apparently, belongs to the products of the above-mentioned pottery workshops.

Therefore, probably, like the complex № 275, the half-dugout № 277 was built within the middle – the third quarter of the 6th century BCE and was backfilled no earlier than the end of the last third or even at the turn of the 6th – 5th centuries BCE. A separate publication is being prepared based on the materials of two utility pits located in the corners of the half-dugout № 277, but at present, it can be said that their ceramic complex does not go beyond the third quarter of the 6th century BCE. Thus, even if at some period the half-dugout and the pits coexisted, the latter were backfilled in for at least a quarter of a century earlier than the half-dugout.

Both described half-dugouts are located in the space of the courtyard of one of the blocks of archaic Borysthenes along the outer facades of the walls of the ground-based crude stone constructions erected during the third quarter of the 6th century BCE. Considering their location, stratigraphic observations, and analysis of material culture, it can be assumed that the creating of both deepen constructions directly preceded the building of ground-based constructions, but at some stage deepened and early ground-based buildings coexisted. So, it is no doubt that the half-dugouts studied in 2020 at excavation unit 'T' belong to the turning point in the history of Borysthenes' architecture, associated with the mass transition from deepen to ground-based construction. Excavations of large excavation units of ancient buildings in different parts of the island gave researchers reason to date this phenomenon to the second half of the 6th century BCE.

L.V. Kopeikina dates the construction of dugouts at the north-western excavation unit of Berezan island to the end of the 7th – the third quarter of the 6th century BCE[41], although later she nevertheless notes the presence of several deepen complexes that

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35 Villing A., Pemberton E.G. Mortaria from ancient Corynth: Form and Function // Hesperia: The Journal of the American School of Classical Studies at Athens. 2010. Vol. 79, No. 4. P. 572-578, fig. 7-9.

36 Буйских А.В. Архаическая расписная керамика из Борисфена… С. 35-36, кат. 6.115-6.119.

37 Буйских А.В. Архаическая расписная керамика из Ольвии. Киев: Стародавній світ, 2013. С. 39-41, кат. 9.316-6.326.

38 Секерская Н.М., Буйских А.В. Ранняя расписная керамика из Никония // Материалы по археологии Северного Причерноморья. 2019. № 14. С. 206, рис. 8, 4; Буйских А.В. Архаическая расписная керамика из Ольвии… С. 118-119, кат. 9.117-9.121.

39 Журавлев Д.В., Быковская Н.В., Желтикова А.Л. Коллекция светильников. В 3-х т. Т. I: Светильники VI – первой половины III в. до н.э. Киев, 2007. Кат. 1-16.

40 Sparkes B.A., Talcott L. Black and Plain Pottery… P. 91-92, No 398-407.

41 Копейкина Л.В. Новые данные об облике Березани и Ольвии в архаический период (истоки строительной традиции) // Советская археология. 1975. № 2. С. 188.

functioned until the 5th century BCE[42]. In the middle – at the beginning of the third quarter[43] or in the last quarter of the 6th century BCE[44], almost all the ground constructions at this excavation unit were backfilled, and in their place, the construction of ground-based multi-chamber buildings began. V.V. Krutilov attributes the construction of dugouts at the excavation unit 'T' to two stages of the archaic period, dating from the end of the second – the third quarter of the 6th century BCE and the first quarter of the 5th century BCE[45].

It is impossible to ignore the materials of the dig 'O' in the eastern part of the island, which today is the largest studied excavation unit of ancient Berezan. Just on these materials, D.Y. Chistov managed to single out the so-called 'colonists' houses' – rectangular half-dugouts that directly preceded the construction of ground-based crude stone buildings. Unlike rounded half-dugouts, rectangular 'colonists' houses' do not form clusters. In their spatial arrangement, one can trace the similarity to the city block network of the third quarter of the 6th century BCE. In most cases, the 'colonists' houses' have the same orientation as the rooms of later multi-chamber buildings, or are even located along the boundaries of future blocks. Taking into account the fact that all complexes of this type of excavation unit 'O' are dated from the second quarter to the middle of the 6th century BCE, the researcher suggests that their appearance refers to a short stage that directly preceded the beginning of mass ground-based construction[46].

Similar systems of deepen constructions are found in Olbia. For example, rectangular half-dugouts, located in a chain along the main longitudinal street of Olbia, allowed S.D. Kryzhytskyi to link their layout with the beginning of the city's block system formation. According to the researcher, the presence of elements of housing development regulation, namely: the location of half-dugouts along the street at approximately multiple intervals, their close orientation in almost the entire area of construction, and corresponding to the future street network, indicates the possibility of the existence of astonomoi magistratus in the third quarter of the 6th century BCE[47].

At the same time, dugouts in the agricultural settlements of the Lower Buh region were grouped without a certain system, and there were no blocks. The organization of the early rural settlements was homogeneous, public or administrative complexes, as well as fortifications, were absent. Therefore, the regulation in the rectangular half-dugouts housing development system is typical only for urban centers.

The context of the two half-dugouts of the excavation unit 'T', to which this publication is devoted, undoubtedly allows us to classify them as 'colonists' houses'.

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[42] Копейкина Л.В. Особенности развития поселения на острове Березань в архаический период (по результатам раскопок на северо-западном участке) // Советская археология. 1981. № 1. С. 193, 201.

[43] Копейкина Л.В. Новые данные об облике Березани… С. 188.

[44] Отрешко В.М., Мазарати С.Н. Архаические сооружения Березани // Ольвийские древности. Сборн. науч. труд. Памяти В.М. Отрешко. Киев: ПП «КОРВІН-ПРЕСС», 2009. С. 87.

[45] Крутилов В.В. Полуземлянки архаического времени на территории участка «Т» на о. Березань (по материалам раскопок 2005-2006 гг.) // Античный мир и варвары на юге России и Украины: Ольвия. Скифия. Боспор. Запорожье: Дикое Поле, 2007. С. 26.

[46] Чистов Д.Е. Землянки архаической Березани… С. 139.

[47] Крыжицкий С.Д. Ольвия. Историографическое исследование архитектурно-строительных комплексов. Киев: Наукова думка, 1985. С. 60, 61.

D.Y. Chistov suggests that these buildings were the first temporary dwellings of the vanguard of the great 'second wave' of Berezan colonization[48], which significantly influenced the further history of Borysthenes. These demographic and architectural changes in Berezan settlement are dated back to the 540s BCE by modern research[49].

Subsequently, most of these temporary dwellings were demolished, and large ground-based buildings were constructed in their place, while others continued to be used and were incorporated into the block network or became part of new buildings[50].

Half-dugouts № 275 and № 277 of excavation unit 'T', in contrast to most of the studied 'colonists' houses' of Berezan island, continued to be used after creating ground-based constructions and, probably, as utility constructions were organically incorporated into the new household.

REFERENCES

Bondarenko, D.V. & Chistov, D.E. (2021). «Kvartal goncharov» (uchastok «HSh») v sisteme zastroiki i v ekonomike arkhaicheskogo Borisfena [«Potters' Quarter» (sector «HSh») and its Place in the City Grid and in Economy of the Archaic Borysthenes]. *Stratum Plus, 3,* 235-259 [in Russian].

Buiskikh, A.V. (2019). *Arkhaicheskaia raspisnaia keramika iz Borisfena (raskopki 1960-1980 gg.).* [Archaic painted pottery from Borysthenes (excavations of 1960-1980)]. Kiev [in Russian].

Buiskikh, A.V. (2013). *Arkhaicheskaia raspisnaia keramika iz Olvii* [Archaic painted pottery from Olbia (East-Greek, Laconic, Corinthian, Imitations)]. Kiev [in Russian].

Chistov, D.E. (2016). Arkhaicheskie doma Berezanskogo poseleniia: nekotorye osobennosti zhilogo domostroitelstva [Archaic house Berezan settlement some features of residential house building]. *Eminak, 4 (16),* 77-86 [in Russian].

Chistov, D.E. (2017). Zemlianki arkhaicheskoi Berezani [Dugouts of the archaic Berezan settlemen]. In *Pivnichne Prychornomor'ia za antychnoi doby (na poshanu S.D. Kryzhytskoho)*. Kyiv, (pp. 127-143) [in Russian].

Chistov, D.E. (2020). Zemlianki, khizhiny, doma: zametki o nachalnom periode grecheskoi urbanizatsii Severnogo Prichernomoria [Dugouts, huts, houses: notes on early days of Greek urbanization of the Northern Black Sea Coastal Region]. *Arkheologicheskie vesti, 29,* 111-128 [in Russian].

Chystov, D.E. (2021). Vulytsi arkhaichnoho Borysfena [Streets of Archaic Borysthenes]. *Eminak: naukovyi shchokvartalnyk, 1 (33),* 93-109 [in Ukrainian].

Chystov, D.E., Ilina, Yu.I., Eremeeva, A.A. & Shcherbakova, O.E. (2021). *Materialy Berezanskoi Nizhnebugskoi antichnoi arkheologicheskoi ekspeditsii. T. 3. Berezasnkoe poselenie v issledovaniiakh 2010-2014 godov* [Materials of the Berezan (Lower Bug) archaeological expedition. Volume 3. The Site of Berezan in the Studies of 2010-2014]. Sankt-Peterburg [in Russian].

Chistov, D.E., Zuev, V.Yu., Ilina, Yu.I., Kasparov, A.K. & Novoselova, N.Yu. (2012). Materialy Berezanskoi Nizhnebugskoi antichnoi arkheologicheskoi ekspeditsii. T. 2. [Materials Berezan ('Nizhnebugskoy') ancient archaeological expedition]. Sankt-Peterburg [in Russian].

Ganzha, A.I. (1986). Raskopki poseleniia Kozyrka IX [Excavations of the settlement of Kozyrka IX]. *Arkheologicheskie otkrytiia 1984 g.* Moskva, 226 [in Russian].

Kopeikina, L.V. (1975). Novye dannye ob oblike Berezani i Olvii v arkhaicheskii period istoki stroitelnoi traditsii [New data on the appearance of Berezan and Olbia in the archaic period (the origins of the building tradition)]. *Sovetskaia arkheologiia*, *2,* 188-199 [in Russian].

Kopeikina, L.V. (1981). Osobennosti razvitiia poseleniia na ostrove Berezan v arkhaicheskii period (po rezultatam raskopok na severo-zapadnom uchastke) [Features of the development of the settlement on the Berezan Island in the archaic period (based on the results of excavations in the North-Western section)]. *Sovetskaia arkheologiia, 1,* 192-208 [in Russian].

Krutilov, V.V. (2009). *Otchet o polevykh issledovaniiakh na Berezanskom antichnom poselenii (uchastok*

[48] Чистов Д.Е. Землянки, хижины, дома: заметки о начальном периоде греческой урбанизации Северного Причерноморья // Археологические вести. Вып. 29. Санкт-Петербург: Ин-т истории материальной культуры, 2020. С. 113.

[49] Ibid. С. 114.

[50] Чистов Д.Е. Землянки архаической Березани… С. 140.

«T») v 2009 g. [Report on field studies on the ancient settlement of Berezan (section «T») in 2009]. In: The Scientific Archive of Institute Archaeology NAS of Ukraine, 38 s. 223 tabl., polevaia dokumentatsiia [in Russian].

Krutilov, V.V. (2007). Poluzemlianki arkhaicheskogo vremeni na territorii uchastka «T» na o. Berezan po materialam raskopok 2005-2006 gg. [Semi-dugouts of archaic time on the territory of site «T» on the island Berezan (based on materials from excavations 2005-2006)]. In *Antichnyi mir i varvary na iuge Rossii i Ukrainy: Olviia, Skifiia, Bospor*. Zaporozhe (pp. 26-35) [in Russian].

Krutilov, V.V., Smyrnov, O.I. & Bondarenko, D.V. (2014). Rozkopky antychnoho poselennia Borysfen (o. Berezan) na diliantsi «HSh» [Excavations of the ancient settlement of Borisfen (Berezan Island) on the sector «HSh»]. *Arkheolohichni doslidzhennia v Ukraini 2013 r.* Kyiv, 195-196 [in Ukrainian].

Kryzhitskii, S.D. (1993). *Arkhitektura antichnykh gosudarstv Severnogo Prichernomoria* [The architecture of the ancient states of the Northern Black Sea region]. Kiev [in Russian].

Kryzhitskii, S.D. (1985). *Olviia. Istoriograficheskoe issledovanie arkhitekturno-stroitelnykh kompleksov* [Olbia: Historiographic Study of Architectural and Building Complexes]. Kiev [in Russian].

Kryzhitskii, S.D., Buiskikh, S.B., Burakov, A.V. & Otreshko, V.M. (1989). *Selskaia okruga Olvii* [The rural district of Olbia]. Kiev [in Russian].

Marchenko, K.K. & Domanskii, Ya.V. (1999). Dva poseleniia Nizhnego Pobuzhia arkhaicheskogo vremeni. Opyt sravnitelnoi kharakteristiki materialnoi kultury pamiatnikov [Two settlements of Low Bug area of the archaic time (The experience of the comparative characteristics of the material culture of monuments)]. *Stratum plus, 3,* 26-74 [in Russian].

Monakhov, S.Yu. (2003). *Grecheskie amfory v Prichernomore. Tipologiia amfor vedushchikh tsentrov-eksporterov tovarov v keramicheskoi tare. Katalog-opredelitel* [Greek amphorae in the Black Sea region. Typology of amphorae of the leading centers-exporters of goods in ceramic containers: Identifier catalog]. Moskva-Saratov [in Russian].

Moore, M.B. & Philippides, M.Z.P. (1986). *Attic Black-Figured Pottery.* Princeton, N. Jersey (The Athenian Agora. Vol. XXIII).

Otreshko, V.M. & Mazarati, S.N. (2009). Arkhaicheskie sooruzheniia Berezani [Archaic structures of Berezan]. In *Olviiskie drevnosti. Sbornik nauchnykh trudov pamiati V.M. Otreshko.* Kiev, (pp. 81-92) [in Russian].

Sekerskaia, N.M. & Buiskikh, A.V. (2019). Ranniaia raspisnaia keramika iz Nikoniia [Early painted pottery from Nikoniy]. *Materialy po arkheologii Severnogo Prichernomoria, 14,* 203-212 [in Russian].

Shtitelman, F.M. (1951). *Gorodishcha, poseleniia i mogilniki Bugskogo limana VII-II vv. do n.e.* [Settlements, settlements and burial grounds of the Bug estuary of the 7th – 2nd centuries BC]. (Candidate's thesis). The Scientific Archive of Institute Archaeology NAS of Ukraine, F. 12, № 312 [in Russian].

Sparkes, B.A. & Talcott, L. (1970). Black and Plain Pottery of the 6th 5th and 4th Centuries B.C. *The Athenian Agora. Vol. XII.*

Villing, A. & Pemberton, E.G. (2010). Mortaria from ancient Corynth: Form and Function. *Hesperia: The Journal of the American School of Classical Studies at Athens, Vol. 79, No. 4,* 555-638.

Vinogradov, Yu.A. (1980). Raskopki pozdearkhaicheskogo antichnogo poseleniia Luparevo-2 [Excavations of the post-archaic antique settlement Luparevo-2]. *Arkheologicheskie issledovaniia v Ukraine v 1978-1979 gg. Tezisy dokladov XVIII konferentsii IA AN USSR.* Dnepropetrovsk, 105 [in Russian].

Zhuravlev, D.V., Bykovskaia, N.V. & Zheltikova, A.L. (2007). *Kollektsiia svetilnikov. Vol. I. Svetilniki VI – pervoi poloviny III v. do n.e.* [Collection of lamps. Vol. I: Lamps of the 6th – first half of the 3rd century BC]. Kiev [in Russian].

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Дві напівземлянки з розкопок острову Березань у 2020 році

В статті розглядаються основні підсумки досліджень двох напівземлянок, зафіксованих у ході розкопок житлового кварталу на захід від теменосу Березанського

поселення у 2020 р. Особлива увага приділяється опису планувальної структури та конструктивних особливостей комплексів, аналізу решток матеріальної культури з їх заповнення, визначається хронологія споруд та їх зв'язок з еволюцією архітектурного вигляду архаїчного Борисфену.

Обидві напівземлянки зафіксовані на площі внутрішнього двору одного з кварталів Березанського поселення третьої чверті VI ст. до н.е. та, незважаючи на більш раннє спорудження, повністю відповідають просторовій орієнтації споруд цього кварталу та всієї вуличної мережі цього району. Стратиграфічні та планіграфічні спостереження, а також детальний аналіз керамічного комплексу із заповнення напівземлянок, дозволяють пов'язати їх виникнення з приходом у Борисфен «другої» великої хвилі колоністів близько 540-х рр. до н.е., для яких вони слугували тимчасовими спорудами до зведення стаціонарних будинків. Однак, на відміну від більшості схожих комплексів, описані напівземлянки продовжили своє існування поряд з наземними домами та тривалий час (ймовірно, аж до кінця VI ст. до н.е.) використовувалися, вірогідно, в якості господарських приміщень.

Ключові слова: Борисфен, архаїка, напівземлянка, планування

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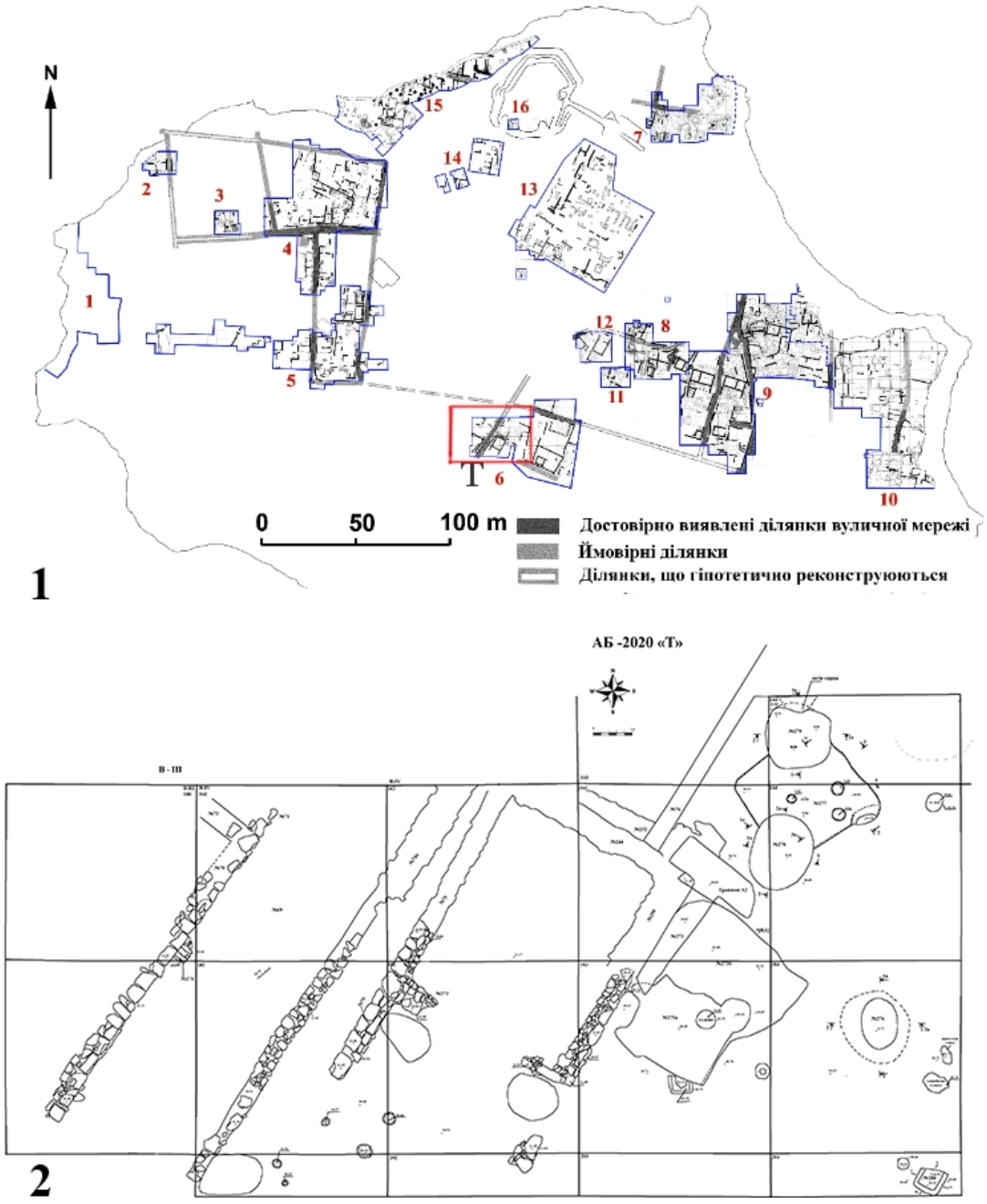

Fig. 1. Berezan island.

1 – imaginary reconstruction of the street network of the ancient Berezan settlement (according to D.Y. Chistov). Location of excavation unit 'T'.
2 – plan of the western slotting to excavation unit 'T' studied in 2020.

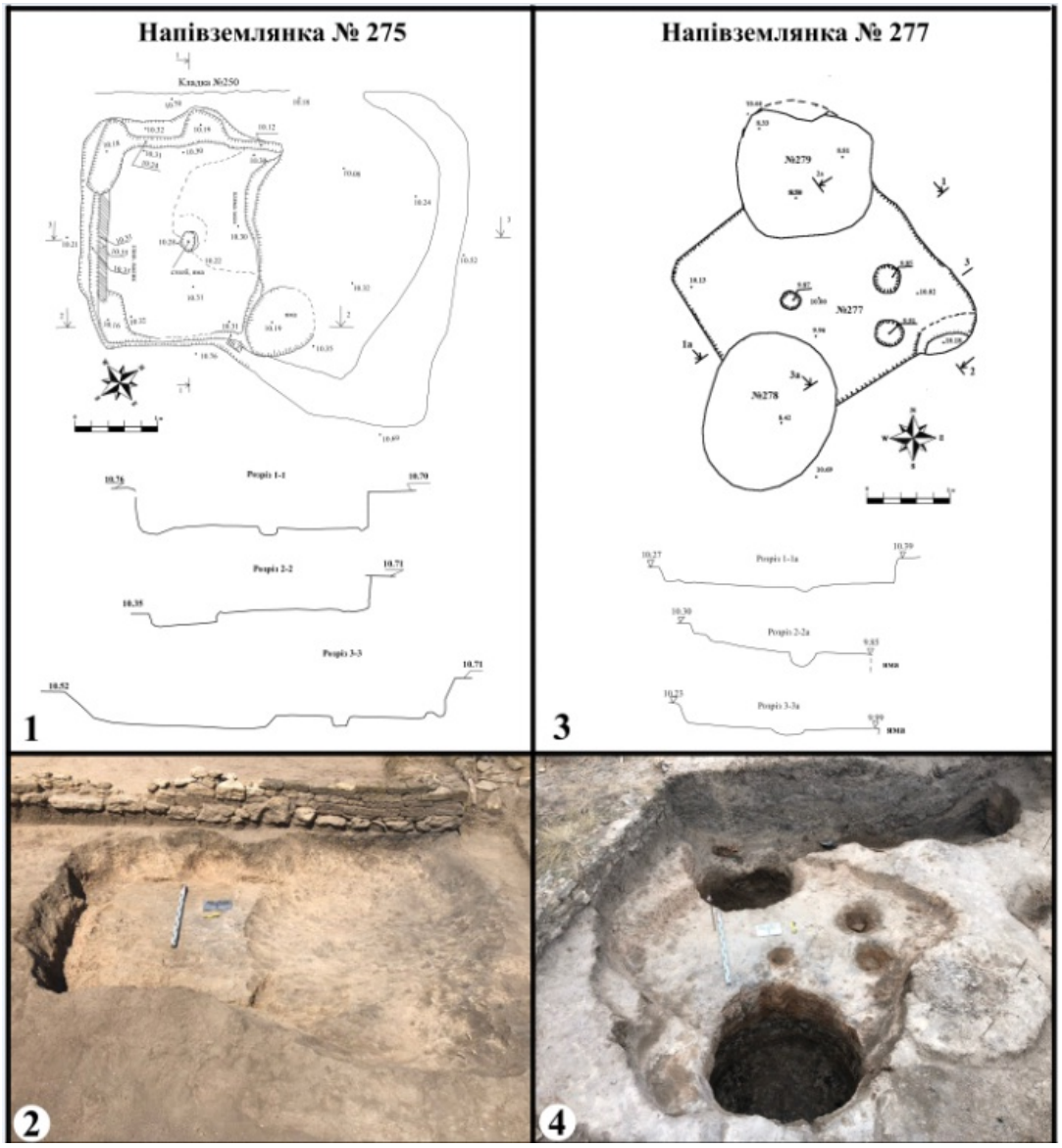

Fig. 2. Berezan island. Excavation unit 'T-2020': 1, 2 – half-dugout № 275; 3, 4 – half-dugout № 277.