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Ancient sanctuaries as a symbolic system: Before the barrow

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Pradziejowe sanktuaria jako system symboliczny: Przed kurhanem

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Abstract: In the North Black Sea area the analysis of early radiocarbon dates and the stratigraphy of "barrow complexes" with early dates (5th mill. BCE) has led to the conclusion that they are not directly related to barrows but rather belong to complicated monumental structures, specifically sanctuaries. Sanctuaries preceded barrows chronologically, and they functioned for a long time without the construction of barrows over them. The separation of these complexes in time and space has allowed conclusions to be drawn about the existence of these sanctuaries around 49–40 cent. BCE. Barrows emerged later, and their placement on the site of sanctuaries is connected to the sacred nature of the place. Across Europe, barrows emerged almost simultaneously, ca. 39/38 cent. BCE, though in different cultures.

Some sanctuaries had astronomical orientations and were associated with calendrical-zodiacal symbolism. Occasionally, burials with a sacred sense took place within the sanctuary areas, featuring flat interments without the construction of barrows. The emergence of sanctuaries can be attributed to a circle of archaeological evidence indicating interaction between the world of early farmers in Southeast and Central Europe and the "Steppe" world" of pastoralists. The practice of constructing various types of sanctuaries continues by Eneolithic population throughout the entire 4th mill. BC, with some types persisting in the Yamna and Catacomb cultures.

Keywords: barrow, sanctuary, cromlech, North Black Sea region, Eneolithic, Bronze Age

Abstrakt: Na obszarach północnego Nadczarnomorza analiza wczesnych datowań radiowęglowych oraz stratygrafii „kompleksów kurhanowych" z takimi oznaczeniami (V tys. p.n.e.) doprowadziła do wniosku, że nie są one bezpośrednio związane z kurhanami, lecz należą do skomplikowanych struktur monumentalnych – sanktuariów. Sanktuaria poprzedzały chronologicznie kurhany i funkcjonowały przez długi czas bez budowy nasypów nad nimi. Rozdzielenie tych kompleksów w czasie i przestrzeni pozwoliło wyciągnąć wnioski na temat istnienia sanktuariów ok. 49–40 w. p.n.e. Kurhany pojawiły się później, a ich umiejscowienie w miejscu sanktuariów wynikało z sakralnego charakteru danego miejsca. W całej Europie kurhany pojawiły się w różnych kulturach niemal jednocześnie ok. 39/38 w. p.n.e.

Niektóre sanktuaria miały orientację astronomiczną i były związane z symboliką kalendarzowo-zodiakalną. Czasami na terenie sanktuariów odbywały się pochówki o charakterze sakralnym, polegające na umieszczaniu ciał zmarłych w płaskich grobach bez budowy nasypów. Pojawienie się sanktuariów można wiązać z szeregiem dowodów archeologicznych wskazujących na interakcję między światem wczesnych rolników w Europie południowo-wschodniej i środkowej a pasterskim „światem stepowym". Praktyka budowania różnego rodzaju sanktuariów była kontynuowana przez ludność eneolityczną przez całe IV tys. p.n.e., a niektóre typy przetrwały w kulturach jamowej i katakumbowej.

Słowa kluczowe: kurhan, sanktuarium, kromlech, północne Nadczarnomorze, eneolit, epoka brązu

Introduction

The origin kurgan rite and its spread across Europe has attracted the attention of researchers. It is believed that the earliest barrows emerged in the Paris Basin around 4500 BC (Furholt, Müller 2011: 26). These were the so-called „long barrows" (megaxylon), associated with the Cerny culture, and the "Passy type" necropolis (Chambon, Thomas 2011: 249). In Northern and Central Europe, long barrows emerged in the second half of the 5th mill. BC (burial complexes of the Lengyel culture, Funnel Beaker cultures).

Archaeologists consider long barrows as both burial and cult structures linked to ancestor worship. On the other hand, they must be seen in an economic context as territorial markers, that delimit the territories controlled by different communities (Turek 2021: 1674). Typically, they took the form of elongated barrows, trapezoidal in plan, bordered by a stone framework made of large, disordered boulders. Sometimes, long barrows included wooden constructions: timber facades, palisade enclosures, and "houses of the dead" (fig. 1: 1).

The oldest round barrows in Central Europe date back to the beginning of the 4th mill. BCE. They were registered mainly in the Baalberg group in the Middle Elbe-Saale region in today's Germany (fig. 1: 2) and in milieu of the Funnel Beaker culture in Cuiavia, Poland[1] (Czebreszuk, Pospieszny 2012: 557). They are dated to the 39–38 cent. BCE. Newest dating of barrows in Małopolska (Lesser Poland) indicates the second quarter of the 4th mill. BCE (Włodarczak 2019: 519).

Discussion

For a long time, these barrows were interpreted solely as burial sites, serving as a permanent marker of the dead person or people. Later, they came to be seen as elements of cultural practice. In several senses, they were not merely receptacles for the body; they were houses for the still-present spirit, or soul of the predecessors of the living (Harding 2011: 29).

However, round barrows have their own symbolism, extending beyond ancestor worship. In the Eneolithic and Bronze Age, the barrow became a sacred center with a specific semiotic status and a complex of symbolic functions. In the Bronze Age, in the North Black Sea region, the barrow tradition reached its peak, with burials from almost all archaeological cultures of this era found beneath barrows.

The reason for this is not a lack of space for burials, nor the technical capabilities of ancient societies, but the formation and functioning of specific ideological systems within societies, their (re)transmission by people of different cultures and generations over an extended period. During the Bronze Age, the barrow were perceived as an existing sacred space, a unique symbolic system with a high semiotic status. Through rites and rituals, humans shape the surrounding world in specific forms with a sign-symbolic character. In the archaeological context, the burial ritual is the most expressive tool for structuring the Universe: it appears as a "text" (in a semiotic meaning), and its components are seen as signs.

The symbolism of the round barrow is also connected with specific sacred places, with sanctuaries that, at times, are located beneath the barrows. Often they were not directly related to the funerary rite, at least initially. Overall, in the North Black Sea region, flat sanctuaries, sanctuaries on natural objects, and sanctuaries beneath or near barrows are known. Analysis of the stratigraphy of sanctuaries and barrows reveals that some sanctuaries discovered during barrow excavations existed for a certain period without a barrow and prior to the barrow. These were flat sanctuaries later covered by barrows.

Stratigraphy and chronology

Considering the early dates of sub-barrows complexes (5th mill. BCE) suggests that they are not directly linked to barrows but are associated with complex monumental structures - sanctuaries (sometimes with astronomical orientations), that chronologically preceded barrows and functioned for a certain period without the construction of earthen embankment. Simultaneously, in some cases, burials were found within sanctuary areas, probably, contemporaneous with them and possessing a sacred nature. Other sanctuaries remained without synchronous burials, and burials occurred there centuries later; it was then that the barrows were built over them.

A specific marker is the presence or absence of a "thrown out soil" (soil from the grave) around the primary burial. Archaeologists excavating barrows are aware that the main burial is always surrounded by its "thrown out soil". This soil is often yellow clay or loess. It is visible in vertical profile of the barrow and in the ancient surface. The barrow

[1] At the same time, there is position is that the practice of tumulus building seems so widespread in time and space that it seems hard to associate it with one particular ethnic group (Harding 2011: 28).

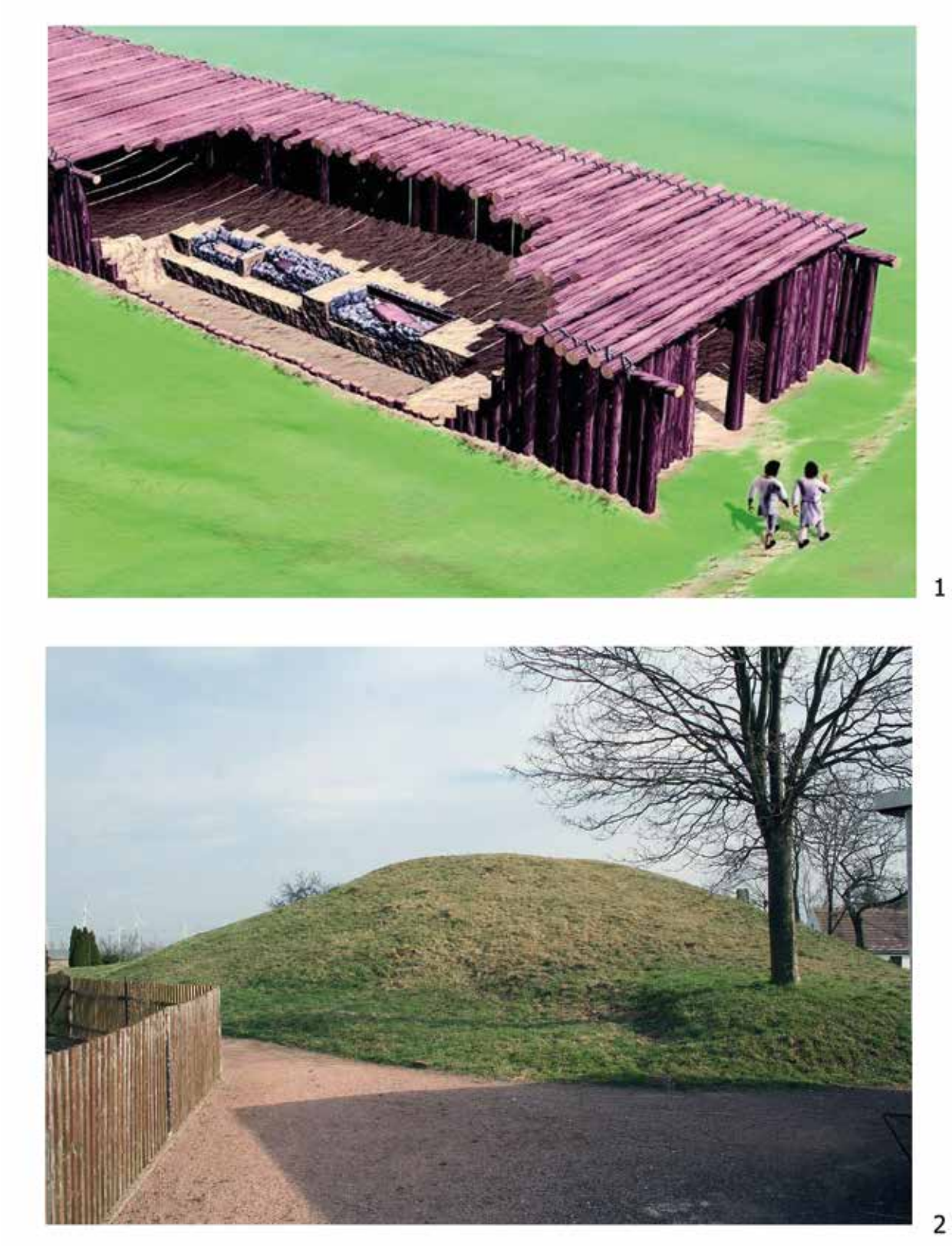


Fig. 1. European early barrows of: 1 – reconstruction of megaxylon no. VI from Słonowice (after Nowak 2017); 2 – Baalberg round barrow, Germany (Wikipedia)

has covered and preserved this soil (fig. 2). In flat graves, the "thrown out soil" from the main grave is not preserved. Such a situation has been recognised, for instance, in: Taraclia II, 18/12 (Sava *et al.* 2019: 86); Verbky V, 1/10, 3 (Rassamakin 2004: 23); Kamianka V, 3/5 (Rassamakin 2004: 93), Cimișlia 8/3 (Popovici, Ciobanu 2021: 119), etc. In such situations, the barrow was undoubtedly constructed over a specific chronological interval.

In my opinion, complex structures (later covered by barrows) could not have been built and adjusted within the short timeframe during burial rites took place. In addition, the burial of the deceased could not fulfill the purposes and potential possibilities of these sanctuaries. Often, these phenomena are of different cultures and different times. The primacy of sanctuaries and their functioning over an extended period should be acknowledged. By the time the barrow was built, some functions had already been lost, so the new population had knowledge of the sacredness of the place but lacked the skills to use it, considering astronomical knowledge.

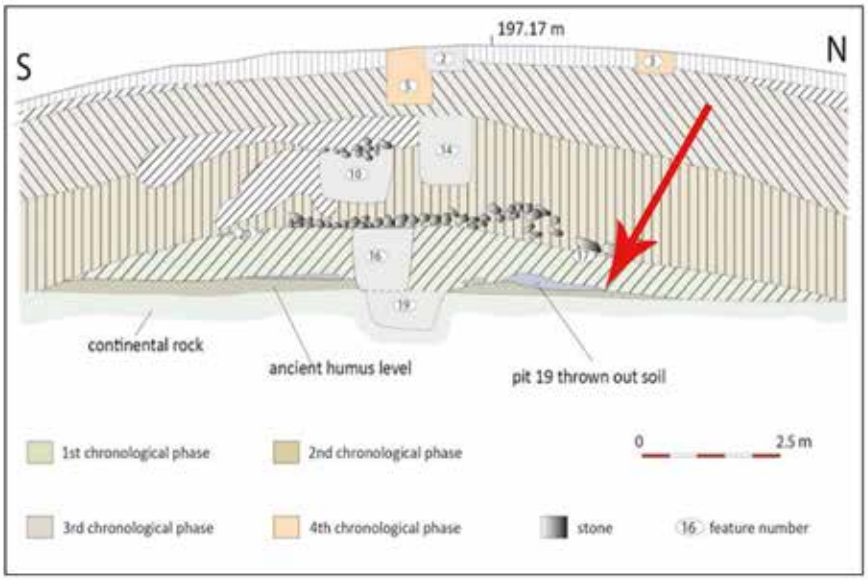
Some burials performed within sanctuary areas (as well as ritual or sacrificial pits) are synchronous with the early period of the existence of the flat sanctuary and precede the construction of the barrow in later Eneolithic or Bronze Age periods. For example, in complex Verbki V, barrow 1 (with zoomorphic ditches), pits without skeletons No. 3 and No. 10 were not accompanied by a throw out soil. Apparently, they belong to the pre-burial period of the sanctuary. The main burial was surrounded by a yellow soil from the grave, hence the barrow was subsequently built over it. And such situations are not unique. Some primary burials are located not in the center of the sacred site but on the edge, near a cromlech or even beyond it (Nova Dolyna 3; Taraclia II, 18). It is quite likely that such burials could be a sacred offering or the burial of a "priest" or a person of special social status. The destruction of some burials made within the sanctuary area does not diminish their significance; it may even enhance their semiotic status[2]. Most likely the dating of sanctuaries not be directly related to the dating of the primary burial associated with the actual construction of the barrow. This is confirmed by cases where several primary burials, differing in dates and cultures, are found beneath the same barrow. For instance, two primary burials were found in barrow Nikopol, 1, Dnipro region (flat Eneolithic grave 1/16, associated with a ritual site, and grave 1/14 of the Yamna culture, with which the construction of the barrow began). Also, two primary burials were found in barrow Aygurskiy II, 17, in the Central Pre-Caucasus. Grave 17/6 is Eneolithic, with a specific wild boar tusk decoration, and is surrounded by a stone construction. Grave 17/2 has a radiocarbon date indicating the Middle Bronze Age. Both graves are under the same barrow, but it is evident that the first burial was associated with a pre-barrows sanctuary, and the second one was associated with the barrow. Similar situations are known in other cases.

Barrows above sacred complexes („sanctuaries") began to emerge after new (or initial) burials were conducted on the sanctuary sites, not earlier than 39/38 cent. BCE. It is precisely over these burials that barrows were constructed, and these „late" burials may not be connected to earlier ground burials or flat sanctuaries.

Thus, the initial stage of the existence of sanctuaries corresponds to the „pre-barrows" period of the steppe Eneolithic. Stone settings, menhirs, pillar structures, ditch systems, figurative earthen or clay barrows, truncated-conical pedestal/platforms, and other constructions may be associated with sanctuaries. Typically, the platforms have a trapezoidal shape in cross-section, with a small height, often not exceeding the level of the stone circle, and their upper surface is only slightly smaller than the lower one. Such platforms are known from the ancient horizon. There is a hypothesis that they may be linked to the early stage of adopting barrow construction traditions (Rostunov 2007). Ditches, often associated with the functioning of sanctuaries, frequently show evidence of prolonged open states (formation of sediment). Ditch passages are unnecessary in the presence of a barrow; in fact, they provided access to the territory of precisely the "barrowless" flat sanctuary. Ditches that are truly associated with barrow construction did not have passages (were "ring-shaped"). Occasionally, these ditch passages correlate with specific astronomical and calendrical markers.

Research on such sanctuary complexes from an archaeoastronomical perspective indicates that many of them functioned as astronomical observatories and have structural details related to the movement of celestial bodies. Tamila Potemkina, together with astronomers, explored sanctuaries

[2] Most often in the destroyed burial in the sanctuary was not a full skeleton. The bones of a certain person may have been buried in several places, giving these places a special sacrality.



1

2

3

Fig. 2. Thrown out the soil from main grave under the barrows: 1 – drawing of the central part of the north-south profile of Pamukli Bair Barrow, Malomirovo (after Alexandrov, Włodarczak 2022); 2 – Nyznia Duvanka II, 1/9, Lugansk region (after Brovender 2020); 3 – Kovtuny 1, Cherkassy region (photo by D. Kushtan)

with astronomical orientations under barrows from several regions of the Northern Black Sea region (Potemkina, Ivanova 2004; Potemkina 2004; 2011). These include complexes with pillar structures, zoomorphic constructions, and cromleches, and contain markers related to astronomical events (fig. 3). There are likely more such complexes, but specialized research is necessary to identify them.

In my view, such complex structures were built for long-term using rather than for relatively quick, singular events like burial ceremonies and barrow construction. This is indicated by astronomical markers for different seasons within a single object. Barrows covered these sanctuaries later. Incorporating archaeoastronomy data in the study of such barrows not only confirms this assumption but also significantly expands the understanding of their place and role in the worldview of ancient populations. In all noted cases, pillars and stone circles served as distinctive landmarks, pointing to the sun and moon rise and set points on the horizon on the most significant days of the year, associated with seasonal and daily changes (Ivanova, Potemkina 2005: 18–19). Observations of astronomical phenomena were closely linked to economic activities, daily life, and the calendar rituals of ancient populations. They laid the foundation for worldview concepts associated with understanding the Universe. The positions of the sun and moon, recording daily and seasonal changes, became fundamental in creating models of the World and its components (Potemkina 2005: 188)[3].

Potemkina connects the origin of such sanctuaries with the roundels of Central Europe. According to her opinion, the spread of these traditions occurred through the "steppe corridor", adapting to other cultures and regions, further eastward, to the Southern Urals, Trans-Urals, reaching the Altay. There was likely a route to the Black Sea Steppe as well. In cases where radiocarbon dates were obtained for individual elements of such sanctuaries (wooden pillars or "sacred" burials, cult pits), they were synchronous with Central European structures with astronomical markers but older than barrows. The most well-known flat burial complexes found under barrows are Suvorove and Giurgiulești (fig. 4). The Suvorove burial was done inside the site surrounded by a cromlech, possibly on the territory of a pre-barrow sacred object. Suvorove lacks a radiocarbon date, but the presence of a scepter allows it to be attributed as the Suvorove group of the Serednіy Stig culture. According to Igor Manzura, the Giurgiulești cemetery consisted of five flat burials and two sacrificial objects, and the allocation of burials, the distribution of sacrificial animals and burial items, as well as other attributes, are closely linked to the structure of the core Indo-European myth (Manzura 1999: 26). New radiocarbon dates show that the emergence of the cemetery can be dated to the third quarter of the 5th mill. BCE (Govedarica, Manzura 2016). Giurgiulești cemetery could be synchronous with the early stage of the Skelanska (Novodanylivska) culture. Sometimes Skelanska and Suvorovo seen as separate but synchronous groups of the Serednij Stig horizon.

Likely, the flat burials of Suvorove and Giurgiulești, along with some other flat burials found under barrows, were associated with pre-barrow sanctuaries. In my opinion, a "common ritual space" persisted for a long time among the steppe population, and in the beginning of 4th mill. BCE and later (late Eneolithic and Bronze Age), barrows were constructed on these sanctuaries. The construction of cromleches and ditches over time could evolve into a tradition, losing some ritual properties: there are barrows with stone circles and ditches but without a distinct sacred features or pronounced astronomical orientations.

Typology of sanctuaries

Several types of pre-barrow sanctuaries can be distinguished (table 1).

First type: pre-barrow flat sanctuaries (26 cases). Some were built long before the appearance of the barrow tradition, while others have dates from the "barrow period" (fig. 5). These sanctuaries are circular areas enclosed by stone circles, ditches, earthen berm or wall, or a group of ritual pits (sometimes were combining several elements). Sometimes black soil is removed from the site, or vice versa, it is covered with a layer of rammed soil or clay, charcoal. There is an entrance to the site in the cromlech or ditch, most often in the south-west. Often traces of various rituals were fixed on the site, such as the fire, covering with bark or clay, etc.

The menhir (a single, vertical standing stone pillar) may be erected on the site, a tomb built (fig. 9: 1b,c), or a stone box grave (cist) installed. Cromleches may

[3] In the Eneolithic barrows studied from the perspective of archaeoastronomy, there are from 6 to 14 significant astronomical alignments, designated by a system of 5–7 poles. All the orientations obtained through the research are linked to important solar and lunar dates. It is worth noting the Vinogradne barrow in particular, where all 12 major astronomical directions (6 solar and 8 lunar), plus north-south, are marked using seven poles (Potemkina 2007: 59). This may indicate the length of time this astronomical object has been in use.

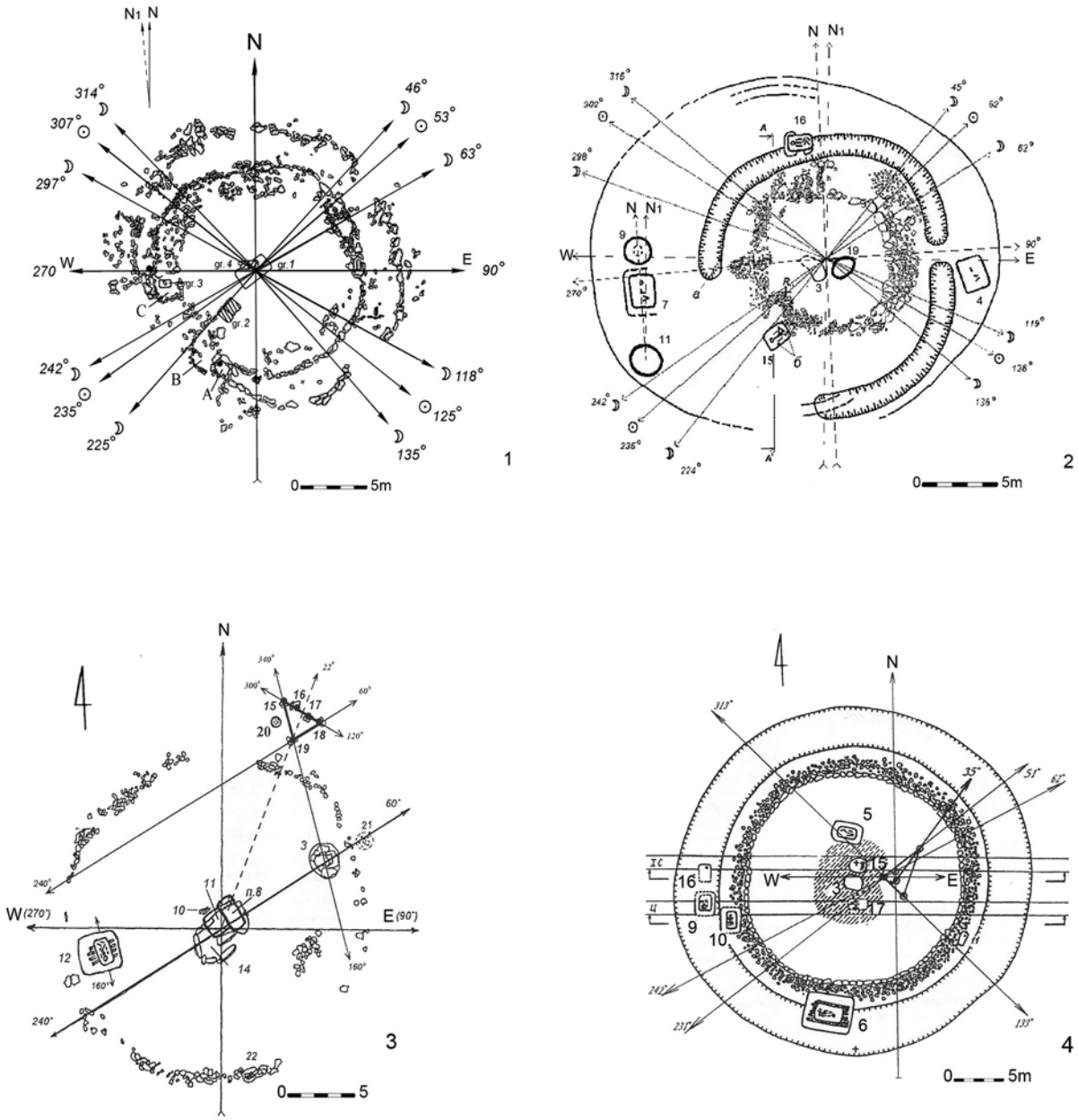


Fig. 3. Sanctuaries with astronomical markers: 1 – Usatove I-4, Odesa region (after Potemkina 2011); 2 – Revova 3, Odesa region (after Potemkina 2005); 3 – Vinogradne 24, Zaporizhia region (after Potemkina 2004); 4 – Kubey 1, Odesa region (after Potemkina 2004)

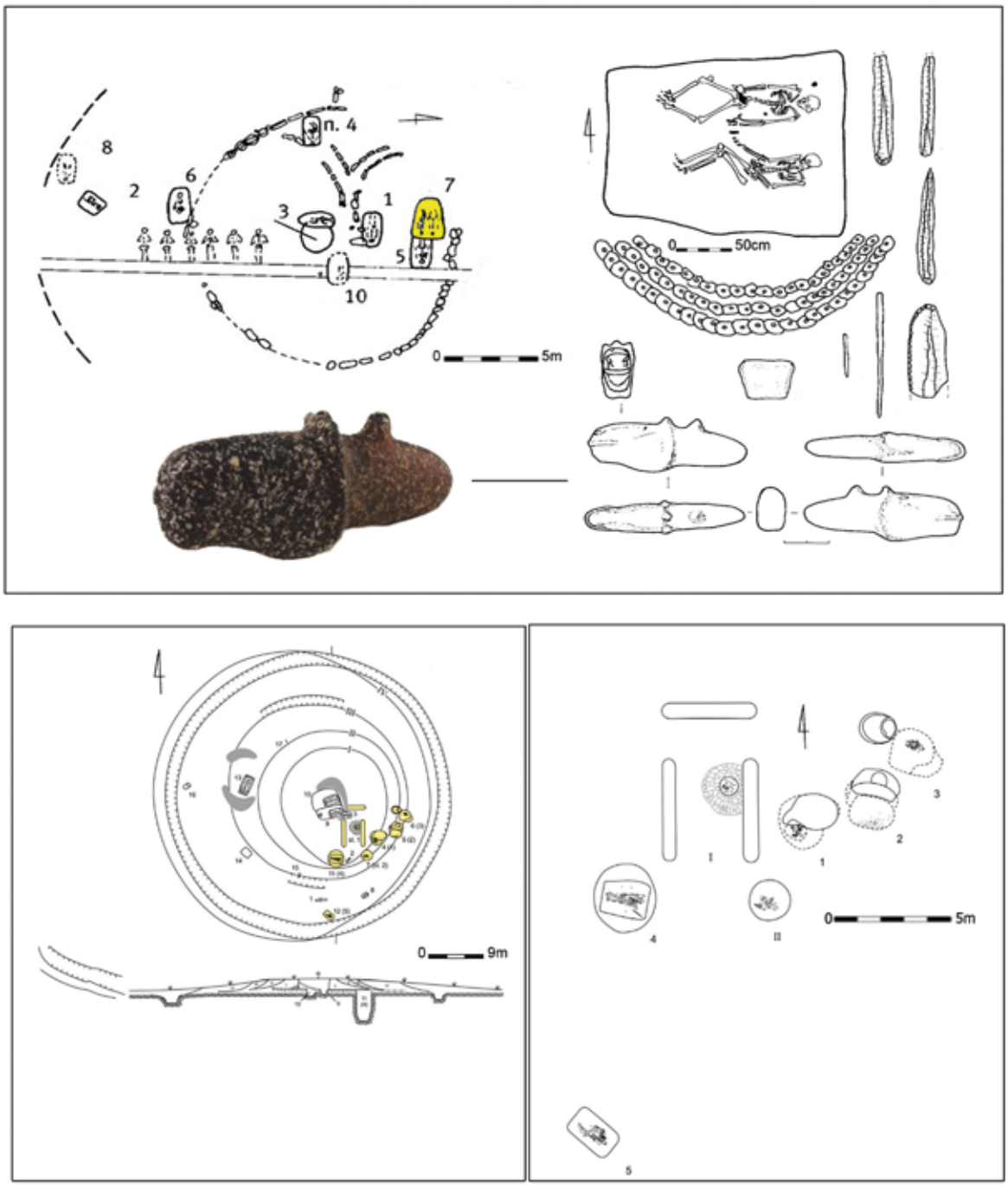


Fig. 4. Flat burial complexes: 1 – Suvorove cemetery, Odesa region (after Rassamakin 2004); 2 – Giurgiuleşti cemetery, Vulcăneşti district of the Republic of Moldova (after Govedarica, Manzura 2016)

Table 1. Information about sanctuaries

Types of sanctuaries: 1st type – pre-barrow flat sanctuaries; 2nd type – pillar sanctuaries; 3rd type – zoomorphic constructions; 4th type – platforms: or pedestals; 5th type – flat tops of the barrows; 6th type – colored barrow; 7th type –stone structure.

Positions of buried persons: 1. supine inhumation with flexed legs: arms stretched along the body; 2. semi supine: bent to the right the left arm bent in the elbow: the hand at the pelvis: stomach or chest; the right arm stretched along the body; 3. semi supine: bent to the left the right hand placed at the pelvis; 4. crouched on the right side with different positions of arms; 5. crouched on the left side with different positions of arms; 6. extended supine position; 7 – destroyed.

No.	Location	Type 1	Type 2	Type 3	Type 4	Type 5	Type 6	Type 7	Position 1	Position 2	Position 3	Position 4	Position 5	Position 6	Destroyed	References
1	Bereznovatka 1/16, 4, 6, 7	+												++	++	Rassamakin 2004: 42
2	Borysivka II, 1/1, 7	+				+								++		Rassamakin 2004: 48
3	Cazaclia 3/15, 17	+	+				+								++	Sava *et al.* 2019: 368
4	Cazaclia 17/22, 23	+											+		+	Sava *et al.* 2019: 149–151
5	Dukanichi 1/10	+							+							Suprunenko 2006: 31–35
6	Giurgiulești 2/1-5	+							++++						+	Rassamakin 2004: 85
7	Kamyanka V 3/5	+				+	+		+							Rassamakin 2004: 93
8	Kovalivka VII, 1/2	+							+							Rassamakin 2004: 97
9	Koshary 3/6, 7	+							+				+			Rassamakin 2004: 98
10	Kryvyy Rih, Ryadovi mogyly, k. 1 (without grave)	+				+										Melnik, Steblina 2012: 140
11	Nikopol 1/16, 14	+												+		Rassamakin 2004: 49
12	Nova Dolyna 3/13, 17, 2, 10, 16	+		+		+			++		+				+	Petrenko *et al.* 2002: 35, 46, 56–60
13	Novooleksandrivka I, 6/16	+				+								+		Rassamakin 2004: 40
14	Oleksandrivka 1/38	+													+	Rassamakin 2004: 175
15	Starogorozhene 1/28a, 28b	+		+		+				+						Rassamakin 2004: 58; Kotova *et al.* 2020: 40
16	Staryy Kodak: k. Storozheva mogyla/1	+	+						+							Rassamakin 2004: 91
17	Suvorove II, 1/7	+							+	+						Rassamakin 2004: 98 Petrenko 2001: 58
18	Taraclia II, 18/12, 19	+				+	+								++	Sava *et al.* 2019: 86
19	Tipki I, 2/16 (cattle bones)	+														Korenevskiy 2012: 27; Lyahov 2002
20	Tymofiivka 5/15, 18, 13 (unknown)	+														Rassamakin 2004: 126
21	Vasylivka 2/11	+												++		Rassamakin 2004: 8
22	Velyka Oleksandrsvka 1, 1/24, 22	+			+								+			Rassamakin 2004: 127
23	Voroshilovgrad (Lugansk) 1/2	+							+						+	Rassamakin 2004: 69
24	Zelenyy Gay 5/12	+											+			Kovaleva *et al.* 2003: 53
25	Zheltyy Jar, k. 14 (without grave)	+														Subbotin: Petrenko 1994: 100
26	Zheltyy Jar, k. 15 (without grave	+														Subbotin: Petrenko 1994: 100
1	Akkermen I, (Novopylipivka) 11/14		+				+								+	Rassamakin 2004: 160
2	Cimișlia 8/3		+												+	Popovici, Ciobanu 2021: 119
3	Cazaclia 3/15, 17	+	+				+								++	Sava *et al.* 2019: 368
4	Crasnoye 9/16		+				+								+	Rassamakin 2004: 181
5	Kubey 1/3, 15		+												++	Subbotin 2001: 160-164
6	Kvytiana balka (Fedorivka)/1-3		+						+			+		+		Rassamakin 2004: 170
7	Nikopol 2/4		+		+		+								+	Rassamakin 2004: 171
8	Pidluzhne, Tsegelnia/1, 2		+	+		+	+					+				Rassamakin 2004: 168
9	Sarateny 1/7, 14		+										+		+	Rassamakin 2004: 135
10	Shevchenko 29		+													Chernykh, Daragan 2014: 77
11	Staryy Kodak, Storozheva mogyla/ 1	+	+						+							Rassamakin 2004: 91
12	Tochile-Răducani 1/27		+												+	Yarovoy 2001: 69

Table 1. Information about sanctuaries (continued)

No.	Location	Type 1	Type 2	Type 3	Type 4	Type 5	Type 6	Type 7	Position 1	Position 2	Position 3	Position 4	Position 5	Position 6	Destroyed	References
13	Vynogradne 24/30		+	+			+					+				Rassamakin 2004: 136
1	Fedorivka (Balka Kvytiana) 1/2			+											+	Rassamakin 2004: 170
2	Katarzhyne 1/10			+					+							Ivanova *et al.* 2005: 26
3	Nova Dolyna 3/13, 17, 2, 10, 16	+		+		+			++		+				+	Petrenko *et al.* 2002: 35, 46, 56–60
4	Pidluzhne, Tsegelnia/1, 2		+	+		+	+					+				Rassamakin 2004: 168
5	Revova 3/19			+											+	Ivanova *et al.* 2005: 57
6	Starogorozhene 1/28a, 28b, 30	+		+		+				+				+		Rassamakin 2004: 58, 97
7	Terny I, 9/14			+										+		Rassamakin 2004: 36
8	Usatove I-4, 1-3			+									++		+	Petrenko 1983: 26; Patokova 1979: 50
9	Usatove 1-8, 1-5			+					+				+		++	Petrenko 1983: 30; Patokova 1979: 55
10	Verbky V, 1/7, 10, 3			+			+							+		Rassamakin 2004: 23
11	Vynogradne 24/30, 21		+	+			+		+			+				Rassamakin 2004: 89: 136
1	Borovkovka 1/15				+				+							Rassamakin 2004: 37: 91
2	Mariyivka 14/1				+									+		Rassamakin 2004: 45
3	Myrolubivka 1/5				+										+	Grebennikov, Smirnov 2015: 21
4	Nikopol 2/4		+		+		+								+	Rassamakin 2004: 49: 171
5	Novooleksandrivka I, 6/16	+			+									+		Rassamakin 2004: 40
6	Orestopol II, 3/2: 5				+									+	+	Rassamakin 2004: 19
7	Sokolivka 1/6a				+										+	Rassamakin 2004: 177
8	Starosillia 4/3				+				+							Rassamakin 2004: 96
9	Svetlyy 1/19				+										+	Manzura 1984: 111
10	Velyka Oleksandrivka 1, 1/24: 22	+			+								+			Rassamakin 2004: 127
11	Vynogradnyy Sad, k. 4				+											Grebennikov, Smirnov 2015: 21
1	Buguslav I, 23/1					+			+							Rassamakin 2004: 117
2	Borysivka II, 1/1, 7	+				+								++		Rassamakin 2004: 48
3	Kayiry II, 1/1					+			+							Rassamakin 2004: 90
4	Kamianka V 3/5	+				+	+		+							Rassamakin 2004: 93
5	Kamianske I, 1/21, 9					+	+		+ +							Rassamakin 2004: 92
6	Katarzhyne 1/6, 7					+			++							Ivanova et al. 2005: 34
7	Kryvyi Rih, Riadovi mogyly, k. 1 (without grave)	+				+										Melnik, Steblina 2012: 140
8	Mala Oleksandrivka I, 1/7, 10, 8					+			+++							Rassamakin 2004: 95
9	Nagirne 1/10					+								+		Rassamakin 2004: 50
10	Nedayvoda, Try braty, k. 1 (without grave)					+										Melnik, Steblina 2012: 301
11	Nikopol 1/3					+								+		Rassamakin 2004: 171
12	Nova Dolyna 3/13, 17, 2, 10, 16	+		+		+			++		+				+	Petrenko *et al.* 2002: 35, 46, 56-60
13	Pidluzhne, Tsegelnia/1, 2		+	+		+	+					+				Rassamakin 2004: 168
14	Pionerske 8/1, 7					+			++							Rassamakin 2004: 114
15	Rozumivka I, 1/5, 15, 16					+	+							+++		Rassamakin 2004: 44
16	Sokolove I, 6/6					+									+	Rassamakin 2004: 166
17	Starogorozhene 1/30	+		+		+								+		Rassamakin 2004: 58
18	Starosillya 1/19					+							+			Rassamakin 2004: 127
19	Svetlyy 1/17					+									+	Manzura 1984: 111
20	Taraclia II, 18/12, 19	+				+	+								++	Sava et al. 2019: 86
21	Trapivka 1/22					+	+								+	Subbotin *et al.* 1995: 20
22	Vasylivka 1/11					+							+			Rassamakin 2004: 136
23	Vasylivka 16/9					+								+		Rassamakin 2004: 17
24	Vyshneve 13/11					+	+								+	Petrenko 1998: 164
25	Vyshneve 56/19					+	+								+	Petrenko 1998: 164
26	Zhovtneve 11/11, 25					+								++		Rassamakin 2004: 16
1	Akkermen I, 11/14		+				+								+	Rassamakin 2004: 160

Table 1. Information about sanctuaries (continued)

No.	Location	Type 1	Type 2	Type 3	Type 4	Type 5	Type 6	Type 7	Position 1	Position 2	Position 3	Position 4	Position 5	Position 6	Destroyed	References
2	Bogdanivka III, ½, 3						+							++		Rassamakin 2004: 21
3	Cazaclia 3/15: 17	+	+				+								++	Sava et al. 2019: 118-120
4	Crasnoye 9/16		+				+								+	Rassamakin 2004: 181
5	Etulia 2/15						+							+		Rassamakin 2004: 62
6	Kamianka-Dniprovska 8/13, 15						+							++		Rassamakin 2004: 17
7	Kamianka V, 3/5	+				+	+		+							Rassamakin 2004: 93
8	Kamianske I, 1/21					+	+		+							Rassamakin 2004: 92
9	Kovalivka VII, 4/32						+				+					Rassamakin 2004: 130
10	Malokaterynivka II, k. 1						+								+	Rassamakin 2004: 164
11	Nikopol 2/4		+		+		+								+	Rassamakin 2004: 171
12	Novomoskovsk 1/9						+					+				Rassamakin 2004: 149
13	Novovasylivka, r. 1						+									Grebennikov, Filatov 2011: 61
14	Pidluzhne, Tsegelnia/1, 2		+	+		+	+					+				Rassamakin 2004: 168
15	Prybuzhany 4/19						+		+							Rassamakin 2011: 300
16	Rozumivka I, 1/5					+	+							+		Rassamakin 2004: 44
17	Skadovsk 1/1, 2, 6: 13: 18						+					+	++++			Rassamakin 2004: 120
18	Taraclia II, 18/12, 19	+				+	+								++	Sava *et al.* 2019: 86
19	Trapivka 1/22						+								+	Petrenko 1998: 164
20	Usatove I-7/1-5						+					+	++		+	Petrenko 1983: 29
21	Vasylivka 1/22						+						+			Rassamakin 2004: 123
22	Verbky V, 1/10, 3, 7			+			+							+	++	Rassamakin 2004: 23
23	Vynogradne 24/30, 21		+	+			+		+			+				Rassamakin 2004: 136
24	Vynogradne 20/13						+						+			Rassamakin 2004: 161
25	Vyshneve 13/11					+	+								+	Petrenko 1998: 164
26	Vyshneve 56/19					+	+								+	Petrenko 1998: 164
27	Volchanske I, 1/22, 21						+					++				Rassamakin 2004: 139
28	Volchanske II, 1/5						+					+				Rassamakin 2004: 140
1	Nova Odessa k.1 (without grave)							+								Rychkov 2000

have images on the stones slabs (fig. 9: 3); "entrance" to the stone circle may be in the form of a corridor made of stone slabs (Taraclia, kurgan 18) or closed with "doors" – 3 large stone slabs, more massive than the cromlech (Usatove I-3; Kholodna Balka 1). Crescent-shaped platforms without burials have also been discovered (Kryvyy Rih, "Riadovi Mogyly" group, barrow 1).

Second type: pillar sanctuaries (13 cases). Interpreting pillar constructions in conjunction with other archaeological evidence, researchers rightfully consider them as ritual objects. They are found near the first barrow embankment or beneath it, and these sanctuaries also have astronomical markers. There may be 1–3 to 17 pillars in one sanctuary, and holes where the pillars stood are preserved. The pillars may be burnt, and beneath them, there may be human burials, animal skulls, burnt bones, and charcoal. Researchers date barrows based on the wooden pillars of sanctuaries. However, dates derived from the pillars are associated with the pillar sanctuary, not the barrow. Some dates precede the possible construction date of the barrow (Krasnoye, Sărăteni). Recent pillar sanctuaries worth mentioning are Shevchenkove, barrow 29, Ukraine (Chernykh, Daragan 2014: 77; Daragan 2015) (fig. 6), and Cimișlia, barrow 8, Republic of Moldova (Popovici, Ciobanu 2021) (fig. 7).

The primary burial in the Cimișlia 8 was destroyed, and yellow clay from the burial (thrown out soil) was not found near it. This fact may indicate that the initially burial was flat, without a barrow embankment. According to the excavation authors, graves No. 3 and No. 4 and the cult complex could have been built by people from different generations. The construction of the first barrow began with a circular ditch, but it is dated to a later period than the pillar sanctuary (pillars data: 5060±35 BP - 4850±90 BP; ditch: 4860±35 BP) (Popovici, Kaiser 2021). These data support my assumption about the functioning of sanctuaries for a certain period without a barrow embankment.

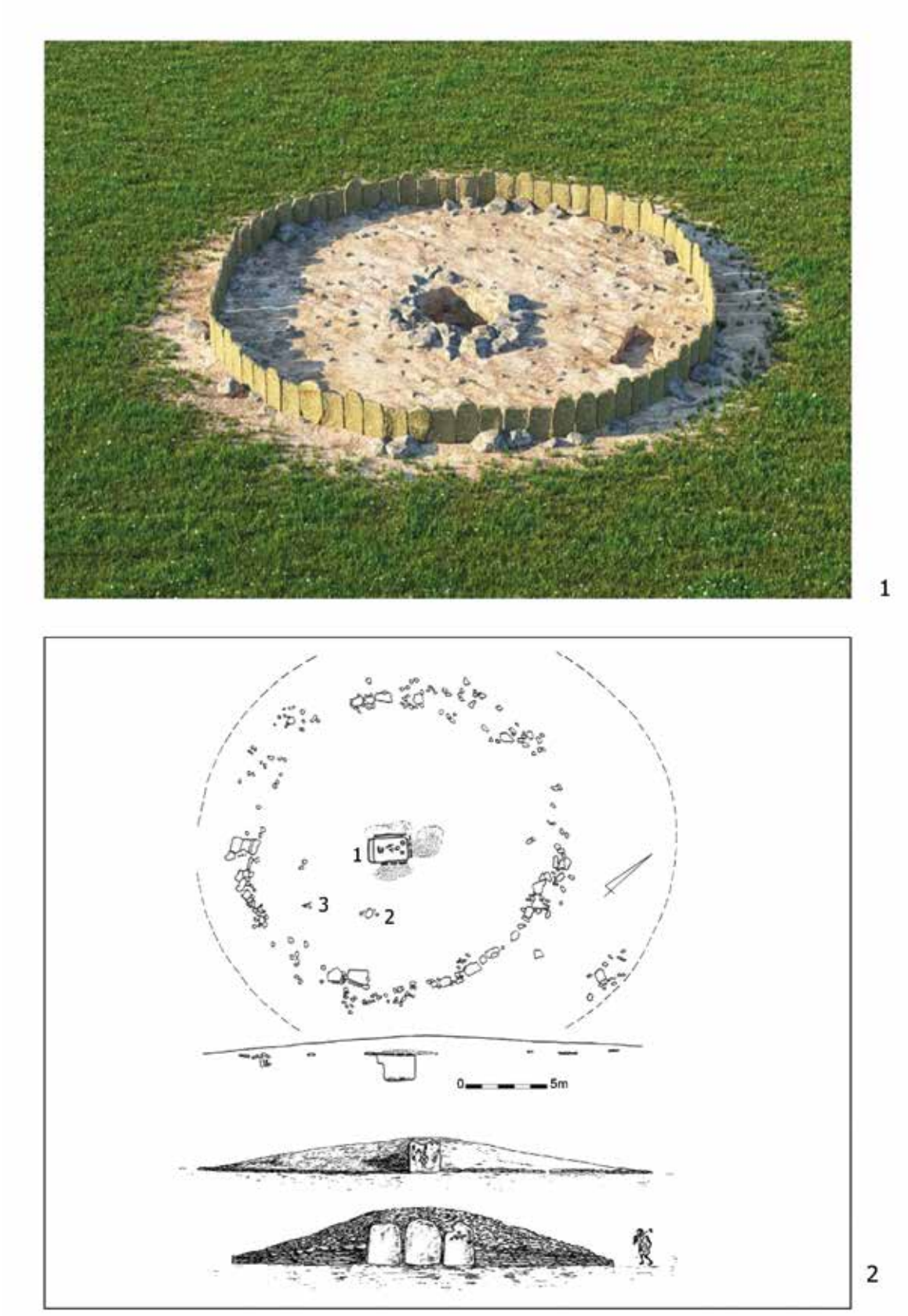


Fig. 5. Flat sanctuaries: 1 – Velika Oleksandrivka 1, Kherson region, 1st stage of construction (Daragan *et al.* 2021); 2 – Usatove I-3, Odesa region, cromlech with "closed entrance" in cromlech (after Petrenko 2010)

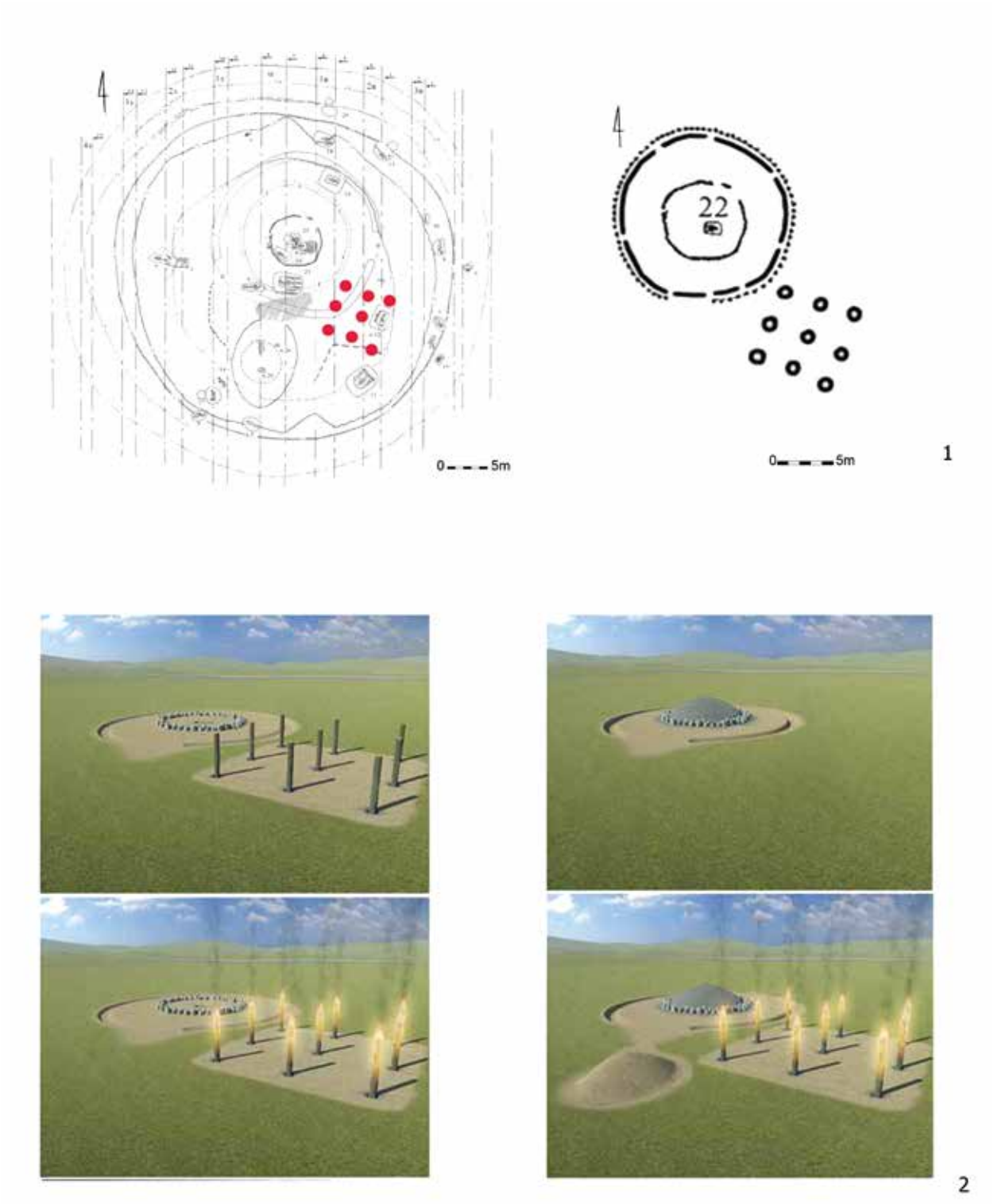


Fig. 6. Pillar sanctuary in Shevchenko 29, Nikopol region (after Chernykh, Daragan 2014; Daragan 2015): 1 – Shevchenko 29, pillar sanctuary; 1 – plan of the barrow; 2 – pillar sanctuary (reconstruction M. Daragan)

Third type: zoomorphic constructions (11 cases). They can be either recessed (ditches) or volumetric (barrow's embankments, figures made from many stones) and often depict a snake, turtle, or frog (fig. 8). These constructions were widespread in the North Black Sea region and the Caucasus. According to Viacheslav Rostunov, this is associated with the spread of the cult of the Mother Goddess of Lands, the World Turtle, which originated in the Gumelnița culture area (Rostunov 2009). The majority of turtle figurines and female-turtle images are concentrated in the Lower Danube Plain, during the chronological range of the second-third quarter of the 5th mill. BCE. The emergence of sanctuaries with turtle-like structures in the North Black Sea region is likely associated with the transformation of the Mother Goddess of Lands image into the Cosmic Turtle, supporting the Earth. This tradition later spread eastward, till the North and even South Caucasus (Rostunov 2009: 362–365). In the Northwest Black Sea region, there is also a known turtle-shaped sanctuary (Revova 3, Odesa region), where the main burial was placed in the central part of the completed sanctuary (fig. 3: 2)[4]. Human bones were found in the pit, not in anatomical order and not complete; hence, it was a secondary burial of part of the skeleton. The sanctuary had astronomical orientations (Ivanova *et al.* 2005: 57–73). Over the burial of Katarzhyne 1/10, in addition to snake (ditch) and turtle (embankment) images, a stone setting resembling a bull's head was identified with the main burial (fig. 8: 8a)[5].

Fourth type: platforms, or pedestals (11 cases). The area surrounded by a cromlech was filled with soil up to the level of the stones, forming a horizontal platform (fig. 9). It was likely intended for performing rituals. Sometimes horizontal stones were placed on top of the stone circle and platform (fig. 9: 2), fixing the horizontal level of the soil filling inside the cromlech (fig. 9: 1d). After some time, a burial was made in the platform (fig. 9: 4), and a barrow was built (fig. 9: 5; fig. 10). There may have been more such complexes, but it was not always possible to find them during archaeological excavations.

Fifth type: is the flat tops of the barrows (26 cases). The barrow was shaped like a truncated cone. To preserve its form, its surface was often covered with silt or clay, or the entire barrow was built from blocks of silt. Traces of certain rituals (remains of fires, structures made of yellow clay) were founded on the flat top, and sometimes stone box burials were placed on them (fig. 11: 1–5). Sometimes this tradition persisted into later times (Yamna culture, Catacomb culture): young layers in such barrows repeated the shape of the first barrow with a flat top (Svetlyy 1; Starosillia 1).

Sixth type: colored barrow (28 cases). The entire barrow could be constructed from yellow clay. Another variant is when the barrow is covered with yellow clay, leaving the top black. There are barrows where only the top is covered with yellow clay, and the entire barrow is made of black soil (fig. 11: 6–8). Vladislav Petrenko noted the color symbolism of barrows in the Northwest Black Sea region during the Eneolithic (cultural variant Khadzhider) and in the Usatove culture, with a more complex composition. In Usatove, I-7, the southwest part had a crescent shape made of black soil, and the northeast part had an almond shape made of yellow soil. This shape allowed suggesting that the barrow represented a phase of the moon (Petrenko 1983: 29–30).

Seventh type of sanctuary is known in single example, this stone structure resembles a megalith but is smaller. It is a structure of stone, similar to a megaxylon, but smaller in size. There was no burial in it, however the location is associated with astronomical markers (fig. 12).

Unique is the sanctuary on the natural site of Kamyana Mogyla, archaeological researches, monographs and articles are devoted to it (Radchenko *et al.* 2020).

Sometimes, a combination of several types of sanctuaries can be observed within one complex (table 1). Elements of Eneolithic sanctuaries have been preserved in the Bronze Age cultures of the Northern Black Sea region, such as the flat tops in the Yamna barrows (fig. 11: 5). One and the same sanctuary, located on the Khortytsa Island (Dnipro River), was used for a long time by the population of different cultures: Yamna, Katakombna, Zrubna (fig. 13).

A considerable variety of geometric stone structures and colored barrows is seen in the architecture of the Usatove culture barrows (fig. 14), but this topic requires a separate study (Petrenko 1983; Subbotin, Petrenko 1986). Several Usatove barrows have been considered in this work, the constructions of which partly resemble the complexes of other cultural groups and territories (zoomorphic stone structures, crescent-shaped barrows).

[4] 3770–3651 cal BCE (at 95.4 probability). A combination of two AMS dates, produced by Harvard and Uppsala. The date is not affected by reservoir effect (information by A.G. Nikitin).

[5] Its date is 3952–3716 cal BCE (at 95.4 probability). A combination of an AMS date (Nikitin, Reich, unpublished) produced by Harvard and a radiometric (non- AMS) date produced by Kovalyukh (Ki-9523, 4950±70 BP). Reservoir offset on the date cannot be quantified due to the lack of comparative fauna (information by A.G. Nikitin).

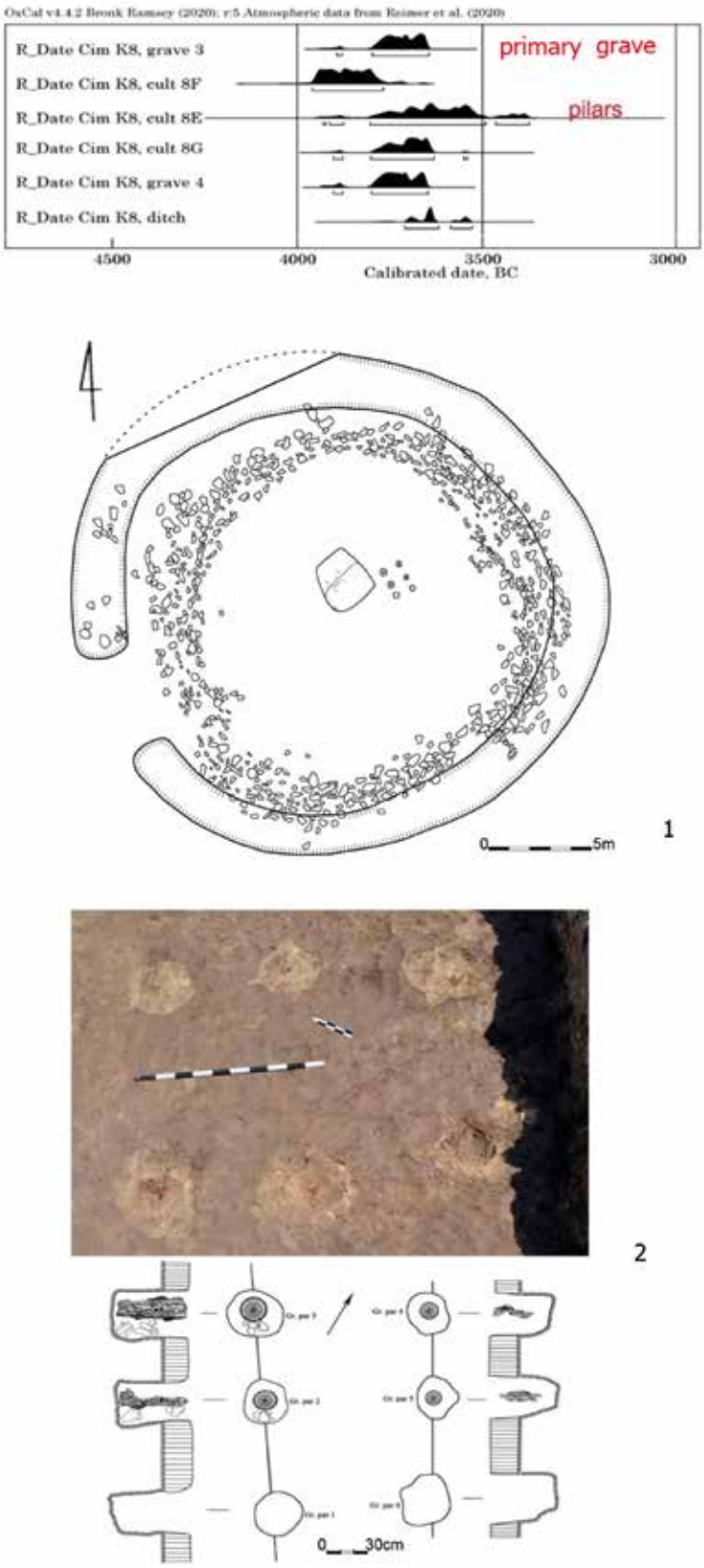


Fig. 7. Pillar sanctuary in Cimişlia, 8, Republic of Moldova: (after Popovici, Kaiser 2021): 1 – plan of the barrow; 2 – wooden pillars

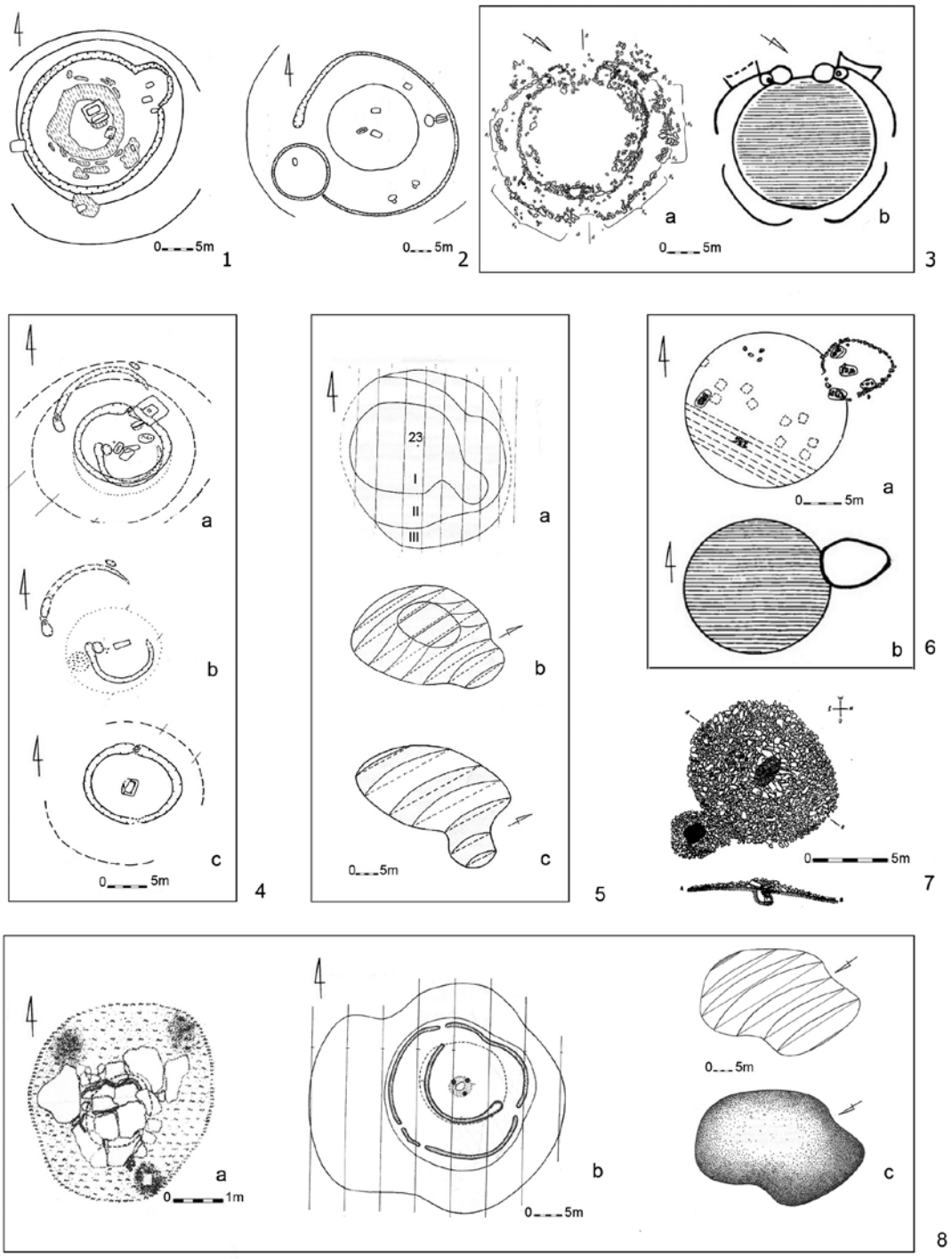


Fig. 8. Zoomorphic sanctuaries: 1 – Verbki V, 1, Dnipro region (after Rassamakin 2004); 2 – Terny I, 9, Dnipro region (after Rassamakin 2004); 3 – Usatove I-4, plan and schematic reconstruction (after Petrenko 1983); 4 – Pidluzhne "Tsegelnia" barrow, Kremenchuh region, stages of constructing serpent-like ditches (after Rassamakin 2004); 5 – Klady necropolis, 11 G, Northwest Caucasus (a – plan of embankments, b – reconstruction of level 1; c – reconstruction of level 2) (after Rostunov 2005–2009); 6 – Usatove I-8, Odesa region plan and schematic reconstruction (after Petrenko 1983); 7 – Fedorivka, Kvitiana balka, Zaporizhia region (after Rassamakin 2004); 8 – Katarzhyne 1/10, Odesa region (f - stone slabs above the central burial in the form of a bull's head; b – serpent-like ditches and embankment in the form of a turtle; c – reconstruction of the embankment (according to Rostunov 2009)

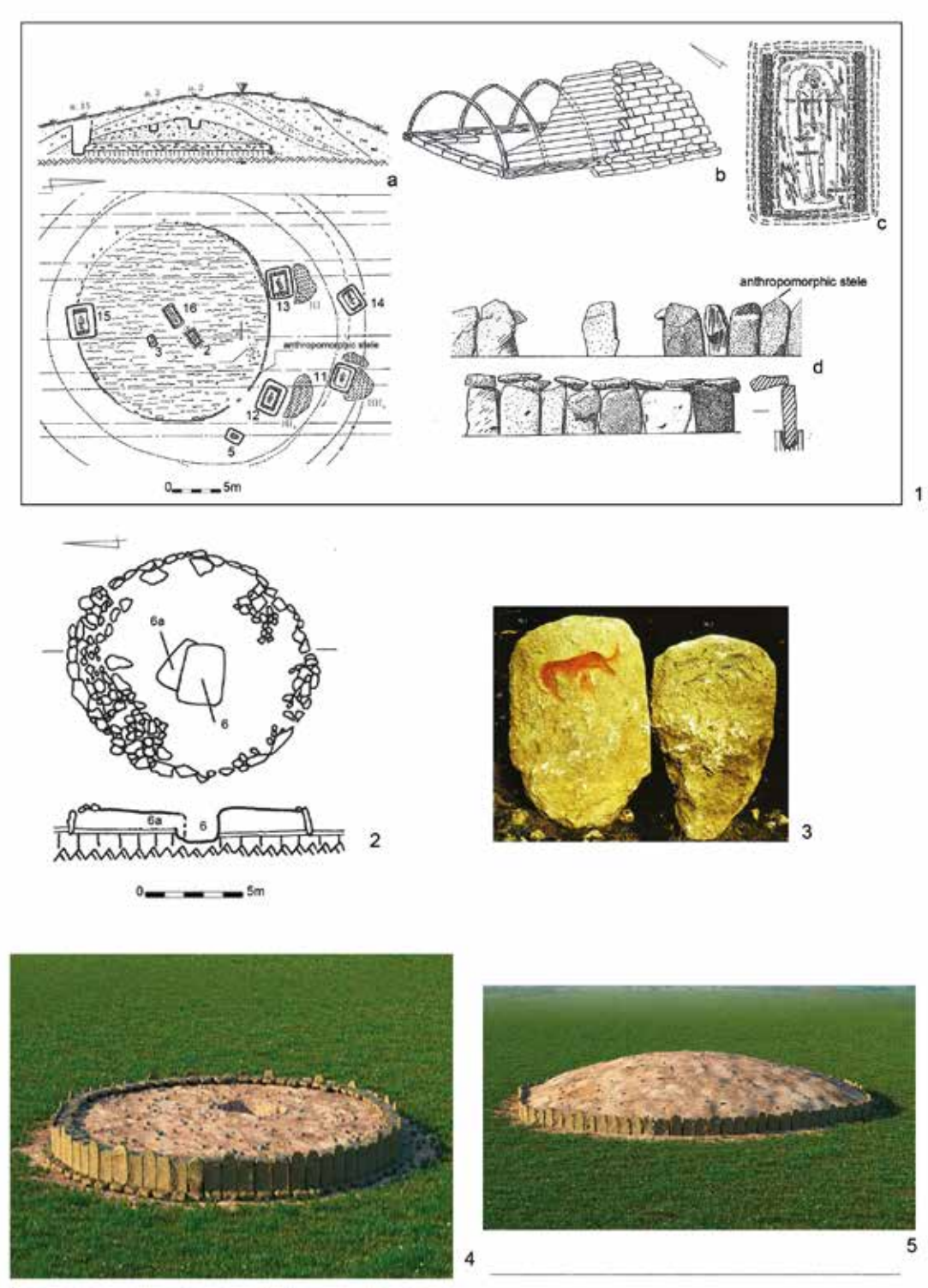


Fig. 9. Platforms: 1 – Novoolexandrivka I, 6/16, Dnipro region (a – profile and plan of the barrow, b – tomb of wood and adobe bricks, c – burial 16 in the tomb, d – stone circle) (after Rassamakin 2004); 2 – Sokolovka 1, Mykolayiv region (after Rassamakin 2004), 3 – Velyka Oleksandrivka 1, Kherson region, slab with an image from the stone circle (after Daragan *et al.* 2021); 4 – platform reconstruction, "sealing" of the stone circle with burials in embankment II (after Daragan *et al.* 2021); 5 – reconstruction: embankment-II over burial 7 (after Daragan *et al.* 2021)

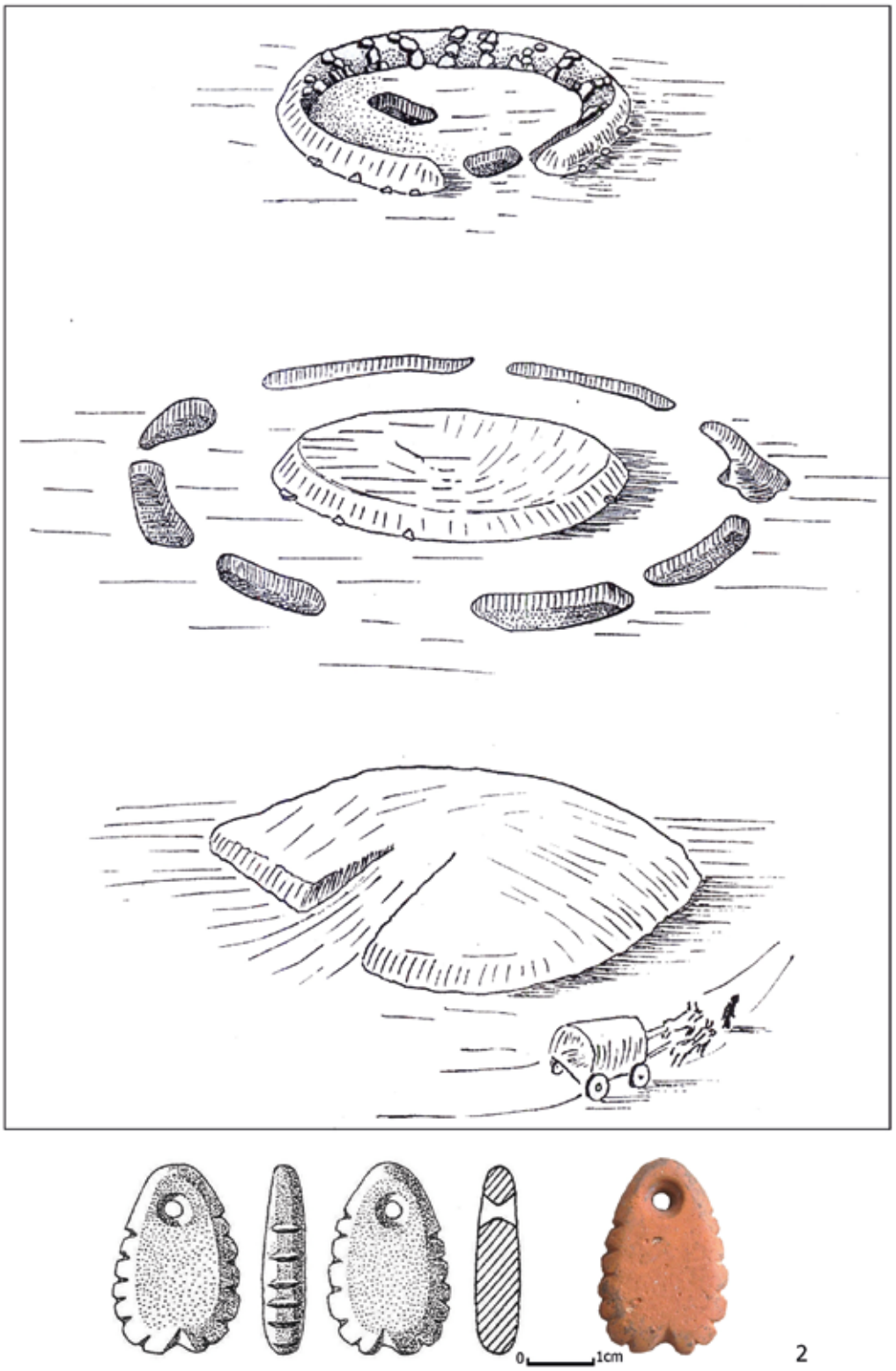


Fig. 10. Nova Dolyna 3, Odesa region: (after Petrenko et al. 2002) 1 – stages of barrow construction; 2 – amulet from grave 13 (photo by M. Videiko)

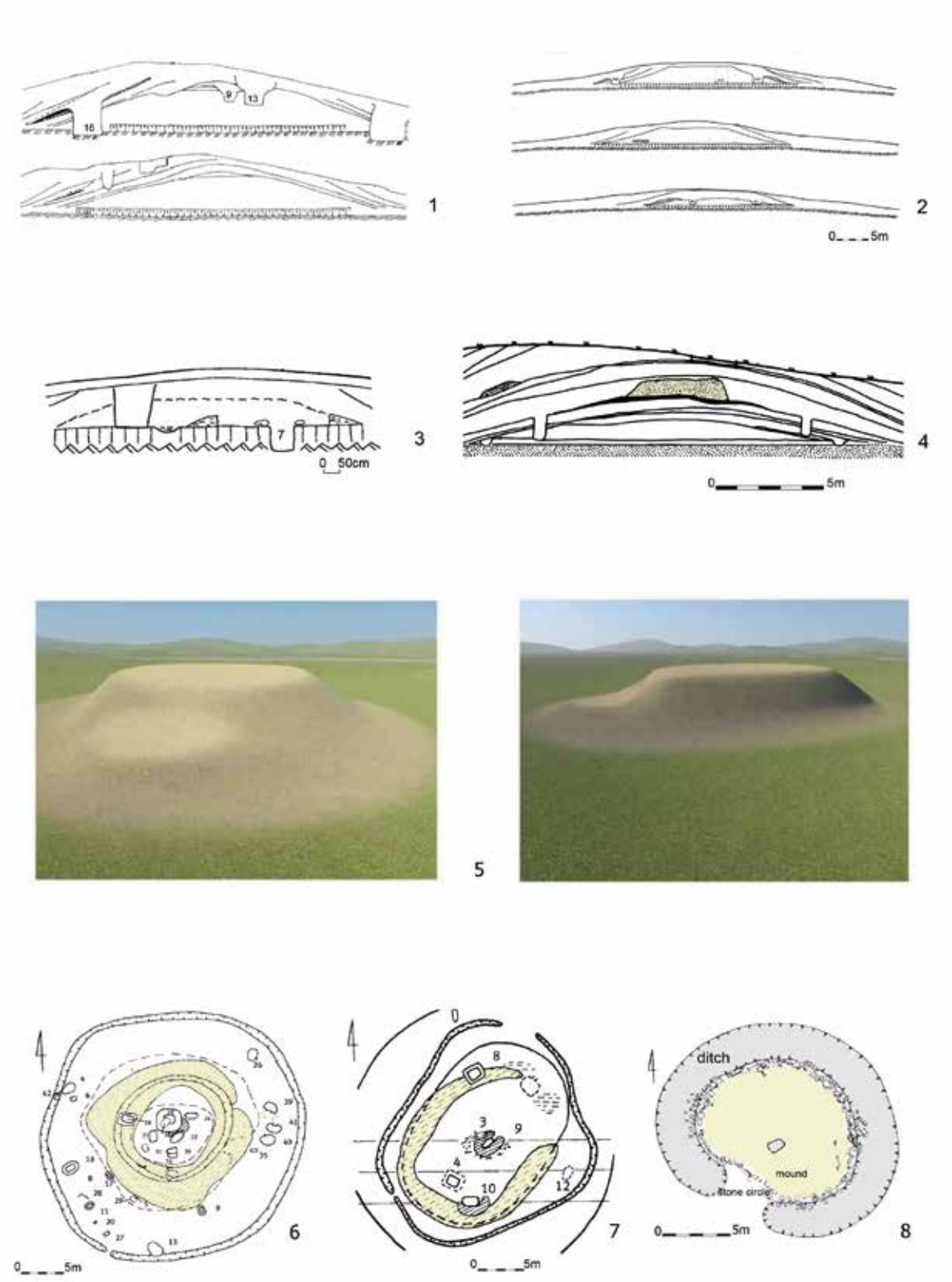


Fig. 11. Barrows with flat top and colored embankments: 1 – Shevchenkivka, 14, Kherson region (after Pustovalov 2016); 2 – Volodymyrivka, 13, Dnipro region (after Pustovalov 2016); 3 – Borysivka II, 1, Nikopol region (after Rassamakin 2004); 4 – Katarzhyne, 1, Odesa region (after Ivanova et al. 2005); 5 – Shevchenko, 29, Nikopol region (after Daragan 2015); 6 – Volchanske I, 1, Zaporizhia region (after Rassamakin 2004); 7 – Sokolove II, 1, Dnipro region (after Rassamakin 2004); 8 – Prybuzhany, 4, Mykolayiv region (Rassamakin 2011)

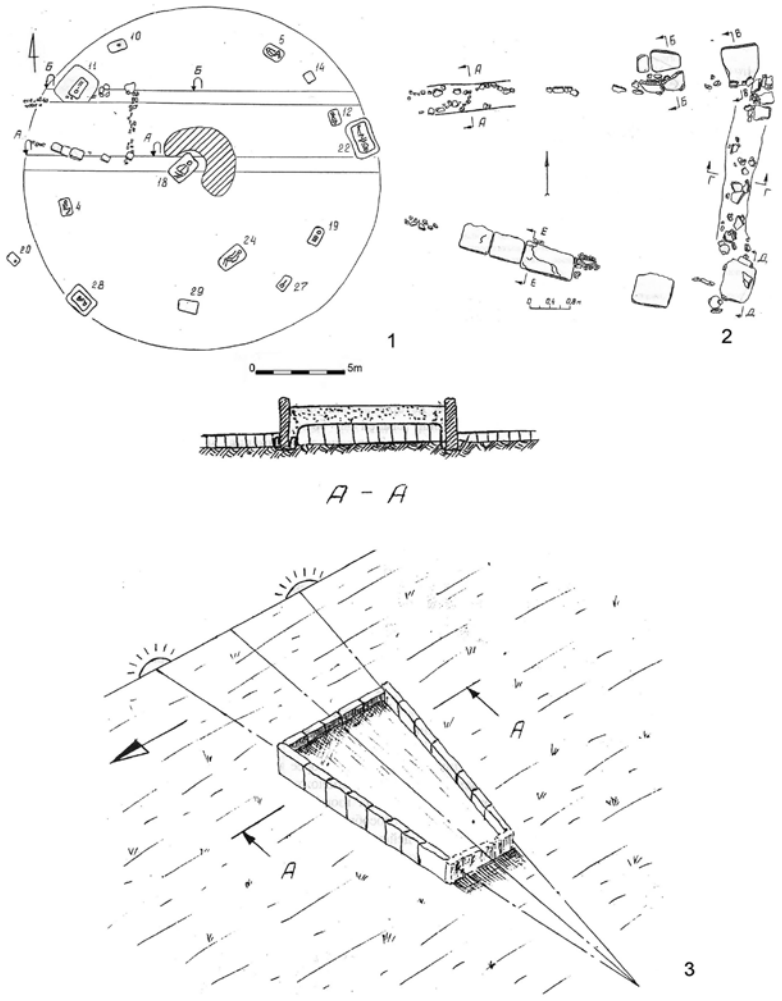


Fig. 12. Stone sanctuary under the barrow Nova Odesa 1, Mykolaiv region (after Rychkov 2000): 1 – plan of the barrow; 2 – plan of the sanctuary; 3 – reconstruction of the sanctuary

According Yu. Rassamakin, "appearance and distribution of ritual monumental architecture in the Black Sea steppe originated in an area of durable contacts between the pastoral and agricultural populations (most obviously the Usatove culture)... During the Eneolithic the world of agriculture had a significant impact on the spiritual life and social relations of steppe populations and thereby also on the development of complex and monumental ritual architecture. The origin of the earliest complex monumental architecture can be linked with the Kvitiana culture, the so-called Post-Stog group and the Lower Mykhailivka culture… Earliest ritual monumental constructions disseminated in the steppe area, between the Dniestr and Prut rivers" (Rassamakin 2011: 299–303).

Sacrificial offerings at sanctuaries. It is assumed that burials or pits synchronous with sanctuaries were indeed sacrificial complexes. They are associated with human sacrifices that determine the choice of the location and the beginning of the sanctuary's construction, its functioning, or are related to the calendar rituals. Often, burials associated with the sanctuary differ from the standard Eneolithic burial by incomplete skeletons (Potemkina 2004). These can be individual bones (Kubey 1/15), bones laid together, conventionally called a "package" (Revova 1/19), or a complex of skulls in combination with a "package" (Vertelnoye Pole 1/12), etc. Among the undated burials of this type are separate skulls, skeletons without skulls, "lying on the stomach", and in other "unnatural" positions.

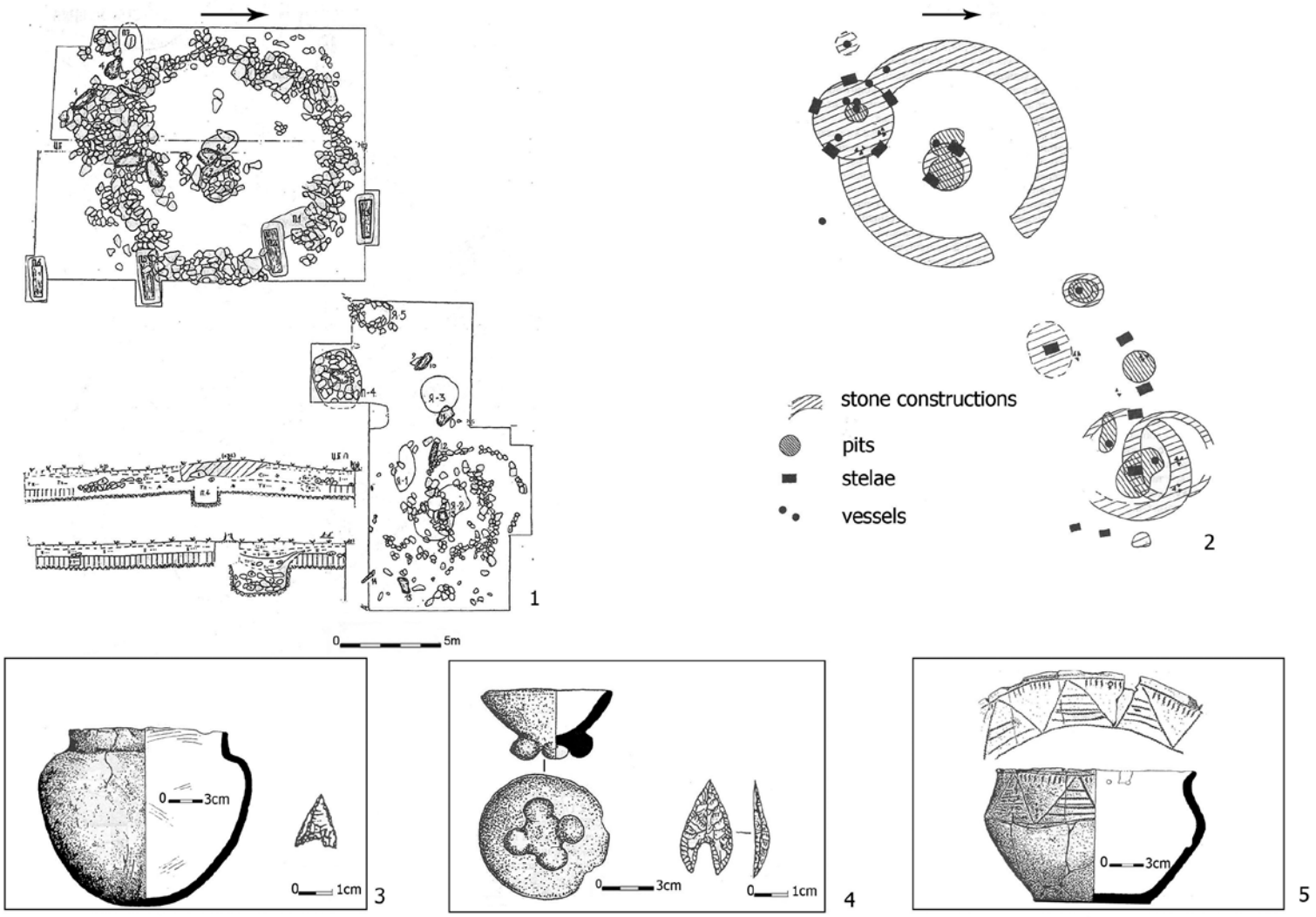


Fig. 13. Sanctuary on Khortytsia Island (Dnieper River), with materials from Yamna, Catacomb, and Zrubna cultures: (after Teslenko, Ostapenko 2000): 1 – plan of excavated areas; 2 – schematic reconstruction; 3 – Yamna culture vessel and flint arrowhead; 4 – Catacomb culture vessel and flint arrowhead; 5 – Zrubna culture vessel

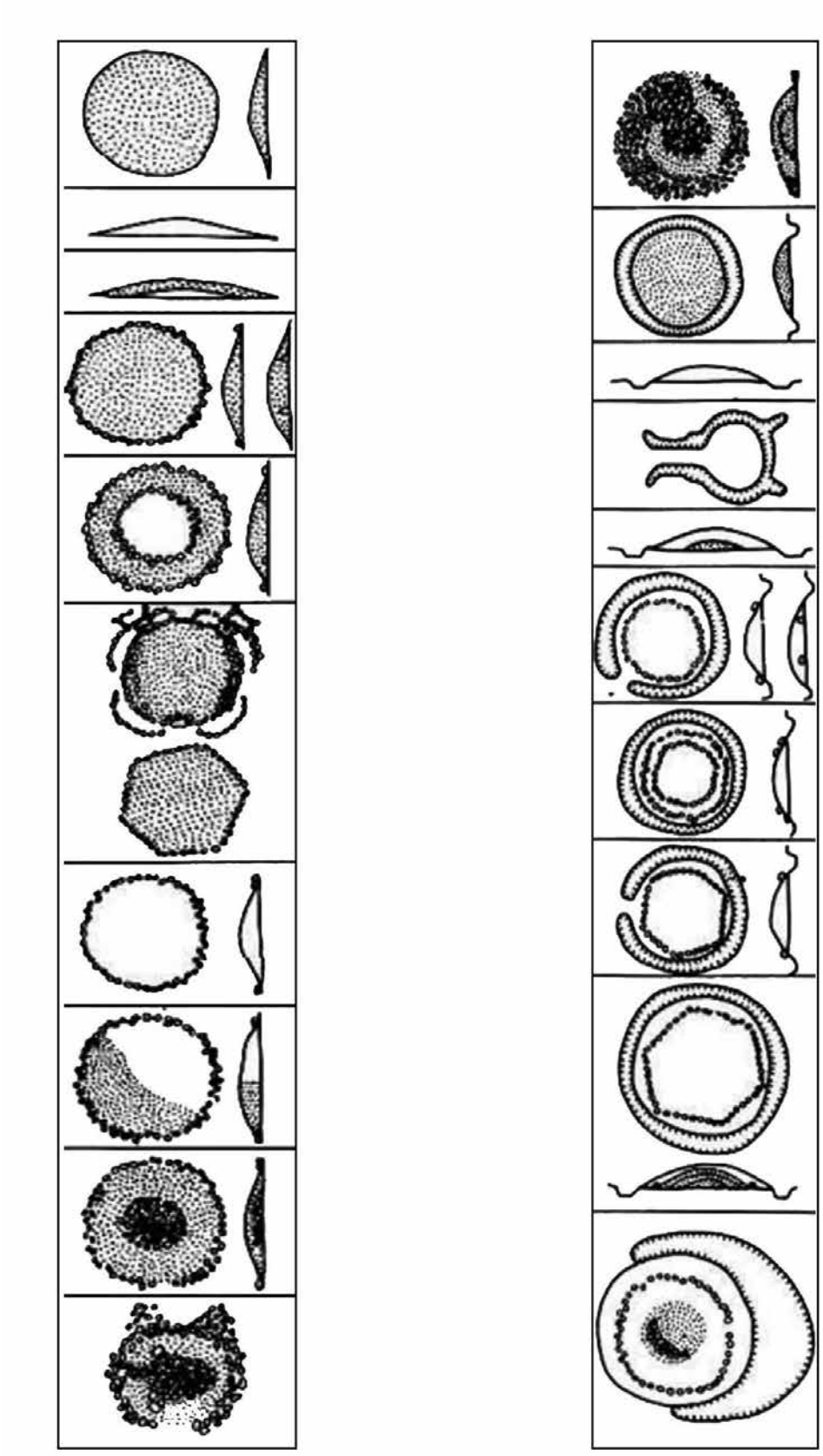


Fig. 14. Schemes of figurative cromlechs and embankments of the Usatove culture (after Petrenko 1983).

Sometimes, remnants of mourning rituals are found on the territory of sanctuaries in the form of fragments of vessels, animal and human bones, most often near stones of cromlech. Also, inside the "sacred area", there may be menhirs (more often near a stone circle or in its passage), large stones (in the center), and anthropomorphic and zoomorphic steles as part of the cromlech.

However, researchers attribute these sanctuaries to the times of constructing burial barrows, considering the sanctuary and the barrow synchronous. Considering such complexes (sanctuary + barrow) allows concluding that their stratigraphic horizons should be separated in time: in such sanctuaries, one can usually distinguish two separate periods: "pre-barrow period" and "barrow period". Burials or pits synchronous with the time of the sanctuary's functioning are not mandatory, although they are quite common. If some burial took place during the time of the sanctuary's functioning, then it was most likely flat burial. The barrow, in this case, emerged much later and was associated with yet another (later) burial within the sacred area. Then, during archaeological excavations, a situation of the existence of two main burials is revealed (and only near the later one, is there thrown out soil from the grave). In this case, only one of them was crucial for the barrow – the one over which the barrow was erected. If there was no burial or sacrificial pit synchronous to the sanctuary, then archaeologists have at the time of excavation only a rather late main burial made in the territory of an older sanctuary. This is the one that will be associated with the beginning of the barrow's building.

Thus, the construction of sanctuaries began before the emergence of barrows and was not associated with them (49–40 cent. BCE). Barrows were later constructed on the territory of sanctuaries, in different periods of the Eneolithic and Bronze Age (fig. 15). The tradition of building sanctuaries continued further; however, the sanctuaries likely remained open for a long time (from the Early to Late Bronze Age), as seen on Khortytsa Island, for example (fig. 13). In other cases, there was not a very long period between the construction of the sanctuary and the construction of the barrow, several generations only, as in the Cimișlia 8 complex.

The emergence of barrows on the site of ancient sanctuaries may be associated with the "sacredness of the place". Yuri Lotman (2000) concluded that symbolic "texts"[6] function not on their own but

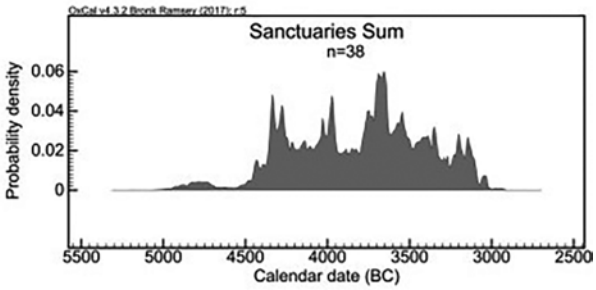


Fig. 15. Sanctuaries summed radiocarbon calibration

only when immersed in a certain semiotic continuum filled with diverse semiotic components. Such a continuum he named the "semiosphere", analogous to academic Vladimir Vernadsky's "noosphere". Semiosphere is all the semiotic space inherent in a given culture, it is both a result and a condition of culture development (Lotman 2000: 250). Despite the existence of different archaeological cultures in the Bronze Age in the Pontic steppes, they share a common perception of the symbolism of barrow space and some similar elements or burial ritual traditions. In our opinion, we can talk about the formation of a unified "sacral space" of the Palaeometallic era, which correlates with one of the elements of Y. Lotman's semiosphere. There is evidence of a common sacred space for steppe populations in the Eneolithic and Bronze Age. This includes not only burials in the same barrow but also the reuse of various symbolic elements of the sanctuary (e.g., cromleches, anthropomorphic stelae, etc.) during later burials of other cultures[7]. Sanctuaries or their elements also persist into the Bronze Age (Yamna, Catacomb cultures), but much less frequently than in the Eneolithic and often in a simplified form.

Radiocarbon dates suggest the emergence of the sanctuary construction tradition in the steppe regions of the Black Sea and the North Caucasus in the 5th mill. BCE, and the beginning of barrow construction in 39–38 cent. BCE.

Where did the barrows originate?

The question of the time and place of the emergence of the first round barrows is partly related with the aspect of sanctuaries. Different researchers provide different lists of the earliest burials, which do not always coincide with each other, and most complexes in such lists are not dated (Korenevskiy 2012; Kotova

[6] Any ritual is a text in a semiotic sense

[7] For example, in the Budzhak Yamna culture there are common positions of the dead persons with the preceding Eneolithic horizon, etc. (Ivanova 2015: 284).

2006; 2013; Morgunova 2011). A small series of "sub-barrows" burials in the steppe zone of Eastern Europe is known, distinguished by early datings (49–40 cent. BCE). Therefore, some archaeologists claim that the barrow ritual in Europe originated in the Volga-Ural region and the North Caucasus. According to their opinion, the absolute chronology data of barrows and artifact complexes confirm the earliest age of fifty of the oldest round barrows in Europe from these regions (Korenevsky, Morgunova 2022)[8]. However, only five of them have radiocarbon dates, which are made of human bones (table 2).

Two of these dates (Peregruznoye 13/7 and Vertoletnoye Pole 1/12) were acknowledged by Natalia Shishlina as antiquated due to the reservoir effect (Shishlina 2007: 272–273 and 380). I aim to demonstrate the inaccuracy of the chronological priority of the Volga-Ural and North Caucasus regions in the emergence of the barrow tradition. As noted earlier, in flat burial, the soil thrown out from the grave is not preserved nearby. This situation is observed in barrows that were mistakenly assigned to very early periods. In such cases, the barrow is a later object that covered a flat burial over some time. Therefore, in such barrows, two main burials are sometimes found. One is more ancient, pre-mound. The second is associated with the construction of the barrow.

Two situations can be traced in barrow stratigraphy:

First situation: Burial or a "ritual pit" was made on the territory of the sanctuary. Such sanctuaries emerged in a period preceding the emergence of the round barrow tradition, in the 5th mill. BCE. Burials or pits located within sanctuaries are often synchronous with the sanctuaries. These have early dates but are not connected with barrow construction. These are pre-barrow objects. Dating the barrow with their date is erroneous. After some time, in the Bronze Age, another deceased individual was buried in the sanctuary, and a barrow was constructed. This will be the actual date of the barrow.

Some archaeologists believe that the oldest round barrow in Europe was built in the Caucasus region, the Tipki-2 barrow (fig. 16). For the main burial No. 16, there is a very early date. However, burial No. 16 is actually a ritual pit, not a burial; an animal bone was found in it, and the date was derived from this bone. The construction of the barrow is not connected to this pit. Sergey Liakhov (2002), who excavated this barrow, believes that the barrow was built in the 3rd millennium BCE, over the burial No. 15 of the North Caucasus culture (Bronze Age). Before the construction of the barrow on this site, there was already an earthen wall/bern. The yellow clay, which had been taken out of the main burial by the builders, lay on this earthen wall. Therefore, long before the construction of the barrow, there was a ritual site here, surrounded by an earthen wall, and it was specifically connected with the ritual pit. There's no soil thrown out from this pit near or anywhere. Therefore, the date of the ritual pit is not the date of the barrow construction; it is the date of the ritual pit on the flat sanctuary, possibly the date of the pre-barrow sanctuary itself. This barrow is dated to the Bronze Age and is not the earliest round barrow in Europe.

For the construction of this ritual platform surrounded by earthen wall, there is an analogy: Nova Dolyna 3 in the Northwestern Black Sea region (Petrenko *et al.* 2002). The first stage of pre-barrow construction is the ditch and the wall with a stone facing. Flat pre-barrow burials No. 2 and No. 13, and ritual pit No. 17 are associated with this stage. The second stage of pre-barrow construction is the building of the platform and the second ditch, and only in the third stage of earthworks, the construction of the barrow began (fig. 10). An amulet was found in burial No. 17, similar to amulets of the Cucuteni-Trypillia culture, stages Precucuteni III/Cucuteni A – Trypillia A-B/BI, about 4600–4500 BC (Burdo 2011). This amulet may date this particular burial.

Second situation: the barrow is not associated with a sanctuary. It is constructed near a flat Eneolithic burial, which the barrow covers with its edge later[9].

The Tonnelnyy barrow (Stavropol region, Caucasus) is also considered one of the oldest barrows, dated by the burial No. 6 (fig. 17). In reality, the main burial No. 4, located in the center of the barrow, is dated to the Late Bronze Age (1690–1420 BCE). Burial No. 6 with an early date is located aside; it is a flat burial covered by the edge of the barrow several thousand years later. It is not related to the beginning of barrow construction and cannot date it.

[8] On the other hand, S. Korenevskiy (2012: 62) includes these burials in the list of the oldest ones, together with the complexes of Giurgiuleşti, Căinari, Kryvyy Rig, which have long been considered by researchers as flat pre-barrow burials although found under barrows (Manzura 2013: 121). The authors of the excavations of the Peregruzhnoye cemetery attribute the Eneolithic burials to the Sredniy Stig culture (Balabanova *et al.* 2014: 80). This culture is characterised by a burial rite without a barrow. Therefore, the attribution of these burials to "barrow period" looks unexpected.

[9] We do not know if this happened by accident, or if it was a conscious choice by the builders.

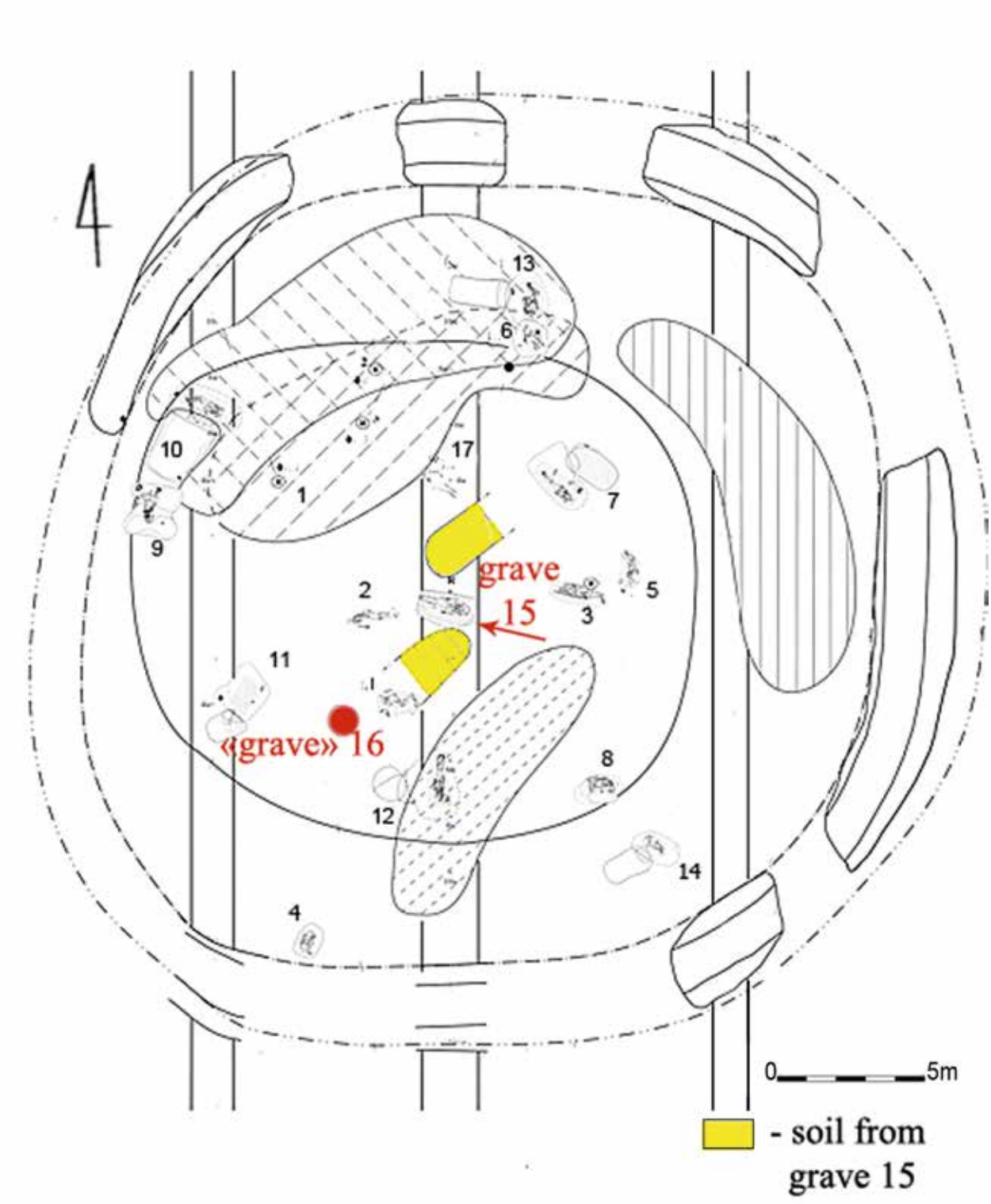


Fig. 16. Plan of barrow Tipki I, 2, Stavropol region, Northern Caucasus (after Lyakhov 2002)

The Peregruznoye 13/7 burial is also located aside from the central part of the barrow, and there is no yellow throw out soil near it (Balabanova *et al.* 2014: 110, fig. 21.1). Probably, the burial is pre-barrow, and the grave goods (a long flint blade) allows attributing it to the Seredniy Stig culture, characterized by flat burials. Such situations are not uncommon in "barrow archaeology"; for example, a similar situation was observed in the Tarasova Mogyla barrow on the eastern bank of the Dnipro river (Rassamakin 2004: 10), and in, Zaltse 4 in the Odesa region (Ivanova *et al.* 2005: 14). Other cases are also known (Rassamakin 2004: 4–5, 65–70; 2009: 291, etc.).

Sometimes pre-barrow burials were made on the tops of small hills, on which barrows were subsequently built. Therefore, these pre-barrow burials ended up later in the central part of the barrows. The main (first) burials of barrows were located next to or on top of such pre-barrow burials. Two cases of early dates are specifically related to such situations (Kursavskiy 1/15; Vertoletnoye Pole 1/12), and both times the barrows were constructed by the population of the Maykop culture. In the Kursavskyy 1/15, the yellow soil thrown out from the main burials surrounds three nearby burials in the center of the barrow. S. Korenevskiy believes that barrow construction is associated with burial No. 15 (Korenevskiy 2012: 27–30), but the barrow plan shows that part of this soil covers the edge of burial No. 15 and surrounds specifically the Maykop burials. Thus, the flat burial No. 15 precedes the construction of the Maykop barrow. Burial Vertoletnoye Pole 1/12 was found 2 meters away from three main burials of the Maykop culture. It was a small pit measuring 1.12 × 0.7 m, containing the skulls of 3 men, 3 women, and 1 child, as well as the bones of the upper and lower limbs of 5 adults and the bones of a bull. There are traces of post-mortem dismemberment on the bones and skulls. A stone slab stood near the pit's wall, and the entire complex was covered with a thick layer of dark-red ochre (Zhitnikov 2000: 90). Probably, this was a sacred complex (sanctuary) associated with specific rituals, and it was created before the construction of the barrow by the Maykop population on the "sacred place".

Conclusions

Probably, we can assume the Central European and Lower Danube influences on the formation of ideological concepts among the Steppe population. Specifically, the phenomenon of earthen and stone sanctuaries in the Middle Eneolithic may have originated under Central European impact and evidently shared structural similarities with other structures built in accordance with the movement of celestial bodies in the late Neolithic of Central and Atlantic Europe, primarily with rondels. The emergence of sanctuaries can be attributed to a broader circle of archaeological evidence of interactions between the early agricultural societies of Southeastern and Central Europe and the steppe world of pastoralists. Neo-Eneolithic interactions between the Steppe and early agricultural communities are also confirmed by genetic and anthropological analyses of ancient populations. Nevertheless, there are no grounds on which to defend the priority of the Maikop-Novosvobodnaya unit influences from the Northern Caucasus on the origin of ritual monumental architecture in the Pontic steppe. It is also interesting to note that complex monumental architecture is absent from the Northern Caspian area and the Lower Volga (Rassamakin 2011: 303).

Early radiocarbon dates of many barrows in the Pontic Steppe are linked not to the barrows themselves but to earlier pre-barrow sanctuaries and burials. Sanctuaries can be categorized into various types based on their architecture, symbolism, and functions. The construction of different types of sanctuaries continued throughout the 4th mill. BCE and into the 3rd mill. BCE, gradually losing complexity and diversity and some functions.

The pillar structures, stone constructions, and other features of sacred complexes (burials, cult objects, ditches, earthen walls and embankments, cromlechs, and steles) embodied the existing worldview, serving as a specific model of the Universe. Thus, they had a well-organized spatial structure in accordance with the horizontal, vertical, and horizontal-vertical projections of the Universe. This spatial organization represented not only astronomical but also more complex mytho-ritual and cosmological content in the worldview logic. Despite differences in the spatial organization of "burials field" of various barrows located quite far apart, there is a remarkable similarity in the structure of the sacred space of sanctuaries preserved beneath the barrows. This similarity is likely based on the same notions about the surrounding world (Universe, Cosmos) (Potemkina 2007: 57). The foundation of the spatial-temporal organization of cult complexes usually

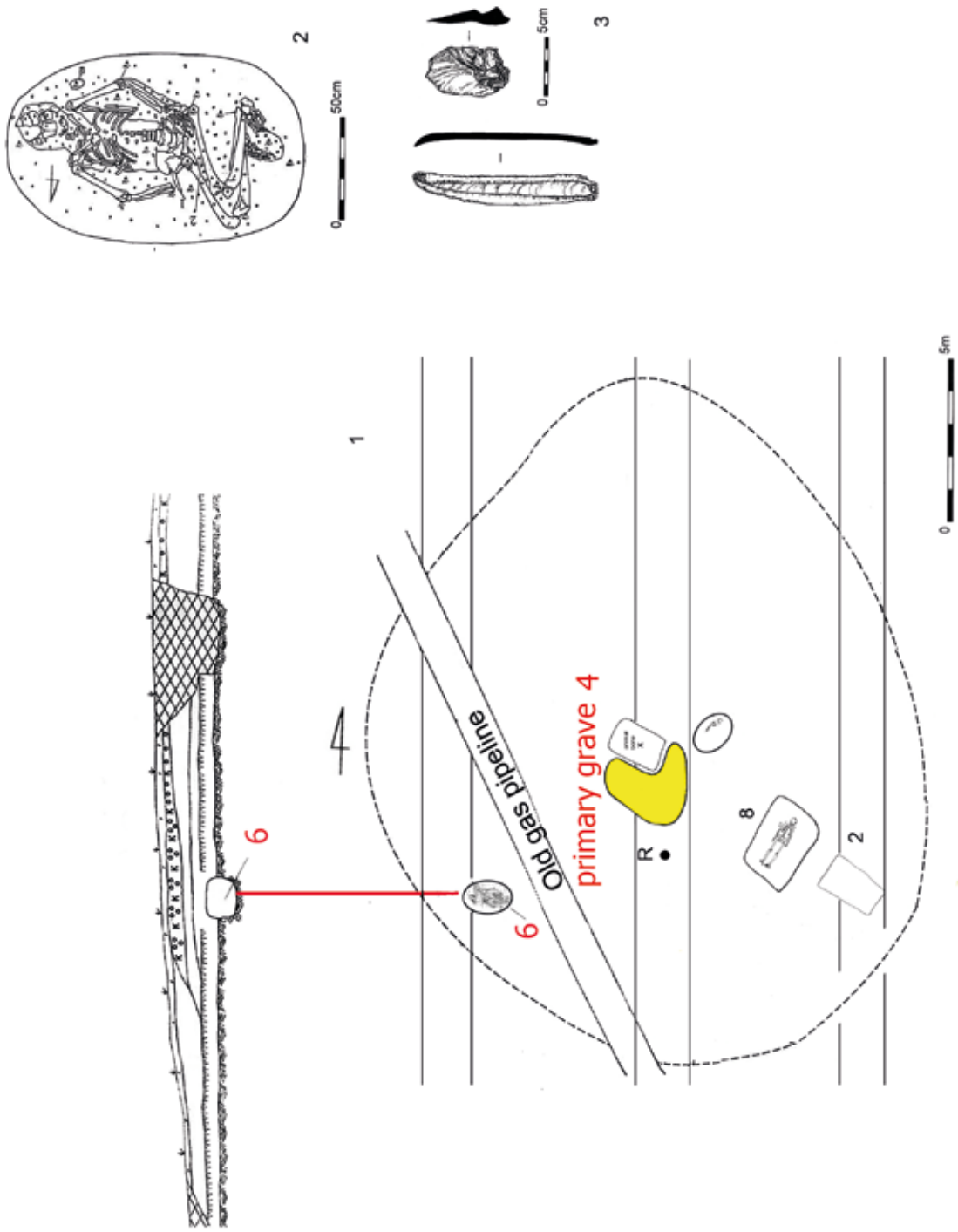


Fig. 17. Plan of barrow Tonnelnyy 6, Stavropol region, Northern Caucasus (after Korenevskiy 2012): 1 – plan and profile of the barrow; 2 – pre-kurgan flat burial 6, plan; 3 – inventory of burial 6

consisted of a clearly expressed four-part structure of horizontal space corresponding to cardinal points. This horizontal structure modeled not only the cardinal directions but also seasons (spring-autumn, summer-winter); parts of the day (morning, day, evening, night); colors, often reflected in various type of soil associated with burials, their orientation, and location; inhabited and uninhabited Space; the Cosmic and mundane worlds. The emergence Neo-Eneolithic circular sanctuaries such as rondels and henges in Central and Northern Europe, could be related to the transition to productive forms of economy in their various manifestations, depending on natural-geographical factors (Potemkina 2005: 188, 198–199).

Thus, the "barrow period" was preceded by the "sanctuary period", which can be dated to the 5th mill. BCE. The sanctuaries can be divided into several types depending on their symbolism and function. Flat burials and ritual pits with dates from the 5th mill. BCE can be associated with sanctuaries. But their dates are not dates of burial mound construction. Barrows emerged in the steppes of the Northern Black Sea region, the Caucasus, and the Volga-Ural region no earlier than 39/38 cent. BCE, coinciding with the dates of Central Europe. It is possible to speak about the common European character of this phenomenon, covered vast territories at the same time. Some burial mounds were built on ancient flat sanctuaries or cemeteries, saving them for archaeologists. Nevertheless, it is impossible to identify a particular culture and a particular territory associated with the birth of the barrow tradition.

References

Alexandrov S., Włodarczak P.
2022 Early Bronze Age Pamukli bair barrow near Malomirovo and the problem of east-oriented barrow graves in Upper Thrace. *Sprawozdania Archeologiczne* 75(1): 213–245.

Arias P.
1999 The Origins of the Neolithic along the Atlantic Coast of Continental Europe. *Journal of World Prehistory* 13(4): 403–464. DOI: 10.1023/A:1022370513087

Balabanova M. A., Pererva E. V., Klepikov V. M., Krivosheyev M. V., Demkin V. A., Eltsov M. V., Skripkin A. S., Udaltsov S. N., Yavorskaya L. V., Dyachenko A. N.
2014 *Kurgannyy mogilnik Peregruzoe I: rezultaty mezhdistsiplinarnykh issledovaniy*. Volgograd.

Brovender Yu. M.
2020 *Zvit pro rozkopky kurhanu bilia selyscha Nyzhnia Duvanka Svativskoho raionu Luhanskoy oblasti v 2020 r.* Severodonetsk.

Burdo N.B.
2011 Антропоморфні образи в традиції Трипілля-Кукутень. *Наукові записки національного історико-етнографічного заповідника «Переяслав»* 5(7): 128–143.

Chernykh L.A., Daragan M.N.
2014 *Äneolitisch – Bronzezeitliche Hügelgr Äber im Flussgebiet Zwischen Bazavluk, Solenaja und Čertomlyk*. Kiev–Berlin.

Chambon P., Thomas A.
2011 The first monumental cemeteries of western Europe: the „Passy type" necropolisin the Paris basin around 4500 BC. In: M. Furholt, F. Lüth, J. Müller (eds.), *Megaliths and Identities. Early Monuments and Neolithic Societies from the Atlantic to the Baltic*: 249–260. Bonn.

Czebreszuk J., Pospieszny L.
2012 The Oldest Round Barrows of the European Lowlands Ancestral Landscape. In: E. Borgna, S. Müller Celka (eds.), *Ancestral Landscapes. Burial mounds in the Copper and Bronze Ages (Central and Eastern Europe – Balkans – Adriatic – Aegean, 4th-2nd millennium BC)*: 557–566. Lyon.

Daragan M.
2015 Opyt 3D-modelirovaniya kurgannykh sooruzheniy epokhi eneolita – ranney bronzy. In: D. Guk (ed.), *Virtual archaeology (Methods and benefits). Proceedings of the Second International Conference held at the State Hermitage Museum, Sankt-Peterburg 1–3 June 2015*: 127–139. Sankt-Peterburg.

Daragan M., Polin S., Svoyski Y.
2021 Chronological sequence of megalithic burial complexes of the Eneolithic in the Velikaya Aleksandrovka burial mound. *Materialy po arkheologii i istorii antichnogo i srednevekovogo Prichernomorya* 13: 13–98.

Furholt M., Müller J.
2011 The earliest monuments in Europe –architecture and social structures (5000-3000 cal BC). In: M. Furholt, F. Lüth, J. Müller (eds.), *Megaliths and Identities. Early Monuments and Neolithic Societies from the Atlantic to the Baltic*: 15–35. Bonn.

Govedarica B., Kaiser E, Rassamakin J., Samar V.
2006 Der Grabhugel Tarasova Mogila bei der Stadt Orechov. *Eurasia Antiqua* 12: 63–112.

Govedarica B., Manzura I.
2016 The Giurgiulesti Cemetery in Chronological and Cultural Contextof Southeastern and Eastern Europe. *Eurasia Antiqua* 22: 1–39.

Grebennykov Yu., Filatov D.
2011 K voprosu o markirovke "predyamnykh" skorchennykh pogrebeniy v protsesse vozniknoveniya kurgannogo stroitelstva v Stepnom Pobuzhie (predvaritelnyy aspekt problemy). *Arkasivski chytannia. Materialy I mizhnarodnoi naukovo-praktychnoi konferentsii, Mykolaiv 14 - 15 kvitnia 2011 r.*: 61–64. Mykolaiv.

Grebennikov Yu., Smyrnov L.
2015 Pochatok kurhannoho budivnytstva u Pivnichnomu Prychornomoryi (na prykladi pamyiatnykiv Stepovoho Pobuzhzhia): arkhitekturnyy ta ideolohichnyy aspekty problemy. *Eminak* 3: 21–30.
Harding A.
2011 The Tumulus in European prehistory. Covering the body, housing the soul. In: E. Borgna, S. Müller Celka (eds.), Ancestral Landscapes. Burial mounds in the Copper and Bronze Ages (Central and Eastern Europe – Balkans – Adriatic – Aegean, 4th-2nd millennium BC): 21–30. Lyon.
Ivanova S. V.
2015 "Proto-Budzhak Horizon" of the North-Western Black Sea Region. *Stratum plus* 2: 275–294.
Ivanova S. V., Petrenko V. G., Vetchinnikova N. E.
2005 *Kurgany drevnikh skotovodov mezhdurechya Yuzhnogo Buga i Dnestr*a. Odessa.
Ivanova S. V., Potemkina T. M.
2005 Archeoastronomical interpretation of the architecture of the Early Bronze Age mound. In: A.A. Tishkin (ed.), *Teoriya i praktika arkheologicheskih issledovaniy*: 18–28. Barnaul.
Jarosz P., Włodarczak P., Tunia K.
2020 Funnel Beaker culture tombs in the eastern part of the Wodzisław Hummock. *Sprawozdania Archeologiczne* 72(1): 313–332. DOI: 10.23858/SA/72.2020.1.014
Korenevskiy S.N.
2012 *Rozhdenie kurgana. Pogrebalnye pamiatniki eneoliticheskogo vremeni Predkavkazyia*. Moskva.
Korenevskiy S.N., Morgunova N.L.
2022 K diskussii o proiskhozhdenii i kulturnoy prinadlezhnosti pervykh kurganov v stepakh Vostochnoy Evropy i Predkavkazya. *Teoriya i praktika arkheologicheskikh issledovaniy* 27(3): 17–27.
Kovaleva I. F., Marina Z. P., Romashko V. A., Teslenko D. L., Shalabudov V. N., Veklenko V. A.
2003 *Kurgany eneolita-bronzyi v Krivorozhskom techenii Ingultsa*. Dnepropetrovsk.
Kotova N. S.
2006 *Early Eneolithic in the Pontic steppes* (= British Archaeological Reports. International Series 1735). Oxford.
Котова N. S.
2013 *Dereivskaya kultura i pamyatniki Nizhnemikhaylovskogo tipa*. Kiev, Kharkov.
Kotova N., Makhortykh S., Dzhos V., Radchenko S.
2020 Eneolithic and Early Bronze Age stone burial constructions of the North Black Sea region. *Revista Arheologică* 2: 31–49.
Król D.
2012 Grobowce w kulturze pucharów lejkowatych. Uwagi na temat alternatywnych modeli genetycznych. In: Czopek S. (ed.), *Hic mortui vivunt. Z badań nad archeologią funeralną*: 41–49. Rzeszów.
Lotman Yu. M.
2000 *Semiosphera*. St. Petersburg.
Lyahov S.V.
2002 *Raskopki kurganov v stepnoy zone Tsentralnogo Predkavkazya v 1997 godu*. http://rosarheolog.ru/lyaxov-s-v-raskopki-kurganov-v-stepnoj-zone-centralnogo-predkavkazya-v-1997-godu/ Accessed
Manzura I. V.
1984 Issledovaniya kurganov u pos. Svetlyy. In: I. I. Artemenko (ed.), *Kurgany v zonakh novostroek Moldavii*: 109–143. Chișinău.
1997 Arheologiya osnovnogo mifa. In: Tkachuk M.E., Manzura I.V. (eds.), *Stratum: struktury i katastrofy*: 26–46. Sankt-Peterburg.
2013 Kultury stepnogo eneolita In: Bruyako I., Samoylova T. (eds), *Drevniye kultury Severo-Zapadnogo Prachernomorya*: 115–153. Odessa.
Melnik O. O., Steblina I. O.
2012 *Kurgany Krivorizhzhya*. Kryviy Rig.
Morgunova N. L.
2011 *Eneolit Volzhsko-Uralskogo mezhdurechya*. Orenburg.
Nowak M.
2017 Ubiquitous settlers, consequent farmers, and monument builders. In: P. Włodarczak (ed.) *Past Societies. The Polish Lands From the First Evidence of Human Presence to the Early Middle Ages.* Vol. 2: *5500–2000 BC*: 125–170. Warszawa.
Patokova E. F.
1979 *Usatovskoe poselenie i mogilniki*. Kiev.
Petrenko V. G.
1983 Arhitekturnyie osobennosti nekotoryikh kurganov Usatovo. In: *Materialy po arkheologii Severnogo Prichernomorya*: 22–31. Kiev.
1998 Eneoliticheskiy kurgan u sela Sarata. In: Subbotin L. V., Dzigovskiy A. N., Ostroverkhov A. S. (eds.), *Arkheologicheskiye drevnosti Budzhaka. Kurgany u sel Vishnevoye i Belolesye*: 159–164. Odessa.
2010 Kurgan epokhi paleometalla na poberezhye Hadzhibeyskogo limana. *Materialy po arheologii Severnogo Prichernomorya* 11: 303–368.
2013 Usatovskaya kultura. In: Bruyako I., Samoylova T. (eds), *Drevniye kultury Severo-Zapadnogo Prachernomorya*: 163–210. Odessa.
Petrenko V. G., Ostroverkhov A. S., Sapozhnikov I. V.
2002 Novyi kurgan epokhi eneolita-bronzy v Nizhnem Podnestrovye. *Starozhitnosti stepovogo Prychornomorya ta Krimu* 10: 39–63.
Popovici S., Ciobanu I.
2021 *Cercetări arheologice la Cimișlia: (1969, 2015, 2019)*. Chișinău.
Popovici S., Kaiser E.
2021 A burial mound in the town of Cimișlia in southern part of the Republic of Moldova: relative and absolute chronology of the burials. *Arkheolohiia i davnia istoriia Ukrainy* 2(39): 270–279. DOI: 10.37445/adiu.2021.02.16.
Polin S. V., Chernykh L. N.
2009 Konstruktivnyie osobennosti pervichnykh nasypey yamnykh kurganov u s. Vladimirovki i u g. Ordzhonikidze. *Problemy arkheologii Podneprovya* 9: 37–48
Potemkina T. M.
2004 Osobennosti struktury sakralnogo prostranstva eneoliticheskikh kurganov so stolbovymi konstruktsiyami (po materialam Severnogo Prichernomorya). In: *Pamiatniki arkheologii i drevnego iskusstva Evrazii*: 215–250. Moskva.

2005 Arheoastronomicheskiy aspekt issledovaniya kurgana 3 u sela Revova Odesskoy oblasti. In: Ivanova S. V., Petrenko V. G., Vetchinnikova N. E., *Kurgany drevnikh skotovodov mezhdurechya Yuzhnogo Buga i Dnestra*: 188–199. Odessa.

2007 Astronomical Basis of Arrangement of Sacral Space of the Eneolithic Burial Mounds in Northern Pontic Area (on materials of the archaeological excavations). In: E. Pásztor (ed.), *Archaeoastronomy in Archaeology and Ethnography: Papers from the annual meeting of SEAC (European Society for Astronomy in Culture) held in Kecskemét in Hungary in 2004* (= British Archaeological Reports. International Series 1647): 55–59. Oxford.

2011 Arkhitekturnye osobennosti kurgana Usatovo I-4. *Kratkie soobscheniya Instituta arkheologii AN SSS*R 225: 206–220.

Potemkina T. M., Ivanova S. V.

2004 Kurgan epokhi eneolita – ranney bronzy u s. Revova Odesskoy oblasti i ego arkheoastronomicheskaya interpretatsiya. *Stratum plus* 2 (2003–2004): 145–162.

Pustovalov S.

2016 Pro priznachennya kurganiv z plaskoyu verhIvkoyu dobi rannoi bronzy stepovoi chastyny Ukrainy. In: G. Ivakin (ed.), *Starozhitnosti Livoberezhnogo Podniprovya:* 15–24. Kyiv.

Radchenko S., Kotova N., Nykonenko D., Dzhos V., Volkov A., Tuboltsev O., Kiosak D.

2020 A complex rock art object in the Ukrainian Steppe. *Rock Art Researc*h 37 (2): 167–183.

Rassamakin Ju. Ja. (Rassamakin Yu.Ya.)

2004 *Die nordpontische Steppe in der Kupferzeit: Gräber aus der Mitte des 5. Jts. bis Ende des 4. Jts. v. Chr.* Teil II (= Archäologie in Eurasien 17). Mainz.

2009 Novye daty k absolyutnoy khronologii eneolita stepnogo Prichernomorya (predvaritelnaya informatsiya). *Arheologicheskiy almanah* 20: 289–296.

2011 Eneolithic burial mounds in the Black Sea Steppe. From the first burial symbols to monumental ritual architecture In: E. Borgna, S. Müller Celka (eds.), *Ancestral Landscapes. Burial mounds in the Copper and Bronze Ages (Central and Eastern Europe – Balkans – Adriatic – Aegean, 4th-2nd millennium BC)*: 293–305. Lyon.

Rostunov V. L.

2007 *Epokha eneolita-sredney bronzy Tsentralnogo Kavkaza*. Vladikavkaz.

2009 Kurgany v vide cherepakh epokhi eneolita – nachala ranney bronzy na Kavkaze i v Severnom Prichernomorye. *Stratum plus* 2 (2005–2009): 344–366

Rychkov N. A.

2000 Kultovoe sooruzhenie na Yuzhnom Buge. In: Z. P. Marina (ed.), *Labores pariunt honores. Problemy arkheologii Podneprovya*: 65–73. Dnepropetrovsk.

Sava E., Agulnikov S., Manzura I.,

2019 *Issledovaniya kurganov v Budzhakskoy stepi*. Chişinău.

Shishlina N. I.

2007 *Severo-Zapadnyy Prikaspiy v epohu bronzy (V–III tysyacheletiya do n. e.)* (= Trudy Gosudarstvennogo Istoricheskogo muzeya 165). Moskva.

Subbotin L. V.

2001 Eneoliticheskoye sviatilysche kurgannogo mogilnyka Kubey. *Starozhytnosti Stepovogo Prychornomorya i Krymu* 9: 160–167.

Subbotin L. V., Ostroverhov A. S., Dzigovskiy A. N.

1995 *Arkheologicheskiye drevnosti Budzhaka. Kurgany u s. Trapovka i Novoselitsa*. Odessa.

Subbotin L. V., Petrenko V. G.

1986 Ob arhitekture usatovskikh kurgannykh sooruzheniy. *Pamyatniki drevnego iskusstva Severo-Zapadnogo Prichernomorya*: 26–42. Kiev.

1994 Kurhannyy mohylnyk usativskoho typu Zhovtyy Yar. *Arkheologiia* 1: 93–104.

Subbotin L. V., Razumov S. N., Sinika V. S.

2017 *Semionovskie kurgany*. Tiraspol.

Suprunenko A. B.

2006 *Kurgany mizh ss. Dukanichi ta Solontsi na Nizhniomu Psli*. Kyiv–Poltava.

Teslenko D. L., Ostapenko M. A.

2000 Megalitichne kultove sporudzhennia doby bronzy na o. Hortytsia. In: Z. P. Marina (ed.), *Labores pariunt honores. Problemy arheologii Podneprovya*: 73–95. Dnepropetrovsk.

Turek J.

2021 Neolithic Long Barrows and Enclosures as Landmarks of Ritual Landscape of Central and North Bohemia. *Open Archaeology* 7: 1674–1684.

Włodarczak P.

2019 Małopolskie społeczności kurhanowe u schyłku neolitu i we wczesnej epoce brązu. In: M. Szmyt, P. Chachlikowski, J. Czebreszuk, M. Ignaczak, P. Makarowicz (eds), *VIR BIMARIS. Od kujawskiego matecznika do stepów nadczarnomorskich. Studia z dziejów międzymorza bałtycko-pontyjskiego ofiarowane Profesorowi Aleksandrowi Kośko* (= Archeologia Bimaris – Dyskusje 5): 519–532. Poznań.

Zhitnikov V. G.

2000 Raskopki kurgannogo mogilnika "Vertolotnoye pole". *Istoriko-arkheologicheskiye issledovaniya v Azove i na Nizhnem Donu* 16: 88–92.

Yarovoy E. V.

2001 Eneoliticheskiye svyatilischa i antropomorfnye stely Dnestrovsko-Prutskogo mezhdurechya. In: M. M. Vegesh, S. V. Vidnyanskiy, D. D. Danilyuk (eds.), *Carpatica* 13: 67–77. Uzhgorod.

Pradziejowe sanktuaria jako system symboliczny: Przed kurhanem

Streszczenie

Na obszarach północnego Nadczarnomorza analiza wczesnych datowań radiowęglowych oraz stratygrafii „kompleksów kurhanowych" z takimi oznaczeniami (V tys. p.n.e.) doprowadziła do wniosku, że nie są one bezpośrednio związane z kurhanami, lecz należą do skomplikowanych struktur monumentalnych, a konkretnie sanktuariów. Sanktuaria poprzedzały chronologicznie kurhany i funkcjonowały przez długi czas bez budowy nasypów nad nimi. Niektóre sanktuaria miały orientację astronomiczną

i były związane z symboliką kalendarzowo-zodiakalną. Czasami na terenie sanktuariów odbywały się pochówki o charakterze sakralnym, polegające na umieszczaniu ciał zmarłych w płaskich grobach bez budowy kurhanów.

Kurhany nad sanktuariami zaczęły pojawiać się dopiero wówczas, gdy w owych uświęconych miejscach zaczęto dokonywać pochówków w późniejszych czasach (nie wcześniej niż w 39/38 w. p.n.e.). Kurhany te są błędnie łączone z płaskimi (przedkurhanowymi) grobami lub sanktuariami. Datowanie kurhanów na podstawie oznaczeń dla płaskich grobów (lub tzw. sanktuariów słupowych) umieszcza czas pojawienia się kurhanów w stepach nadczarnomorskich oraz w innych regionach Europy Wschodniej w zbyt odległej przeszłości. Rozdzielenie tych kompleksów w czasie i przestrzeni (płaskie sanktuarium i rzeczywisty kurhan) pozwoliło wyciągnąć wnioski na temat istnienia sanktuariów ok. 49-40 w. p.n.e. Kurhany pojawiły się później, a ich umiejscowienie w miejscu sanktuariów jest związane z sakralnym charakterem tego miejsca. W całej Europie kurhany pojawiły się w różnych kulturach niemal jednocześnie – w 39/38 w. p.n.e.

Wpływy środkowoeuropejskie i dolnodunajskie mogły przyczynić się do powstania koncepcji ideologicznych wśród ludności stepowej i pojawienia się zjawiska sanktuariów w środkowej odcinku eneolitu. Prawdopodobnie miały one podobieństwa strukturalne do innych kompleksów zbudowanych zgodnie z ruchem ciał niebieskich w późnym neolicie Europy Środkowej i atlantyckiej. Pojawienie się sanktuariów można wiązać z szeregiem dowodów archeologicznych wskazujących na interakcję między światem wczesnych rolników w Europie południowo-wschodniej i środkowej a pasterskim „światem stepowym". Kurhany w stepach Nadczarnomorza i Kaukazu są synchroniczne z kurhanami europejskimi, a ich definiowanie jako równie starych jak sanktuaria jest błędne. Praktyka budowania różnego rodzaju sanktuariów była kontynuowana przez ludność eneolityczną przez całe IV tys. p.n.e., a niektóre typy przetrwały w kulturach jamowej i katakumbowej.