Regional peculiarities of the Zrubna/Timber-grave culture tribes' calendar system ¹

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ABSTRACT

The article presents the results of the study on the burial of the Zrubna/Timber-Grave culture (Late Bronze Age) from the mound near the village of Komyshuvate in the North Azov Area in the south of Donetsk Region of Ukraine. The article deals with issues related to some peculiarities of the material and spiritual culture of the ancient population of the Azov steppes, their social organization and funeral rites. Ceramic vessels are the most common category of equipment in the funerary inventory of the Zrubna/Timber-grave culture graves. Finds of pottery with extraordinary ornaments, which researchers interpret as pictograms, proto-literacy, and plot drawings, have always been of particular interest. The calendar ornamentation on the pots of the Zrubna/Timber-grave culture deserves special attention. The pot with the ornamentation, which, according to the authors, was of a calendar nature, comes from burial 1 of barrow 4 of the Komyshuvate cemetery. A detailed analysis of the ornamentation on the pot from this burial allowed us to suggest that the cyclic composition depicted on the ceramic vessel records recurring time periods that were important to the ancient population. Perhaps the ornament also reflects the regional peculiarities of the calendar system of the Zrubna/Timber-grave culture tribes: annual and lunar cycles with the time of transition from the old to the new year.

KEYWORDS

regional history of Ukraine, regional calendar, North Azov Region, Late Bronze Age, Zrubna/Timber-grave culture, ceramic studies, cyclic ornament

Introduction

Modern archaeological studies of the Zrubna/Timber-grave culture mounds (Late Bronze Age) located in the North Azov Region permit to find out the regional peculiarities of these tribes' calendar system. In 2021, the archaeological expedition of Mariupol State University carried out scientific excavations of two barrows near the village of Komyshuvate of the Mangush territorial community of Mariupol district, Donetsk region of Ukraine. The investigated barrows were part of a barrow group that included five mounds.

The studied mound group is located within the Ukrainian Northern Azov Sea Region (Azov Lowland Plain), on a watershed plateau between the small steppe rivers. At the top of the watershed between the upper reaches of the gullies in the interfluve of the Berda and Komyshuvatka rivers (Azov Sea basin), in the immediate vicinity of the investigated cemetery, there are a number of single mounds and mound groups. As an authentic element of the historical and cultural landscape of the Northern Azov Sea region, the mound group of five barrows near the village of

Komyshuvate was first discovered and marked on maps by military topographers in the mid-nineteenth century (Military topographic map of the Katerynoslav province of 1846–1863 (**Fig. 1**).

The history of archaeological research of burial sites in the adjacent territory has only a few episodes. Thus, in 1965, thanks to local residents, the archaeological collection of the Mariupol Museum of Local Lore was replenished with finds of the Early Iron Age originating from a looted mound near the village of Komyshuvate (*Dubovska*, 1997: 205). In 1989, near the village of Zakharivka, an expedition of Donetsk University excavated 3 barrows in a group of 7 barrows. They found materials of the Zrubna/Timber-grave culture, which are culturally and chronologically similar to the data obtained by the archaeological expedition of Mariupol State University in 2021. Among other things, burials in stone tombs were investigated (*Lytvynenko*, 1999: fig. 2; 2000, fig. 4, 5–13, 5, 6–10, 7).

The discovery of the burial mound near the village of Komyshuvate by scientists took place in 1988 during the

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explorations of Donetsk archaeologists M. Shvetsov and O. Dubovska (*Shvecov, Kravchenko,1988*). In 1989, the Mariupol Archaeological Expedition led by V. Kulbaka investigated three barrows from this group (barrows 1 –

3). Burials of the Late Bronze Age and the Middle Ages were discovered (*Kulbaka, Gnatko, 1989*). Two mounds in the eastern part of this group (barrows 4 and 5) were investigated by a university expedition in 2021.

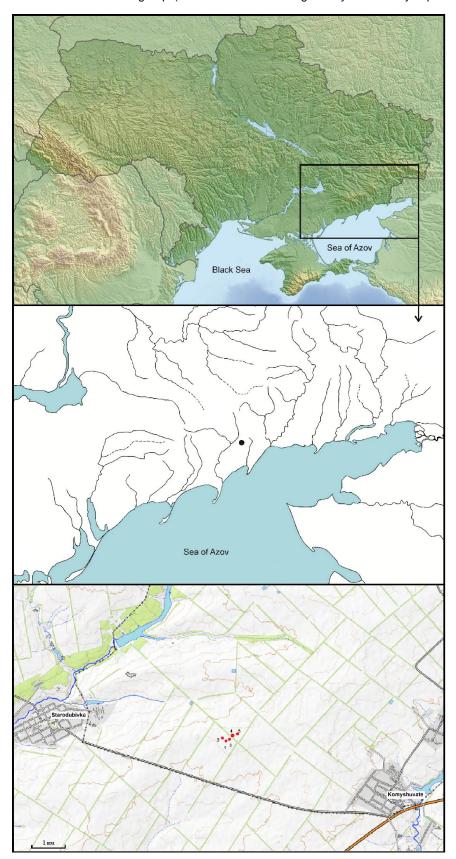


Figure 1. Scheme of the location of the mound group near the village of Komyshuvate in the North Azov Region

СХІД Том 5 (1) 2023 Регіональний дискурс історії України In general, the beginning of the kurgan cemetery is associated with the tribes of the Zrubna/Timber-grave culture. Of the five barrows in the group, only three belonged to the period of the Late Bronze Age (mounds 1, 3 and 4). All the three mounds of the Zrubna/Timber-grave culture contained one main burial each, and the largest mound in the group, mound 4, contained another inlet burial. The next stage of the cemetery's existence is associated with medieval nomads. Cases of ritual activities on Bronze Age mounds were traced, and two mounds were built over the burial of a medieval nomad (mound 2) and a cenotaph grave (mound 5).

In connection with the proposed research subject, mound 4, in particular the inlet burial 1, is of particular interest, as it clearly demonstrates a number of deviations from the model of ordinary burials of the Zrubna/Timbergrave culture of the North Azov Region and signs of social extraordinary. A fairly rare category of funerary material in Late Bronze Age burials in the North Azov Region is ceramic vessels with an extraordinary cyclic ornament, which researchers interpret as a calendar.

Research methods

For most archaeological cultures, ceramics are the dominant type of finds that contain extremely rich historical information. Pottery is a reliable source for dating archaeological sites.

The study of ceramic pottery is one of the broadest research fields in archaeology, and ceramic products are one of the most informative resources for the study of ancient populations. Over the past two centuries, archaeologists have developed many approaches and methods with different goals: from the study of ceramics as an art object to the reconstruction of production technologies, and the study of pottery as a "mediator" for the study of the ancient populations' everyday life. The researchers divided the methods of studying ceramics into groups: (1) description of technological information; (2) description of the form; (3) analysis of the ornament; (4) reconstruction of the cultural tradition of pottery. Along with the development of physical methods in archaeological research, the methods and models of analysis are also changing (Andriiovych, 2019: 143).

The descriptive approach that emerged in the late nineteenth and early twentieth centuries at the stage of formation of archaeological science and ceramic studies, albeit in a slightly modernised form, exists in contemporary publications by Ukrainian researchers and is in fact one of the dominant ones. Based on this approach, morphological (shape, colour, ornament) and some technical and technological features (impurities, moulding methods, etc.) of ancient ceramics are distinguished. Its use is quite justified when working with large collections of ceramics, grouping them and forming a source base for further research. Through visual observation, the ceramics are first grouped and classified according to the main categories inherent of the archaeological site. Each category is then considered separately and further divided into groups and subgroups in the context of existing typologies. The main drawback of this approach is that the interpretation of finds and their description are often subjective (*Puholovok*, 2018: 84–85).

The next stage of the study involves the application of formal classification and formal typological approaches. Their use involves the analysis and systematisation of ceramics according to certain criteria, which permits a comparative analysis of the selected groups. The seman-

tic-technological approach permits to study the historical patterns of ceramic decoration development in relation to the technological features of its manufacture. At the current level of knowledge, after the phase of description and classification, the main issue is to correlate ceramic products with specific population groups, to clarify contacts and influences between communities, and, ultimately, to culturally interpret and reconstruct the spiritual culture of the ancient population based on the analysis of ornamental compositions on ceramics.

In addition to general scientific methods, a set of special methods is used to systematise archaeological material, identify existing relationships and dependencies at the level of features, types and complexes, and determine chronological and spatial dynamics: comparative-historical, problematic-chronological, correlation, statistical, comparative-stratigraphic (data of direct and relative stratigraphy), cartographic, etc.

The corpus of sources accumulated and available to the authors allowed us to consider the ritual and inventory complex of burials of the Late Bronze Age at the Komyshuvate cemetery through the prism of the created general register of burial mounds of the Zrubna/Timbergrave culture of the North Azov Region. The analysis of the materials obtained during archaeological research permits to reconstruct, to some extent, the processes of the ancient population's life and communication links in the territorial plane, as well as the interaction of geographical, economic, demographic, environmental, sociocultural processes in the regional dimension of Ukrainian history.

Results and Discussion

Burial 1 of the mound 4 of the Komyshuvate barrow complex. Mound 4 is an oval-shaped mound made of soil, stretched along the northwest – southeast line, 0.9 m high, 40×32 m in size (Fig. 3). Some large stone blocks were found on the surface or in the upper layers of the mound. Two burials of the Zrubna/Timber-grave culture and a ritual complex of the medieval period were investigated in the barrow.

Grave 1 (**Fig. 2**) – inlet burial was discovered at a distance of 7.0 m to the west and 2.65 m to the south of the mound centre (5.55 m 250° from the centre). The bottom of the grave was found at the level of the mainland layer, at a depth of 1.49 m from the present-day surface (1.63 m from R). The burial was carried out at the level of the primary mound above the main grave 2.

A funerary structure is a stone tomb with predominantly horizontal masonry of stone building material (sandstone). The presence of vertically placed slabs is noted (northern corner, lower part of the southern longitudinal wall). An indistinct fragment of a medieval pottery vessel was found under the sod layer. Some elements of the stone burial structure were found almost immediately under the sod layer. During the clearing of the upper layer of the grave fill, a ceramic pot (vessel 1) was found at a depth of 0.58 m from the present-day surface (0.72 m from R). During the excavation of the Western Trench I, the horizontally placed slab of the eastern wall of the burial structure was moved by a mechanism. The upper part of the eastern corner of the tomb was partially destroyed in ancient times (before the grave was filled with soil), as some small stone slabs were directly on the bones of the deceased.

At the bottom of the stone tomb, orientated with its long side along the west-east line, the remains of an adult

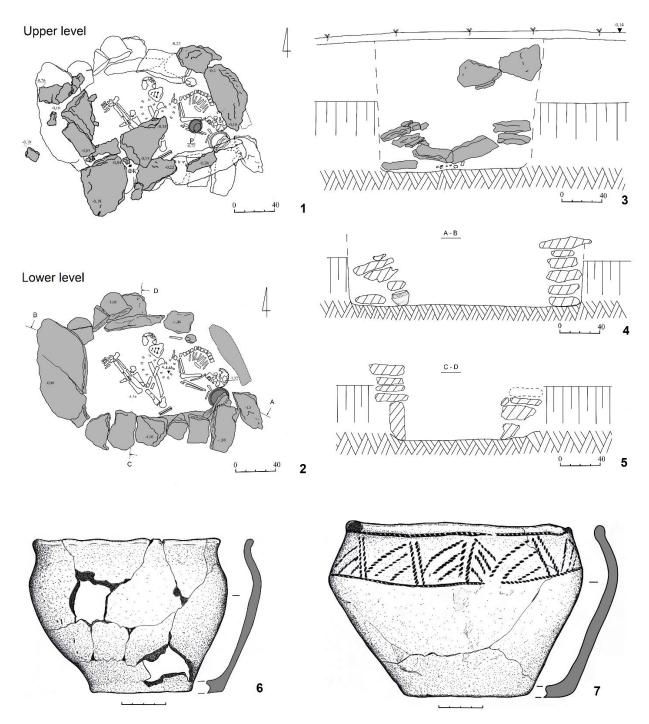


Figure 2. Komyshuvate, barrow 4 burial 1

were found. The deceased was laid crouched on his left side with his head facing southeast. The spine is strongly curved in the thoracic section. It seems that this is the result of a lifelong anomaly (kyphosis?) or post-mortem displacement of the deceased's remains. The legs were bent at an acute angle at the knee joints: left - 30°, right - 60°; at the hip joints: left - 60°, right - 90°. The arms were bent at the elbow joints: left - 65°, right - 35°, with the left hand in front of the face and the right hand under the jaw.

Under the pelvic bones, there is decay of the deceased's flooring or clothing remains. There is also a trace of decayed plant litter under the head. In front of his face there was a ceramic pot 2, near the knee of his left leg was a tubular bone of an animal - the remains of a farewell meal.

Inventory:

1) Ceramic vessel 1 - a pot of slightly asymmetrical proportions, with convex sides and rims bent outwards, rounded in cross-section. The firing is uneven; the outer

surface is yellow/grey-brown. The vessel is unornamented. The sherd is black at the fracture. Dimensions: height – 14.0 cm, diameter at the rim – 17.0 cm, diameter of the sides – 18.0 cm, diameter of the bottom – 9.2 cm. The volume is 2.1 litres.

2) Ceramic vessel 2 is a sharp-ribbed pot of squat proportions, with the maximum diameter in the upper third of the body. The outer surface is yellow/grey-brown in colour. The vessel is decorated with a geometric ornament made by imprints of a "caterpillar" (a flexible stick with a wound thread) in the form of triangles with their vertices upwards, which are located between two horizontal lines. The sherd is black at the break. Dimensions: height - 16.0 cm, diameter at the top - 21.0 cm, diameter of the sides - 23.5 cm, diameter of the bottom - 11.5 cm. The volume is 3.72 litres.

Cultural and chronological characteristics of the materials. The corpus of sources accumulated and available to the authors allows us to consider the ritual and inventory complex of the Late Bronze Age burial of the barrow through the prism of the created general register of funerary grounds of the Zrubna/Timber-grave culture in the North Azov Region.

Only three mounds from the group belonged to the Zrubna/Timber-grave culture and were located at approximately the same distance from each other. All the three mounds contained one main burial each, and the largest of the mounds contained another inlet burial. The kurgan cemetery we have studied is fully consistent with the trend of kurgan construction Zrubna/Timber-grave culture tribes in the North Azov Region. According to the shape of the mounds in the group, the cemetery demonstrates a linear layout. With this layout, the mounds in the group are lined up in a chain. This arrangement of mounds is largely due to the terrain: the mounds are stretched along the crests of watersheds, duplicating the contours of gullies or plateau slopes. Moreover, in our case, the largest mound in the group, barrow 4, occupied the highest site in the watershed. The mounds of the Zrubna/Timber-grave culture of the Komyshuvate cemetery (mounds 1 - 3 - 4) are lined up in a south-west - north-east direction.

Burial 1 was arranged in a stone tomb with predominantly horizontal masonry of stone building material (sandstone). The presence of vertically placed slabs is noted (northern corner, lower part of the southern longitudinal wall). Studying the funerary structures of the Zrubna/Timber-grave culture of the North Azov Area and the basin of the Siverskyi Donets, R. Lytvynenko proposed a classification of types of stone tombs, among which complex structures were assigned to groups II and III (Lytvynenko, 1992: 37-39). According to this classification, burial 1 of barrow 4 is assigned to group III (combined tombs with horizontal and vertical masonry walls). In general, the use of stone boxes belongs to the developed and late stages of the Zrubna/Timber-grave culture. As for the stone tombs with horizontal masonry and boxes of complex construction, the available materials permit to attribute them to the end of the developed - beginning of the late stage of the Zrubna/Timber-grave culture of the Siverskyi Donets basin (Lytvynenko, 1992: 42) or to the II-III horizons of the burial grounds in the North Azov Region (Lytvynenko, 1999:19).

The funerary rite of the Zrubna/Timber-grave culture looks somewhat standardised, primarily due to the ritual norms of corpse laying (inhumation). Statistical calcula-

tions have shown that the most common form of burial in the North Azov Region is an individual corpse laid crouched on the left side, with the arms bent at the elbows and placed near the face or in front of the chest of the deceased. The dominant form is the placement of the body on the left side, with the head facing east. According to our calculations, in 92.5% of the burials (in which the original position of the bodies was established), the deceased were laid on their left side. The position of the deceased's hands, when both arms are bent at the elbows, with the hands placed in front of the skull or chest (W), was recorded in 75.6% of burials (Zabavin, Bulyk, 2020: tab. 2). The studied burial of the Zrubna/Timbergrave culture of the Komyshuvate barrow cemetery to some extent demonstrates these patterns.

Remains of funerary meat food are fixed in burials with individual animal bones. They were also present in burial 1 of barrow 4 in the form of a tubular animal bone. Meat food was widely used in the funerary practice of the Zrubna/Timber-grave culture carriers in the North Azov Region. According to our data, 7% of the burials contained animal bones, which can be interpreted as the remains of a funeral meal. In a number of cases, animal bones were found in funerary vessels, but the remains of meat food directly in the vessel were recorded in only three cases (including once the bones of a small animal were found directly on a fragment of pottery). In two other cases, the bones were placed directly on a wooden dish or in a vessel (*Zabavin, Nebrat, Bulyk, 2021: 97*).

An integral part of the funeral rite is the tradition of accompanying the deceased with food/drink in ceramic vessels. Ceramics remains the most common category of finds in the burials of the Zrubna/Timber-grave culture of the North Azov Region. The Komyshuvate burial contained one ceramic vessel. In addition, small fragments of a second vessel were also found in the grave fill above the stone slab during the soil clearing. The vessel from the burial was attributed to the second (developed) horizon of the Zrubna/Timber-grave culture of the North Azov Region due to qualitative features manifested in the composition of the ceramic mass, shape and proportions, surface treatment and ornamentation. The ceramic vessel is classified as a sharp-ribbed pot of squat proportions, with a maximum diameter in the upper third of the body (Zabavin, 2019: 97, fig. 1).

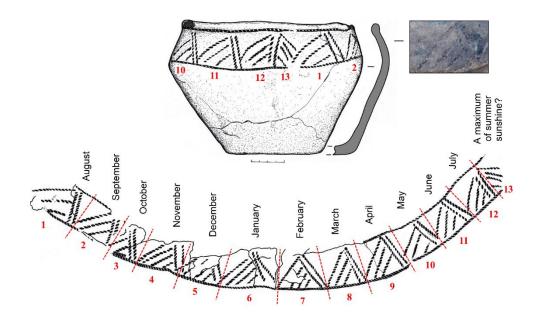
We have information on 742 burials of the Zrubna/Timber-grave culture of the North Azov Region, for which it is possible to zone the location of ceramic vessels in the grave. Zone I, in front of the chest and head, was the most characteristic for ceramic placement (84.3% of cases). At one time, it was suggested that the selected zones of the location of ceramic vessels in relation to the body of the deceased II–V can be recognised as "extraordinary" for the funerary practice of the Zrubna/Timber-grave culture carriers of the North Azov Region. The presence of pottery in these positions should also be considered as a sign that indirectly indicates that the complex belongs to earlier chronological horizons (*Zabavin*, 2019: tab. 3).

In general, the second (developed) horizon of the burial mounds of Zrubna/Timber-grave culture of the North Azov Region is characterised by both main and inlet burials in pits. In the same period, stone chests appeared, made of stone slabs placed vertically on an edge. At the end of the period, another type of stone tombs, called stone crypts by researchers, became widespread, as well

as combined chests or mixed-type chests, the walls of which were built of vertically installed slabs in various combinations with horizontal masonry. The characteristic features of the ceramic pottery from the Komyshuvate burial are also typical for the second (developed) horizon.

Ceramic vessels are the most common category of equipment in the funerary dowry in the graves of the Zrubna/Timber-grave culture. The findings of vessels with extraordinary ornaments, which researchers interpret as pictograms, proto-literacy, and plot drawings, have al-

ways been of particular interest. The calendar ornamentation on the pots deserves special attention. A pot with ornamentation, which, in our opinion, was of a calendar nature, comes from burial mound 1 of barrow 4 of the Komyshuvate graveyard. That is why we will try to analyse the cyclic ornament on the pot from this burial in more detail. Since the main characteristic of cyclic compositions is the presence of a finite sequence of alternating elements, we took a large element as a unit of account in our analysis (**Fig. 3**).



An element of ornamental composition	Quantity	Application technique
	8	rope prints
	4	rope prints
1111	1	rope prints

Figure 3. Ornamental composition of 12 or 13 elements on a vessel from the Komyshuvate burial site.

Regional calendar of the Zrubna/Timber-grave culture tribes of the North Azov Region

The ceramic vessel is a sharply-ribbed pot of squat proportions, with the maximum diameter in the upper third of the body. The outer surface is yellow/grey-brown in colour. The vessel is decorated with a geometric ornament made by imprints of a "caterpillar" (a flexible stick with a wound thread) in the form of triangles with their vertices upwards, which are located between two horizontal lines – the first under the upper rim, the second along the rib. The composition is represented by 12 isosceles triangles shaded with two (8 triangles) or three (4 triangles) diagonal lines. The right side of each triangle is formed by two lines, and the left side by one line. The basis for all shapes is a horizontal line drawn along an

edge. The first and the last triangles are connected by four diagonal lines, which stand out from the context of a single regular composition.

Despite the fact that the authors have a source base (1515 burials of the Zrubna/Timber-grave culture of the North Azov Region), we were unable to draw a wide range of analogies. The vast majority of illustrations in reports and publications do not contain "scans" of the ornament and its detailed description. Despite all the difficulties of any interpretation of the drawings on the ceramics of the Zrubna/Timber-grave culture, pots with calendar ornaments are easier to identify due to a certain number of images that can be identified with the months

of the solar, lunar or lunisolar calendar. Thus, with a certain degree of probability, an ornamental composition containing 12 or 13 elements can be associated with a calendar. Of course, conclusions drawn only on the basis of the appropriate number of ornamental elements will look unconditional, since chance cannot be ruled out either.

The vessels with the signs of the tribes of the Zrubna/Timber-grave culture have always attracted the attention of researchers as one of the brightest manifestations of the ancient population's ceramic tradition. The largest compilation of such vessels is contained in the monographic study by O. Zaharova, in which the author pays considerable attention to historiographical analysis, issues of their systematisation and interpretation (*Zaharova*, 2000).

One of the directions in the interpretation of symbolic compositions on the ceramics of the Zrubna/Timber-grave culture tribes is associated with the desire to link them to calendar ideas. The calendar interpretation of the symbolic friezes on the ceramic vessels was first proposed by V. Andrienko. The researcher suggested that the calendar annual cycle used by the Zrubna/Timber-grave culture tribes was recorded in this way (*Andrienko*, 1979: 70).

According to a number of researchers, the agrarian cults that existed among the population of the Zrubna/Timber-grave culture community are reflected in compositions with calendar semantics (*Gershkovich*, *Yevdokimov*, 1982: 228–231; Kovaleva, 1989: 62; Suprunenko, 1999; Gershkovich, Yakubenko, 2001: 72–80; Otroschenko, 2007; 2019). In connection with the ornamental composition of 12 or 13 elements on the vessel from the Komyshuvate burial ground, it should be noted that the idea of the calendar semantics of 12/13-element compositions was also expressed by Ya. Gershkovich and I. Kovaleva (*Gershkovich*, *Yevdokimov*, 1982: 228–231; Kovaleva, 1989: 63; Gershkovich, Yakubenko, 2001: 72–80).

Based on statistical methods of material processing, the researchers were able to identify digital patterns of iconic friezes on the ceramics of the log cabin culture. This allowed them to demonstrate the presence of information related to the idea of time on the vessels. Thus, it is proposed to consider 12/13-element symbolic compositions as variations of the lunisolar calendar with an additional 13th month of the leap year (Besedin, Safonov, 1996: 22–32; Safonov, 1996: 66–70; Zaharova, 2000: 83–86).

According to O. Zaharova's calculations, the largest number of vessels (14) contained 13-element compositions out of the 65 vessels with cyclic compositions. The researcher, referring to the developments of her predecessors, pointed out the connection between 12/13-element compositions presented in various archaeological cultures, starting from the Eneolithic era, with the ideas of the calendar year within the relevant tradition. The existence of a 13-month (leap) year was characteristic of many ancient cultures that kept track of time according to the lunisolar calendar in this way; they solved the problem of counting months by the Moon and years by the Sun (*Zaharova*, 2000: 81–83).

In our opinion, the 13-element composition on the ceramic vessel from burial 1 of barrow 4 of the Komyshuvate burial ground reflects the ideas about the annual cycle that existed among the Zrubna/Timber-grave culture population in the North Azov Region. The pres-

ence of a series of 12 elements in the composition on the vessel in the form of shaded triangles connected by four diagonal lines, which stand out from the context of a single regular composition, is also significant. This confirms the researchers' opinion about the special semantics of the additional 13th month.

In addition, two types of symbols arranged in groups were recorded on the vessel: 8 isosceles triangles shaded with two diagonal lines; 4 triangles shaded with three lines. According to researchers, this dualism in the 13-element compositions of the annual cycle, expressed in the use of two groups of symbols, reflects the division into seasons. The first is a time of active economic life, full of various events and holidays, while the second is associated with the "dying" of nature and the freezing of economic life (Zaharova, 2000: 84). This fact may to some extent indicate the existence of two seasons in the regional calendar system of the Zrubna/Timber-grave culture tribes inhabiting the Northern Azov Sea region, which demonstrates local climatic features: a longer warm summer (spring and autumn) and a shorter cold winter.

Thus, the above facts allow us to assume that the cyclic composition depicted on the ceramic vessel from the burial of the Zrubna/Timber-grave culture of the Komyshuvate burial ground records the recurring time intervals that are significant for the population. It also possibly reflects the annual and lunar cycles with the timing of the transition from the old to the new year.

Conclusions

The materials of the Komyshuvate burial mound are an important source for studying the material and spiritual culture of the Azov steppes ancient population. The corpus of sources accumulated and available to the authors allowed us to consider the ritual and inventory complex of the Late Bronze Age burial of the burial ground through the prism of the created general register of burial grounds of the Zrubna/Timber-grave culture in the North Azov Region.

Burial 1 of barrow 4 was arranged in a stone tomb with predominantly horizontal masonry of stone building material. The presence of vertically placed slabs is noted. The time of existence of such complex structures is the developed and early late horizons of the North Azov Region Zrubna/Timber-grave culture. In the studied region, the most common form of burial is an individual cadaver laid prone on the left side, with the arms bent at the elbows and placed near the face or in front of the chest of the deceased. The dominant form is the placement of the deceased's body with the head facing east. The studied burial of the Zrubna/Timber-grave culture of the Komyshuvate burial mound to some extent demonstrates these patterns.

In general, the second (developed) horizon of the burial mounds of the North Azov Region Zrubna/Timbergrave culture of is characterised by both main and inlet burials in pits. In the same period, stone chests appeared, made of stone slabs placed vertically on an edge. At the end of the period, another type of stone tombs, called stone crypts by researchers, became widespread, as well as combined chests or mixed-type chests, the walls of which were built of vertically installed slabs in various combinations with horizontal masonry. The characteristic features of the ceramic pottery from the Komyshuvate burial are also typical for the second (developed) horizon.

Due to the comparative-typological and natural methods, as well as the method of extrapolation using objects-chronological indicators in the chronological framework of the North Azov Region Zrubna/Timber-grave culture is determined within 1700–1200 BC. The fund of finds, together with stratigraphic observations, allowed us to develop an internal chronology of the culture under study and divide its development into three phases. The second (developed) horizon dates back to 1600–1400 cal. BC (level [BB1/BB2 (C1)] according to Reinecke's scheme or MD III according to Hänsel's scheme) (Zabavin 2022: 267, fig. 6).

A fairly rare category of funerary equipment in the burials of the log culture is ceramic vessels with extraordinary cyclic ornaments. The authors propose a calendar interpretation of the symbolic frieze on a ceramic vessel from the Komyshuvate burial; suggest that this way the calendar annual cycle used by the Zrubna/Timber-grave culture tribes of the North Azov Region was fixed.

The agrarian cults that existed among the ancient population are reflected in the composition, which has a calendar semantics. A detailed analysis of the cyclic ornamentation on the pot from this burial allowed us to suggest that the cyclic composition fixes repeated time intervals that were important for the ancient population and possibly reflects the regional peculiarities of the calendar system of the Zrubna/Timber-grave culture tribes in the North Azov Region: annual and lunar cycles with the fixation of the time of transition from the old to the new year.

REFERENCES

- Andrienko, V. P. (1979). O semantike ornamenta sosuda iz Vladimirovki. In: *Problemy epokhi bronzy Yuga Vostochnoy Yevropy*. Donetsk, 70. (In Russian)
- Andriiovych, Marta P. (2019). The Brief «Walk-Through» in the Archaeological Ceramic investigations in the way to a New Approach in Neolithic Ceramics Styles Research. *Antiqua*, 11, 138–143. https://doi.org/10.37098/VA-2019-11-138-143
- Besedin, V. I., Safonov, I. Ye. (1996). Chisla v ornamentatsii keramiki srubnoy kultury. *Rossiyskaya arkheologiya*, 2, 22–33. (In Russian)
- Dubovska, O. R. (1997). Ob etnokul'turnoj atribucii «novocherkasskih» pogrebenij Severnogo Prichernomor'ya. *Arheologicheskiy almanakh*, 6, 181–218. (In Russian)
- Gershkovich, Ya. P., Yakubenko, O. O. (2001). Kalendarniy friz na posudini bronzovoï dobi z Aksyutinetskikh kurganiv. *Muzeini chytannia*. Kyiv: Muzei istorychnykh koshtovnostei Ukrainy, 72–80. (In Russian)
- Gershkovich, Ya. P., Yevdokimov, G. L. (1982). Ob odnoy kategorii kostyanykh izdeliy srubnoy kultury. *Sovetskaya arkheologiya*, 4, 228–231. (In Russian)
- Kovaleva, I. F. (1989). Socialnaya i duhovnaya ku'tura plemen bronzovogo veka (po materialam levoberezhnoj Ukrainy). Dnepropetrovsk. (In Russian)
- Kulbaka, V. K., Gnatko, I. I.(1989). Otchet ob issledovaniyah kurganov v zonah novostroek: u s. Kalinovka Novoazovskogo r-na, u s. Razdol'noe Starobeshevskogo rna, u s. Kamyshevatoe Pershotravnevogo r-na, u s.

- Kondrat'evka Konstantinovskogo r-na i g. Mariupolya Doneckoj obl. v 1989 g. Kyiv. Report 1989/87. Scientific archive of the Institute of Archeology of the National Academy of Sciences of Ukraine. (In Russian)
- Lytvynenko, R. A. (1992). Pogrebalnye sooruzheniya srubnoj kultury Podoncovya i Severo-Vostochnogo Priazov'ya. *Doneckij arheologicheskij sbornik*, 1, 29–46. (In Russian)
- Lytvynenko, R. A. (1999). Periodizatsiya srubnyih mogilnikov Severo-Vostochnogo Priazovya. In: *Drevnosti Severo-Vostochnogo Priazovya*. Donetsk, 4–23. (In Russian)
- Lytvynenko, R. O. (2000). Pokhovannia zrubnoi kultury v kamianykh hrobnytsiakh z horyzontalnoiu kladkoiu stin. *Arkheolohiia*, 4, 3–18. (In Ukrainian)
- Otroschenko, V. V. (2007). Znakova systema plemen zrubnoi spilnoty (XVII–XII st. do n. e.). *Wspólnota dziedzictwa archeologicznego ziem Ukrainy i Polski*. Warszawa, 197–212. (In Ukrainian)
- Otroshchenko, V. V. (2019). Znaky na keramitsi doby piznoi bronzy. *Arkheolohichna keramolohiia*, 1, 53–77. (In Ukrainian)
- Puholovok, Yu. (2018). *History of Ukrainian Archaeological Ceramology (1991–2016)*. Ceramological Studies, 17. Opishne. (In Ukrainian)
- Safonov, I. Ye. (1996). Osobennosti khozyaystvennogo kalendarya srubnoy kultury dono-donetskogo regiona. Dono-donetskiy region v sisteme drevnostey epokhi bronzy vostochnoevropeyskoy stepi i lesostepi, 2. Voronezh, 66–70. (In Russian)
- Shvecov, M. L., Kravchenko, E. E. (1988). Otchet ob arheologicheskih issledovaniyah ekspedicii v 1988 g. Kyiv. Report 1988/165. Scientific archive of the Institute of Archeology of the National Academy of Sciences of Ukraine. (In Russian)
- Suprunenko, O. B. (1999). Horshchyk z kalendarnym ornamentom u zrubnomu kompleksi v Poorilli. *Etnichna istoriia ta kultura naselennia Stepu ta Lisostepu Yevrazil (vid kamianoho viku po rannie serednovichchia*. Dnipropetrovsk, 88–91. (In Ukrainian)
- Zabavin, V. O. (2019). Keramichnyi kompleks zrubnoi kultury Pivnichnoho Pryazovia. *Donetskyi arkheolohichnyi zbirnyk*, 22, 90–101. (In Ukrainian)
- Zabavin, V. (2022). Metal artefacts of Zrubna/Timber-Grave culture of the North Azov Area as chronological indicators. *Slovenská archeológia*, 70/2, 257–273. https://doi.org/10.31577/slovarch.2022.70.12
- Zabavin, V., Bulyk, M. (2020). Cultural Genesis and the final of Zrubna/Timber-Grave culture of the North Azov Area (the Late Bronze Age). Slovenská archeológia, 68/1, 23–36. https://doi.org/10.31577/slovarch.2020.68.2
- Zabavin, V. O., Nebrat, S. H., Bulyk, M. V. (2021). *Kurhanna hrupa Mohyla Babakova. Seriia: Arkheolohiia Pivnichnoho Pryazovia* 2. Kyiv. (In Ukrainian)
- Zaharova, E. Yu. (2000). Sosudy so znakami srubnoj obshchnosti epohi pozdnej bronzy. Voronezh. (In Russian)

Регіональні особливості календарної системи племен зрубної культури

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У статті опубліковано результати дослідження поховання зрубної культури доби пізньої бронзи з кургану біля с. Комишувате у Північному Приазов'ї на півдні Донецької області України. У статті розглядаються питання, пов'язані з проблемами деяких особливостей матеріальної та духовної культури давнього населення приазовських степів, їх соціальної організації та поховальної обрядовості. Керамічний посуд є найбільш масовою категорією інвентарю у складі поховального приданого у могилах зрубної культури. Особливий інтерес завжди викликали знахідки посуду з неординарним орнаментом, який дослідники трактують як піктограми, протописемність, сюжетні малюнки. На окрему увагу заслуговує календарна орнаментація на горщиках зрубної культури. З поховання 1 кургану 4 Комишуватського могильника, походить горщик з орнаментацією, яка, на думку авторів, мала календарний характер. Аналіз циклічного орнаменту на горщику з цього поховання дозволив висловити припущення, що циклічна композиція, відображена на керамічній посудині, фіксує значущі для давнього населення проміжки часу, що повторюються, та, можливо, відбиває регіональні особливості календарної системи племен зрубної культури: річний і місячний цикли з фіксацією часу переходу від старого до нового року.

Ключові слова: регіональна історія України, регіональний календар, Північне Приазов'я, доба пізньої бронзи, зрубна культура, керамологія, циклічний орнамент.

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