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KURGAN RITES IN THE ENEOLITHIC AND
EARLY BRONZE AGE PODOLIA IN LIGHT
OF MATERIALS FROM THE FUNERARY-
CEREMONIAL CENTRE AT YAMPIL

ABSTRACT

The paper discusses the kurgan burial rites observed by communities inhabiting the eastern part of the Podolie Region in the second half of the 4th and first half of the 3rd millennia BC. The presented data concern finds from four areas: Yampil, Kamienka, Mocra, and Tymkove. The research made it possible to distinguish among the examined material assemblages linked with Late Eneolithic communities. They included graves of the Zhivolitovka-Volchansk type, burials in the extended position, as well as burials representing other cultural traditions (Nizhnaya Mikhailovka, Post-Stog). Materials attributed to the Yamnaya culture prevailed, and their analysis allowed us to trace changes in funeral rituals, reflected in the architecture of graves, arrangement of burials, and grave goods. Materials linked with the late phase of this cultural unit have not been recorded.

Key words: Eneolithic, Early Bronze Age, Yamnaya culture, Podolia, Ukraine, funeral rite

The results of field research carried out by a Polish-Ukrainian expedition investigating kurgans in the middle Dniester basin have already been published [Koško (Ed.) 2014; 2015; 2017], and many specialist analyses connected with this research have already been concluded as well [apart from the publications quoted above,

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see: Koško (Ed.) 2017]. The Podolia Region became the focus of our particular interest because the area is believed to have played an important role in contacts between steppe/forest-steppe communities of the North Pontic zone and those inhabiting Central Europe. Changes observable in funerary rites are often regarded as stemming from these contacts. Therefore, the taxonomic and chronological characteristics of kurgan cemeteries on the Dniester River, situated on the fringes of the North Pontic cultural area, were expected to provide a crucial contribution to creating over-regional models for reconstructing processes which took place in the second half of the 4th and first half of the 3rd millennia BC. An efficient tool for performing this task was deemed to be a dialogue among researchers whose areas of interests spanned Central Europe [cf. Koško 2014; Włodarczak 2014a; 2014b] and the Black Sea coasts [Ivanova 2013; Iwanowa 2014; Ivanova, Toshev 2015a; 2015b; Razumow 2014, among others]. Such a dialog should produce findings allowing for the developing of optimal taxonomic models, in this case related with the funerary sphere.

Studies on kurgan communities of Podolia have become of particular importance in the context of recent archaeogenetic projects [i.a. Haak *et al.* 2015; Allentoft *et al.* 2015; Juras *et al.* forthcoming]. Taxonomic-periodization description of sepulchral rituals is a necessary supplementation to reconstructions of demographic changes. Being a contact zone between the cultural complexes of the steppes and Central Europe, the area in question seems to be of key importance for understanding the transfer of new funerary ideas: the “kurganisation” of Europe.

1. THE YAMPIL GROUP AND THE YAMNAYA CULTURE IN PODOLIA

The field research carried out by the Polish-Ukrainian expedition in 2010-2014 was focused on kurgans situated in the Yampil Region, Vinnitsa *Oblast'* [Klochko *et al.* 2015a; 2015b, 2015c; 2015d]. The particular interest in this group stemmed from its specific location within the “Yamnaya cultural-historical entity”: its exposure to Central European Corded Ware culture (further as CWC) on the one hand, and discernible contact with communities representing the Globular Amphorae culture (GAC), expanding to the south-east, on the other [e.g. Szmyt 1999; 2000]. The location on the fringes of the north-western variant of the Yamnaya culture (YC) [acc. to Merpert 1974; cf. Rassamakin 2013a; 2013b; Rassamakin, Nikolova 2008] opened up an interesting perspective for tracing the transfer of Central European cultural patterns to the North Pontic area, and for determining the specificity of the cultural model of steppe communities, which due to their geographic location seemed somehow predestined for westward expansion.



Fig. 1. Locations of Eneolithic and Early Bronze Age kurgan cemeteries in Podolia. 1-7 – Yampil cluster (1 – Dobrianka, 2 – Klembivka, 3 – Pidlisivka, 4 – Porohy, 5 – Pysarivka, 6 – Prydnistryanske, 7 – Severynivka), 8-11 – Kamienska cluster (8 – Hrustovaia, 9 – Kuzmin, 10 – Ochnița, 11 – Po-doima), 12 – Mocra, 13 – Tymkove

Kurgans linked with YC were first investigated in Podolia as early as the second half of the 19th century. In the Yampil Region, a barrow at Kachkivka was explored at that time, in which graves from the discussed period were found [Sulimirski 1968: 172]. Roughly in the same period, several kurgans in the Kamienska Region were investigated by N.E. Brandenburg [1908: 166-177; Kachalova 1974: 12, 13, 18]. After a long break, Yampil kurgans became the subject of rescue-conservation research carried out by archaeologists from Vinnitsa in the 1980s and 90s [Harat *et al.* 2014]. In 2010-2014, a Polish-Ukrainian expedition excavated another seven

barrows. These new materials made it possible to perform many specialist analyses, including archaeogenetic ones and isotope examination of human remains. A long series of radiocarbon dates were also obtained [Goslar *et al.* 2015], which were distinguished by their very high quality and were therefore very useful in advanced chronometric studies on Eneolithic and Early Bronze Age cultural groups from the north-west Pontic area. The research also brought important discoveries, which allowed an older – Eneolithic – stage in the development of the Yampil ceremonial-funeral centre to be distinguished, not recorded in previous research.

The Podolia variant of YC was distinguished here based on geographic reasons, and also because the significance of the location of the discussed sites on an important route of migration of humans and ideas between the Black and Baltic Seas [Koško, Klochko 2009]. The analysed kurgan clusters on the left bank of the Dnieper River are part of a larger agglomeration occupying the forest-steppe areas of what is today Ukraine and Moldavia. They constitute the northern, i.e. forest-steppe, part of the above-mentioned north-western variant of YC in N.Y. Merpert's [1974] classification. The latter also includes two other, similar clusters of kurgans: on the upper Prut River [e.g. Dergachev 1982] and between the Dnieper and the Reut Rivers [e.g. the kurgans at Brăviceni and Bursuceni: Larina *et al.* 2008; Yarovoy 1978]. Together with the Podolia kurgans, these two clusters form the forest-steppe part of the North-West Pontic finds [Ivanova, Toshev 2015a: 14, Fig. 2]. In the past, they were discussed jointly with much richer materials – and therefore determining the cultural picture – from the Budzhak Region, from the steppe part of the territory between the Danube and the Dniester [i.a. Dergachev 1986; Ivanova 2001; Yarovoy 1985; 1990].

2. SOURCE BASIS

The analysed sources comprised of materials discovered in kurgans from four regions of Podolia (Fig. 1):

- Yampil: 25 kurgans, 81 graves [Harat *et al.* 2014; Klochko *et al.* 2015a; 2015b; 2015c; 2015d];
- Kamienka: 13 kurgans, 87 graves [Yarovoy 1981; Manzura *et al.* 1992; Bubulich, Khakhey 2001];
- Mocra: 3 kurgans, 17 graves [Kashuba *et al.* 2001-2002];
- Tymkove: 1 kurgan, 5 graves [Subbotin *et al.* 2000].

Thus, the basis for the analysis is a set of 188 graves discovered in 41 kurgans. Although the number is still small as compared with the neighbouring YC regions (including the Budzhak and Lower Dniester), the collected data are sufficient for

attempting credible recapitulation, for presenting local characteristics and directions of cultural contacts, and for tracking the chronology of changes.

The materials presented below include Eneolithic/Early Bronze Age features from the Podolia Region, except for Eneolithic graves from the site of Prydnistryanske, which have been radiocarbon dated to around 4300-4100 BC. In some other cases, the chronological and taxonomic attributions (first of all of central burials) are open to doubt. It can only be assumed that the vast majority of them most likely originate from the very close of the 4th millennium and the first half of the 3rd millennium BC. First, particular traits of the kurgan rite in Podolia were analysed jointly (183 graves from 38 kurgans), and then attempts were made at their taxonomic and chronological divisions. According to the rules adopted here, two certain burials of the Catacomb culture (graves 3/5 from Ocnîța and I/4 from Prydnistryanske) were excluded from the analysis, while three other graves probably attributed to this culture were included, because they can possibly be linked with the YC or Eneolithic/Post-Eneolithic traditions as well (burials 1/4 and 1/7 from Pidlisivka and 2/5 from Kuzmin).

3. SPECIFIC TRAITS OF BURIAL RITES OF KURGAN COMMUNITIES IN PODOLIA IN THE FIRST HALF OF THE 3RD MILLENNIUM BC

One specific trait observed among burials dating to the first half of the 3rd millennium BC is a considerable degree of standardisation in terms of the arrangement of burials, contrasting with a higher diversity of funeral behaviours known from the second half of the 4th millennium BC [*see* Rassamakin 2013a; 2013b]. Several previously popular patterns ceased to be used, resulting in the vast majority of YC burials looking very similar: in a pit, with the body lying at the bottom of the pit in the supine position, legs highly contracted with knees up. With respect to central burials, the body orientation was along the E-W axis, with the head pointing to the west [Yarovoy 1985: 52-54; Dergachev 1986: 39; Ivanova, Toshev 2015: 357]. Furthermore, other constant traits of the ritual include rectangular grave pits, the application of ochre in the funerary ritual, the presence of linings of various kinds (e.g. mats) at the bottoms of grave pits, and the use of wooden structures (primarily for roofing the graves). Defined as above, the set of markers of the YC funeral rite was also observed in the Yampil Region and in the entire Podolia cluster, with the vast majority of burials revealing all the above-mentioned traits. The recorded examples of different arrangements should probably be explained in terms of genetic and chronological differences.

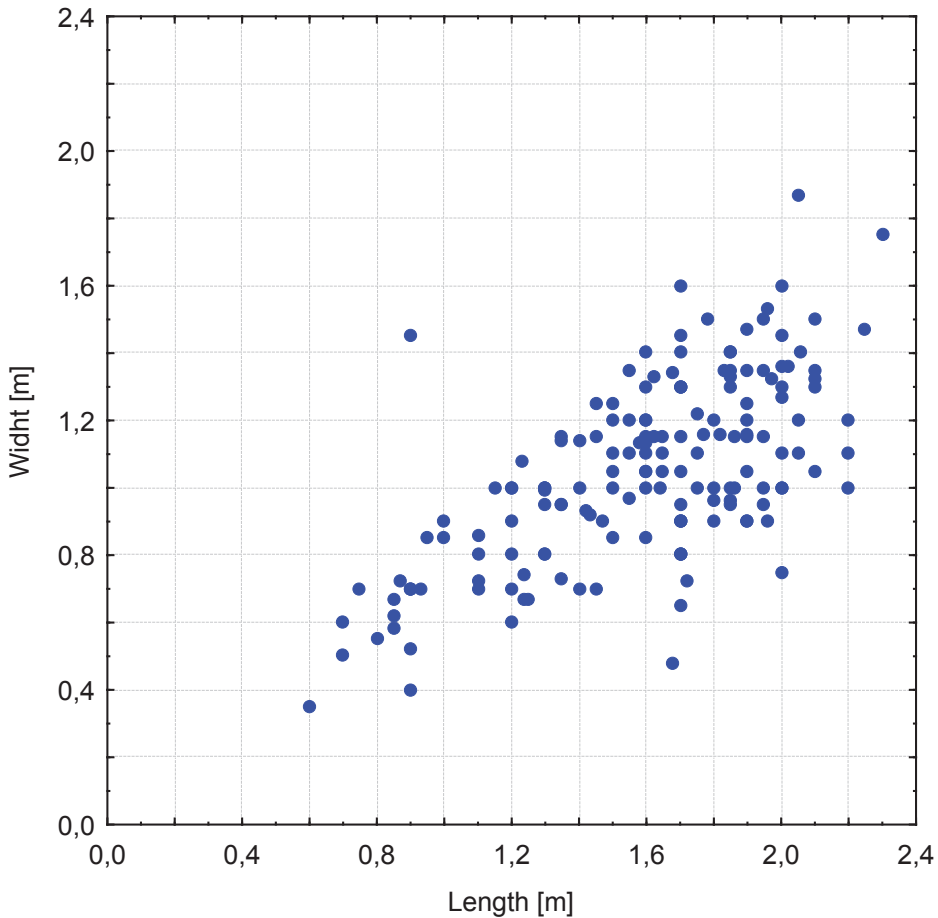


Fig. 2. Dimensions of grave chambers in Podolia kurgans

The bulk of the grave cuts analysed here were rectangular in shape (161). Only in 10 cases were oval or nearly circular pits recorded (Kuzmin, graves 2/5 and 2/6). Oval pits in central graves were recorded three times (Klembivka, grave 1/15, Porohy, grave 3/2, and Severynivka, grave 1/5). As in other regions, grave cuts could be simple (including central burials in all kurgans) or have a step leading down to the grave chamber, which also supported a wooden or stone roofing. Grave chambers differed in size (Fig. 2), which depended primarily on the age of the deceased. Small features designed for children aged *Infans I* are a clearly distinct group, with dimensions of 0.5-1.0 x 0.4-0.75 m. A less clearly discernible group were mid-sized pits, intended primarily for burial of older children and juveniles (approx. 1.2-1.6 x 0.6-1.2 m). The largest group were the largest chambers, made for adult

people, with dimensions of approx. 1.7-2.3 x 0.9-1.6 m. These parameters correspond with grave sizes in the neighbouring regions of YC [e.g. Shaposhnikova *et al.* 1986: 14, 15; Dergachev 1986: 34, 35; Melnik, Steblina 2013: 20].

Wooden roofing was recorded in the majority of burials (121 cases, i.e. 66.1%). Boards/laths were placed perpendicularly to the grave's principal axis slightly more often (53 cases) than in parallel arrangement (38 cases). In studies on YC in the North-West Pontic area the orientation of the roofing has sometimes been given a chronological value [e.g. Manzura *et al.* 1992: 89]. The finds from Podolia support this view and suggest a clear connection of the parallel arrangement of planks with central burials, and with burials dug into the central part of a kurgan during the older phase of YC. Transversal roofing correlates with younger phases of YC, and was recorded for example in series of graves forming characteristic arching arrangements in the marginal parts of kurgan mounds. The presence of transversal roofs in central burials correlated with some other traits atypical of YC, such as oval pits and body orientation other than E-W, which suggests a funeral tradition other than YC (three cases: Hrustovaia, grave 5 and Porohy, graves 1/2 and 3/2).

Nine of the grave pits (4.9%) were covered with stone blocks. This raw material was used only for the cover, while stone boxes, typical of the GAC funerary tradition, have not been recorded. The best-preserved, and at the same time well-documented, feature with stone roofing was grave IV/4 from Prydnistryanske. The cover, built from four large stone blocks, was supplemented with a wooden grate supported by stakes driven into the pit's bottom, and the structure was sealed with two mats. Thus, we are dealing here with a double roof structure, and the same was the case in grave 1/7 from Dobrianka and 2/13 from Severynivka. What was unique for Podolia, however, was the application of well-fitted, slightly dressed slabs resembling schematic stelae, such as those known from the territory between the Boh and Dnieper Rivers, from the Ingul cluster in particular [Rychkov 2001: 45; Ivanova, Toshev 2015b: 357].

The use of stone in Podolie kurgans seems to be a chronologically sensitive trait. Stone was recorded in graves of Eneolithic and early Yamnaya date, including in central burials representing various cultural traditions (grave 2/3 from Pysarivka and 2/5 and 6/24 from Ocnîța). The mentioned grave 1/7 from Dobrianka and grave 2/13 from Severynivka are certainly linked with early YC.

Small stakes driven into the ground at the margins of the pit were recorded in 29 graves (15.8%). Most often (15 cases) there were eight stakes: in the corners and in the middle of each wall. They have typically survived only as impressions a few centimetres in diameter. Large fragments of stakes themselves have survived in grave 4 from the Prydnistryanske kurgan, and they were similar to even better-preserved stakes from grave 1/4 from Brînzeni Noi [Agulnicov, Mistreanu 2014: 69, Fig. 7]. The Prydnistryanske grave also yielded transversal stakes, originally probably mounted between the tops of the vertical stakes. Graves with wooden stakes are commonplace and are typical of YC kurgans. They are known both from adult

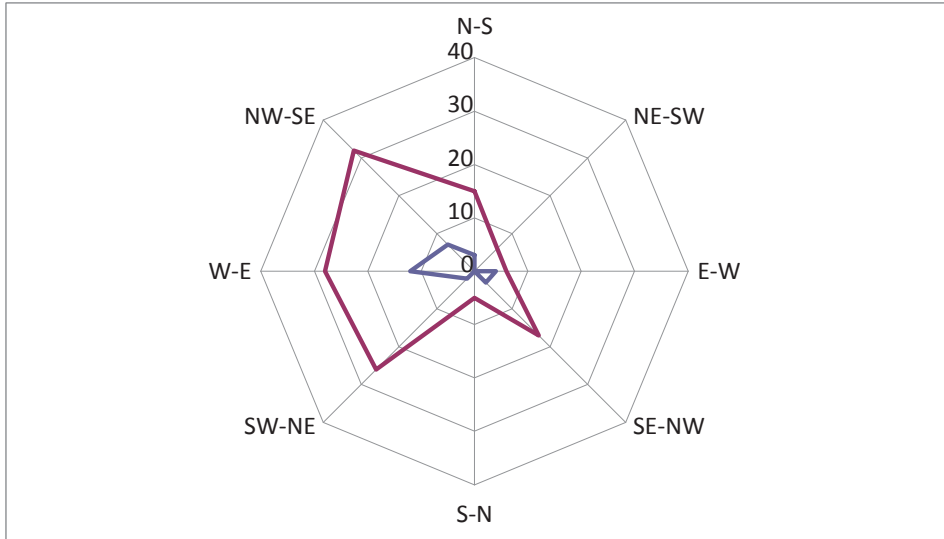


Fig. 3. Orientation of central (blue) and secondary (red) burials in Podolia kurgans

and child burials, and it is worth noting their presence in central burials (8 cases in the Podolia cluster). This constructional element was particularly popular in the kurgan cemetery at Mocra (9 out of 17 graves). The presence of stakes as elements of grave construction is a good indicator of Early Bronze Age rituals of YC, which in the discussed area was absent from Eneolithic funerary traditions.

The connection between the use of stakes along the perimeter of grave pits and the parallel arrangement of wooden roofing is quite clear, although some exceptions to this rule are known (Ocnîța, graves 1/7 and 3/14, Porohy grave 3A/1). This connects with the dating of graves with stakes to the early stages of YC: graves with stakes are usually situated in the central parts of kurgans.

Another typical element of YC grave construction, namely grooves marking the limits of pits, was less often recorded in Podolia kurgans – only in 9 cases, mainly in Ocnîța and Mocra, and only once in the Yampil cluster (Porohy, grave 3A/1). Unlike the stakes discussed above, this element was not recorded in central burials, which means it links with later stages of YC. Grooves have most often been interpreted as elements for setting vertical or horizontal planks or timbers lining grave chambers walls.

Wooden wall linings made from horizontal timbers were recorded in 11 graves: in the Yampil cluster (Porohy, graves 2/4, 2/6, 3A/1, Prydnistryanske, grave IV/9), the Kamienka cluster (Ocnîța, graves 3/6, 3/12, 3/13, 6/9, 6/13 and 6/27) and in Mocra (grave 1/13). These were graves dug into kurgan mounds, and most of them are linked with younger stages of YC. This element of grave construction can be

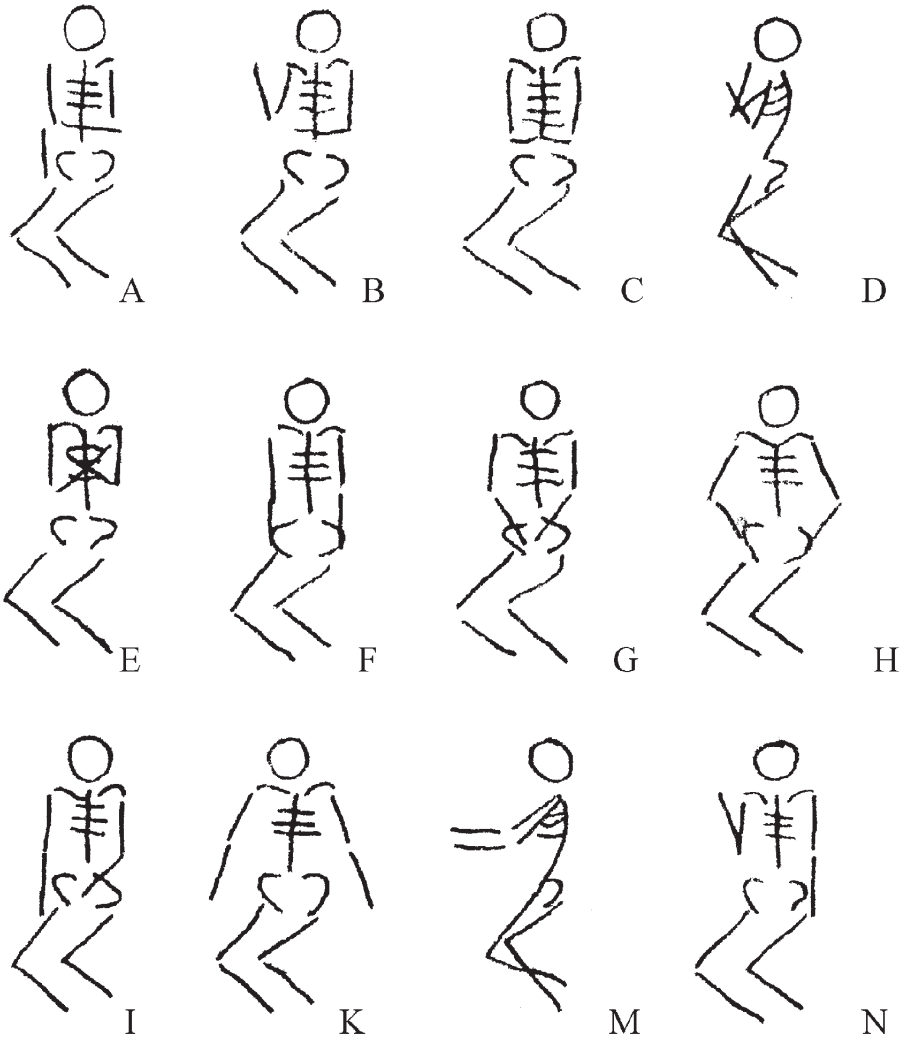


Fig. 4. Types of upper limbs arrangement [Häusler 1974; Włodarczak 2006]

seen as typical of the Podolia Region [Manzura *et al.* 1992: 89; Kashuba *et al.* 2001-2002: 221], although isolated cases are known from other parts of the North-West Pontic area [Yarovoy 1985: 13, 19].

Burial orientation should be discussed separately for central burials and those dug into already existing mounds [e.g. Dergachev 1986: 39-42], although the latter group also include founding burials for successive stages of the kurgan's enlargement, whose orientation was probably established in relation to cardinal directions

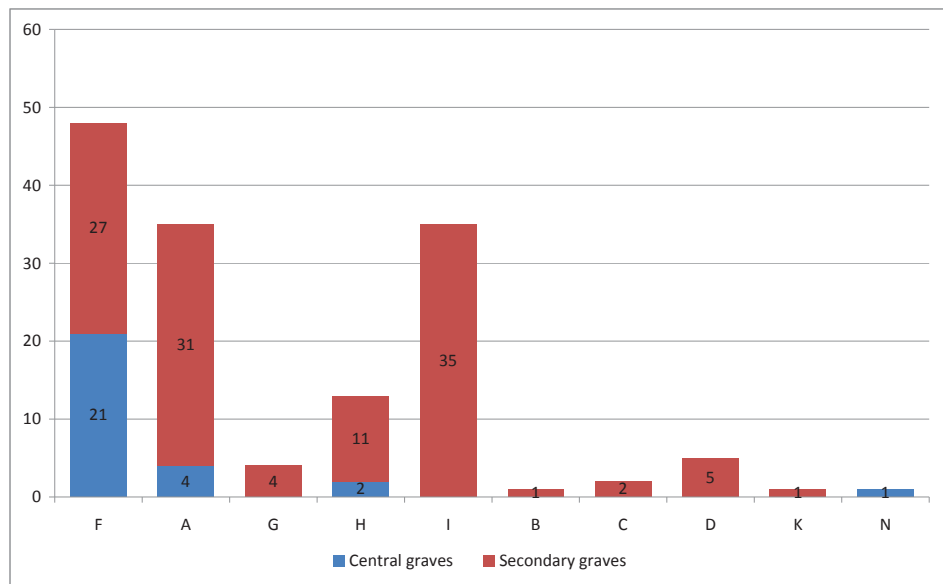


Fig. 5. Types of upper limbs arrangement in graves from Podolia kurgans

rather than the kurgan's centre. However, their objective identification is sometimes impossible. In both groups, the deceased were predominantly buried with their heads to the west (Fig. 3). In the case of central burials, the orientation towards NW was also popular. Graves dug into the existing mounds were oriented in relation to the centre of the kurgan. Additionally, it was observed with respect to Podolia kurgans that subsequent burials were placed according to what is known as the “clock rule”, i.e. with the head either in clockwise (in the southern part of the mound) or counter-clockwise direction [Manzura *et al.* 1992: 90, 91; Kashuba *et al.* 2001-2002: 221]. These observations made in the Kamienska cluster and Mocr were confirmed in the Yampil cluster, from where a larger number of graves is known (first of all Dobrianka; Porohy 3A; Severynivka 2). The application of the clock rule for YC graves forming arching arrangements correlates with the preference for burying the dead with the head towards the west (with deviations towards NW and NE – *see* Fig. 3).

The deceased from Podolia kurgans were buried predominantly in the supine position (128 cases, 75.7%), which belong to group II in Y. Rasamakin's classification [2004: 151-168]. This number also includes those cases where the body was lying on the back but slightly leaning to one side, sometimes distinguished as a separate category [e.g. Yarovoy 1985: 38-42; Ivanova 2012: 12, 13]. Such cases are sometimes difficult to objectively distinguish from burials in the typical supine position, and the intentionality of arrangement is difficult to determine due to the

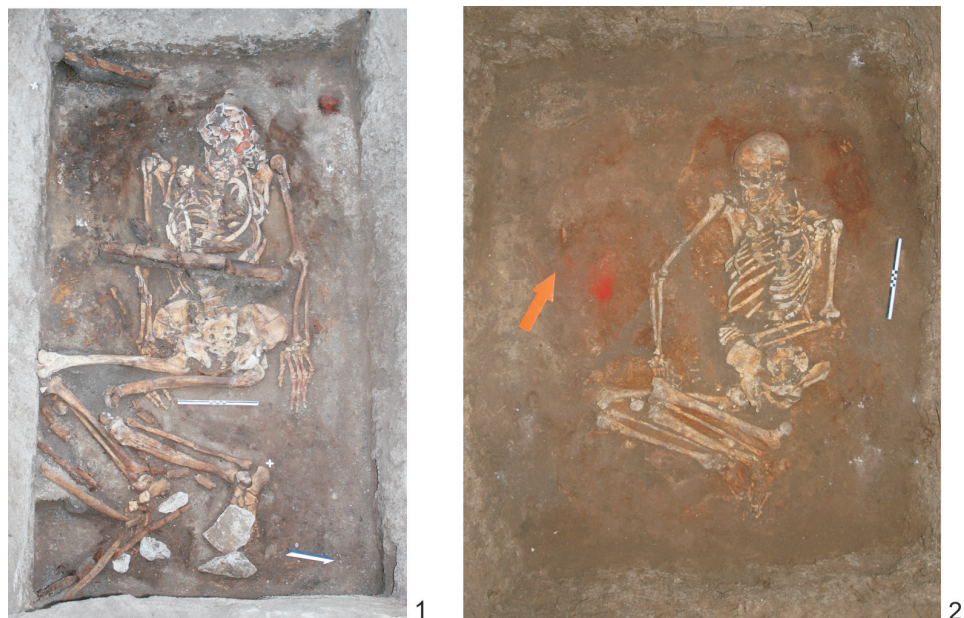


Fig. 6. The two most characteristic arrangements of YC burials. 1 – Prydnistryanske, grave IV/4, 2 – Porohy, grave 3A/10. Photo by D. Żurkiewicz

operation of post-depositional factors. One can only mention that the supine position with a deviation to one side was recorded primarily in graves dated to later stages of YC in Podolia (e.g. in a group of burials from kurgan 3A at Porohy). The finds from the analysed region confirm the connection of burials in the supine position proper, with legs bent and knees up, with the beginning of the Early Bronze Age – early YC (here belong central burials and burials dug into the central part of a kurgan, linked with the older stages of the mound's enlargement) [Yarovoy 1885: 105-108; Manzura *et al.* 1992: 90].

The position of arms is one of the diagnostic traits in funerary behaviours of Eneolithic and Early Bronze Age communities both in Central Europe (CWC) and in the North-West Pontic area [e.g. Häusler 1974; Yarovoy 1985; Dergachev 1986; Rassamakin 2004]. Some authors have proposed developed typologies in this respect, with dozens of variants [e.g. Yarovoy 1985: 38-49]. For the needs of this study, a generalised classification proposed by A. Häusler [1974: 11, Fig. 1], also applied in the description of funeral rituals of Central European communities (Figs. 4 and 5) [Włodarczak 2006], has been deemed sufficient.

In general, the arrangement particularly typical of YC is with both arms stretched along the body (type F – *see* Fig. 6: 1), sometimes with one or both arms slightly bent at the elbow and hands pointing towards the pelvis (types G, H, and I – *see* Fig. 6: 2). All these four types of arm arrangement have been only

incidentally recorded among CWC groups from Central Europe, where the clearly predominant types were A, B, and C: namely with at least one arm sharply bent and placed at the pelvis of the deceased person [Włodarczak 2006; 2014b]. Types B (less common) and C (more widespread) are in particular contrast to the Podolia variant of YC, since they have not been recorded there at all.

During the examination of the materials from kurgan 3A at Porohy, a group of burials situated along an arch around the centre of the kurgan have revealed specific traits in terms of arm arrangements. In each case, one of the arms was bent and placed on the waist or pelvis of the deceased (arrangements A, G, H, or I). An even more telling situation was observed in a kurgan at Hrustovaia (in the Kamienka cluster), where the mentioned arrangement was recorded in all burials forming the arch along the perimeter, and two deceased from the central part (including the central burial) were buried with both arms stretched straight along the body (F). This regularity finds confirmation in other complexes as well (including the kurgans at Ocnîța in the Kamienka cluster and Severynivka in the Yampil cluster). Thus, in the Podolia variant of YC the arrangement of arms is a chronological indicator, with type F characteristic of the older phase and types G, H, I, and A typical of younger stages.

The position of legs is more difficult to be schematically presented due to the operation of post-depositional factors considerably disturbing the original arrangement. With respect to those buried in the supine position, the variant with legs bent and knees up was obviously predominant, although the position would become disturbed due to the decomposition of the body. All that can be concluded is that the deceased buried on their backs usually had their legs bent at the knee joints at a very acute angle.

A specific variant of supine burials was with the rhomboidal arrangement of legs, recorded in 9 cases (the so-called “rider’s position” or “frog position”). In some cases it can be assumed to stem from natural processes of decomposition, with legs falling outwards to the sides (Porohy, grave 3A/11). In most cases, however, the rhomboidal arrangement of legs was mirrored by the same arrangement of arms (type H, 10 cases), which suggests intentional activity. This indicates that this was a specific variant of body position, with knees distinctly spread, most likely applied to males.

The deceased buried on their sides in single graves were twice more often lying on their left side (24 cases) than on the right (12 cases).

Although burials in anatomical positions were by far the predominant group, some proportion of secondarily disturbed graves was recorded as well. The disturbances are interpreted as traces of looting or of ritual behaviour associated with some secondary, post-burial rituals. To the group of 11 burials with clearly disturbed human remains add cenotaphs, graves containing single bones, and those almost totally damaged by secondary pits (e.g. Porohy, grave 3A/14; Mocra, grave 1/15). The tendency to disturb central graves in kurgans finds analogy in customs

recorded among North Pontic Eneolithic communities [cf. Larina 2003: 66; Klochko *et al.* 2015d: 240]. For example, none of the five central burials at Prydnistryanske held a skeleton in anatomical position, and in the case of burial III/1 it was confirmed that bones of the deceased had been removed from the bottom of the grave chamber. An analogical situation was recorded in burial 2/12 from Severynivka, linked with YC [Harat *et al.* 2014: 200, Fig. 2.16.4: 23]. This confirms the survival of the Eneolithic tradition into the Early Bronze Age. A new light on the problem of secondary disturbances of grave chambers has been cast by the specialist analysis performed for grave 3A/10 from Porohy. The results show that the chamber was entered again for making paintings on the bones after the body had decomposed [Lorkiewicz-Muszyńska *et al.* 2017].

The use of ochre was confirmed in 148 cases (80.9%), and was recorded slightly later in central burials (61.1%) than in those secondarily dug into the mound (85.5%). The pigment was typically identified on human bones (first of all the skull and limbs), and additionally lumps of bright-red ochre were often found by the head of the deceased. Spilling ochre over the grave's bottom was a rare custom (e.g. Pidlisivka, grave 1A), while grave IV/4 at Prydnistryanske, in which the upper part of the skull of an adult male had been painted with bright-red ochre, is a unique case. Rare examples of such behaviours are known from elite male burials in the steppe part of the North-Pontic area [Shaposhnikova *et al.* 1986: 20].

Ceramic objects were found in only 27 graves (14.8%). Burials were most often furnished with a single vessel, and only in three graves were sets of two pots discovered. S-shaped pots (including "pot-shaped" beakers) were the largest group (15 pcs). Most of them were undecorated, sometimes with notched rims. Another common form were small one-segment beakers with arching walls (6 pcs), typical of the North-West Pontic area [Ivanova 2012: 24]. Amphorae of various types were represented by 7 vessels [see Ivanova *et al.* 2014]. They included two GAC amphorae (Ocnîța, grave 3/14 and Mocra, grave 3/4) and one revealing trait of the oldest CWC horizon (Porohy, grave 2/6). The remaining part was made up of amphorae with egg-shaped bodies, some of them adorned with bucranium motifs (Porohy, graves 3/4 and 4/8, Ocnîța, grave 6/18). A bulbous, broad-mouth beaker, a form particularly characteristic of late YC assemblages from the Budzhak area [Ivanova, Toshev 2015c], was found only in one grave (Mocra 1/3).

Among other objects occurring in Podolia graves, flint artefacts were the most common group. These were typically blanks, primarily flakes, from 1 to 4 pieces per grave (31 graves, 16.9%). Single tools were found in only 15 graves, and these were primarily scrapers and retouched flakes, which in terms of typology and technology referred to CWC assemblages from Central Europe.

Bone artefacts were a small group, with tools (awls and perforators) discovered in 6 graves, and ornaments (beads and pendants) in merely two graves. Four graves yielded metal ornaments: silver and bronze earrings (Pysarivka, grave 5/1; Mocra, grave 1/6; Kuzmin, grave 3/2), and beads made of copper/bronze (Ocnîța, grave 3/8).

Table 1

Taxonomic characteristic of the selected Eneolithic/Early YC graves from Podolia

	Region			
	Yampil	Kamienka	Mocra	Tymkove
Type Zhivotilovka-Volchansk	Prydnistryanske, graves: I/1, II/2, III/1-3, IV/10 <i>Porohy, grave 3A/7?</i>	<i>Kuzmin, grave 2/2?</i>		
Type Kvityana (burials in extended position)	(Pysarivka, grave 2/3)?	Ocnița, graves 6/24 i 7/14		Tymkove, grave 5
Type Nizhnaya Mikhailovka (Černavoda/ Khadzider?)	Porohy, grave 3/2; Severynivka grave 1/5			
Type „Post-Stog”?/ Early Yamnaya?	Pidlisivka, grave 1/1B; Porohy, grave 2/5 Klembivka 1/15?			
Early Yamnaya	Pysarivka, graves 1/2, 3/1, 4/2, 5/1, 6/2, 7/2, 8/2 i 9/2; Dobrianka, grave 1/5; Severynivka, grave 2/12	Ocnița, graves 1/1, 2/5, 3/1, 3/17, 5/7, 6/11, 6/20; Kuzmin, grave 3/1	Mocra, graves 1/15, 1/2, 3/2, 4/2	Tymkove, grave 4
Early Yamnaya?	Pysarivka, grave 2/3	Ocnița, graves 1/8, 4/5, 4/7, Kuzmin, grave 2/7		

4. STAGES OF CULTURAL DEVELOPMENT – ATTEMPT AT GENERALISATION

4.1. THE FOUNDERS OF CEREMONIAL-FUNERAL CENTRES – PROBLEM OF IDENTIFICATION

Podolia kurgans originate from various stages of the Eneolithic and Early Bronze Ages, and this chronological diversity is reflected in differences in construction of mounds and central graves for which kurgans were originally built (being burials of the “kurgans’ founders”). These oldest burials link with various Eneolithic and YC communities, and the taxonomic attribution of some of the phenomena discussed here poses difficulties (Tab. 1). This stems from the nature of the finds, which are sometimes only slightly distinctive and often retrieved from contexts difficult to interpret (e.g. from kurgans damaged to a significant degree). Another reason for the high discordance and ambiguity of opinions lies in

the nature of the problem itself, since taxonomic definitions can be no more than proxies for cultural processes which are both fluid and multi-directional. This is particularly evident for phenomena associated with the Eneolithic and the very beginnings of the Bronze Age in steppe and forest-steppe areas [e.g. Rassamakin 2013; Manzura 2016], while later stages (the classic and late YC) are marked by much more regularity in terms of funeral rituals. Funerary behaviours displayed by Eneolithic steppe groups were the outcome of intercultural relationships and often combined elements borrowed from different milieus [e.g. Rassamakin 2008: 215, 216]. One consequence of this is the multitude of approaches to the description of Eneolithic phenomena proposed in the literature, with the controversies the situation creates. This is also true for the Podolia kurgans discussed here, where chronology is relatively easy to interpret while taxonomical attributions are much more difficult. A good example in this context is a recently published complex at Prydnistryanske, which has been linked either with the late Trypilia group of Gordinești [Klochko *et al.* 2015d] or with the Eneolithic steppe formation known as Zhivotilovka-Volchansk [Manzura 2016], or recently with the Bursuceni group [Demcenko 2016].

The stratigraphy of Podolia kurgans poses problems familiar in other regions as well. In some of the mounds, especially those significantly levelled by ploughing, the reconstruction of the chronological sequence of ritual actions is difficult, and sometimes even basic issues such as the identification of the central burial or the linking of particular graves with particular phases of the mound's enlargement create problems. This is well illustrated by examples of kurgans 1 and 2 from Porohy [Harat *et al.* 2014], where central burials can be only hypothetically identified based on constructional traits of graves.

A distinct feature of Podolia kurgans having YC burials is the multi-phase nature of their mounds, a feature recorded throughout the North Pontic area. It is particularly evident in the cases of sequences of burials (typically two burials) placed in the central parts of kurgans and connected with separate stages of the mound's construction. In this context, the temporal and cultural relationship between the older and younger burial becomes a very interesting issue. Younger burials typically revealed traits characteristic of the YC complex, while older ones were often different and distinguished by a different shape of the grave pit and sometimes a different arrangement and orientation of the body as well. In the most evident cases, older pits held a body in the extended position, reminiscent of the Postmariupol'/Kvityana tradition. Such a grave was discovered in kurgan 1 at Tymkove [Subbotin *et al.* 2000, 84, ris. 3: 4] beneath grave 4 linked with YC. Kurgans in which two burials in the centre were both laid in rectangular pits and in a contracted position are more difficult to interpret, with examples known from Hrustovaia [Yarovoy 1981] and Pidlisivka [Klochko *et al.* 2015a]. In such cases, the older grave often stands out with a funerary tradition diverging from model YC behaviours, in terms of orientation, body position, and constructional features.

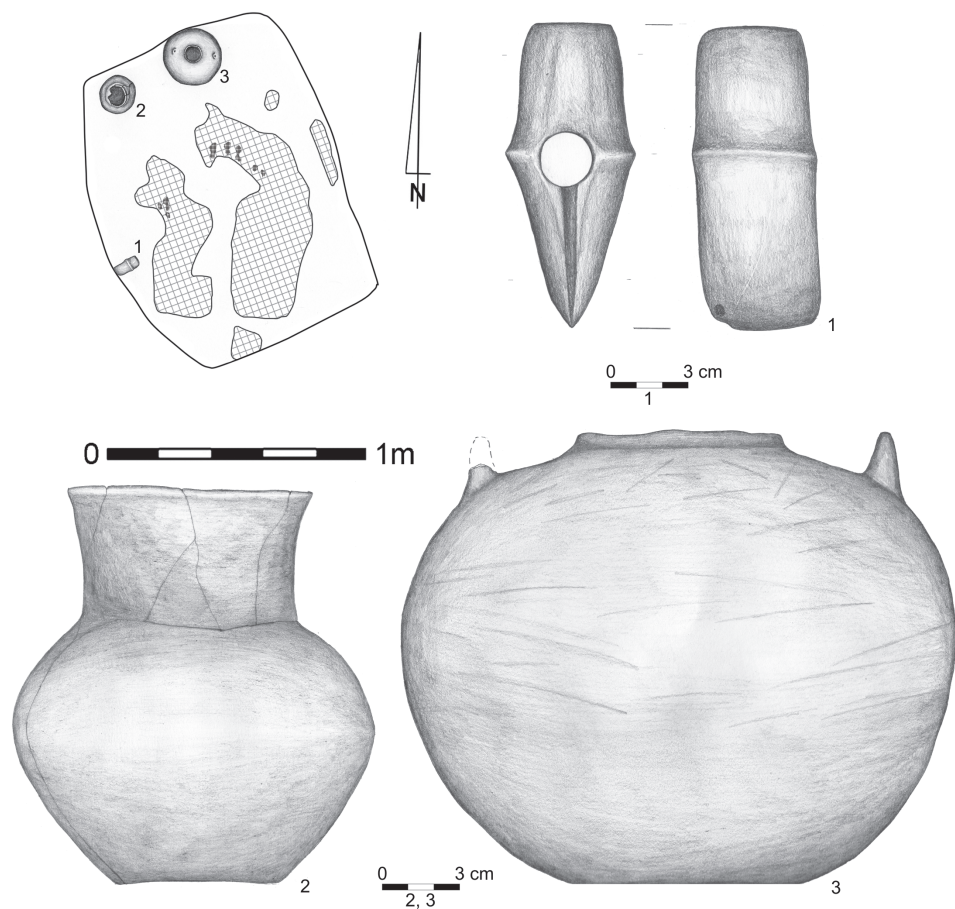


Fig. 7. Grave III/3 from Prydnistryanske, Yampil Region. Drawing by M. Podsiadlo

4.2. THE ZHIVOTILOVKA-VOLCHANSK/GORDINEȘTI TYPE

A distinct group among the materials from North-West Pontic kurgans is that of burials with bodies lying on their left or right side with upper limbs sharply bent at the elbows and pointing towards the face, corresponding to group III-C in Y. Rasmakin's classification [2004]. Such a body position finds analogies in "Trypilia" cemeteries from the later stage of phase C/II (the Usatowo and Gordinești groups), the only difference being much greater freedom in the orientation of burials and a much smaller percentage of bodies buried on the side rather than in the supine



Fig. 8. Klembivka, grave 1/14. Photo D. Żurkiewicz

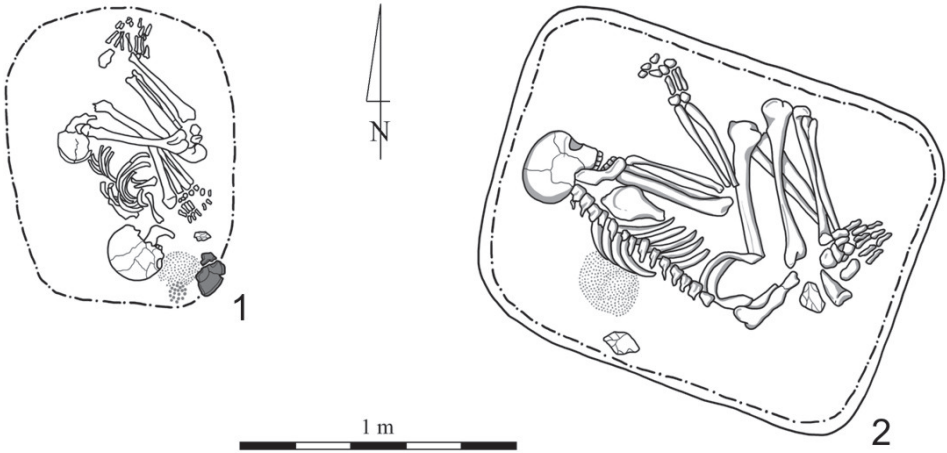


Fig. 9. Burials representing funerary traditions of Zhivotilovka-Volchansk group in Podolie kurgans: 1 – Porohy, grave 3A/7, 2 – Kuzmin, grave 2/2 [after Klochko *et al.* 2015b, Bubulich, Khakhey 2001]

position [Manzura 2016: 157]. This similarity results in discrepancies in cultural affiliations given to particular assemblages from the North Pontic area. Some of them have been included either in late Trypilia groups or the Zhivotilovka-Volchansk [Rassamakin 1999; 2004]/Zhivotilovka [Manzura 2016] group, which partly stems from the constant refinement of classification criteria enforcing changes in cultural attribution. How important this distinction is depends on the genetic definition of the discussed group of finds, and may prove to be of no importance if a connection can be confirmed between the Gordinești group and the Zhivotilovka-Volchansk communities representing the steppe Eneolithic tradition.

In the source publication, the complex of kurgans from Prydnistryanske 1 was attributed to the Gordinești group [Klochko 2015d], which follows the interpretation proposed by O. Larina, who included kurgan burials furnished with characteristic Trypilia pottery into the funeral traditions of this late Trypilia group [Larina 2003]. Undoubtedly, using other criteria the Prydnistryanske complex could be included into the Zhivotilovka-Volchansk group, and the same holds true for burials from kurgan 1 at Bursuceni and assemblages from the upper Prut River basin. The finds from kurgan no. 3 are particularly distinctive. Ceramic vessels from grave 3/3 (amphorae and “pot-shaped” beakers – Fig. 7) represent two leading forms known from Zhivotilovka-Volchansk graves, revealing at the same time traits characteristic of the Gordinești group [cf. Manzura 2016, 160-164]. In turn, a stone battle-axe discovered in the same grave has a good analogy in an artefact from feature 10/17 from Taracila [Dergachev, Manzura 1991, 256, ris. 35: 12].

Comprised of four kurgans, the ceremonial complex at Prydnistryanske is currently one of the most important sources for studies on the mentioned Eneolithic group, and the only one in Podolia. Along with the Bursuceni kurgan and the group of finds from the upper Prut basin [e.g. Dergachev 1982], it forms a group of finds of the Zhivotilovka-Volchansk type in the forest-steppe part of the North-West Pontic area. Non-invasive research carried out in the vicinity of the Prydnistryanske site has demonstrated that the excavated kurgans were part of a larger ceremonial-funerary complex, situated near the edge of the Dniester River valley [Przybyła *et al.* 2017].

Among other Podolia kurgans, it is worth noticing three burials revealing traits of the Zhivotilovka-Volchansk group, discovered at Klembivka, grave 1/14 (Fig. 8) [Klochko *et al.* 2015c: 168, 169], Kuzmin, grave 2/2 (Fig. 9: 2) [Bubulich, Khakhey 2001: 130, 131], and Porohy, grave 3A/7 (Fig. 9: 1) [Klochko *et al.* 2015b: 98, 99]. The deceased were adults, buried on their sides with upper limbs pointing towards the face (type D), in pits having rather irregular shapes. The stratigraphic position was determined with certainty only at Klembivka, where grave 1/14 was the central burial for the second phase of the mound’s construction. In Porohy and Kuzmin the discussed graves were situated among YC graves, forming no discernible relations with them. One can either connect them with the Zhivotilovka-Volchansk group (its late and terminal stages) or assume the survival of traits typical of this group

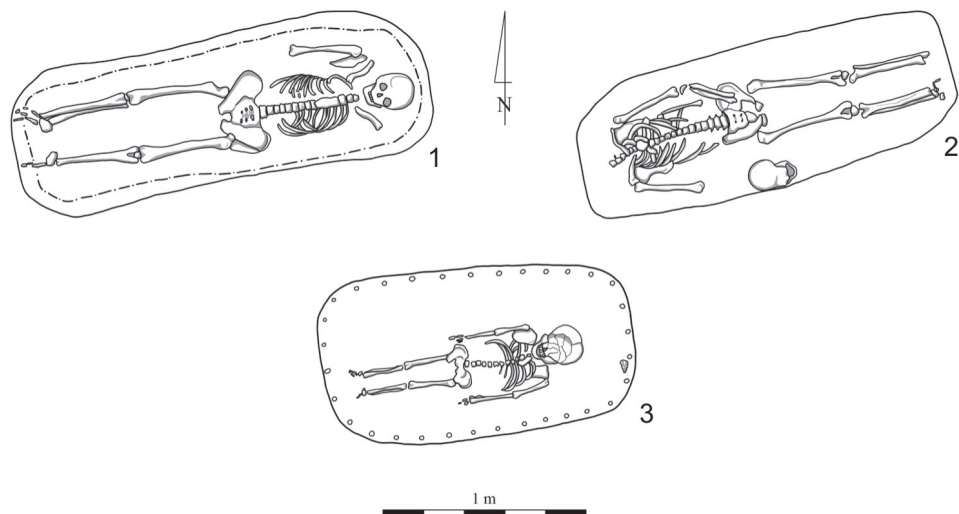


Fig. 10. Eneolithic burials in extended position in Podolia: 1 – Tymkove, grave 5, 2 – Ocnîța, grave 7/14, 3 – Ocnîța, grave 6/24 [after Subbotin *et al.* 2000; Manzura *et al.* 1992]

into the Early Bronze Age [cf. Ivanova 2015: 285]. The latter option is suggested by the radiocarbon date obtained for grave 3A/7 from Porohy, which is similar to those obtained for YC burials from that site. It is worth emphasizing, however, the specific features of funerary rituals recorded in these three burials, which clearly diverged from Early Bronze Age patterns. The manner of body deposition represents a tradition unknown from the YC complex [Rassamakin 2013: 127, 130].

In the forest-steppe zone of the North-West Pontic area, important data concerning the chronological position of the Zhivotilovka-Volchansk group have been produced by the exploration of the Bursuceni kurgan, which is still awaiting full publication [Yarovoy 1978; cf. also Demcenko 2016; Manzura 2016]. Burials linked with the mentioned group were stratigraphically the eldest in the kurgan, and pre-dated a burial in the extended position and YC graves. Two of these burials (features 20 and 21) produced radiocarbon dates falling around 3350-3100 BC [Petrenko, Kovaliukh 2003: 108, Tab. 7]. Similar absolute age determinations were obtained for Podolia kurgans at Prydnistryanske [Goslar *et al.* 2015]. These dates, falling within the Late Eneolithic, mark the currently oldest horizon of kurgan burials in the forest-steppe zone of the North-West Pontic area. The Podolia graves linked with other, older traditions of the steppe Eneolithic seem to represent a slightly later horizon dated to the transition between the Late Eneolithic and Early Bronze Age (*see* Chapter 4.3 and 4.4).

The presence on the left bank of the Dniester River of kurgans associated with the Eneolithic tradition, which at the same time reveals connections with the

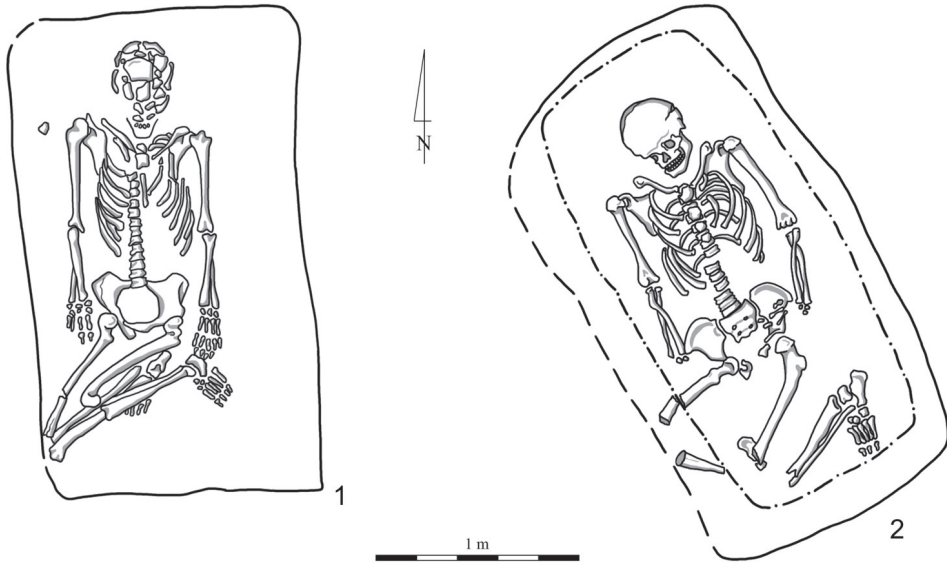


Fig. 11. Central burials in kurgans from the Yampil cluster (Eneolithic/early phase of YC?): 1 – Porohy, grave 2/5, 2 – Pidlisivka, grave 1B [after Klochko *et al.* 2015a; Harat *et al.* 2014]

Gordinești-Kasperovce-Horodiștea complex, raises questions about the western range of the new trend in funerary rituals, and its potential connection with the expansion of the late Trypilia culture to the West Podolia and West Volhynia Regions. The data potentially suggesting the attribution of kurgans from the upper Dniester basin to this period is patchy and difficult to verify [e.g. Liczkowce – *see* Sulimirski 1968: 173]. In this context, the discovery of vessels in the Gordinești style in a kurgan at Zawisznia near Sokal is inspiring [Antoniewicz 1925].

4.3. BURIALS IN EXTENDED POSITION (OF THE KVITYANA/ POSTMARIUPOL TYPE)

The Pre-Yamnaya (Eneolithic) phase came to be distinguished in kurgan cemeteries from the Podolie Region after the discovery of burials in extended position (i.e. of the Kvityana/Postmariupol type) at Očnița (Fig. 10: 2, 3) [kurgans 6 and 7; Manzura *et al.* 1992] and Tymkove (Fig. 10: 1) [Subbotin *et al.* 2000, 84, ris. 3: 4]. In all these three cases the burials marked the oldest phase of mound construction, and later YC burials were dug into the central part of the kurgan,

which entailed the remodelling and considerable enlargement of the mound. Both the chronological and taxonomic positions of extended burials in the North Pontic area are subjects of debate [e.g. Manzura 2010; Rassamakin 2013; Ivanova 2015, 280-282]. Their distinct chronological diversity seems likely given constructional differences among the kurgans, and this view is additionally supported by sparse (for the time being) radiocarbon dates [Rassamakin 2013]. Podolia burials or, more generally, sepulchral features discovered throughout the forest-steppe zone of the North-West Pontic area seem to corroborate the opinion positing that burials in narrow rectangular pits represent the youngest variant [cf. Nikolova, Rassamakin 1985; Manzura 2010; Ivanova 2015, 282]. Unfortunately, radiocarbon dates confirming this hypothesis have not yet been obtained. Radiocarbon dates from other regions place burials of the Postmariupol type at the beginning of the first half of the 3rd millennium BC, contemporary with the early YC. They were obtained for graves from Vapniarka and Oleksandrivka in the Pontic steppes [Ivanova 2010; Petrenko, Kovaliukh 2013], at Tiszavasvári-Deákhalom in Hungary [Horváth *et al.* 2013: 157], and Šajkaš “Ciganska humka” in Serbia [Włodarczak *et al.* forthcoming], among other sites. As for the funerary-ceremonial complex at Ocnîța, kurgans 6 and 7, where burials in extended position were found, suggest a late chronology also due to their location among analogical kurgans dated (also in terms of relative chronology) to the turn of the 4th and 3rd millennia BC.

Elements of ritual recorded with burials in extended positions find analogies in the finds representing the Late Eneolithic/early Yamnaya horizon in Podolia. They include irregular, roughly rectangular pits, narrow grave cuts, details of upper limbs arrangement (type F), and manners of ochre application. The graves which reveal these similar traits are feature 1/1B from Pidlisivka (Fig. 11: 2) [Klochko *et al.* 2015a: 49-51] and feature 2/5 from Porohy (Fig. 11: 1) [Harat *et al.* 2014: 82, 83]. Stratigraphic analysis suggests these burials were connected with the first, original phase of respective kurgans, while the position of the body (lying on their backs with legs in type F arrangement) hints at their Post-Stog connotations.

The chronological position of graves with burials in extended position can be narrowed down thanks to stratigraphic observations made in kurgans at Bursuceni, between the Dniester and Prut rivers [Yarovoy 1978]. Graves from this site were younger than the burials representing the Zhivotilovka-Volchansk tradition and older than those linked with the early phase of YC. Based on a relatively compact series of radiocarbon dates obtained for graves of the Zhivotilovka-Volchansk group, the chronology of burials in extended position can be determined as the very close of the 4th – beginning of the 3rd millennia BC (most likely around 3100-2800 BC).

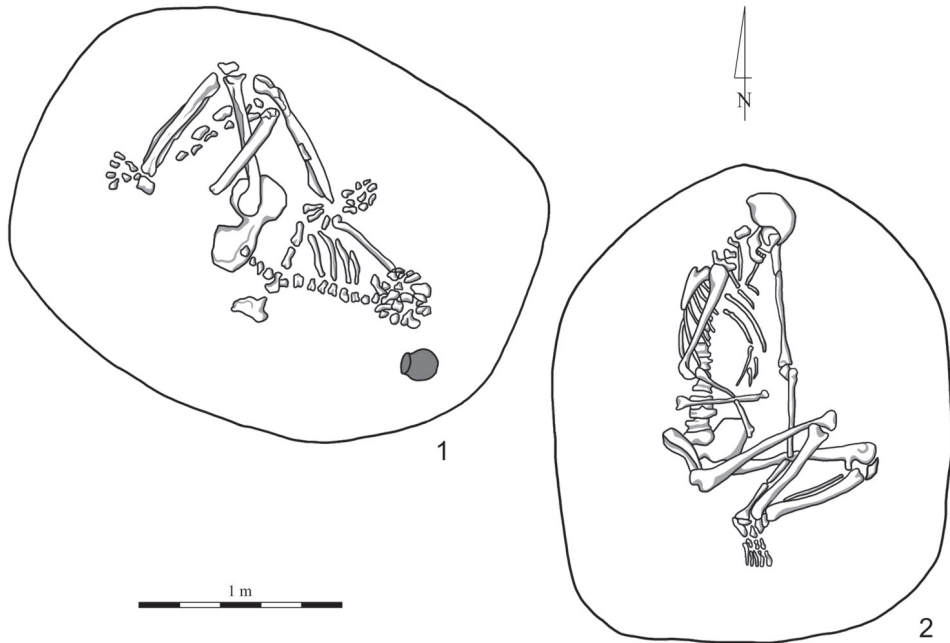


Fig. 12. Central burials representing the Eneolithic tradition in kurgans from the Yampil cluster. 1 – Porohy, grave 3/2, 2 – Severynivka, grave 1/5 [after Harat *et al.* 2014]

4.4. BURIALS REPRESENTING OTHER ENEOLITHIC TRADITIONS OR LINKED WITH THE EARLY YAMNAYA PHASE

The investigation of the Yampil kurgans highlighted problems with the interpretation of those central burials in kurgans which were laid in a contracted position and did not reveal the full set of traits typical of the YC ritual. The phenomenon has been given different interpretations, including as a mark of an older, Eneolithic cultural component in the genesis of Early Bronze Age funerary rites [“Protobudzhak component” within YC acc. to Ivanova 2015]. One can also consider a slightly earlier, Eneolithic origin of such burials, pre-dating the appearance of “classic Yamnaya” rites. Yet another possible explanation is the heterogeneity of burials from the very beginnings of the Early Bronze Age – they might blend various traditions, as was the case in the Late Eneolithic. This would imply a considerable diversity of communities who erected Podolia kurgans, of whom only some would represent the tradition linked with the YC proper.

Two central burials in the Yampil cluster, at Porohy grave 3/2 (Fig. 12: 1) and Severynivka grave 1/5 (Fig. 12: 2), were specific, because the deceased were buried

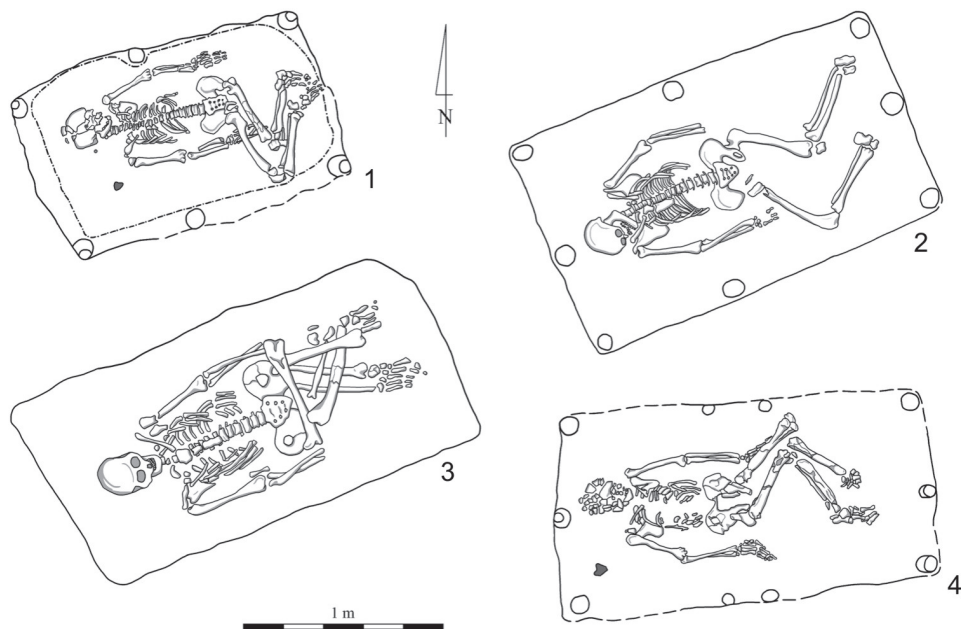


Fig. 13. Central graves in kurgans from Pysarivka, Yampil Region: 1 – grave 5/1, 2 – grave 7/2, 3 – grave 8/2, 4 – grave 6/2 (early phase of YC) [after Harat *et al.* 2014]

in a contracted position on their sides, in pits which were oval in plan. These features correspond with the definition of burials of the Nizhnaya Mikhaylovka type according to Y.Y. Rassamakin [e.g. 1997; 2008]. Although burials from the eponymous site date early (first half of the 4th millennium BC) [Kotova 2013], analogical arrangements are known from the Late Eneolithic as well [Rassamakin 1998: 215], representing group III-A in North Pontic funeral traditions [Rassamakin 2004: 51, 52]. The burials from Porohy and Severynivka also correspond with the Bessarabia variant of the Černavoda culture, as understood by I. Manzura [2013, 130, 132]. This variant is distinguished by a specific arrangement of upper limbs, with one arm sharply bent at the elbow and placed at the waist. The deceased from Porohy was laid in a manner specific to this group of burials, namely with the head to the SE [cf. Manzura 2013, 132]. Its Eneolithic origin is also suggested by the transversal arrangement of the wooden roofing, unknown from central graves of YC in Podolia. The deceased from grave 3/2 at Porohy was furnished with a “pot-shaped” beaker [Harat *et al.* 2014, 90, Fig. 2.4.4: 1: 1].

It cannot be ruled out that graves discovered in kurgan 1 at Klembivka (no 5 and possibly also a poorly preserved burial from grave 15) [Klochko *et al.* 2015c] and kurgan 2 at Kuzmin (grave 2/5) [Bubulich, Khakhey 2001] also link with the group of finds discussed here.

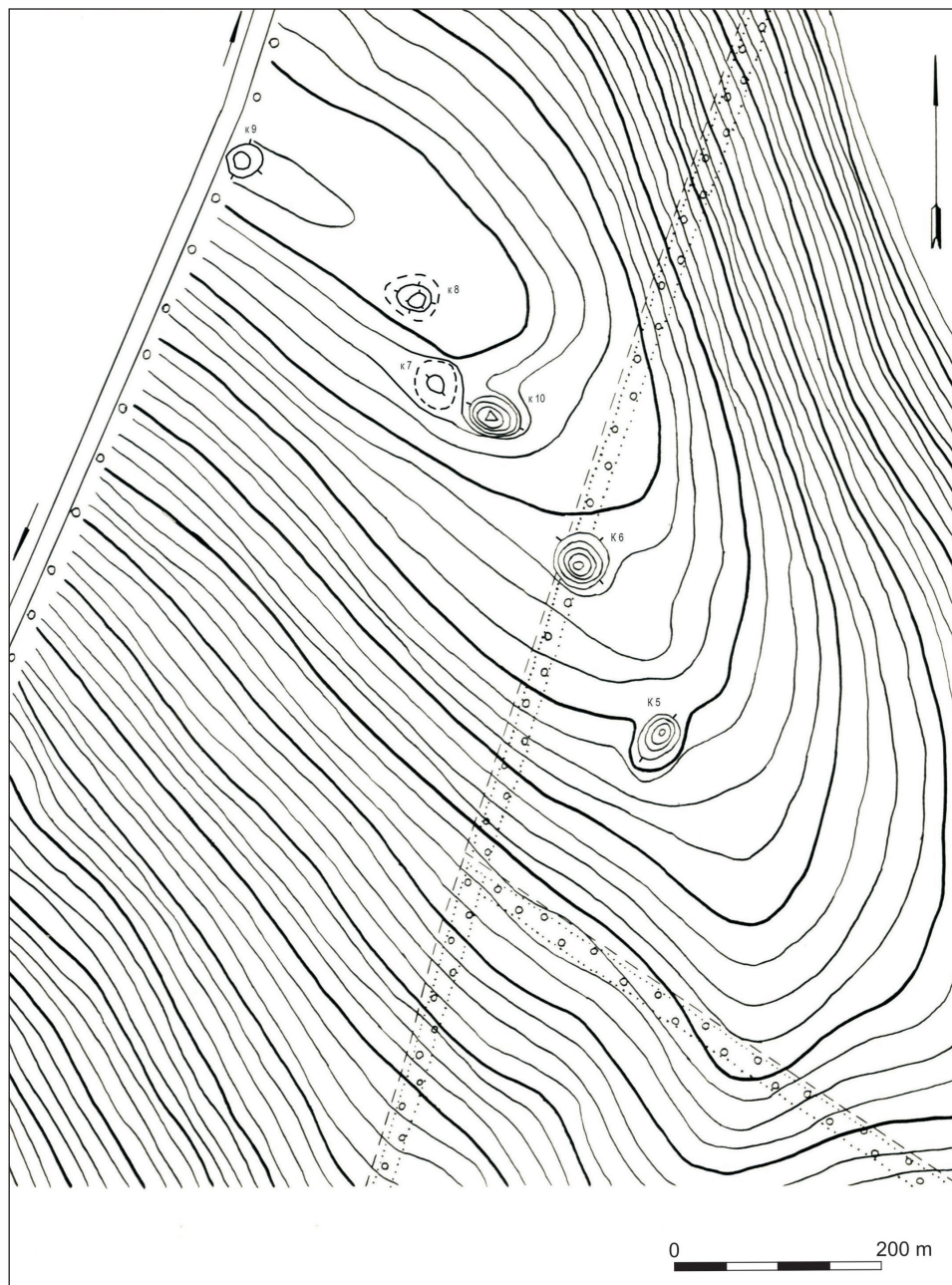


Fig. 14. Pysarivka, Yampil Region. Location of kurgans 1-5. Source: archives of the Heritage Protection Office in Vinnytsa

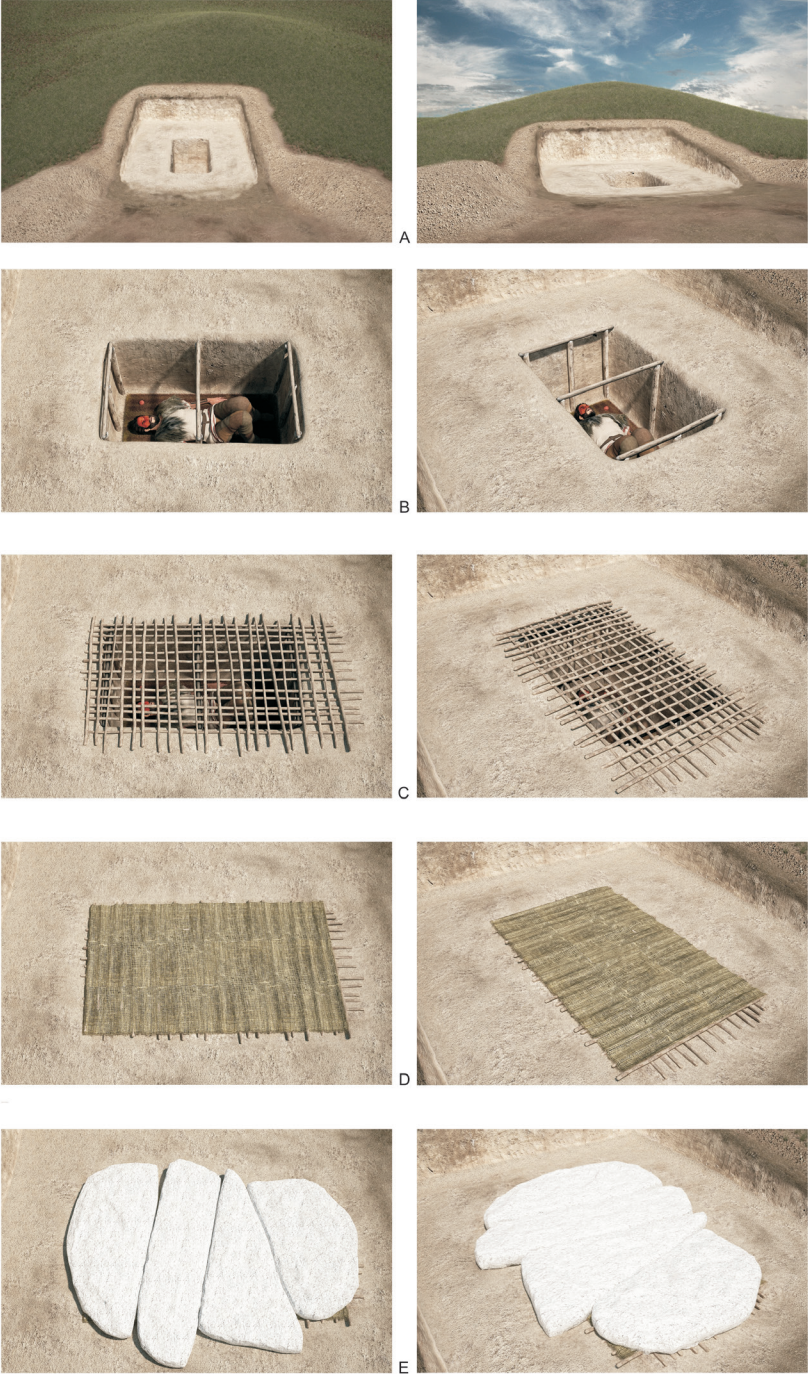


Fig. 15. Prydnistryanske, Yampil Region. Reconstruction of stages of grave IV/4 construction.

By M. Podsiadło

The problem with determining the taxonomic and chronological positions of central burials emerges with respect to other kurgans in Podolia as well and has already been addressed in the literature [Manzura *et al.* 1992: 81-92; Kashuba *et al.* 2001-2002: 220, 221]. A good illustration is the situation recorded at Ocnîța in the Kamienka Region, where a group of 7 kurgans were explored and only 3 of the documented burials linked with the earliest phases of the mound construction revealed traits allowing them to be linked with YC (kurgans 2, 3, and 5). The remaining central graves held burials in extended position (kurgans 6 and 7) or burials which due to the characteristics of the ritual (e.g. orientation) can be linked with Eneolithic traditions (kurgans 1 and 4).

Some of the central burials yielded no human remains, or only single bones were found. Sometimes such graves bore clear marks of secondary opening (Porohy, grave 3A/14; Mocra, grave 1/15). The result is that taxonomic-chronological traits cannot be determined with sufficient certainty in five kurgans (Mocra 1; Porohy 3A, Kuzmin 2 and 5, and Podoima). Whether kurgans which revealed traces of sophisticated rituals (such as large postholes, grooves, cromlechs, and sacrificial pits) can be linked with the Late Eneolithic is another issue. Such ritual behaviours were recorded in kurgans at Porohy (3A), Mocra (1), and Klembivka (1).

4.5. GRAVES FROM THE EARLY PHASE OF YC

Among the finds associated with the early phase of YC one should mention first of all burials connected with the construction of the earliest mound (“founder” graves) and some of those dug into the central parts of kurgans during their subsequent enlargements. Graves filling in funerary spaces created by older, Eneolithic communities also belong to this group.

A model ceremonial-funerary complex created by a YC community is a group of kurgans in Pysarivka village [Harat *et al.* 2014: 104-165]. Nine mounds have been explored there, of which eight (1, 3-9) yielded central burials of YC sharing a number of similar features (Fig. 13). The deceased were placed in regular, rectangular pits having vertical walls. Vykids (mounds of soil extracted while digging grave pits) formed regular narrow walls surrounding each grave, and seem to have been integral elements of sepulchral architecture. Chambers were covered with 5-7 timbers/planks arranged parallel to the grave’s longer axis. Another characteristic element was that of wooden stakes driven symmetrically into the bottom along grave chamber edges, recorded in four cases. The deceased were laid on their backs, in a contracted position with the knees up. The head was as a rule turned to W, with possible deflections towards NW or SW. Skeletons bore traces of painting with ochre. Other characteristic elements of YC rituals discovered at this site

included silver earrings from grave 5.1 and elements of a wooden wagon from grave 6/2. Unlike kurgan clusters initiated in the Pre-Yamnaya period (in Porohy and Prydnistryanske), kurgans 5-8 at Pysarivka form a regular line along the top of a ridge (Fig. 14). This finds analogies in Central Europe, in CWC barrows. The Pysarivka model of YC kurgans is also followed in nearby complexes at Dobrianka (kurgan 10, with a slightly different body orientation – with the head to E) and Severynivka (kurgan 2) [Harat *et al.* 2014].

Different features, unique in the entire Podolia Region, were recorded in the central burial of kurgan 2 at Pysarivka [Harat *et al.* 2014]. A small pit, oriented N-S, was covered with stone blocks, a construction not typical of the forest-steppe zone of the North-West Pontic area but with analogies further to the east, including in the Boh and Ingul River basins [Shaposhnikova *et al.* 1986: 15] and on the Ingulec River [Melnik, Steblina 2013: 11] – generally between the Dnieper and the Boh. A pot-shaped beaker richly adorned with cord imprints discovered in grave 2/3 at Pysarivka is also atypical for the region. The vessel differs in terms of style from pottery manufactured in the North-West Pontic area, and its ornamentation hints at connections with early Yamnaya materials from the territory between the Dnieper and the Boh.

The role of south-eastern connections at the early stage of YC development can also be seen in grave IV/4 at Prydnistryanske. This is indicated by a combined (wood and stone) roof construction involving stela-like slabs, and by the skull of the deceased characteristically painted with red pigment. The absolute date obtained for grave IV/4 (ca 3100-3000 BC) suggests its early provenance [Goslar *et al.* 2015]. The grave was most likely connected with the oldest stage of enlargement of the Eneolithic barrow [Klochko *et al.* 2015].

The kurgans described above, in which graves connected with the earliest mound reveal set of traits typical of YC, are not in the majority in Podolia. More often, YC graves were secondarily dug into the central part of an earlier kurgan. Such a burial became the new focal point for a cemetery which might comprise graves of different chronology, a “central YC grave”. Thus, a typical behaviour of YC communities was to remodel an “appropriated” Eneolithic kurgan rather than to simply continue using the mound erected by their predecessors [cf. Petrenko 2010: 362]. In such kurgans, the older grave represented a different cultural tradition. It could be a burial in an extended position (as at Ocnîța in kurgans 6 and 7 and at Tymkove) or such in which the body was oriented along an axis other than W-E (e.g. Hrustovaia, Pidlisivka, Ocnîța, kurgans 1, 3, and 4). The younger burial, on the other hand, bore traits typical of the older phase of YC: W-E orientation, wooden roofing parallel with the pit’s axis, a simple pit with no step, the body laid in a contracted position with the knees up and the upper limbs in type F arrangement.

As in other regions, there were single “elite” graves in Podolia, being burials of adult males. To this group belong the central grave from kurgan 6 at Pysariv-

ka, where fragments of a wagon were found, the sophisticated funeral structure from kurgan IV at Prydnistryanske (grave IV/4 – Fig. 15), and the central grave from kurgan 5 at Pysarivka, which yielded silver earrings. In terms of these “elite” markers the Yampil cluster represents a typical ceremonial centre of the North-West Pontic area [Ivanova, Toshev 2015: 378].

4.6. LATER STAGES OF YC

The middle phase of YC is quite clearly evident in Podolia kurgans. It is marked by burials dug into the existing mounds. These are either single burials inserted into different parts of the mounds, or groups of graves forming arches around a central part. Graves with steps leading to the burial chamber are typical of that stage, and they were wider than those in the centres of kurgans. Chambers were typically roofed with planks or timbers placed perpendicularly to the grave’s longer axis. Burials on one side and burials on the back but leaning to either side become more numerous, and upper limbs were most often placed in A, G, H, or I arrangements. Ceramic vessels become more common in graves, including forms indicative of contacts with GAC and CWC milieus. Model examples of sepulchral features from that period are kurgans 3, 6, and 7 at Očnița and kurgan 3A at Porohy.

Among issues of particular importance one can mention the relationship between the Podolia finds linked with the late phase of YC and materials from the Budzhak Region (i.e. from the Dniester-Danube steppe). Indicating the latter is an original ceramic inventory, combining specific vessel forms with elaborate ornamentation (mainly cord impressions), featuring primarily on broad-mouth one-segment beakers. What is also striking in the materials discussed here is the small number of graves with burials arranged in a manner indicative of a late chronology, i.e. with bodies lying on their sides. This allows for an assumption that only single burials from Podolia (e.g. Mocra, grave 1/3) date to the late phase (in the periodisation used for the Budzhak Region) and, accordingly, that the majority of Podolia kurgans already had ceased to be used as burial grounds before the middle of the 3rd millennium BC.

The succession of the Catacomb culture features poorly in the Podolia materials, with only two burials, of different cultural attributions, standing out: grave 3/5 from Očnița, linked with the early Catacomb culture [Klochko 1990] and grave I/4 from Prydnistryanske, revealing inspirations from the Donets or Dnieper (or possibly Ingul) basins [Klochko *et al.* 2015d]. Radiocarbon dates obtained for the latter grave point to about 2600-2500 BC [Goslar *et al.* 2015], which means to the early Catacomb culture. The chronology of these burials does not diverge much from the youngest YC graves in Podolia. This suggests a hiatus of about 500 years in kurgan

cemeteries in Podolia between the Yamnaya and Catacomb phase and burials of the Babyno culture, radiocarbon dated to not before circa 2100-2000 BC.

5. SUMMARY

The materials collected during the investigation of the *Yampil kurgans* have made it possible to describe the funerary ritual of local Eneolithic and Early Bronze Age communities, which was a variant of sepulchral rites practiced in the Podolia Region or, more generally, in the forest-steppe part of the North-West Pontic area. The analyses performed have shown distinct similarities in terms of ritual behaviours between this newly investigated group and the communities from the Dniester-Danube area. The majority of kurgan necropolises in question were established in the Late Eneolithic, and this initial period was marked by significant genetic diversity, with rituals indicative of various cultural traditions of the North Pontic area. The oldest – thus far – cemeteries are those associated with the Zhiotilovka-Volchansk group, showing strong links with the Gordinești type of the Trypilia culture. Later finds link with the turn of the Eneolithic and Early Bronze Age, and represent a variety of traditions: Early Yamnaya, burials in extended position, Nizhnaya Mikhailovka, and Post-Stog.

The peripheral position of the Yampil cluster within the YC complex favoured contact with Central Europe, which found its reflection in the regional specificity of funerary behaviours. It should be noted, however, that subsequent genetic breakthroughs in funerary rituals in the Podolia cluster were connected primarily with influences from the east and south east. This is indicated by the recorded ritual elements specific to the Early Yamnaya, Late Yamnaya, and Catacomb cultures.

In an overwhelming majority, the Podolia finds represent a local, forest-steppe variant of YC rites from the North-West Pontic area. It shows similar traits with the rituals practiced by North-Pontic communities expanding towards Central and South-Eastern Europe. This expansion resulted in interactions with cultural groups living further to the west. In the forest-steppe zone of the North-West Pontic area there is clear evidence of contact with GAC and CWC communities, while in the Budzhak Region influences from the Balkans and South Carpathians played a more important role. Nevertheless, the impact of these contacts was limited to the adoption and introduction of certain artefacts (pottery, flint tools) into funerary rites of YC communities.

An important task awaiting future researchers is to determine the range and scale to which North Pontic kurgan rituals influenced western Podolia and south-eastern Poland. The findings will be of crucial importance for understanding the

genesis of funerary (thanatologic) ideologies of communities inhabiting Central Europe at the close of the Eneolithic. They would also offer valuable supplementation to the results of archaeogenetic studies flourishing in recent years [cf. Chyleński *et al.* 2017; Juras *et al.* forthcoming].

Translated by Piotr Godlewski

REFERENCES

Agulnicov S., Mistreanu E.

- 2014 Cercetăile de salvare la tumuli 1 de lângă s. *Brânzenii Noi (r-i Telenești)*.
In: Arheologia preventivă în Republica Moldova, vol. I, nr. 1-2, 63-74.

Allentoft M.E., Sikora M., Sjögren K.-G., Rasmussen S., Rasmussen M., Stenderup J., Damgaard P.B., Schroeder H., Ahlström T., Vinner L., Malaspinas A.-S., Margaryan A., Higham T., Chivall D., Lynnerup N., Harvig L., Baron J., Della Casa P., Dąbrowski P., Duffy P.R., Ebel A.V., Epimakhov A., Frei K., Furmanek M., Gralak T., Gromov A., Gronkiewicz S., Grupe G., Hajdu T., Jarysz R., Khartanovich V., Khokhlov A., Kiss V., Kolář J., Kriiska A., Lasak I., Longhi C., McGlynn G., Merkevičius A., Merkyte I., Metspalu M., Mkrtychyan R., Moiseyev V., Paja L., Pálfi G., Pokutta D., Pospieszny Ł., Price T.D., Saag L., Sablin M., Shishlina N., Smrčka V., Soenov V. I., Szeverényi V., Tóth G., Trifanova S.V., Varul L., Vicze M., Yepiskoposyan L., Zhitenev V., Orlando L., Sichertz-Pontén T., Brunak S., Nielsen R., Kristiansen K., Willerslev E.

- 2015 Population genomics of Bronze Age Eurasia. *Nature* 522: 167-173.

Antoniewicz W.

- 1925 Eneolityczne groby szkieletowe we wsi Złota w pow. Sandomierskim.
Wiadomości Archeologiczne 9: 191-242.

Brandenburg N.E.

- 1908 *Zhurnal raskopok N.E. Brandenbura 1888-1902 gg.* Sankt-Peterburg.

Bubulich V., Khakheu V.

- 2001 Issledovaniya kurganov v Kamenskom rayone na levoberezhe Srednego Dnestra. In: N.A. Ketraaru (Ed.) *Severnoe Prichernomore ot eneolita k antichnosti*, 112-148. Tiraspol.

Chyleński M., Juras A., Żurkiewicz D., Jankowski M., Włodarczak P.

- 2017 Preservation of ancient DNA in human bones from Bronze Age Ukraine.
Baltic-Pontic Studies 22: 54-63.

Demcenko T.I.

- 2016 K voprosu o vydelenii kulturnoy grupy Bursuceni v ramkakh grodineshtskogo-pozdnemaykopskogo fenomena In: L. *Sîrbu, N. Telnov, L. Ciobanu, G. Sîrbu, M. Kaşuba (Eds) Culturi, Procese și contexte în Arheologie. Volumul omagial Oleg Levițki la 60 de ani*, 84-99. Chișinău.

Dergachev V.A.

1982 *Materialy raskopok arkheologicheskoy ekspeditsii na Srednem Prute (1975-1976 gg.)*. Kishinev.

1986 *Moldaviya i sosednie territorii v epokhu bronzy*. Kishinev.

Dergachev V.A., Manzura I.V.

1991 *Pogrebalnye komplekсы pozdnego Tripolia*. Kishinev.

Goslar T., Klochko V.I., Koško A., Włodarczak P., Żurkiewicz D.

2015 Chronometry of Late Eneolithic and “Early Bronze” cultures in the Middle Dniester area: investigations of the Yampil Barrow Complex. *Baltic-Pontic Studies* 20: 256-191.

Haak W., Lazaridis I., Patterson N., Rohland N., Mallick S., Llamas B., Brandt G., Nordenfelt S., Harney E., Stewardson K., Fu Q., Mittnik A., Bánffy E., Economou C., Francken M., Friederich S., Garrido Pena R., Hallgren F., Khartanovich V., Khokhlov A., Kunst M., Kuznetsov P., Meller H., Mochalov O., Moiseyev V., Nicklisch N., Pichler S.L., Risch R., Rojo Guerra M.A., Roth C., Szécsényi-Nagy A., Wahl J., Meyer M., Krause J., Brown D., Anthony D., Cooper A., Alt K.W., Reich D.

2015 Massive migration from the steppe was a source for Indo-European languages in Europe. *Nature* 522: 207-211.

Harat K., Potupczyk M., Razumov S.

2014 Charakterystyka źródeł archeologicznych pozyskanych w latach 1984-1993. In: A. Koško, M. Potupczyk, S. Razumow (Eds) *Naddniestrzańskie komplekсы cmentarzysk kurhanowych społeczności z III i z pierwszej połowy II tysiąclecia przed Chr. w okolicach Jampola, obwód winnicki. Z badań nad północno-zachodnią rubieżą osadnictwa społeczności kręgu kultur „wczesnobrązowych” strefy pontyjskiej. Badania z lat 1984-2014. Archaeologia Bimaris – Monografie* 6, 45-204. Poznań.

Häusler A.

1974 *Die Gräber der älteren Ockergrabkultur zwischen Ural und Dnepr*. Berlin.

Horváth T., Dani J., Petó Á., Pospieszny Ł., Svingor É.

2013 Multidisciplinary contributions to the study of Pit Grave Culture kurgans of the Great Hungarian Plain. In: V. Heyd, G. Kulcsár, V. Szeverényi (Eds) *Transition to the Bronze Age. Interregional interaction and socio-cultural change in the Third Millennium BC Carpathian Basin and neighbouring regions*, 153-179. Budapest.

Ivanova S.V. [=Iwanowa S.]

- 2001 *Sotsialnaya struktura naseleniya yamnoy kultury severo-zapadnogo Prichernomoria*. Odessa.
- 2012 Ob istokakh formirovaniya Budzhakskoy kultury. *Starozhytnosti stepovoho Prychornomoria i Krymu* 16: 18-62.
- 2013 Connections between the Budzhak culture and central European groups of the Corded Ware culture. *Baltic-Pontic Studies* 18: 86-120.
- 2014 Stan badań nad osadnictwem kultur jamowej i katakumbowej w zlewni dolnego Dniestru. In: A. Koško, M. Potupczyk, S. Razumow (Eds) *Naddniestrzańskie kompleksy cmentarzysk kurhanowych społeczności z III i z pierwszej połowy II tysiąclecia przed Chr. w okolicach Jampola, obwód winnicki. Z badań nad północno-zachodnią rubieżą osadnictwa społeczności kręgu kultur „wczesnobrązowych” strefy pontyjskiej. Badania z lat 1984-2014. Archaeologia Bimaris – Monografie 6*, 17-33. Poznań.
- 2015 „Protobudzhakskiy gorizont” Severo-Zapadnogo Prichernomoria. *Stratum plus* 2 (2015): 275-294.

Ivanova S.V., Toshchev G.I.

- 2015a Late Eneolithic and Bronze Age prologue Pontic societies. Forest-steppe middle Dniester and Prut drainage basins in the 4th/3rd-2nd millennium BC: a history of investigations. *Baltic-Pontic Studies* 20: 7-39.
- 2015b The Middle-Dniester cultural contact area of early metal age societies. The frontier of Pontic and Baltic drainage basin in the 4th/3rd-2nd millennium BC. *Baltic-Pontic Studies* 20: 336-405.
- 2015c Budzhakskiye banki kak markery: transkulturnyi i transterritorialnyi aspekt. *Starozhytnosti stepovoho Prychornomoria i Krymu* 18: 17-36.

Iwanowa S., Koško A., Włodarczak P.

- 2014 Komponent tradycji kultur ceramiki sznurowej. Amfory w północno-zachodnio-nadczarnomorskich grobach kultury jamowej. In: A. Koško, M. Potupczyk, S. Razumow (Eds) *Naddniestrzańskie kompleksy cmentarzysk kurhanowych społeczności z III i z pierwszej połowy II tysiąclecia przed Chr. w okolicach Jampola, obwód winnicki. Z badań nad północno-zachodnią rubieżą osadnictwa społeczności kręgu kultur „wczesnobrązowych” strefy pontyjskiej. Badania z lat 1984-2014. Archaeologia Bimaris – Monografie 6*, 351-386. Poznań.

Juras A., Chyleński M., Ehler E., Malmström H., Żurkiewicz D., Włodarczak P., Wilk S., Peška J., Fojtík P., Králík M., Libera J., Bagińska J., Tunia K., Klochko V., Dabert M., Jakobsson M., Koško A.

forthcoming Ancient mitochondrial genome data support the participation of females in the Yamnaya migration into Central Europe.

Kachalova N. K.

1974 Ermitazhnaya kolleksiya N.E. Brandenburga. In: *Svod arkheologicheskikh istochnikov V*, 4-12. Moskva.

Kashuba M.T., Kurchatov S.Y., Scherbakova T.A.

2001-2002 Kochevniki na zapadnoy granitse Velikoy stepi (po materialam kurganov u s. Mocra), *Stratum plus* 4 (2001-2002): 180-252.

Klochko V.I. Koško A., Razumow S.M., Włodarczak P., Żurkiewicz D.

2015a Eneolithic, Yamnaya, Catacomb and Babyno culture cemeteries, Pidlisivka, Barrow 1, Yampil Region, Vinnitsa Oblast: archaeometry, chronometry and taxonomy. *Baltic-Pontic Studies* 20: 40-77.

2015b Eneolithic, Yamnaya, and Noua culture cemeteries from the first half of the 3rd and the middle of the 2nd millennium BC, Porohy, site 3A, Yampil Region, Vinnitsa Oblast: archaeometric and chronometric description, ritual and taxonomic-topogenic identification. *Baltic-Pontic Studies* 20: 78-141.

2015c Eneolithic, Babyno and Noua culture cemeteries, Klembivka site 1, Yampil Region, Vinnitsa Oblast: archaeometry, taxonomy and topogenetics. *Baltic-Pontic Studies* 20: 142-182.

Klochko V.I. Koško A., Potupchyk M.V., Włodarczak P., Żurkiewicz D., Ivanova S.V.

2015d Tripolye (Gordinești group), Yamnaya and Catacomb culture cemeteries, Prydnistryanske, site 1, Yampil Region, Vinnitsa Oblast: An archaeometric and chronometric description and a taxonomic and topogenetic discussion. *Baltic-Pontic Studies* 20: 183-255.

Klochko E.O.

1990 Redkiy pogrebalnyi kompleks katakombnoy kultury na Srednom Dnestre. In: O.G. Shaposhnikova, V.V. Otroshchenko, S.Z. Pustovalov, G.N. Toshchev, G.I. Shapovalov (Eds) *Problemy izucheniya katakombnoy kulturno-istoricheskoy obschnosti*, 28-30. Zaporozhe.

Koško A.

2014 Traits of “Early Bronze” Pontic cultures in the development of lowland and eastern European forest cultural environments in the Baltic southern drainage basin. An outline of the state of research. *Baltic-Pontic Studies* 19: 53-73.

Koško A. (Ed.)

2015 *Podolia as a cultural contact area in the 4th/3rd-2nd millennium BC*. *Baltic-Pontic Studies* 20.

2017 *Podolia ,barrow culture’ communities: 4th/3rd–2nd millennium BC*. *Baltic-Pontic Studies* 22.

Koško A., Klochko V.I.

2009 Transit routes between the Baltic and Black seas: early development stages – from the 3rd to the middle of the 1st millennium BC. An outline of research project. *Baltic-Pontic Studies* 14: 9-18.

Koško A., Potupczyk M., Razumow S. (Eds)

2014 *Naddniestrzańskie kompleksy cmentarzysk kurhanowych społeczności z III i z pierwszej połowy II tysiąclecia przed Chr. w okolicach Jampola, obwód winnicki. Z badań nad północno-zachodnią rubieżą osadnictwa społeczności kręgu kultur „wczesnobrązowych” strefy pontyjskiej. Badania z lat 1984-2014. Archaeologia Bimaris – Monografie 6. Poznań.*

Kotova N.S.

2013 *Dereivskaya kultura i pamiatniki nizhnemikhailovskogo tipa. Kiev.*

Larina O., Manzura I., Khakheu V.

2008 *Brevitchenskiye kurgany. Kishinev.*

Lorkiewicz-Muszyńska D., Sobol J., Langer J.L., Koško A., Włodarczak P., Żurkiewicz D.

2017 Barrow culture “tattoo” rituals and techniques, Pontic-Caspian Steppe/Forest Steppe, Porohy 3A, Yampil Raion, Vinnytsia Oblast. Specialist research perspectives. *Baltic-Pontic Studies* 22: 64-90.

Manzura I.V.

2010 „Vytyanutyje” pogrebeniya epokhi eneolita v Karpato-Dnestrovskom Regione. *Tyragetia, Serie nouă* 4(1): 35-47.

2016 North Pontic steppes at the oft he 4th millenium BC: the epoch of broken borders. In: A. Zanoci, E. Kaiser, M. Kashuba, E. Izbitser, M. Băț (Eds) *Man, culture and society from the Copper Age until the Early Iron Age in northern Eurasia (Contributions in honour of the 60th anniversary of Eugen Sava). Tyragetia International* 1, 149-171. Chisinau.

Manzura I.V., Klochko E.O, Savva E.N.

1992 *Kamenskie kurgany. Kishinev.*

Melnik O.,Stebлина I.

2013 *Yamnaya kultura serednoyi techiyi Inhultsia. Kryvyi Rih.*

Merpert N. Y.

1974 *Drevneyshiye skotovody Volzhsko-Uralskogo mezhdurechia. Moskva.*

Nikolova A.V., Rassamakin Y.Ya.

1985 O pozdneeneoliticheskikh pamiatnikakh Pravoberezhia Dnepra. *Sovetskaya Arkheologiya* 3: 37-56.

Petrenko V.G.

- 2010 Kurgan epokhi paleometalla na poberezhe Khadzhibeyskogo limana. In: *Materialy po arkeologii Severnogo Prichernomoria* 11, 303-368. Odessa.

Petrenko V.G., Kovaliukh N.N.

- 2003 Novye dannye po radiouglerodnoy khronologii eneolita Severo-Zapadnogo Prichernomoria. In: O.H. Korvin-Piotrovskiy (Ed.) *Trypilski poseleennia-hihanty v Ukrainyini*, 102-110. Talianki, Kyiv.

Przybyła M.M., Podsiadło M., Potupczyk M., Włodarczak P., Żurkiewicz D.

- 2017 The Eneolithic ritual barrow complex, Prydnistryanske, Vinnytsia Oblast: magnetometric surveys. *Baltic-Pontic Studies* 22: 30-40.

Rassamakin Y.Ya.

- 1997 Svit skotariv. In: V. Tolochko (Ed.) *Davna istoriya Ukrainy*, vol. 1, 273-301. Kyiv.
- 2004 *Die nordpontische Steppe in der Kupferzeit Gräber aus der Mitte des 5. Jts. bis Ende des 4. Jts. v. Chr. Archäologie in Eurasien* 17. Mainz.
- 2008 Stepy pivnichnoho Prychornomoria za doby midi. In: *Ukrayina – khronologiya rozvytku. Z davnykh chasiv do piznoyi antichnosti*, 202-218. Kyiv.
- 2013a From the Late Eneolithic period to the Early Bronze Age in the Black Sea steppe: what is the Pit Grave Culture (late fourth to mid-third millennium BC)? In: V. Heyd, G. Kulcsár, V. Szeverényi (Eds) *Transition to the Bronze Age. Interregional interaction and socio-cultural change in the third millenium BC. Carpathian Basin and neighbouring regions*, 113-138. Budapest.
- 2013b Pokhovannia kvitianskoyi kultury v konteksti absolutnoyi khronolohii. *Arkheolohiya* 4/2013: 17-41.

Rassamakin Y.Ya., Nikolova A.

- 2008 Carpathian imports and imitations in context of the Eneolithic and Early Bronze Age of the Black Sea steppe area. In: P.F. Biehl, Y.Ya. Rassamakin (Eds) *Import and Imitation in Archaeology*, 51-87. Langenweißbach.

Razumow S.

- 2014 Komponent tradycji kultury jamowej. In: A. Koško, M. Potupczyk, S. Razumow (Eds) *Naddniestrzańskie kompleksy cmentarzysk kurhanowych społeczności z III i z pierwszej połowy II tysiąclecia przed Chr. w okolicach Jampola, obwód winnicki. Z badań nad północno-zachodnią rubieżą osadnictwa społeczności kręgu kultur „wczesnobrzązowych” strefy pontyjskiej. Badania z lat 1984-2014. Archaeologia Bimaris – Monografie* 6, 341-346. Poznań.

Rychkov N.A.

- 2001 Ob uslovykh tsestrakh nositeley Yamnoy kultury. In: N.A. Ketraru (Ed.) *Severnoe Prichernomore ot eneolita k antichnosti*, 42-66. Tiraspol.

Shaposhnikova O.G, Fomenko V.N., Dovzhenko N.D.

- 1986 *Yamnaya kulturno-istoricheskaya Oblast (yuzhnobugskiy variant)*. Kiev.

Subbotin A.V., Subbotin L.V., Ostroverkhov A.S.

- 2000 Timkovskiy kurgan v svete problem stepnogo eneolita i kultur bronzovogo veka. In: Y.V. Yarovoy (Ed.) *Chobruchskiy arkheologicheskiy kompleks i drevniye kultury Podnestrovia*, 80-95. Tiraspol.

Sulimirski T.

- 1968 *Corded Ware and Globular Amphorae North-East of the Carpathians*. London.

Szmyt M.

- 1999 *Between West and East. People of the Globular Amphora Culture in Eastern Europe, Baltic-Pontic Studies* 8.
- 2000 In the far reaches of two worlds. On the study of contacts between the societies of the Globular Amphora and Yamnaya cultures. In: S. Kadrow (Ed.) *A Turning of Ages/Im Wandel der Zeiten. Jubilee book dedicated to Professor Jan Machnik on His 70th Anniversary*, 443-466. Kraków.

Włodarczak P.

- 2006 *Kultura ceramiki sznurowej na Wyżynie Małopolskiej*. Kraków.
- 2014a Sekwencja czynności obrzędowych: problem korespondencji tradycji funeralnych kultury jamowej i kultury ceramiki sznurowej na Wyżynie Podolskiej. In: A. Kośko, M. Potupczyk, S. Razumow (Eds) *Naddniestrzańskie kompleksy cmentarzysk kurhanowych społeczności z III i z pierwszej połowy II tysiąclecia przed Chr. w okolicach Jampola, obwód winnicki. Z badań nad północno-zachodnią rubieżą osadnictwa społeczności kręgu kultur „wczesnobronzowych” strefy pontyjskiej. Badania z lat 1984-2014. Archaeologia Bimaris – Monografie* 6, 313-340. Poznań.
- 2014b The traits of Early-Bronze Pontic cultures in the development of old upland Corded Ware (Małopolska groups) and Złota culture communities. *Baltic-Pontic Studies* 19: 7-52.

Włodarczak P., Bugaj U., Jarosz P., Koledin J., Novak M., Spašić M.

- forthcoming *Archaeological investigations of the „Ciganska humka” at Šajkaš, municipality of Titel, Serbia and the question of the Eneolithic/Early Bronze Age barrows in Vojvodina.*

Yarovoy E.V.

- 1978 *Otchet o polevykh issledovaniakh eneoliticheskoy archeologicheskoy ekspeditsii v 1977 godu*. Kishinev.

- 1981 *Kurgan yamnoy kultury u s. Hrustovaya*. In: Arkheologicheskiye issledovaniya v Moldavii (1974-1976 gg.), 45-58. Kishinev.
- 1985 *Drevneyshie skotovodcheskie plemena yugo-zapada SSSR (klassifikatsiya pogrebalnogo obriada)*. Kishinev.
- 1990 *Kurgany epokhi eneolita-bronzy Nizhnego Podnestrovia*. Kishinev.