

Influences of the Corded Ware Culture in the Belarusian Lakeland (on the Ground of the Kryvina Peat-Bog Microregion)

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This article analyzes the cultural development of the Neolithic settlements in the Belarusian Lakeland at the 4th–3rd millennium BC, mainly based on the archaeological studies on the Kryvina peat-bog settlements. Although cultural complexes of analyzed settlements of the successive Usviaty and Northern Belarusian cultures are quite similar, the latter one possesses a noticeable and significant influence of the Corded Ware tradition that had reached the region from the north-west and south. Based on the obtained radiocarbon dates, this cultural change took place in the second half of the second quarter of the 3rd millennium BC. This is also related with the beginning of the manifestations of the Corded Ware tradition's influence in the region.

Keywords: Belarusian Lakeland, Usviaty culture, Northern Belarusian culture, Corded Ware cultures, cultural transformation, pottery, Neolithic.

Straipsnyje analizuojama Baltarusijos ežeringojo krašto neolito gyvenviečių kultūrinė raida IV–III tūkst. pr. Kr., daugiausia remiantis Kryvinos durpyno gyvenviečių archeologiniais tyrimais. Nors viena po kitos ėjusių giminingų Usviatų ir Šiaurės Baltarusijos kultūrų kompleksai analizuojamose gyvenvietėse yra gana panašūs, pastarojoje matyti ir didelė virvelinės keramikos tradicijų įtaka, pasiekusi šį regioną iš vakarų ir pietų. Remiantis gautomis radioaktyviosios anglies datomis, šis kultūrinis pasikeitimas įvyko ir virvelinės keramikos tradicijų įtaka regione pradėjo reikštis III tūkst. pr. Kr. antrojo ketvirčio antrojoje pusėje.

Reikšminiai žodžiai: Baltarusijos ežeringasis kraštas, Usviatų kultūra, Šiaurės Baltarusijos kultūra, virvelinės keramikos kultūros, kultūrinė transformacija, keramika, neolitas.

INTRODUCTION

The Belarusian Lakeland occupies the northern part of Belarus. It is located on the border of a large watershed between the Baltic and the Black Seas. The main river of the Lakeland is the Dzvina (Daugava), and on the southwest it is bounded by the Vilija River (Neris), a tributary of the Nioman River (Nemunas). Both of them, the Dzvina and the Vilija Rivers, flow into the Baltic Sea. At the same time, there is a riverhead of the Berezina River, one of the biggest tributary of the Dnieper (Dniapro) River which is situated in the middle-southern part of the Lakeland. The Lakeland's southeastern border is very close to the Dnieper River itself and its small tributaries. These rivers also belong to the basin of the Black Sea (Fig. 1).

Such geographical disposition of the region favors the exchange of different cultural traditions at all times of history. However, its location, which is close to the upper reaches of large rivers, has led to a weaker level of cultural impulses on the region, even to the possible

mediate impact, without a sure physical presence of actual carriers of these traditions.

CULTURAL PROCESS/TRANSFORMATION IN THE LATE NEOLITHIC

The Neolithic of the Belarusian Lakeland is characterized mostly by the evolutionary development of its archaeological cultures. Sources of their transformation were the residual influences of powerful cultural impulses that have radically changed the map of cultures in the neighboring regions. In the Early Neolithic, the Lakeland area was inhabited by bearers of the Narva culture. In the second half of the 4th millennium BC, the region was penetrated by bearers of the Pit-comb Ware culture (rare settlements of this culture are now known in the western and central-southern parts of the region). As a result, at the end of the 4th millennium BC, a new Usviaty culture was formed under the influence of newcomers on the local Narvian basis. In the middle of the 3rd millennium BC, the Usviaty

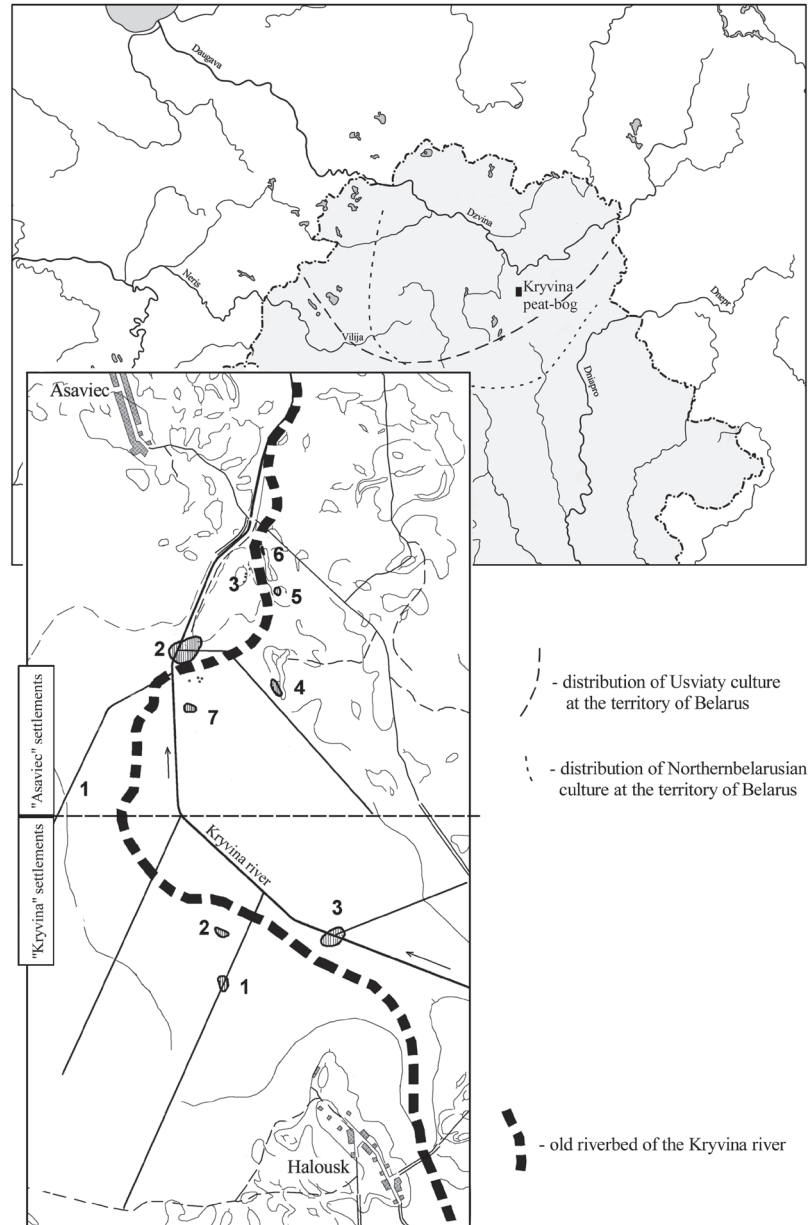


Fig. 1. The localization of the Kryvina microregion and its settlements.

1 pav. Krivinos mikroregiono situacija ir jo gyvenviečių išsidėstymas

culture was replaced by the related Northern Belarusian culture (Zhyzhusa-Kryvina phase (Чернявский, 2014, 25)), formed under the influence of the traditions of the circle of Corded Ware cultures.

Settlements of the Usviaty culture are located almost throughout all the Lakeland. In comparison with them, sites of the later Northern Belarusian culture moved a little to the East (toward eastern borders) under the pressure of bearers of Corded Ware traditions from Paniamonnie (Nioman region at the territory of

Belarus). In the rest of the Lakeland area, Northern Belarusian materials are located mainly in the same places as the previous Usviaty's culture sites (Fig. 1).

Main data on the Neolithic-Bronze Age of the Belarusian Lakeland comes from the settlements of Kryvina peat-bog. Almost 90% of all materials of that period known in the Lakeland were found in this microregion. It is located on the border of Sianno and Beshankovichy district, Viciebsk region. It covers an area of about 8 square kilometers (Fig. 1). There are

10 settlements and 3 locations relating to the Neolithic-Bronze Age times. 9 of these settlements preserve organic materials in their cultural layers: Asaviec 2, 3, 4, 5, 6, 7 on the north side of the peat-bog, Asaviec 1 (destroyed by peat-fire), Kryvina 1, 2, 3 on the south side. The most studied are Kryvina 1, 2 and Asaviec 2. The last settlement had been researched by Michal Charniauski since 1966 to 2012. The author of this article carries out personal excavations of the settlement from 2008 as well. Since then, Michal Charniauski has focused on the northern part of the settlement, which is dominated by the materials of the Usviaty culture, while the author's research is concentrated in the southern part, with the dominance of the Northern Belarusian artifacts.

As mentioned above, the Northern Belarusian and Usviaty cultures are genetically related. As a result, a large number of tools of these cultures are rather similar. Bone and horn tools, with the exception of a certain set of pendants and weapon, are almost identical (Чарняўскі, 2007, 74, 75, 67, 68). A similar situation exists with flint items as well. For example, known arrowheads of the Northern Belarusian culture are divided into 5 main groups, 3 of them are similar to previous Usviaty arrowheads and represent about 90 percent of all findings of this type. Only two small groups reflect a penetration of the new elements (Чарняўскі, 2010, 199, 201). The situation is similar to other types of tools.

However, if we look at the pottery of Usviaty and Northern Belarusian cultures, we will see a different situation. The pottery of these cultures is visually very different.

For the Usviaty culture, the most typical are helmet-like pots with sharp-rounded bottoms (Fig. 2). There are finds of tiny vessels and, very rarely, round and oval bowls (Fig. 2: 1, 3, 4; Fig. 3: 16). Rims are straight or slightly bent, cuts are often thickened and slanted inside. The surface of the vessels is smooth, treated in the technique of "hammer and anvil" and sometimes contains textile-like imprints produced by rolling sticks with winded threads. Ornamentation is sparse – it is concentrated in the upper parts of the vessels. The most typical are the imprints of a smooth stamp and thin notches including those that are made by using broken shells (Fig. 3). There are figurative

motifs as well. Among them there are images of ducks, snakes, stylized plants and duck eggs (Чарняўскі, 2008) (Fig. 3: 15–20).

The pottery of the Northern Belarusian culture includes more forms of vessels. The most common were pots with an expressive transition from bottom to slightly reduced top. There are also pots with a highlighted neck, helmet-like vessels (Fig. 4). The edges of the rims are usually bent out, but there are direct and brought-inside edges as well. Their cuts are mostly rounded, flat, T-shaped, rarely slanted. Bottoms at the early cultural development stage were sharp-rounded, but shortly after they became flat.

The ornamentation of the vessels is quite dense, its elements have a generally smaller size and cover the entire surface of the vessels. Often cuts of rims, their internal surface and bottoms are ornamented as well. The ornamentation, in comparison with the Usviaty culture, is quite simple and homogenous. One vessel is typically decorated with one or two elements of ornamentation (Fig. 5). Former elements of Usviaty culture are also present but in a more dense manner and on a smaller scale.

The surface of the vessels is covered with almost horizontal hatchings on both sides. Belts are fixed with a slanting method.

At the same time, shortly after conversion from the Usviaty culture to the Northern Belarusian culture, the internal characteristics of pottery remain almost unchanged. Old admixtures continued to be used in clay mass – crushed shells and organics (grass). Hybrid elements are very rare – a combined slanting-end method of affixing belts and an advanced treatment of surface using the hammer and the anvil technique before covering it with hatches.

Thus, it is possible to make a number of assumptions: the process of cultural transformation from the Usviaty culture into the Northern Belarusian culture has been relatively fast. Distinct changes are recorded in external, visual and religious aspects of life. New bone and amber ornaments and religious items, new ornaments and shapes of ceramic vessels, several new types of arrowheads and axes all appear. At the same time the internal, traditional life and household are left untouched. Almost all previous types of bone and flint tools and weapons dominate in collections. At the be-

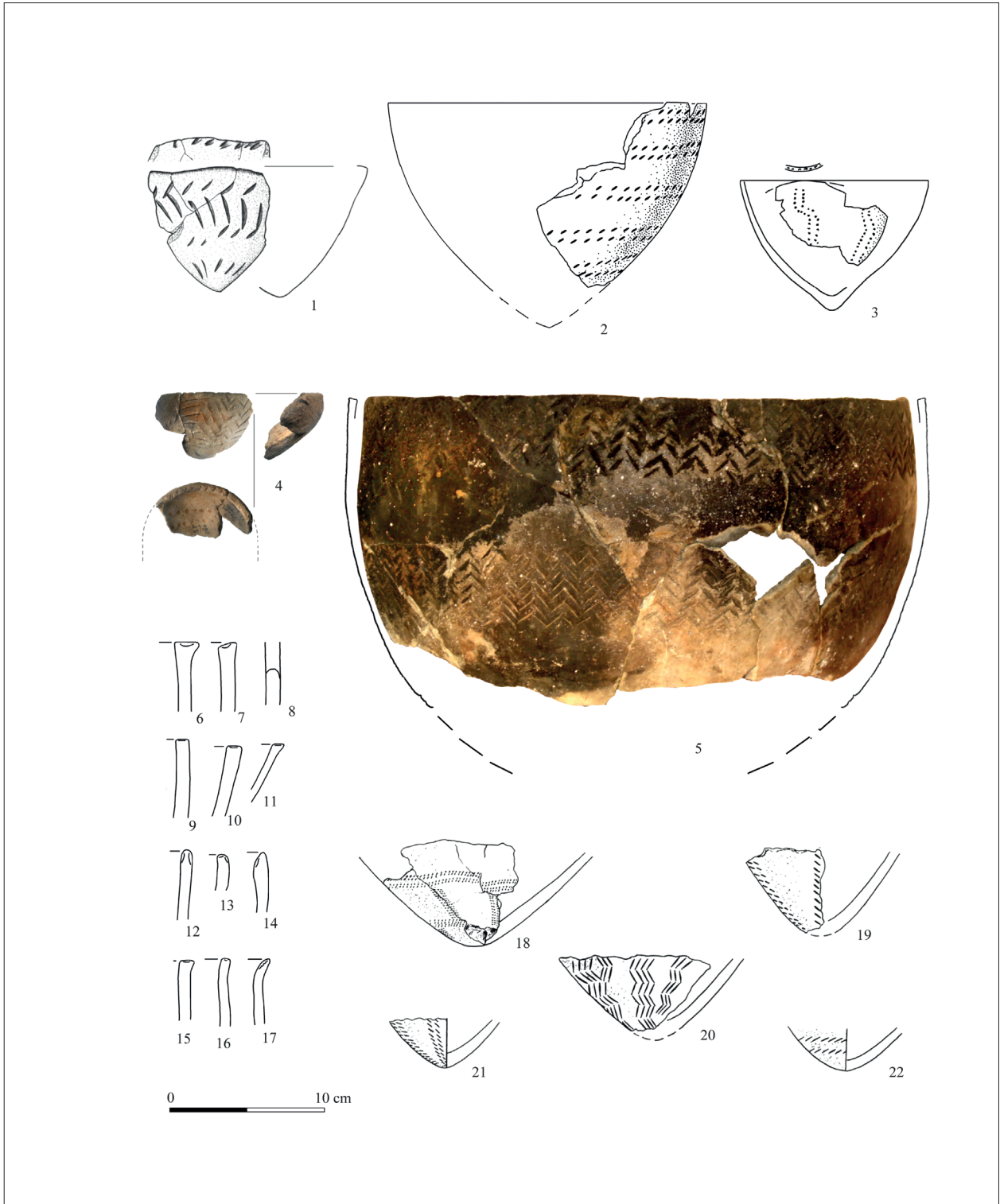


Fig. 2. Pottery of Usviaty culture from the settlement at Asaviec 2. 1–5 – forms of vessels, 6–7, 9–17 – forms of rims, 8 – typical type of belt connection, 18–22 – forms of bottoms. 2, 3, 6–22 – according to Michal Charniauski.

2 pav. Usviatų kultūros keramika iš Asaviec 2 gyvenvietės. 1–5 – indų formos; 6–7, 9–17 – pakraštėlių formos; 8 – būdingas sujungimo tipas; 18–22 – dugnų formos; 2, 3, 6–22 – pagal Michalą Charniauskį



Fig. 3. Ornamentation of the Usviaty culture pottery. After Michal Charniauski.

3 pav. Usviatų kultūros keramikos ornamentika. Pagal Michalą Charniauskį

ginning of the Northern Belarusian culture, the clay admixtures remained the same as in Usviaty culture. All these facts may indicate the dominance of the local population in formation of the new archaeological culture.

In his works, Michal M. Charniauski, the main researcher of the region in the 2nd half of the 20th and first

decade of 21st centuries, defined the impact done by bearers of the Upper Dnieper and Middle Dnieper cultures from the Dnieper region and later impact of the next Corded Ware tradition from the Baltic as the main causes of this culture's transformation (Чарняўскі, 1997, 329). Later on, on the basis of new materials, including excavations carried out by the author, the

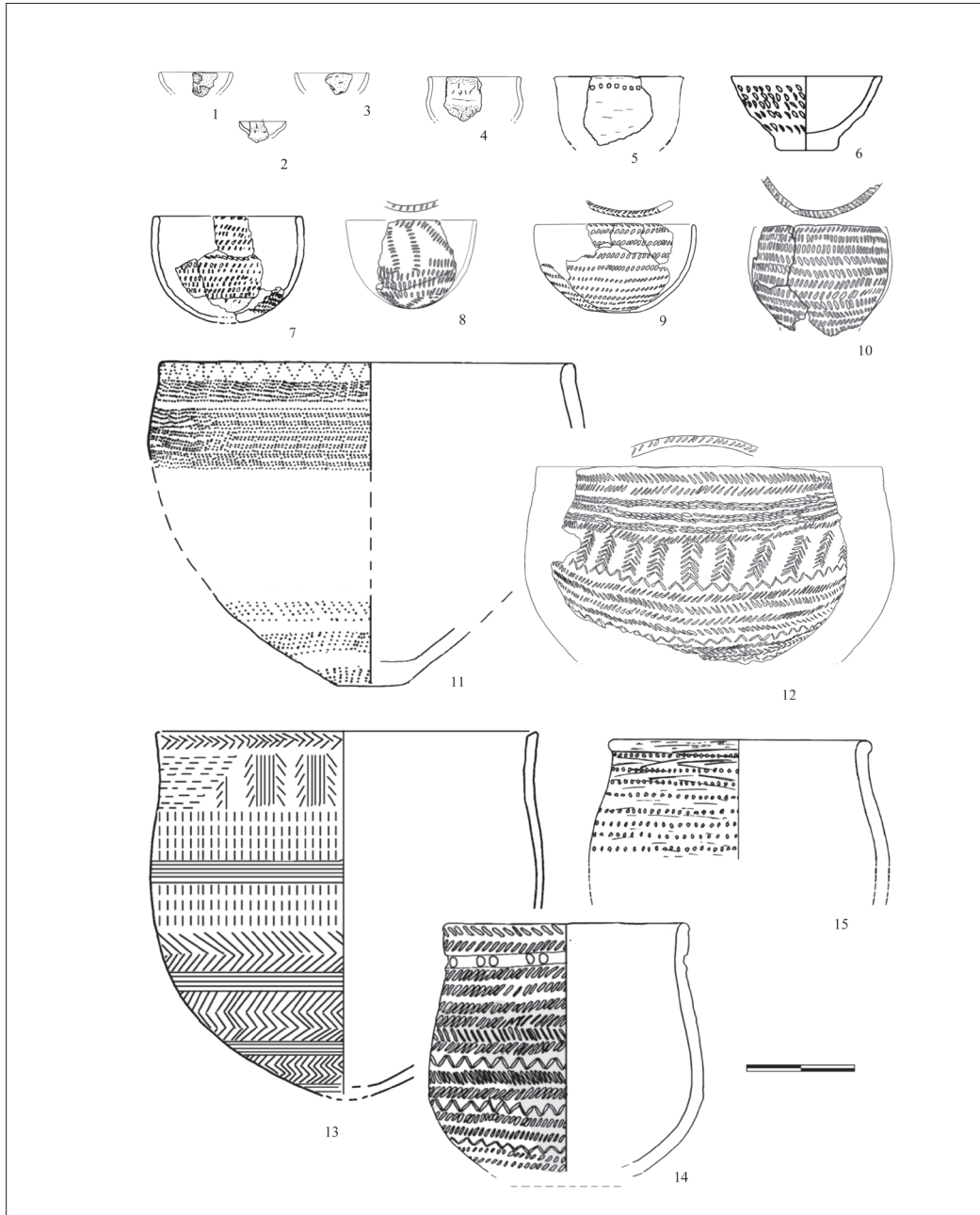


Fig. 4. Pottery of Northern Belarusian culture. 1–5, 8–10, 12 – Asaviec 2 settlement; 6, 7, 11, 13, 14 – Asaviec 7 settlement.

4 pav. Šiaurės Baltarusijos kultūros keramika. 1–5, 8–10, 12 – iš Asaviec 2 gyvenvietės; 6, 7, 11, 13, 14 – iš Asaviec 7 gyvenvietės

order and degree of the mentioned Corded Ware culture influences have not been determined (Чернявский, 2012, 96).

In years, 2008–2015 the author of this article excavated 27 sq. m. in the southern part of the Asaviec 2 settlement, close to the previous shore of the ancient lake. In this part of the settlement, the materials of the

Northern Belarusian culture (Zhyzhycha-Kryvina stage) dominate. Total capacity of the retained cultural layer at trench reaches 1.3 meters. The upper 0.2–0.3 meters of the cultural layer were destroyed during peat harvesting in the 1970s–1980s of the last century. Totally, more than 14 thousand definable fragments of ceramic were found in this trench. A little more than



Fig. 5. Most common motives of ornamentation of Northern Belarusian pottery. Asaviec 2 settlement.

5 pav. Būdingiausi Šiaurės Baltarusijos keramikos motyvai. Asaviec 2 gyvenvietė

13 thousand of found pieces belong to the Northern Belarusian culture, about 800 belongs to the Usviaty culture, 113 – to the circle of the Corded Ware cultures and about 50 are culturally undefinable (data of the initial analysis).

The major part of the materials of the Circle of the Corded Ware cultures was located in the final layers of the Usviaty culture and in the transition layer to the Northern Belarusian culture. 99 fragments of vessels were found there. From the beginning of Northern Belarusian materials dominance in the layer, ceramic fragments of the Circle of the Corded Ware cultures disappear. Closer to the middle and upper parts of the Northern Belarusian cultural layer, they reappear but in small number. Some of this latter group material is definitely linked to the Middle Dnieper culture.

Fragments of the Corded Ware culture pottery from the final Usviaty layer and the transition layer to the Northern Belarusian culture are visually very similar to the materials of the Northern Belarusian culture. It often makes them difficult to identify. The main difference is in the admixtures used in clay mass. For Corded Ware pottery, these are solely mineral impurities – medium and coarse-grained sand, grass and fireclay. There are several fragments of the Corded Ware pottery with homogeneous clay paste without visually identifiable impurities. The surface of Corded Ware fragments is covered with mostly horizontal hatchings, belts are fixed using the slanting method. Ornamentation is dominated by smooth stamp prints. There are also notches, pit impressions, comb stamps, tracings, cord prints. The combined use of different elements is quite common: smooth stamp/notches, notches/pit impressions, cord prints/pit impressions, smooth stamp/pit impressions. The main motives are the following: horizontal lines of vertical or inclined prints, horizontal zigzag. Less common are scratched triangles, lines of cord impressions (Fig. 6). Entire forms of vessels, unfortunately, were not discovered; therefore, a complete reconstruction of ornamentation is not possible.

Along with the described materials of the Circle of the Corded Ware cultures, there are fragments of vessels in the final Usviaty and the early Northern Belarusian layers that can be identified as local replicas of the Corded Ware. They are characterized by copying the morphology and ornamentation of vessels, while

the clay paste contains traditional admixtures – crushed shells and chopped grass. Similar facts of imitation are recorded with later Middle Dnieper Culture materials as well. At a nearby settlement, Asavec 7, which does not contain any materials of the early Northern Belarusian culture, almost complete forms of such pots have been discovered and reconstructed (Чернявский, 2008, 378).

Together with the pottery of the Circle of Corded Ware cultures described above, in the late Usviaty and its transition layers there was also found an accompanying collection of flint arrowheads, which may relate directly to the Circle of Corded Ware cultures or be their local replicas of original works. These are triangular arrowheads with a straight, oblique or concave base, and triangular arrowheads with a haft (Fig. 7).

There is a number of radiocarbon dates obtained from the final Usviaty and transition layers from excavation of years 2008–2015:

- 3970±60 BP (Le-10470) (2635–2288 (94.2%) cal BC (*hereinafter: OxCal v4.2.4 Bronk Ramsey (2013); r:5 IntCal13 atmospheric curve (Reimer et al., 2013)* – charcoal, 420/90–100 the end of transition layer with the dominance of the Northern Belarusian ceramics);
- 4090±45 BP (Le-10471) (2779–2559 (67.9%) cal BC – charcoal, 422/100–110 the beginning of transition layers with the dominance of Usviaty ceramics);
- 4115±120 BP (SPb-1189) (2873–2573 (67.6%) cal BC – soot, ceramic of Northern Belarusian Culture (Zhyzhytsa-Kryvina stage), 423/90–100);
- 4212±70 BP (SPb-1206) (2930–2577 (94.9%) cal BC – soot, ceramic of Usviaty culture, 420/110–125);
- 4217±120 BP (SPb-1188) (2923–2619 (66.0%) cal BC – soot, ceramics of the circle of Corded Ware cultures, 424/110–120).

CONCLUSION

The process of cultural transformation of the Usviaty culture into the Northern Belarusian culture can be attributed to the second half of the second quarter of the 3rd millennium BC. It is connected, first of all, with the penetration of traditions of the Circle of the Corded Ware cultures into the region, which began in



Fig. 6. Pottery of the Circle of the Corded Ware cultures. Asaviec 2 settlement. 1–5, 8, 12–15 – layers with the dominance of late Usviaty materials; 6, 7, 9–11 – transition layer from Usviaty to Northern Belarusian culture.

6 pav. Virvelinės keramikos kultūrų rato keramika. Asaviec 2 gyvenvietė. 1–5, 8, 12–15 – sluoksniai, kuriuose dominuoja vėlyvoji Usviatų medžiaga; 6, 7, 9–11 – pereinamieji sluoksniai iš Usviatų į Šiaurės Baltarusijos kultūrą

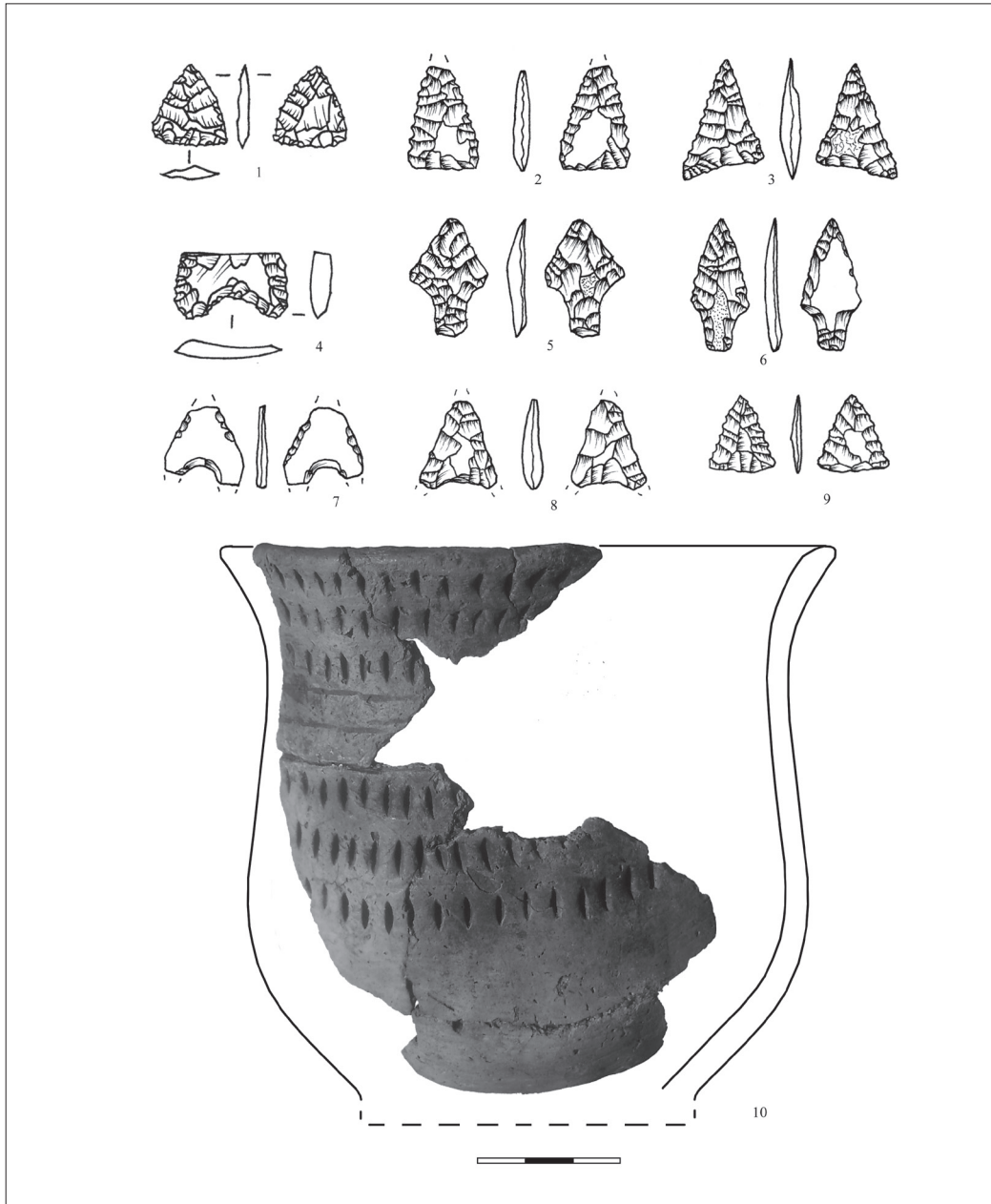


Fig. 7. Flint arrowheads and the vessel of the Circle of the Corded Ware cultures. 1–7 – the transition layer from the Usviaty culture to the Northern Belarusian culture. 8–9 – layer with the dominance of late Usviaty culture materials.

7 pav. Virvelinės keramikos kultūrų rato titmaginiai strėlių antgaliai ir indas. 1–7 – pereinamasis sluoksnis iš Usviatų kultūros į Šiaurės Baltarusijos kultūrą; 8–9 – sluoksnis, kuriame dominuoja vėlyvosios Usviatų kultūros medžiaga

the first quarter of the 3rd millennium BC and has reached its peak in the next quarter.

Directions of the penetration of the Corded Ware traditions into the region, as well as presence of actual bearers of the Circle of the Corded Ware cultures

at the settlements of the Kryvina region, remain questionable. Given the aforementioned displacement to the east of the western range of Northern Belarusian culture under pressure of the Corded Ware population of Nioman region, the western direction (River Vili-

ja) can be excluded. Also, it cannot be attributed to the impact of the Middle Dnieper culture (by the rivers Berezina and Dnieper and their tributaries) since the beginning of the existence of the Middle Dnieper culture refers to the 2600/2500 BC (Крывальцэвіч, 2006a, 41). The earliest absolute date for the Belarusian Dnieper region (burial no. 1 of cemetery Prorva 1) is 2590 BC (Крывальцэвіч, 2006b, 65).

On the other hand, a number of ornamental motives from the settlement Asaviec 2 are often found among

the Corded Ware materials at the settlements of the Baltic region. Northern traditions could have penetrated into the Belarusian Lake region through the old amber route of the Dzvina River. In this connection, the discovery of an amphora of the Globular Amphora culture in 2009 by M. M. Charniauski (Чарняўскі, 2012, 286, 1) should be noted, which may be an indicator of already formed communication paths that could have been used as the means of infiltration of a new population or cultural influence into the region.

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VIRVELINĖS KERAMIKOS KULTŪROS ĮTAKOS BALTARUSIJOS EŽERINGAJAME KRAŠTE (REMIANTIS KRYVINOS DURPYNO MIKROREGIONO MEDŽIAGA)

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Santrauka

Baltarusijos ežeringasis kraštas užima šiaurinę šalies dalį, kuri yra vandenskyros tarp Baltijos ir Juodosios jūrų baseinų paribyje. Regiono geografinė padėtis turėjo įtakos skirtingų kultūrinių tradicijų mainams. Tačiau išskirtinė geografinė padėtis prie didžiųjų regiono upių aukštupių nulėmė gana žemą kultūrinių impulsų lygį regione.

Viena po kitosėjusių Usviatų ir Šiaurės Baltarusijos kultūrų analizės, atliktos remiantis Kryvinos durpyno tyrinėtų gyvenviečių medžiaga, rodo didelį jų kaulo bei rago ir titnago industrijų panašumą. Pagrindinius skirtumus tarp šių kultūrų atspindi palyginti mažas kiekis naujų darbo įrankių ir ginklų tipų atsiradimas, ornamentika ir svarbiausia – kera-

mika. Nors išvardyti požymiai rodo tam tikrus dirbinių morfologijos ir ornamentikos skirtumus, yra daug ir jų techninio įgyvendinimo panašumų.

Kultūrinės transformacijos iš Usviatų į Šiaurės Baltarusijos kultūrą procesas gali būti priskirtas III tūkstm. pr. Kr. antrojo ketvirčio antrajai pusei. Tai sietina su virvelinės keramikos tradicijų patekimu į šį regioną. Tačiau pagrindinis naujosios kultūros elementas lieka vietos gyventojai. Pirmoji virvelinės keramikos tradicijų banga tikriausiai atėjo iš vakarų, Baltijos regiono, tačiau netrukus ji buvo sustiprinta Dniepro vidurupio kultūros įtakų iš pietų.

Vertė Egidijus Štavičius

Įteikta 2016 m. rugpjūčio mėn.