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BURIALS OF THE CORDED WARE CULTURE WITH OCHRE IN THE UPPER DNISTER REGION

ABSTRACT

Voitovych M. 2023. Burials of the Corded Ware culture with ochre in the Upper Dnister region. *Sprawozdania Archeologiczne* 75/1, 115-140.

This paper considers burials of the Corded Ware Culture (CWC) with ochre in the Upper Dnister region. Tigher concentration of these graves was recorded on the right bank of the Dnister river, within the Drohobych Upland. It has been established that now about 30 burials, in which this mineral substance was found, have been found in this territory. The ochre was deposited both inside the burials and on the original ground level under the barrow mounds. It was observed that the body of the deceased was covered with ochre, or it was placed as separate lumps inside the burial. It is noted that the remains of wooden structures in the form of flooring and ceilings are often present in burials with ochre. It was determined that burials of the CWC with ochre in the Upper Dnister region date to the period of the first half of the 3rd millennium B.C. and are related to influences from the environment of the Yamna culture.

Keywords: Corded Ware culture, Yamna culture, ochre, burial, wooden construction

Received: 30.03.2023; Revised: 24.05.2023; Accepted: 19.09.2023

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INTRODUCTION

The presence of ochre in burials of the Corded Ware culture (CWC) in Western Ukraine is a regional feature of this culture in the Upper Dnister region. In our opinion, its presence in funerary sites has not been sufficiently studied, and it is usually only mentioned briefly in publications (Sveshnikov 1974, 29, 30). No attention has been paid to the comparison of the presence of this mineral substance with discovered burial goods, structural features of burial constructions, *etc.*

So far, there are more than fifty researched barrow grave fields and individual mounds of the CWC in the Upper Dnister region, among which the presence of ochre is attested in ten. It is recorded in Bolekhivtsi, Velyka Ozymyna, Dashava, Kolpets, Koropuzh, Kulchytsi, Nyzhni Hai, Krylos (two sites), and Pidhoroddia (Fig. 1). In the Upper Dnister region, the first burials with ochre were researched by T. Sulimirski (Sulimirski 1968, 125, 131, 138), Yaroslav Pasternak (Pasternak 1936, 132; 1978, 70; Sveshnikov 1949, 151), and Markian-Ores Smishko (Śmiszko 1933, 24). In the second half of the 20th century, ochre was found during research in Kulchytsi conducted by Petro Zavada (Sveshnikov 1974, 30) and Igor Sveshnikov (Sveshnikov 1970, 3-4), as well as during the work of the latter in Bolekhivtsi (Sveshnikov 1977, 7-9, 13, 16; 1978b, 20-22). Only one grave field, where ochre was found was explored during the early 21st century – in Nyzhni Hai. It was researched by participants of the Ukrainian-Polish archaeological expedition Jan Machnik, Dmytro Pavliv and Volodymyr Petehyrych (Machnik *et al.* 2011).

During the study of the mapping of the sites where this mineral substance was found, it is noticeable that most of them are located quite compactly, in the territory of the right bank of the Dnister river within the borders of the Drohobych Upland (Kulchytsi, Velyka Ozymyna, Bolekhivtsi, Kolpets and Nyzhni Hai – Fig. 2: 1-5). The highest elevations on the territory of this Upland are recorded on the watershed areas of the Carpathian foothills (600-700 m above sea level), and the lowest – at the junction with the Upper Dnister basin (300 m above sea level). The relief is characterized by a strong dissection of the terrain. A dense network of smaller valleys in the form of gullies and ravines is superimposed on the main structure of the valleys, and floodplain strands stretch along the riverbeds (Łanczont and Hołub 2011, 164-166).

At a rather significant distance from the cluster of grave fields with ochre burials, three more barrow grave fields are located on the right bank of the Dnister river (Dashava, Krylos). The grave field in Dashava is located closer to the Drohobych Upland than the two grave fields in Krylos and is located in the territory of the Morshyn Upland (Fig. 2: 6), which covers a relatively small area to the southeast of the Stryi-Zhydachiv basin, to the north from the Carpathians and the west from Svicha river in the form of a narrow strip oriented to the northeast (Kravchuk and Zinko 2018, 73, 74, fig. 1). The grave fields in Krylos are localized within the boundaries of the Prylukvynska Upland, which are bounded by the Limnytsia and Bystrytsia-Solotvynska rivers (Fig. 2: 7, 8). The interfluvium of these



Fig. 1. Burial of the CWC with ochre in the Upper Dnister region. Illustrated by M. Voitovych

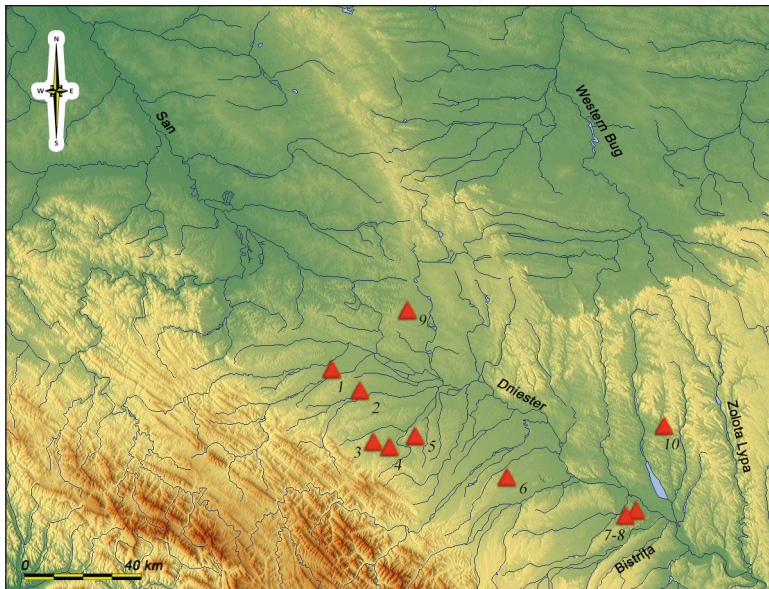


Fig. 2. Location of barrow grave fields of the Corded Ware culture with ochre in the Upper Dnister region: 1 – Kulchytsi, Sambir district; 2 – Velyka Ozymyna, Sambor district; 3 – Bolekhivtsi, Drohobych district; 4 – Kolpets, Drohobych district; 5 – Nyzhni Hai, Drohobych district; 6 – Dashava, Stryi district; 7-8 – Krylos, Ivano-Frankivsk district; 9 – Koropuzh, Lviv district, 10 – Pidgoroddia, Ivano-Frankivsk district. Illustrated by M. Voitovych

rivers is characterized by significant elevations, the axis of which runs along the Halych-Maidan line (Tsys 1962, 173).

Ochre was found twice on the left bank of the Dnister river. In the first case, it is evidenced in the eastern part of the San-Dnister Uplands (Koropuzh – Fig. 2: 9), which is characterized by the spread of glacial and hydro-glacial forms of relief and covers the main central part of the San-Dnister interfluvium with the Main European watershed (Kravchuk and Zinko 2018, 71, fig. 1). In the second case, it is found in a grave field in Pidhoroddia (Fig. 2: 10), located in the territory of Opillia between the Gnyla Lypa and Narayivka rivers, which is characterized by a hilly landscape (Herenchuk and Koinov 1973, 8). The grave field in Pidhoroddia covers the most eastern position together with the cluster of barrows in Krylos among the group of barrow burials with ochre in the region.

In the Upper Dnister region, this mineral substance was discovered under twenty-seven barrows. This does not include the barrow grave field in the “Glyna” Place in Krylos since archaeological materials and scientific documentation from the unpublished studies of Ya. Pasternak have not survived. It is only known that the presence of ochre was evidenced here (Sveshnikov 1949, 151). It is not clear how many of the examined barrows (four were excavated) contain it. The presence of ochre was confirmed in two out of three researched barrows in Nyzhni Hai (Barrows 8 and 10; Machnik *et al.* 2011, 96, 116), as well as in seven of eleven excavated barrows in “Mohylky” Place in Kulchytsi (Barrows 1-4, 7, 8 and 12; Sveshnikov 1970, 3, 4; 1974, 30; Sulimirski 1968, 136). A much larger amount of ochre was recorded in the barrow grave field in Bolekhivtsi. There, it was present in eight of the twelve investigated barrows (Barrows 2, 3, 5, 7, 9, 10, 13 and 14; Sveshnikov 1977, 7, 9, 13, 16, 17; 1978b, 18-22).

Under the mounds of the barrows, ochre was found both at the level of the ancient surface and within the burial pits.

BURIALS WITH OCHRE

Ochre within the grave pits was recorded twenty-six times. It was used for covering the bodies of the deceased or placed near them. However, first, we have to give a general description of the burial pits researched under the mounds of the burial pits.

Under the mounds of the barrows, which differ from each other by their parameters (diameter – 10-40 m and height 0.4-3 m), there is an elongated-oval, rarely rectangular, burial pit with parameters from 0.7 × 0.4 to 2 × 1.7 m dug into the ancient soil, sometimes into the bedrock, mainly in the central part of the barrow. Constant values for the depths of burial features are not observed. In some cases, they are barely dug into the ancient soil (Bolekhivtsi, Barrows 2, 9; Kulchytsi, Barrow 7; Nyzhni Hai, Barrow 10, Features 4 and 6) in others – 0.6-0.8 m deep (Bolekhivtsi, Barrows 10 (Burial 2) and 13 (Burials 1 and 2), Velyka Ozymyna, Barrow 2; Kolpets, Barrow 2; Koropuzh; Kulchytsi, Barrow 2). Instead,

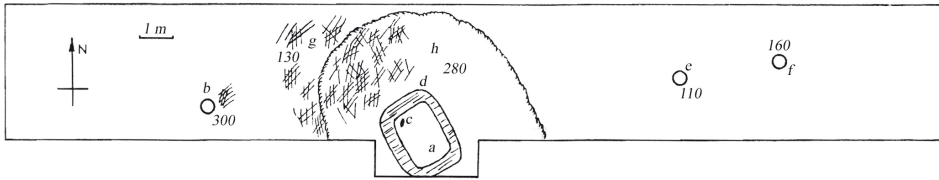


Fig. 3. Kolpets, Drohobych district. Plan of the Barrow 2: a – shaft grave; b – broken vessel; c – flint axe; d – imprints of oak logs covering the shaft grave; e, f – odd potsherds; g (crossed) – an area within which lay scattered lumps of charcoal, small flint chips and a few odd potsherds; h – area seemingly covered by a layer of logs; numbers indicate the depth (in cm) at which the objects were found. After Sulimirski 1968

the spatial orientation of the graves according to the cardinal directions is more constant. Thus, about two-thirds of the burials are oriented along the northeast-southwest line. Less often – west-east (Bolekhivtsi, Barrow 13, Burial 1; Koropuzh; Kulchytsi, Barrow 7; Nyzhni Hai, Barrow 10, Feature 6) and northwest-southeast (Bolekhivtsi, Barrow 2; Kolpets, Barrows 2 and 5 – Table 1). There are no burials with the north-south orientation of the graves.

Within two barrow grave fields, in burials with ochre, the fact is recorded that the burial pits were covered with wooden flooring, which is striking in size. For example, such a burial was researched under Barrow 2 in Kolpets. The remains of a floor with a diameter of 7-8 m made of oak logs, which was located in the central part of the barrow, were found above the burial pit (Fig. 3). Under it was a rectangular burial 1.7 × 2 m in size, traced at the original ground level. The walls of the pit are also overlaid with wood. The skeleton of the buried person was not preserved. Pieces of red ochre were found at the bottom of the feature. Near the burial (close to the southern corner) lay a flint axe with a lenticular cross-section, which has not survived (Sulimirski 1968, 133).

The remains of even larger flooring, which overlapped two burials, were discovered in Barrow 13 in Bolekhivtsi. It was represented by a dark-brown layer 5 cm thick. It was recorded over an area of 8.5 × 12 m in size. Besides, in Burial 1 under the flooring, the remains of some wooden construction were also found (Fig. 4). That burial was dug into the level of the ancient surface and bedrock to a depth of 0.6 m from the level of its discovery. It has a rectangular form with bevelled edges of 0.6 × 1.8 in size and is oriented along the east-west line with a deviation to the southeast and northwest. Also, across the long walls of the burial pit, two half-round stains remained from the wooden pillars. From the south, they protrude to 0.18 m beyond the burial and are located at an equal distance from the western wall (0.4 m) and from the first and second pillars. Three well-traced pillars were 0.22 m in diameter. The fourth one was ruined by a foxhole. On the flat bottom of the pit, in its western part, two concentrations of red ochre were found (Fig. 5: 1). No skeleton or grave gods were discovered there (Sveshnikov 1978b, 19, 20).

Remains of wooden structures were also found in other areas. Taking into account the peculiarities of the source base, it is not always clear what kind of structures were built. For

Table 1. Ochre in burials of Corded Ware Culture of the Upper Dnister region

| No | Name of the site, No of barrow/ burial | Diameter of the barrow (m) | Height of the barrow (m) | Location of the burial | Form of the burial | Size of the burial (m) | Depth of the burial (m) | Orientation of the burial | Posture of the skeleton | Location of ochre in the burial | Remarks |
|----|--|----------------------------|--------------------------|------------------------|--------------------|------------------------|-------------------------|---------------------------|-------------------------|---|--|
| 1 | Bolekhivtsi, bar. 2 | 14 | 0.45 | center | elongated-oval | 1.2×0.9 | ~0.2 | northwest—southeast | | on the bottom, the northeast part | ochre is found on the level of the ancient horizon |
| 2 | Bolekhivtsi, bar. 3 | 20 | 0.66 | center | elongated-oval | 1.32×0.7 | 0.4 | northeast – southwest | | on the bottom, a larger concentration in the western part | ochre imitated the position of the deceased crouched on the side |
| 3 | Bolekhivtsi, bar. 5 | 20 | 0.86 | | - | - | - | - | - | - | ochre on the level of the ancient horizon in the central part |
| 4 | Bolekhivtsi, bar. 7 | 28 | 0.86 | center | elongated-oval | 1.9×1.2 | 0.35 | northeast – southwest | | on the bottom, sporadically, a larger concentration in the northwest part | walls of the burial are burnt |
| 5 | Bolekhivtsi, bar. 9 | 16 | 0.32 | center | elongated-oval | 0.65×0.95 | 0.25 | northeast – southwest | | several pieces on the bottom, larger concentration in the northwest part | vessels with ochre in the burial |

| | | | | | | | | | | | |
|----|-------------------------------|-------|------|-----------|--------------------|--------------------|-----|--------------------------|--|---|--|
| 6 | Bolekhivtsi, bar. 10, b. 2 | 40 | 1.25 | center | elongated- oval | 1.05×1.75 | 0.6 | northeast – southwest | | western part | ochre on the level of the ancient horizon in the central part of the barrow, remains of wooden construction |
| 7 | Bolekhivtsi, bar. 13, b. 1 | 24 | 1.57 | periphery | rectangular | 1.8×0.6 | 0.6 | west – east | | two spots on the bottom in the southwest part | three concentrations of ochre on the level of the ancient horizon near the burial I, remains of wooden construction |
| 8 | Bolekhivtsi, bar. 13, b. 2 | 24 | 1.57 | periphery | elongated- oval | 1.73×1.05 | 0.6 | northeast – southwest | | southwest part | |
| 9 | Bolekhivtsi, bar. 14 | 36×42 | 1.26 | center | elongated- oval | unclear outline | | | | among the infill | |
| 10 | Velyka Ozymyna, bar. 2 | 21 | 0.6 | center | rectangular | 1.9× 0.85-1.1 | 0.6 | northeast – southwest | crouched on the right side, head to the southwest | skeleton covered by a layer of ochre | individual pieces of ochre were discovered near the chest and the scull, remains of wooden construction |
| 11 | Dashava, bar. 1 | 22 | 0.7 | | | | | | | | individual pieces of ochre on the level of the ancient horizon |
| 12 | Kolpets, bar. 2 | 28 | 3 | center | rectangular | 1.8×1.3 | | northwest – southeast | | individual pieces on the bottom | remains of the wooden construction |

| No | Name of the site, No of barrow/ burial | Diameter of the barrow (m) | Height of the barrow (m) | Location of the burial | Form of the burial | Size of the burial (m) | Depth of the burial (m) | Orientation of the burial | Posture of the skeleton | Location of the burial | Remarks |
|----|--|----------------------------|--------------------------|------------------------|--------------------|------------------------|-------------------------|---------------------------|---|--------------------------------------|---|
| 13 | Kolpets, bar. 3 | 18 | 1 | center | | | | | | individual pieces | |
| 14 | Kolpets, bar. 5 | 30 | 0.5 | center | rectangular | 2×1.7 | 0.75 | northwest – southeast | | individual pieces on the bottom | ochre, remains of wooden construction |
| 15 | Kolpets, bar. 7 | 20 | 0.8 | center | rectangular | 1.8×1.2 | | northeast – southwest | | individual pieces on the bottom | |
| 16 | Koropuzh | 26 | 1 | center | rectangular | 1.9×1 | 0.8 | west – east | crouched on the right side, head to the west | skeleton covered by a layer of ochre | remains of the wooden construction |
| 17 | Krylos, bar. 1 (Dibrova Place) | | | | | | | | | skeleton covered by a layer of ochre | |
| 18 | Kulchyysi, bar. 1 | 27 | 1.5 | center | rectangular | 1.7×0.8 | 0.55 | northeast – southwest | crouched on the right side, head to the southwest | skeleton covered by a layer of ochre | more intensely applied on the head |
| 19 | Kulchyysi, bar. 2 | 28 | 0.6 | center | rectangular | 2×1.2 | 0.65 | northeast – southwest | | southwest part | remains of the wooden construction |
| 20 | Kulchyysi, bar. 3 | 24 | 0.5 | | | | | | | | pieces of ochre on the level of the ancient horizon |

| | | | | | | | | | | | |
|----|-------------------------------|---------|-----------|-------------|----------|------|-----------------------|---------------------------------|--|------------------------------------|--|
| 21 | Kulchytysi, bar. 4 | 20 | center | oval | | | | | | presence of ochre | |
| 22 | Kulchytysi, bar. 7 | 10 | periphery | rectangular | 0.9×0.65 | 0.16 | west – east | crouched, head to the west | skeleton covered by a layer of ochre | | |
| 23 | Kulchytysi, bar. 8 | | | | | | | | individual pieces of ochre | | |
| 24 | Kulchytysi, bar. 12 | 13 | periphery | rectangular | 1.7×1 | 0.45 | northeast – southwest | crouched, head to the southwest | skeleton covered by a layer of ochre | | |
| 25 | Nyzhni Gai, bar. 8, ob. 4 | 15×16.7 | center | rectangular | 1.1×0.65 | 0.25 | northeast – southwest | | individual pieces of ochre on the bottom | wooden construction? | |
| 26 | Nyzhni Gai, bar. 10, ob. 4 | 14×16 | periphery | rectangular | 1.1×0.5 | 0.1 | northeast – southwest | | several individual pieces of ochre in the northeast part | | |
| 27 | Nyzhni Gai, bar. 10, ob. 6 | 14×16 | periphery | rectangular | 0.7×0.4 | 0.1 | west – east | | individual pieces of ochre in the central and northwest part | | |
| 28 | Pidhoroddia, bar. 1 | | | | | | | | skeleton covered by a layer of ochre | more intensely applied on the head | |
| 29 | Pidhoroddia, bar. 2 | | | | | | | | skeleton covered by a layer of ochre | more intensely applied on the head | |

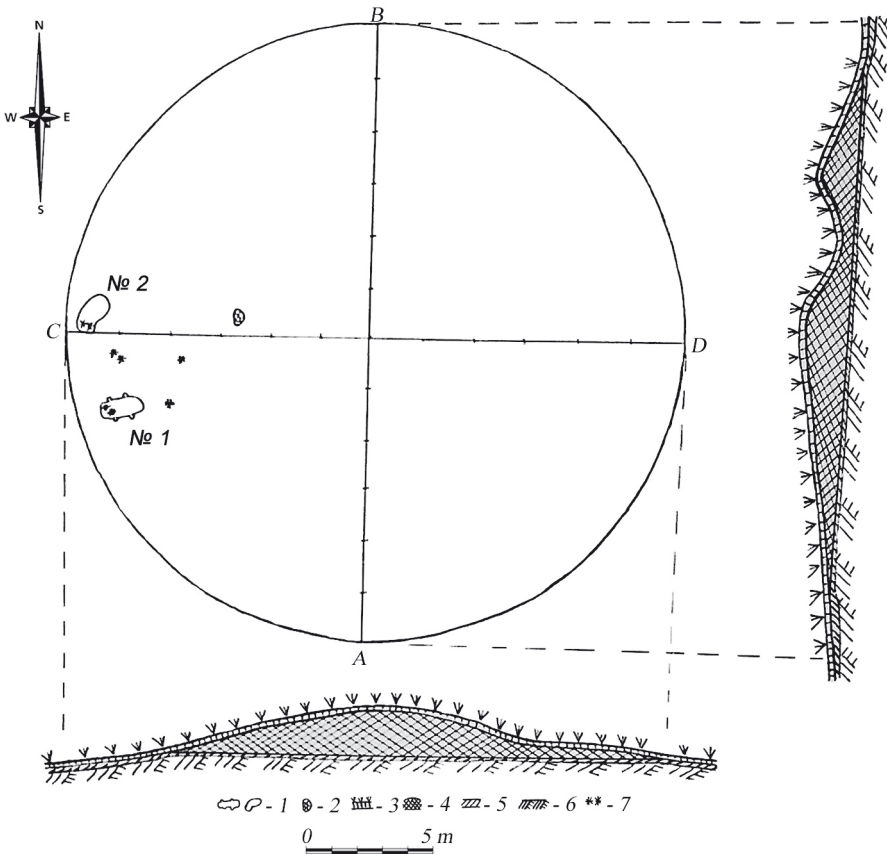


Fig. 4. Bolekhivtsi, Drohobych district. Plan and profiles of Barrow 13.

Legend: 1 – Burials 1, 2; 2 – hearth; 3 – modern horizon and humus; 4 – Barrow mound; 5 – ancient humus; 6 – bedrock; 7 – ochre. After Sveshnikov 1978

instance, we know that a layer of oak logs was recorded in Barrow 2 in Kulchytsi at a distance of 0.1 m from the bottom of the pit (Sulimirski 1968, 136). It is not clear whether the bottom of the burial was covered with these oak logs, or they were the remains of the floor that fell on the bottom of the burial. Several burials are known, the bottom of which was paved with oak logs, and the same coverage was on their top (Bolekhivtsi, Barrow 10, Burial 2; Koropuzh; Sulimirski 1968, 125, 126; Sveshnikov 1977, 17-19).

Among the graves with wooden structures, there are also ones with walls covered with wood. In particular, the grave from Barrow 5 in Kolpets is also overlapped by oak logs from above (Sulimirski 1968, 135). The presence of a wooden structure in Feature 4 of Barrow 8 in Nyzhni Hai, is testified by the depressions in the bottom of the pit near its walls on the northern and eastern sides with a width of 5-10 cm, 10-15 cm deeper than the pit's bottom.

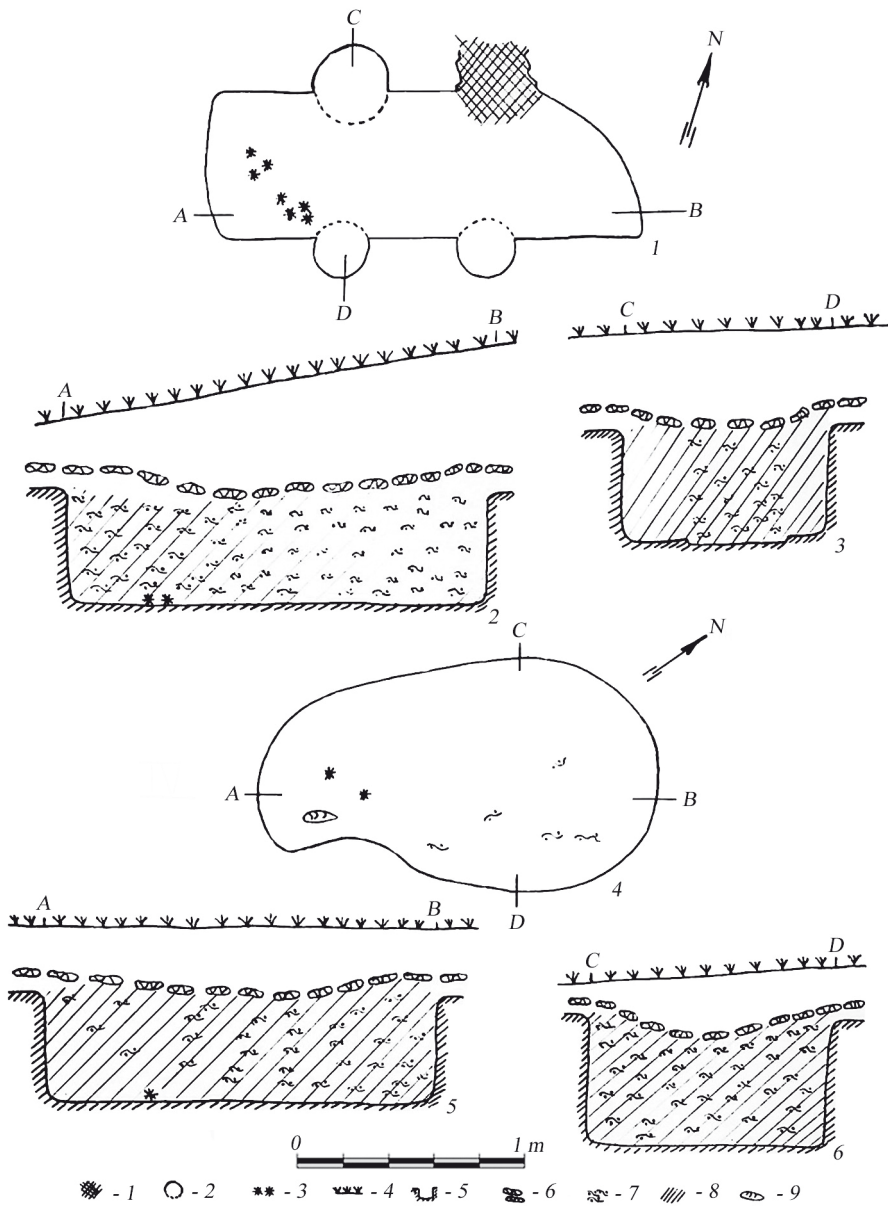


Fig. 5. Bolekhivtsi, Drohobych district. Plan and profiles of the burials of Barrow 13.

Legend: 1 – plan of Burial 1; 2, 3 – profiles of Burial 1; 4 – plan of Burial 2; 5, 6 – profiles of Burial 2.
 Legend: 1 – foxhole; 2 – traces of pillar; 3 – ochre; 4 – modern surface; 5 – outlines of burials; 6 – traces of wooden covering; 7 – charcoal; 8 – in-fill of burials; 9 – sharpening stone.
 After Sveshnikov 1978



Fig. 6. Kulchytsi, Sambir district. Burial from Barrow 4 on the level of its discovery. Photo by Ya. Pasternak (Scientific archive of the Department of Archaeology of the Ivan Krypiakevych Institute of Ukrainian studies of NAS of Ukraine)

They were probably grooves in which the planks located along the burial walls were inserted (Machnik *et al.* 2011, 62, figs 14-15).

It can be assumed that the oval-shaped burial pit from Barrow 4 in Kulchytsi could also have been covered with wood. This fact is indicated by the darker colour of the in-fill at the edges of the feature at the level of its discovery. Unfortunately, the results of the studies conducted by Y. Pasternak have not been published yet. We managed to identify in the archive of the I. Krypiakevych Institute of Ukrainian Studies of the National Academy of Sciences of Ukraine two photos that show this burial during its discovery and after removal of the in-fill from it. In one of the photos, we can see that the darker spots along the walls of the pit in some places reached a width of up to 0.2 m, and on one of the sides of the burial, there are traces of at least three split logs (Fig. 6), which by their appearance similar to the structural features of funerary features from the barrows in Bykiv, Bihiyivka Place (Machnik *et al.* 2006, 280, 281; fig. 1; foto 10; Machnik *et al.* 2009b, 292, 293; Czopek *et al.* 2016, 328-330).

An interesting construction of a burial pit was researched in Barrow 10 in Bolekhivtsi. Three burial pits were discovered there, that probably belong to adult persons. Such an assumption can be made based on the rather large sizes of these pits (1.0 × 1.65; 1.05 × 1.75; 0.8 × 1.4 m). However, ochre was found in Feature 2, where the grave was surrounded by a heap of bedrock clay, under which, at a small distance from the long walls of the burial, wooden logs were laid in parallel (one on either side). At a depth of 0.3 m from the bottom of the burial pit, a layer of rotten wood was found, which originally covered the burial, but over time it collapsed into the pit's in-fill. The same layer was found at the bottom of the pit (Fig. 7: 3, 7). Its thickness may indicate that it represents the remains of wooden planks placed lengthwise on the long sides of the pit, and in its central part, they were located across. Several pieces of red ochre were lying on wooden planks near the western corner of the burial. No such structure is witnessed in the two other burials, so Burial 2 was probably the central one. It is also located closest to the center of the mound (Sveshnikov 1977, 17-19).

It is worth noting that in the Upper Dnister region, a heap of bedrock clay around the burial was witnessed only three times – Kulchytsi, Barrow 12; Bolekhivtsi, Barrow 10; Nyzhni Hai, Barrow 7 (Voitovych 2020b, 139). Among these burials, in addition to the one from Bolekhivtsi, described above, ochre was found in the middle of the burial in Barrow 12 in Kulchytsi (Sveshnikov 1970, 2-4).

An unusual discovery was made under the mound of Barrow 7 in Bolekhivtsi. This is the only researched burial of the CWC in the Ukrainian Subcarpathian region, where the walls and bottom of the burial pit were burned into a pink colour. In general, the walls of this burial are much harder than the surrounding ground. The in-fill consisted of saturated black soil with pieces of charcoal and ash. Near the northeastern edge of the burial three larger pieces of charcoal – the remains of a burnt pillar and a plank (deck) were recorded. The bottom of the burial is covered with a layer of ochre (however irregular). Its larger concentration was found near the southwestern edge. No traces of skeleton or grave goods were found (Sveshnikov 1977, 15, 16).

Now let us consider how exactly the ochre got into the burials. It should be recalled that we are dealing with a source base formed from half a century to a century ago (except the research conducted in Nyzhni Hai). Therefore, it is quite difficult to separate bits of information and systematize them. Additional inconvenience is caused by the absence, in most instances, of preserved skeletons. Generally, in five cases it is noted that the deceased lay in a crouched position in the middle of the grave (Velyka Ozymyna, Barrow 2; Koropuzh; Kulchytsi, Barrows 1, 7, 12). Among them in three cases was indicated that the skeleton lays on its right side – Velyka Ozymyna, Barrow 2; Koropuzh, Kulchytsy, Barrow 1 (Sulimirski 1968, 125, 136, 138; Sveshnikov 1970, 3, 4; 1971, 64). Also, in three instances, the head of the deceased was directed to the southwest (Velyka Ozymyna, Barrow 2; Kulchytsi, Barrows 1, 12), less often to the west (Koropuzh; Kulchytsi, Barrow 7; Sulimirski 1968, 125, 136, 138; Sveshnikov 1970, 3, 4; 1971, 64).

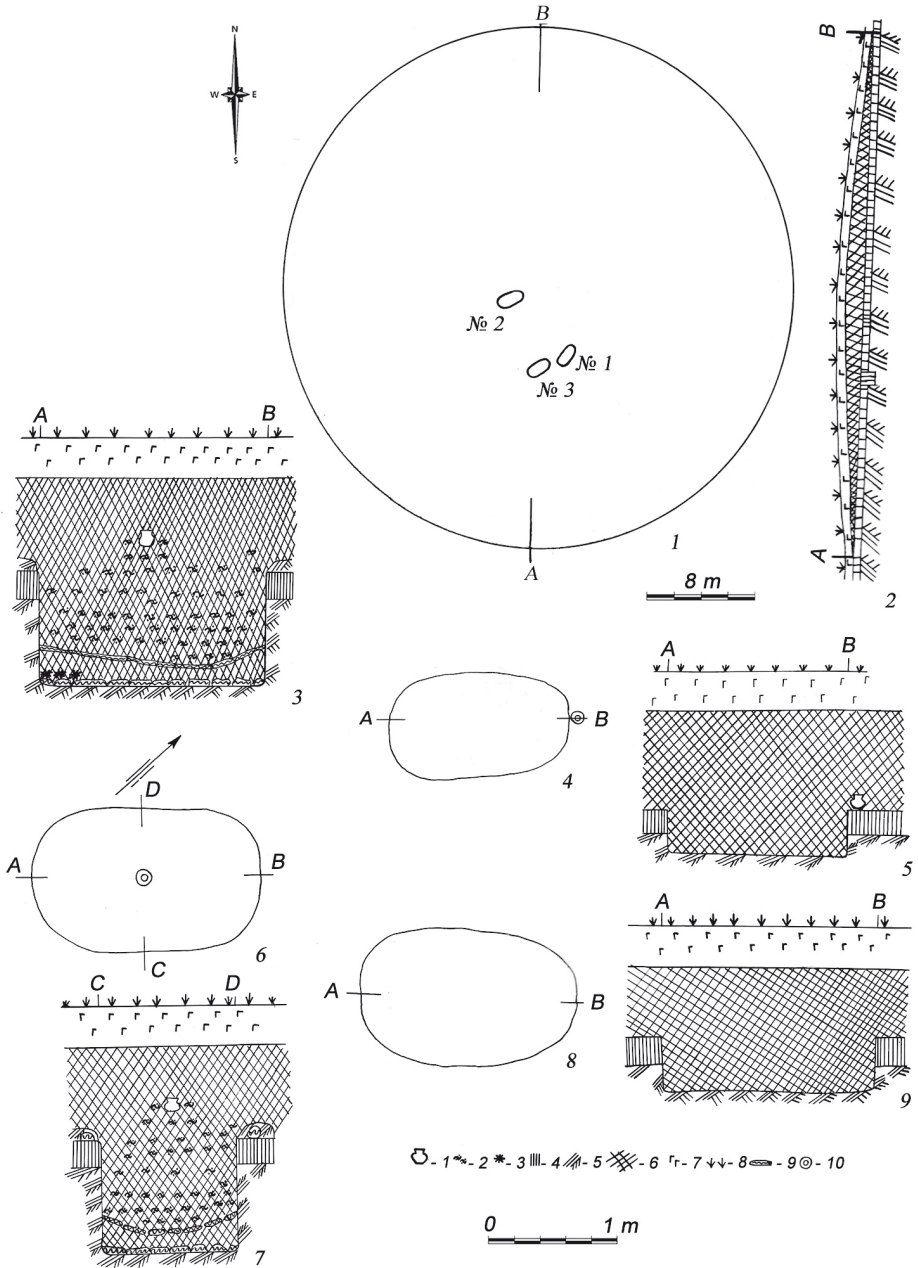


Fig. 7. Bolekhivtsi, Drohobych district. Plan of Barrow 10 (1), stratigraphic profile (2), plans and profiles of the burial of Barrow 1: 3, 6, 7 – Burial 2; 4, 5 – Burial 3; 8, 9 – Burial 1. Legend: 1, 10 – ceramic ware; 2 – pieces of charcoal; 3 – ochre; 4 – loam soil; 5 – bedrock; 6 – infill of burials; 7 – humus; 8 – level of modern surface; 9 – pieces of wood. After Sveshnikov 1977

More often can be noted that the skeleton is covered with a layer of ochre (Bolekhivtsi, Barrow 3; Velyka Ozymyna, Barrow 2; Koropuzh; Kulchytsi, Barrows 1, 7, 12; Pidhoroddia, Barrows 1, 2; Sulimirski 1968, 135, 136, 138, Sveshnikov 1970, 3-4; 1974, 30; 1977, 9; Pasternak, 1978, 70). For example, in Barrow 12 in Kulchytsi, the bottom of the pit was covered with a thick layer of ochre, which repeated the pose of the buried person. The deceased was lying with his head directed to the southwest. His left hand was placed across the abdomen, and the right hand was bent at the wrist and directed to the right shoulder (Sveshnikov 1970, 3, 4). It seems that often the whole body of the buried person was covered with ochre. Moreover, it is emphasized that ochre was more intensively applied to the skulls of the deceased (Kulchytsi, Barrow 1; Pidhoroddia, Barrows 1, 2; Sulimirski 1968, 136; Pasternak 1978, 70). We can assume that the head of the deceased from Barrow 7 in Bolekhivtsi was also covered with ochre more intensively because I. Sveshnikov noted that relatively more remains of ochre were found in the southwestern part of the grave (Sveshnikov 1977, 16).

In some graves, the ochre was found only on one side of the burial, most likely, in the place where the head of the buried person was placed. It is most often recorded in the western part of the grave: Bolekhivtsi, Barrow 3, 10 (Burial 2), 13 (Burial 1, 2); Kulchytsi, Barrow 2; Nyzhni Hai, Barrow 10 (Burial 6; Sulimirski 1968, 136; Sveshnikov 1977, 9, 19; 1978, 20, 21; Machnik *et al.* 2011, 116). Separate pieces of ochre were also found in the burials. In this form, it was discovered in a barrow grave field in Kolpets (Barrows 2, 3, 5, 7; Sulimirski 1968, 133-135) and Nyzhni Hai (Barrow 8, Feature 4; Barrow 10, Features 4 and 6; Machnik *et al.* 2011, 62, 96, 116). As a result of the identification of the mineralogical and chemical composition of four samples of ochre obtained from the Barrows in Nyzhni Hai, it was established that its main component is hematite formed by the process of purposeful heating of ochre, which led to the appearance of a red colour (Ratajczak and Sala 2011, 188, 189). Ochre of the same colour was discovered in Barrow 1 in Krylos (Pasternak 1936, 132). In the burial in Koropuzh, yellow and red ochre is present (Sulimirski 1968, 125).

In two cases, ochre was placed in a ceramic vessel as a gift for the buried person. A small bowl discovered by P. Zavada in Barrow 7 in Kulchytsi was filled with it (Sveshnikov 1974, 30). In another case, recorded in Barrow 9 in Bolekhivtsi, we know that ochre was found in the form of separate pieces at the bottom of the burial pit, and its greater concentration was discovered above and below the remains of a poorly preserved ceramic vessel, of which only several fragments survived. According to I. Sveshnikov, this small-sized vessel was decorated with a horizontal impressions of a thin cord and a band of triangular notches (Sveshnikov 1977, 17).

Unfortunately, in some cases, there is only a brief note that a burial with ochre had been found (Krylos, Barrow 1; Kulchytsi, Barrow 4; Pasternak 1936, 131, 132; 1937, 251). In the case of Barrow 8 in Kulchytsi, we find out about the presence of ochre from the metrical documentation which accompanies the artefacts from this Barrow, stored in the stock

collection of the Department of Archeology of the I. Krypiakevych Institute of Ukrainian Studies of the National Academy of Sciences of Ukraine. It says that this material and clods of the earth with ochre are from the grave in Barrow IV (numbering of the barrow by P. Zavada).

INVENTORY OF BURIALS

Graves of the CWC in the Upper Dnister region are in most cases quite poor. The same trend is observed in burials with ochre. Only 17 of them were accompanied by grave goods. Two Barrows in Pidhoroddia are not included here. The researcher of this site gives information that fragments of unornamented vessels, flint and stone axes were found inside the burials, but without specifying what exactly was found in each burial (Pasternak 1978, 70). Only in Barrow 3 in Kolpets, was the burial accompanied by ceramic ware together with stone and flint items. Tadeusz Sulimirski provides information that three vessels decorated with a cord that could not be restored (a cup, a bowl, and a ladle), a flint knife, and a battle ax made of lime sandstone were discovered here (Sulimirski 1968, 133). In the other two cases, vessels accompanied by stone or flint items were discovered in the graves. Thus, a ceramic vessel from Barrow 7 in Kulchytsi was found together with a chisel made of sandstone (Fig. 8: 1-4; Sveshnikov 1974, 30) and a flint knife was discovered inside the burial in Koropuzh together with a clay amphora (Sulimirski 1968, 125).

In two of the three burials in Nyzhni Hai (Barrow 8, Feature 4, Barrow 10, Feature 6) one goblet was placed in each (Machnik *et al.* 2011, 74, 116). One vessel that could not be restored came from the burial of Barrow 9 in Bolekhivtsi (Sveshnikov 1977, 17). At the same grave field, several small fragments of ceramic vessel were found in the burial of Barrow 14 (Sveshnikov 1978b, 22). In another case, a clay amphora stood near a burial pit (Kulchytsi, Barrow 2; Sulimirski 1968, 136).

In Burial 2 of Barrow 13 in Bolekhivtsi, a grinding stone, most likely made of sandstone pebble, was found. It was recorded in the southwestern part of the grave together with two pieces of red ochre (Sveshnikov 1978b, 21).

Objects made of flint, as a gift to the deceased, were discovered in graves much more often than stone artefacts. Three graves contain one axe each. Moreover, one of them is rectangular-sectioned (Kulchytsi, Barrow 1), and two are lenticular-sectioned (Kolpets, Barrows 2 and 5; Sulimirski 1968, 133, 134, 136, fig. 15: 14). A lenticular axe from Barrow 5 in Kolpets was found together with a flint knife (Sulimirski 1968, 134). Another knife made on a blade of Turonian flint from the Volhynian region was found inside the burial of Barrow 2 in Bolekhivtsi (Sveshnikov 1977, 7; pl. 13: 10). Two scrapers that came from the grave of Barrow 4 in Kulchytsi were deposited in the Museum of the Shevchenko Scientific Society in Lviv (Pasternak 1937, 251).

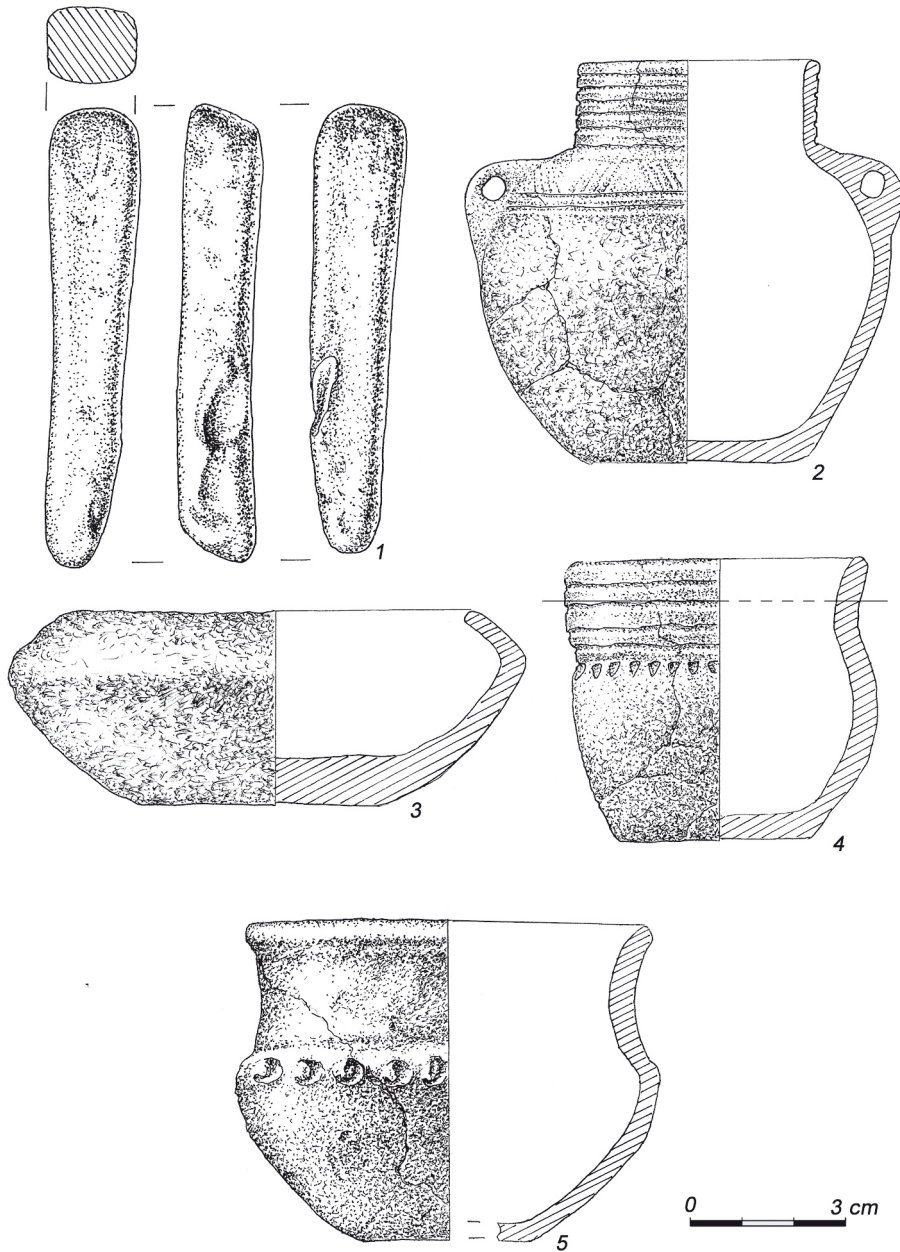


Fig. 8. Kulchytsi, Sambir district. Ceramic (2-5) and stone (1) items from Barrows 7 (1-4) and 8 (5).
Illustrated by M. Voitovych

OCHRE AT THE ORIGINAL GROUND LEVEL

Ochre at the level of the ancient surface is witnessed six times. In three of them, it was also found inside the burials researched there (Bolekhivtsi, Barrows 2, 10 and 13). That gives us a reason to associate its presence here with these burials and indicate certain rituals during the burial. In particular, the ochre in Barrow 10 in Bolekhivtsi was found in the central part and is located closest to Burial 2, inside which it is also present (Sveshnikov 1977, 19, 20). It is interesting that in Barrow 13 it was found in three concentrations and placed around Burial 1. The accumulations of ochre were 5-10 cm in diameter. The first was placed at a distance of 1 m to the east of the burial, the second – 2.5 m to the northeast, and the third – 2 m to the north (Sveshnikov 1978b, 20).

A different situation can be seen under Barrow 3 in Kulchytsi. Here, at a distance of 3 m to the southeast, a burial pit without a preserved skeleton was discovered. However, it had

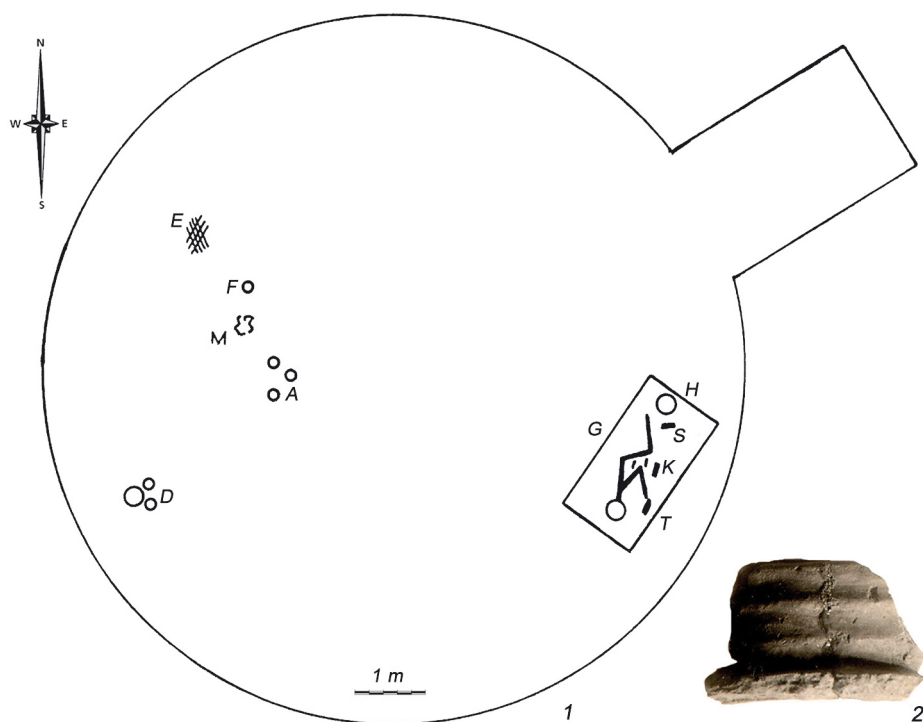


Fig. 9. Kulchytsi, Sambir district. 1 – Plan of Burial 3 (legend: A, D, F – fragments of amphorae, found at different depths in the barrow mound and ancient horizon; E – charcoal; G – burial; H – goblet; K – two flint arrowheads and scraper; S – flint axe; T – damaged perforated stone axe); 2 – amphorae rim sherd from the eastern part of Barrow 3 (by 1 – Sulimirski 1968; 2 – Scientific archive of the Department of Archaeology of the Ivan Krypiakevych Institute of Ukrainian studies of NAS of Ukraine)

a fairly rich accompanying inventory consisting of a clay goblet with a rounded bottom, flint arrowheads, a side-scraper, a flint axe, and a stone axe. No traces of ochre were found in the burial (Fig. 9: 1). On the other hand, in the western part of the mound, large pieces of it were found, which were between the fragments of ceramic vessels originating from the amphora and the remains of charcoal (Sulimirski 1968, 136, Plan 30: 1). During the work with archival materials, it was possible to find a photo with an image of the neck of an amphora originating from this accumulation (Fig. 9: 2). The ornamentation of this find in the form of three horizontal grooves attracts attention. It represents the manner of decoration of the early CWC products (Młodkowska-Przepiórowska and Włodarczak 2011, 202). It is most likely that in the place where the ochre and the remains of the broken amphora were found, there was a burial, the traces of which could not be found. Instead, the discovered burial in the eastern part of the mound should be dated no earlier than the middle of the 3rd millennium BC, and it was dug into a much earlier mound of the CWC. Such assumptions are due to the presence in the burial of flint arrowheads, an axe with a lenticular cross-section, and a goblet with a rounded bottom which is more similar to the later products (Voitovych 2012, 151; 2016, 97-99).

In two cases where ochre was discovered at the level of the ancient surface, no remains of skeletons or burial pits were found (Bolekhivtsi, Barrow5; Dashava, Barrow1). Under the mound of Barrow 5 in Bolekhivtsi, red ochre in the form of several pieces was found at a distance of 0.9 m to the southwest of the centre of the barrow. Also, at the original ground level, in several places, there were accumulations of charcoal and small fragments of ceramic ware, brick-coloured on the outside and black on the inside (Sveshnikov 1977, 13). A similar situation was observed under Barrow 1 in Dashava, where pieces of ochre, small fragments of ceramic vessel, and a flint flake were found at a distance of 5 m from the centre (Sulimirski 1968, 130). It is not clear whether the ochre in these two barrows indicated the presence of a burial, which was not dug into the bedrock and due to the peculiarities of the local ground was not traced among the immediate environment, or whether we are dealing with a symbolic burial – a cenotaph.

CHRONOLOGY OF BURIALS WITH OCHRE

It is quite difficult to date burials with ochre, considering the lack of absolute dates obtained by exact methods. The only ¹⁴C date made for Barrow 7 in Bolekhivtsi, given the time of the dating conducted, is significantly outdated (2640±105 BP) and needs to be reinterpreted in the direction of increasing the age (Sveshnikov 1978a, 46). Samples of charcoal from Nyzhni Hai that were collected and sent to the Conventional Carbon Dating Laboratory in Kyiv were irretrievably lost (Machnik *et al.* 2011, 7). Thus, burials with ochre can be dated only by the typological comparison of the obtained materials from burials, primarily, from the territory of Central-Eastern Poland (Machnik *et al.* 2009a; Włodarczak 2006).

However, even with the comparison of the small amount of material that we have, we can assume that the ochre in the burials of the CWC north of the Carpathian mountains was used for a long time, and possibly during the whole period of existence of this culture. However, the latter suggestion needs to be verified by the following studies. The earliest burials (phase I), which are associated with the pan-European horizon, and in which ochre was found, are represented by Barrows 7, and 8 in Kulchytsi (Machnik 1979, 55; Jarosz 2012, 324, 325). In Barrow 7, two of the three indicators (amphora and cup), which belong to the early phase of the CWC, were found inside the grave. Regarding Burial 8, we doubt whether the amphora and the small pot originate from the same grave. It is not indicated on the last ceramic vessel (Fig. 8: 5) that it was discovered exactly in the burial, as it is noted, for example, on the inventory from Barrow 7. Information with a detailed description of Barrow 8 has not been preserved, but in the source where the items are published is noted, without further detail, that there was an amphora and a pot from a Barrow (Sveshnikov 1974, fig. 6, 4, 6). Features of the ceramic body, surface treatment, and shape of vessels are not typical for ceramics of the CWC. It is most likely that there is an intrusive, much later burial here.

Other amphorae (Kulchytsi, Barrow 2, 3; Koropuzh; Figs 10 and 11) found in barrows with ochre should be dated to the II phase of the development of the CWC in Sub-Carpathian region, which P. Jarosz dates to the second quarter of the 3rd millennium BC (Jarosz 2011,



Fig. 10. Koropuzh, Lviv district. Remains of amphorae in the burial.
Photo by T. Sulimirski (Scientific archive of the Department of Archaeology of the Ivan Krypiakevych Institute of Ukrainian studies of NAS of Ukraine)

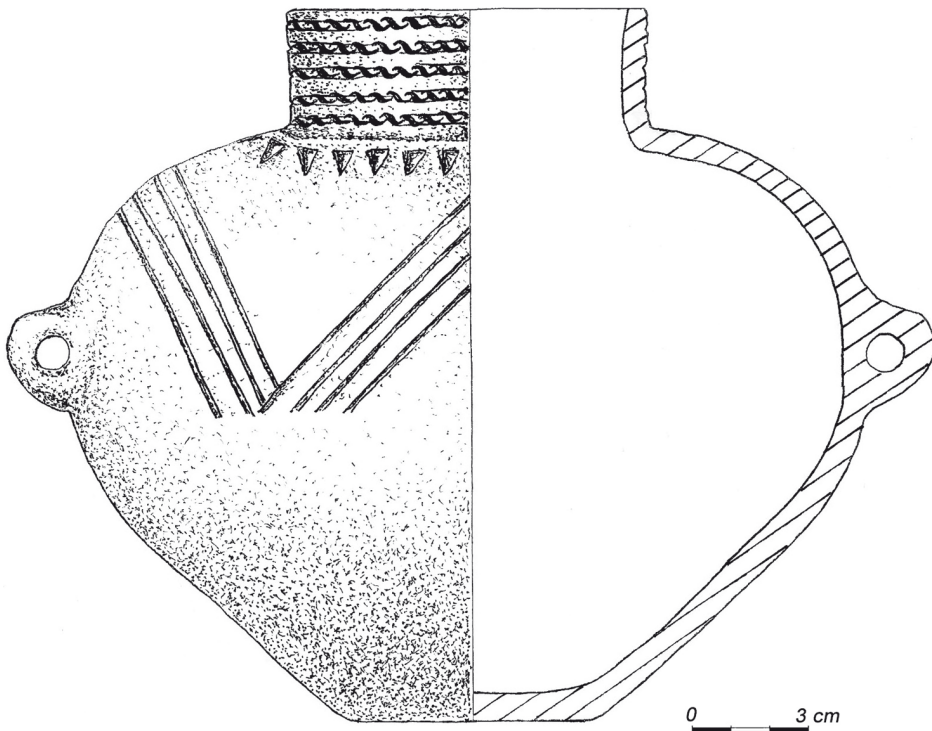


Fig. 11. Koropuzh, Lviv district. Ceramic amphorae from the grave. Illustrated by M. Voitovych

268). Researchers date the goblet from Barrow 8 in Nyzhni Hai to the middle of the 3rd millennium BC and associate it with influences on ceramic production of the Middle Dni-pro culture (Machnik *et al.* 2011, 106).

Findings of flint axes with a lenticular cross-section, which were discovered inside two graves in Kolpets, help to establish the relative chronology of some burials with ochre (Sulimirski 1968, 133, 134). J. Machnik defines such finds as type III according to his classification (Machnik 1966, 46). Type III axes were included in the burial inventory of the Sokal group of the CWC (Koman 1997, 39, fig. 3: 5; Machnik *et al.* 2009a, 26, 27, 46, 50, 91, 94, figs 13: 5; 35: 1; 68: 1). In one of the barrows researched there, two flint axes with a rectangular cross-section were found together with a lenticular one (Hubinek, Site no. 4, Barrow 1, Feature 2; Bagińska 1998, 69, 75, fig. 5: b-d). Such observations confirm the fact that flint axes with a rectangular cross-section existed for a certain time in parallel with lenticular ones (Dobrakowska and Włodarczak 2018, 157). All studied burials, where lenticular objects were found, date from the middle of the 3rd millennium BC (Machnik *et al.* 2009a, 203, 206, 208, 230). It seems impossible to date other burials due to the absence of grave goods, or the lack of detailed descriptions and items from these graves.

DISCUSSION

Currently, ochre has been found only exceptionally in barrow burials in the Upper Dnister region. However, it should be pointed out that there are practically no known flat graves of the CWC here, and (except two burials in Berezhets) most of those discovered are related to the late period of the culture (Voitovykh 2020a, 79–83). It is difficult to determine whether this situation is due to insufficient knowledge of the sites of the CWC in the Upper Dnister region or rather indicates the «unpopularity» of this type of burials compared to barrows. The current source base indicates that the scheme of burial customs that existed on the territory of Central-Eastern Poland, did not appear here or exist in a mixed form. There, the custom of raising barrows gradually disappears in the CWC environment and has a new development in the Komariv culture (Makarowicz 2011, 150–155).

In the Kraków-Sandomierz, Lubaczów, and Podillia groups, there is practically no evidence of the custom of covering the dead with ochre. An exception is the niche burial researched in Koniusza (Tunia 1979, 50). Also, another one, in which ochre is present, originates from the territory of Sokal Ridge (Machnowek; Włodarczak 2014a, 331). On the other hand, a few more burials where ochre was used are known in the Middle Dnipro culture (Buniatian 2007, 43; 2008, 6). Thus the largest number of graves with this natural mineral paint (six cases) was discovered in upright burials (Buniatian 2005, 28). In burials of Globular Amphora culture there are a few more (Kolodiazhne, Skolobiv, Ostrog, Kikova I, Suyemtsy II, Zavadyntsy; Sveshnikov 1983, 13; Szmyt 2010, 29). However, the number of these burials is not proportionate to the Upper Dnister burials. In general, ochre is characteristic of the Yamna culture (Shaposhnykova 1971, 268, 272).

The presence of ochre in the burials of the CWC should be associated with the influence of the steppe. In addition, one of the routes of penetration of the population of Yamna/Catacombna cultures into Central Europe passed through the territory north of the Carpathian mountains (Włodarczak 2014b, 11, fig. 2). Of course, there are not so many marker finds that duplicate this path, but they exist anyway. First of all, this concerns one of the excavated burials in Święte on the San River (Koško *et al.* 2012, 67, 68; Olszewski and Włodarczak 2018, 35–41) and the burial under a mound in Komarno (Ivanova and Voitovykh 2021, 63). In the latter, a ceramic vessel typical of the population of the Yamna culture from the Northern Black Sea region was found. This find indicates which population migrated to Central Europe (Ivanova and Voitovykh 2021, fig. 5).

Influences on the funeral rite can also be traced. In addition to ochre, a third of the burials contain the remains of wooden structures. Moreover, wall-facing is rare. As we can see from the presented examples, the bottom of the grave was mostly lined with wood or covered with it. And in some places, traces of flooring and covering have been preserved, as in Burial 2 of Barrow 10 in Bolekhivtsi. It is interesting that in this burial the covering was made in the direction of the longer walls of the grave (Sveshnikov 1977, 19). In this way, the central burials of the Yamna culture were covered (Ivanova 2021, 46). Only on the

territory of the Upper Dnister region was recorded the fact of additional covering of graves with wooden flooring, the sizes of which exceeded several metres. And in the case of Barrow 13 in Bolekhivtsi, two burials were covered with flooring (Sveshnikov 1978b, 21).

I. Sveshnikov, the researcher of the site in Bolekhivtsi, noted that in the local funeral rites significant influences from the Northern Black Sea region, in particular, can be traced (Sveshnikov 1978a, 47), and it should be noted that this is in an area where organic remains are poorly preserved. However, the archaeologist did not publish the results of these works, except short theses about research in Bolekhivtsi (Sveshnikov 1978a, 45-47). Therefore, the presence of wooden flooring in the burials of the CWC has remained outside the attention of researchers.

CONCLUSIONS

During the analysis of burials with ochre, it was observed that wooden structures in the form of flooring or ceilings are often found in such graves. The latter are impressive in size. Ochre is recorded both on the original ground level and inside burials. Despite the poor state of the source base, it can be safely asserted that the body of the dead was covered with this mineral substance, and its separate lumps were placed nearby, sometimes inside ceramic vessels. On the body of the dead, as we can conclude based on preserved skeletons, its greater concentration is recorded on the head. Therefore, we assume that in burials where no bones have been preserved, the presence of ochre in the graves indicates the orientation of the head according to the cardinal directions.

On the basis of the facts mentioned above, we consider that the custom of covering bones with ochre in the burials of the CWC in the territory of the Northern Sub-Carpathian region existed from the time of the appearance of the first sites of the CWC until the middle of the 3rd millennium BC. It is difficult to say whether ochre was used in later burials since the source base does not indicate this yet. We associate the presence of ochre in the burials of the CWC in the Upper Dnister region with the influence of the population of the Yamna culture, where its presence in burials is typical.

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