

EASTERN EXODUS OF THE GLOBULAR AMPHORA CULTURE PEOPLE

Mikhail M. Charniauski

Stanisław Gołub

Sławomir Kadrow

Wiesław Koman

Wanda Kozak-Zychman

Mykola Kryvaltsevich

Yuriy Maleyev

Boris Pryshchepa

Yuriy Y. Rassamakin

Irina L. Serdyukova

Svyatoslav V. Shelomentsev-Terskiy

Evgeniy A. Shmidt

Marzena Szmyt

Józef Ścibor

BALTIC-PONTIC STUDIES

V O L U M E 4 • 1996

BALTIC-PONTIC STUDIES
61-809 Poznań (Poland)
Św. Marcin 78
Tel. (061) 536709 w. 147 Fax (061) 536-536

EDITOR
Aleksander Kośko

EDITORIAL COMMITTEE
Sophia S. Berezanskaya (Kiev), Aleksandra Cofta-Broniewska
(Poznań), Mikhail Charniauskii (Minsk), Lucyna Domańska
(Łódź), Viktor I. Klochko (Kiev), Petro Tolochko (Kiev)

SECRETARY
Marzena Szmyt

ADAM MICKIEWICZ UNIVERSITY
EASTERN INSTITUTE
INSTITUTE OF PREHISTORY
Poznań 1996
ISBN 83-86094-03-6
ISSN 1231-0344

EASTERN EXODUS OF THE GLOBULAR AMPHORA CULTURE PEOPLE

Mikhail M. Charniauski
Stanisław Gołub
Sławomir Kadrow
Wiesław Koman
Wanda Kozak-Zychman
Mykola Kryvaltsevich
Yuriy Maleyev
Boris Pryshchepa
Yuriy Y. Rassamakin
Irina L. Serdyukova
Svyatoslav V. Shelomentsev-Terskiy
Evgeniy A. Shmidt
Marzena Szmyt
Józef Ścibor

BALTIC-PONTIC STUDIES

V O L U M E 4 • 1996

© Copyright by BPS and Authors
All rights reserved

Cover Design: Eugeniusz Skorwider

Linguistic consultation: James Grossklag

Printed in Poland

Computer typeset by PSO Sp. z o.o. w Poznaniu

CONTENTS

INTRODUCTION	3
Marzena Szmyt, GLOBULAR AMPHORA CULTURE IN EASTERN EUROPE. PRESENT STATE OF RESEARCH AND POSSIBILITIES FOR FUTURE STUDIES	3
SOURCES	28
Józef Ścibior, Wiesław Koman, GRAVE OF THE GLOBULAR AMPHORA CULTURE FROM SITE NO. 27 IN ŚWIERSZCZÓW (PROV. OF ZAMOŚĆ, POLAND)	28
Stanisław Gołub, GRAVE OF THE GLOBULAR AMPHORA CULTURE FROM SITE NO. 8 IN KRASNYSTAW (PROV. OF CHEŁM, POLAND)	35
Stanisław Gołub, GRAVE OF THE GLOBULAR AMPHORA CULTURE FROM SITE NO. 1 IN ŁOPIENNIK DOLNY KOLONIA (PROV. OF CHEŁM, POLAND)	44
Wanda Kozak-Zychman, ANTHROPOLOGICAL DESCRIPTION OF BONE REMAINS FROM A GRAVE OF GLOBULAR AMPHORA CULTURE IN ŁOPIENNIK DOLNY KOLONIA, SITE 1 (PROV. OF CHEŁM, POLAND)	51
Yuriy Maleyev, SELECTED GRAVES OF GLOBULAR AMPHORA CULTURE FROM VOLHYNIA AND PODOLIA (UKRAINE)	53
Yuriy Maleyev, Boris Pryshchepa GRAVE OF GLOBULAR AMPHORA CULTURE FROM TOVPYZHYN (DISTRICT OF RIVNE, UKRAINE)	62
Svyatoslav V. Shelomentsev-Terskiy, SETTLEMENT OF GLOBULAR AMPHORA CULTURE IN PERESOPNITSA, THE VOLHYNIA REGION (UKRAINE)	70

Evgeniy A. Shmidt, Marzena Szmyt RITUAL COMPLEX OF THE GLOBULAR AMPHORA CULTURE ON THE UPPER DNIEPER BASIN (RUSSIA)	79
Mikhail M. Charniauski, MATERIALS OF GLOBULAR AMPHORA CULTURE IN BELORUS	87
Mykola Kryvaltsevich, GRAVE OF THE MIDDLE DNIEPER CULTURE FROM PRORVA, SITE 1 (GOMEL REGION, BELORUS)	98
ANALYSIS	103
Sławomir Kadrow, Marzena Szmyt, ABSOLUTE CHRONOLOGY OF THE EASTERN GROUP OF GLOBULAR AMPHORA CULTURE	103
Yuriy Y. Rassamakin, ON EARLY ELEMENTS OF THE GLOBULAR AMPHORA CULTURE AND OTHER CENTRAL EUROPEAN CULTURES IN THE LATE ENEOLITHIC OF THE NORTHERN BLACK SEA REGION	112
Irina L. Serdyukowa, CONTRIBUTION TO THE ORIGIN OF THE BRONZE AGE IN THE MIDDLE DNIEPER REGION	133
References	156
List of Authors	170

Editor's Foreword

Globular Amphora culture settlements make one of the most important systems of circulation of cultural patterns in the border zone between the drainage areas of the Baltic and Black Seas. One aspect of this problem, namely the „eastern exodus” mentioned in the title, has seemingly rich historiography. Under closer scrutiny, however, it reveals many intuitive opinions based on weak and insufficiently explored sources. This belief lay behind the present issue of the „Baltic-Pontic Studies”. The papers presented in this issue open new areas of discussion of the problems in question. For the first time, the discussion is set against an incontrovertible scale of absolute chronology. This issue anticipates a broader synthesising presentation to be published in the not too distant future.

Editorial comment

1. All dates in the *B-PS* are calibrated [see: *Radiocarbon* vol.28, 1986, and the next volumes]. Deviations from this rule will be point out in notes.

2. The names of the archaeological cultures (especially from the territory of the Ukraine) are standarized according to the English literature on the subject [e.g. Mallory 1989]. In the case of a new term, the author's original name has been retained.

3. The place names located in the Ukraine have been transliterat from the versions suggested by the author (i.e. from the Belorussian, Ukrainian, Polish or Russian originals).

Svyatoslav V. Shelomentsev-Terskiy

SETTLEMENT OF GLOBULAR AMPHORA CULTURE IN PERESOPNITSA, THE VOLHYNIA REGION (UKRAINE)

For almost a hundred and fifty years, the territory of the village of Peresopnitsa, Rivne district of the Volhynia region has been in the spotlight of archaeological study [Terskiy, Terskiy 1994:50]. Earlier excavations in the vicinity of the village discovered (Fig.1) settlements of the Lengyel and Strzyżów cultures; an embriional position of the buried of the Strzyżów culture on the hill near village Biliy; a mound of the Gródek-Zdolbitsa culture located to the North of the Pastivnyk ravine; a settlement and a burial ground of the Strzyżów culture on the left bank of the river Stubla in village Iskra; a ground mound of the Strzyżów culture at the Zamostya ravine near village Novostav Dalniy and Tripolye ceramics in the Shlikhter ravine in the territory of village Peresopnitsa [Sveshnikov, Nikolchenko 1982:89-100; Terskiy 1993:65].

1. THE FEATURE OF GAC

In August 1994 the Volhynia archaeological expedition organised by the Lviv Historical Museum and sponsored by the State Foundation for Fundamental Research of the Ukrainian State Committee for Science and Technologies continued the systematic exploration of the early medieval town in Peresopnitsa launched in 1974. The expedition conducted major excavation works on the eastern outskirts of village Peresopnitsa in the territory of a natural island created by branches of the Omeliana (Ustya) river nort far from the place where it flows into the river Stubla (tributary river Khoryn).

The area of the island is about 10 hectares occupied by arable land. An excavation site of the total area of some 100 sq.m was made near the western edge of the upper horizontal plateau of the island. Besides prevailing materials of the tenth to thirteenth centuries, the cultural layer featured individual fragments of ceramic pots, probably of the Komarów culture and stone retouched plates of the Bronze

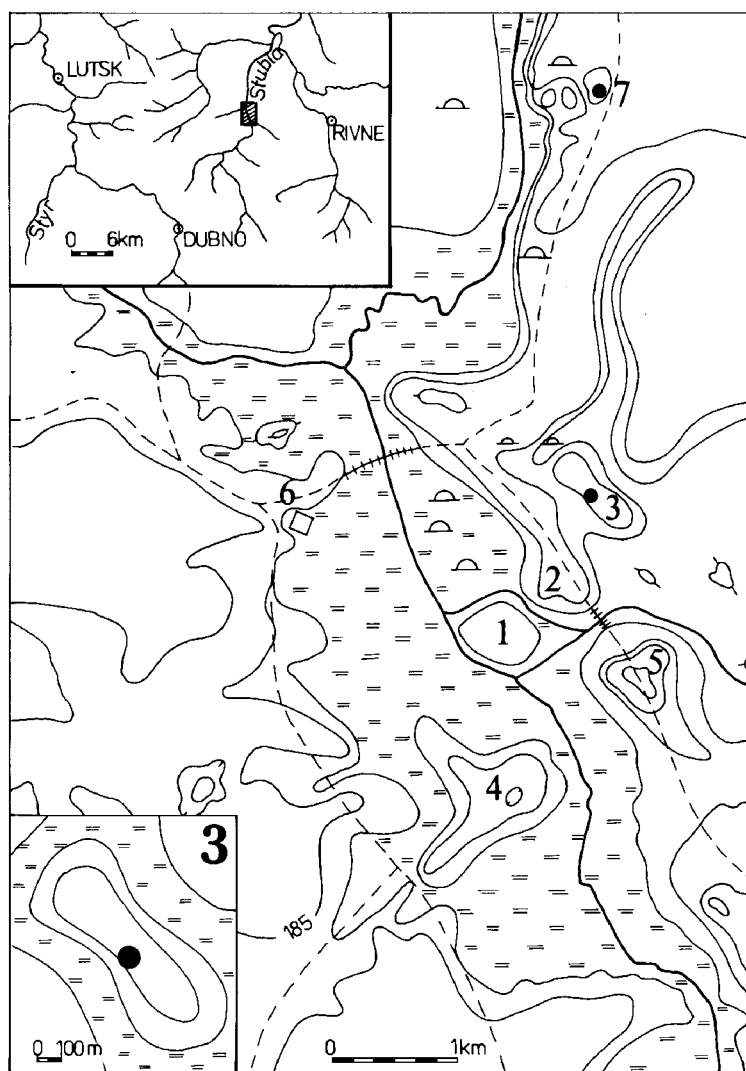


Fig. 1. Location of archaeological sites in the area of Peresopnitsa (3 - a GAC settlement)

Age. The subsoil loam was bedded 0.5-0.7 m deep from the present-day surface. Black soil was bedded down to 0.3-0.5 m deep. The cultural layer was untype.

A pit of the Globular Amphora culture (GAC) was discovered 0.7-0.8 m below the present-day surface (Fig. 2) in the process of smoothing out the floor of a deepened dwelling dating back to the twelfth and thirteenth centuries. It was covered by a thin layer of clay analogous in colour to subsoil clay. The upper part of the

Table 1

Definition of fauna from structure no.1 (GAC) from Peresopnitsa (Pastivnyk Island) of the Rivne region.
Performed by Professor Konstantin A. Tatarinov

No.	Fauna composition	Bones	Individuals	Notes
1.	Boar (<i>Sus scrofa</i>)	9	1	occipital bone, hoof phalanx vertebrae and fractions of tubular bones, a young animal
2.	Roe deer (<i>Capreolus capreolus</i>)	3	1	left lower jaw, ribs, a vertebra of a young animal
3.	Sheep or goat (<i>Ovis</i> sp./ <i>Capra</i> sp.)	20	2	two left lower jaws, fraction of an upper jaw, coronal bone, pelvis, tubular bones, a mature animal
4.	Carp (<i>Cyprinus carpio</i>) ¹	1	1	fragment bones of a mature animal
5.	Mustelids, probably weasel (<i>Mustelidae</i> - <i>Mustela nivalis</i> ?)	12	1	breckchia (bones in rock), a small predator's lower jaw, bones of the extremities
6.	European beaver (<i>Castor fiber</i>)	2	1	fraction of incisor enamel
Total		47	7	

Note: 1. Rather Cyprinidae? (Editor's comment)

structure's filling up to 1.0-1.2 m deep consisted of an almost compact layer 30 cm thick with a high concentration of fragments of ceramics divided by a mixture of light subsoil clay (about 25%), darker clay with a dissemination of burnt clay, pieces of processed clay plaster, charcoal and white powder, probably ash. Osteological materials (Table 1) was concentrated mainly in the middle and lower parts of the filling mass. Besides three major broken pieces of sooth naturals flint pebbles, 25 flat flint pinches and four flint plates were collected at the levels of the feature filling.

The lower part of the filling consisted of a considerably smaller amount of ceramic fragments. There was a horizontal floor 1.4-1.5 m deep. Closer to the north-west corner of the floor there was a higher concentration of pieces of burnt clay with traces of twigs. Also, the find featured remains, possibly, of a hearth of a fine layer of firm ash.

The structure's floor did not have definite limits and was not rammed. The pit's walls were vertical, 1.35 x 1.75 m in dimensions (Fig. 2).

Bones from the pit were submitted to the ¹⁴C analysis [see Kadrow, Szmyt, Absolute... , in this volume].

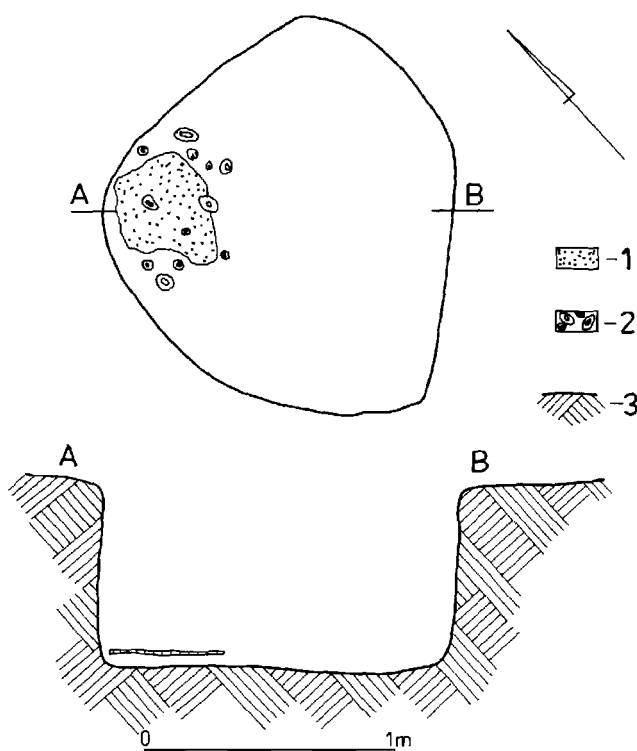


Fig. 2. Peresopnitsa site 3. Plan and cross-section of the feature. Legend: 1 - layer of a firm ash, 2 - fragments of burnt clay, 3 - rock-bed

2. CHARACTERISTICS OF MATERIALS

All 161 of the found items from the filling are stored in the Lviv Historical Museum (LIM A No 55011-55171).

Ceramics lay in the upper part of the pit in the complex and with bottoms down, only the best-preserved plate no.13 found almost on the floor had been turned bottom up. All in all, 17 intact and fragmented pots were collected in the structure.

Amongst the ceramic pots there was a group of thin-walled vessels decorated with in-cut lined filling with chalk paste (Fig.3:1-5):

1. Black, walls 3-4 mm thick, more smoothed from the inside, brims 29 cm in diameter, the dough contained an admixture of ground shells (Fig. 3:1);
2. Light-yellow, with a well-smoothed surface, the dough contained an admixture of finely ground shells, brims 17 cm in diameter (Fig. 3:2);

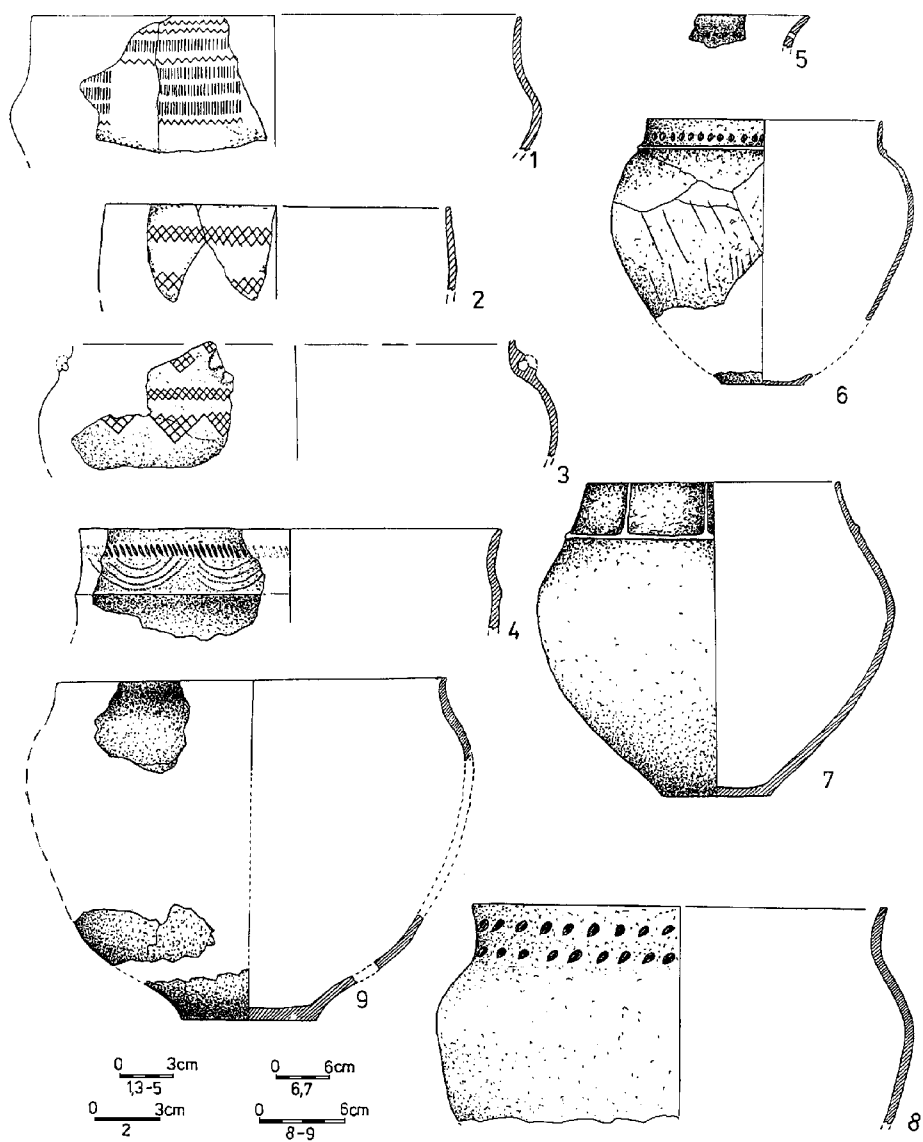


Fig. 3. Peresopnitsa site 3. Pottery from the GAC feature

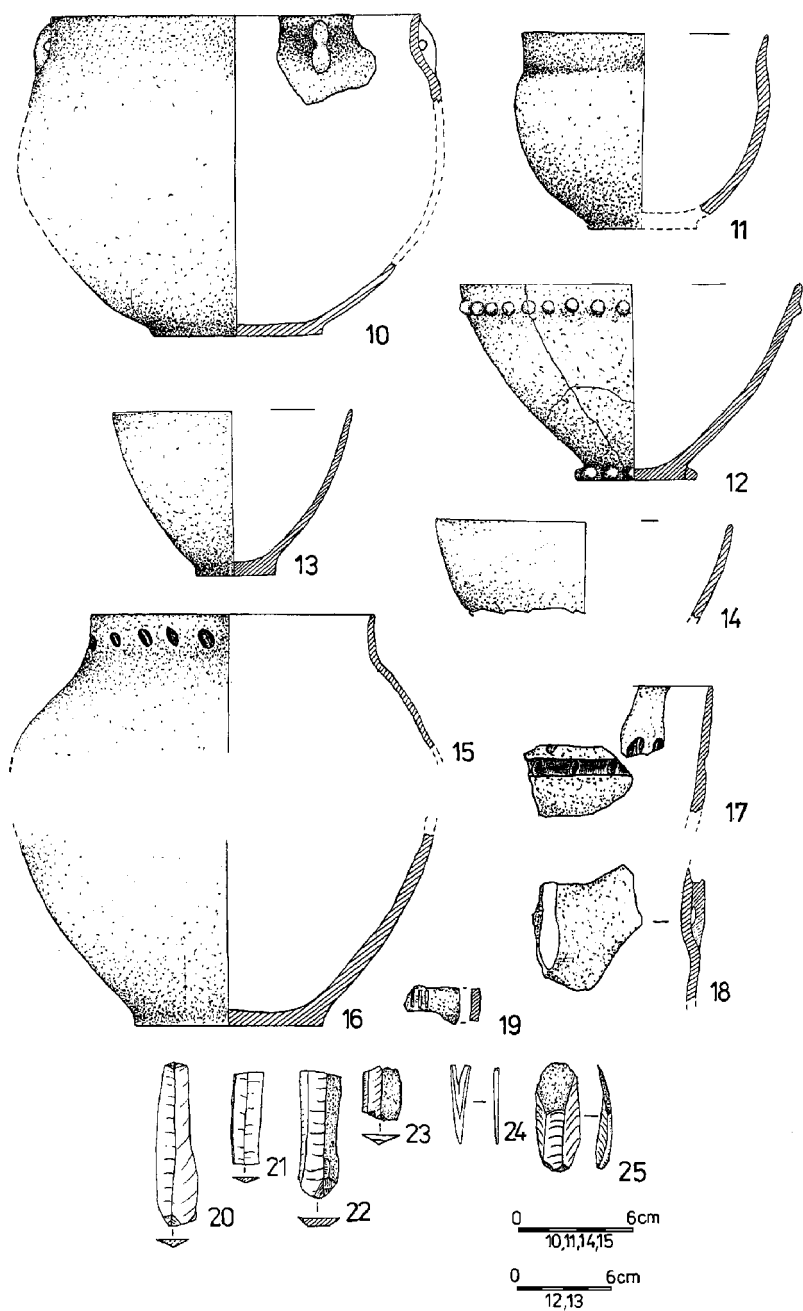


Fig. 4. Peresopnitsa site 3. Materials from the GAC feature (10-19 - pottery, 20-23, 25 - flint, 24 - bone)

3. Yellow, the dough similar to that of previous pot, the inside surface polished much better than the outside, the largest diameter 31 cm (Fig. 3:3);

4. Decorated with cord shaped scallops, the dough features a rare admixture of finely ground shells, the fracture with three layers, the surface processed in a way similar to the previous vessel (Fig. 3:4);

5. A brim with a number of holes for a cord, the dough with an admixture of finely ground shells, with a smooth, black surface (Fig. 3:5).

Large pots:

6. A brim, decorated with nail imprints along the vertical rim and with a horizontal roller on the lower part of the brim, grey surface smoothed from the inside, outer walls bear traces of scratches, walls 5-6 mm thick, the dough with an admixture of flint; the vessel was 32 cm high with brims of 28 cm in diameter (Fig. 3:6);

7. The rim on the lower edge is accentuated by a continuous roller with vertical springs, a yellow smoothed surface, walls 6-10 mm thick, the inside surface is smoked, and the bottom is 16 mm thick; the dough with an admixture of ground flint; the vessel is 40 cm high, the diameter of the brims is 30 cm (Fig. 3:7);

8. A vessel decorated along vertical rims by two rows of nail imprints, the brown polished surface is smoked from the inside, the upper edge of the brim is cut down horizontally, with walls 5-6 mm thick; the dough contained ground flint; the brim diameter is 29 cm (Fig. 3:8);

9. A yellow polished surface, without ornaments, the dough with admixture of ground flint, 23 cm high, the diameter of brims 27 cm, the bottom is 9 mm thick with a minor cavity in the center from the downside (Fig. 3:9);

10. A plate with handles on the rims, the outer surface is better polished, brown, illburnt with crumbling walls, brick coloured in the fraction, the bottom inside is slightly salient in the center, with walls up to 4 mm thick, the vessel was 17 cm high, the dough contained admixtures of finely ground flint and shells (?; Fig. 4:10);

11. A severely burnt bowl with a heavily polished surface; the dough contains finely ground shells, the vessel is 10.5 cm high, with brims 13 cm in diameter (Fig. 4:11);

12. A hemisphere-shaped bowl decorated along the perimeter below the upper edge and along the perimeter of the bottom with plasters, the surface is smoothed and black, the dough contains a scarce admixture of finely ground shells, the vessel is 11.5 cm high, the brims are 21.5 cm in diameter (Fig. 4:12);

13. A cone-shaped bowl without decoration, the surface is smooth, the dough contains a considerable amount of ground shells (?), the vessel is 10 cm high, the brims are 15 cm in diameter (Fig. 4:13);

14. A hemisphere-shaped bowl with medium-smooth surface; the dough contains an admixture ground shells and the diameter of the vessel is 16 cm (Fig. 4:14);

15. A thin-walled pot, with a brick coloured smoothed surface, the dough contains admixtures of mica and flint; the surface is uneven (Fig. 4:15);

16. A pot with a vertical handle below the edge of vertical rims, the dough contains an admixture of sand, or occasionally ground flint which accounts for the rough surface of the vessel (Fig. 4:16);

17. A vessel's rim decorated with two rows of nail imprints (lower line in the continuous cavity), the surface is rougher, and an admixture of sand occurs (Fig. 4:17).

Among the above-mentioned ceramics one may distinguish decorated fine-walled vessels with ornaments characteristic of the Volhynia group of monuments. Therefore, similar elements of engraved ornaments (zigzags and groups of parallel vertical engravings similar to those on no.1 pot of Peresopnitsa) occur on decorated pots found in a nearby settlement of Gorodok of the Rivne region and Skolobov of the Zhitomir region [Sveshnikov 1983:Tabs.IV,3, IX,1,3,7]. An ornament of rhombs (similar to that on vessels no.2 and no.9 of Peresopnitsa) occurs on pots found in the Kamyany Brid settlement of the Zhitomir region [Sveshnikov 1983:Tab.XIV]. Hatched triangles (see the vessel no.3 from Peresopnitsa) one may find in the settlements of Uvisla and Ulashkivtsy [Sveshnikov 1983:Tab.XVII,7,8] and scallops similar to those on vessel no.4 from Peresopnitsa occur on pots from Mezhyryche of the Rivne region [Sveshnikov 1983:Tabs. VI:7, IX,3, X, XII].

Flint items (Fig. 4:20-23,25) are represented primarily by knife-like blades 8.5 and 5 cm long (the latter retouched by minor chops), and two sickle-shells. Another knife-shaped chip was found near object of GAC. All the flint samples are of local Volhynia origin. One of the chips used to be part of a polished axe.

Bone artefacts are represented by a polished fine head, possibly a needle for making nets or an arrowhead (Fig. 4:24).

3. CONCLUSIONS

The settlement of GAC discovered near Peresopnitsa so far has been the only one found in the Stubla river basin. Similar to it is a Didychi settlement in the Volhynia region, located approximately on the same latitude and discovered by author in 1988. As in Peresopnitsa, in Didychi, the widened river Putilivka made the location an attractive site for building the main settlement in the basin.

Considering the described material, conclusion can be made that the newly discovered settlement in Peresopnitsa provides prospects for further excavation of sites related to the GAC. Due to unusual types of vessel shapes, especially nos.6,7,12, as well as to predominance of ground flint as a dough admixture, more typical for cultures of the Bronze Age, the site described hereby may be referred to as from the late phase of GAC. The settlement dwellers were engaged mainly in hunting and fishing, as well as sheep and goat-breeding (Table 1). The local types of flint

were processed in the settlement. According to the amount and sizes of pots, the settlements was of a stable, permanent kind. Possibly it occupied the whole area of the Pastivnyk Island.

The GAC settlement in Peresopnitsa is one of a few settlements of this culture discovered so far to the East of the river Western Bug. The materials collected in the settlement provide ample new data for the study of the settled way of life of this culture in the territory of contemporary Ukraine.

Translated by James Grossklag and Inna Pidluska

ABBREVIATIONS

AAC	– Acta Archaeologica Carpathica, Kraków.
AO	– Arkheologicheskiye otkrytya, Moskva.
BPS	– Baltic-Pontic Studies, Poznań.
JIES	– The Journal of Indo-European Studies, Berkeley.
KSIA	– Kratkiye soobshcheniya Instituta Arkheologii, Moskva.
KSIA AN USSR	– Kratkiye soobshcheniya Instituta Arkheologii AN USSR, Kiev.
MIA	– Materialy i issledovaniya po arkheologii, Moskva.
SA	– Sovetskaya Arkheologia, Moskva.

REFERENCES

- Antoniewicz W.
1938 Z dziedziny archeologii ziem Polski. *Światowit* 17 (1936): 341-422.
- Arkheologiya
1985 *Arkheologiya Ukrainskoy SSR*, 2nd edition, vol.1. Kiev.
- Artemenko I.
1985 Srednedneprovskaya kultura. In: *Arkheologiya Ukrainskoy SSR*, vol.1, 364-375. Kiev.
1987 Kultury rannego bronzovogo veka yuzhnoy polosy lesov Evropeyskoy chasti SSSR. In: *Epokha bronzы lesnoy polosy SSSR*, 35-51. Moskva.
- Äyräpää A.
1933 Über die Streitaxtkulturen in Russland. *Eurasia Septentrionalis Antiqua* 8: 1-160.
- Beier H.J.
1988 *Die Kugelamphorenkultur im Mittelbe-Saale-Gebiet und in der Altmark*. Veröffentlichungen des Landesmuseums für Vorgeschichte in Halle, Band 41. Berlin.
- Berezanskaya S.
1975 Neolitieskaya stoyanka u khut. Grischevka na Sredney Desne. *SA* 2: 148-167.
- Berezanskaya S., N. Bondar
1964 Poselennya epokhi rannoy bronzы v Kanevi. *Archeologiya* 17: 32-51.
- Berezanskaya S., V. Pyasetskiy
1979 Pershe poselennya kultury kulyastykh amfor na Ukraini. *Archeologiya* 30: 75-82.

- Bondar N.
1974 *Poseleniya Srednego Podneprovya epokhi ranney bronzy*. Kiev.
- Bratchenko S.
1977 K voprosu o slozheni babinskoy kultury mnogovalikovoy keramiki. In: *Vilnyanskiye kurgany v Dneprovskom Nadporozhye*, 21-42. Kiev.
- Bratchenko S., O. Shaposhnikova
1985 Katakombnaya kulturno-istoricheskaya obshchnost. In: *Arkheologiya Ukrainskoy SSR*, vol.1, 403-420. Kiev.
- Breunig P.
1987 *14C – Chronologie des vorderasiatischen, südost- und mitteleuropäischen Neolithikums*. Köln-Wien.
- Bryusov A.
1952 *Ocherki po istorii plemen evropeyskoy chasti SSSR v neoliticheskuyu epokhu*. Moskva.
- Charniauski M.M. (Cherniavski M.M.)
1969 Pogrebeniye bronzovogo veka vozle m.Kuranets. In: *Tezisy dokladov k konferentsii po arkheologii Belarusii*, 59-62. Minsk.
1972 Mogilnik na Rosi. In: *Pomniki gistory i kultury Belarusi* 4.
1979 *Nealit Belaruskaga Paniamonnya*. Minsk.
1987a Kamenniy i bronzoviy veka Poniemanya i Podvinya. In: *Belorusskaya Arkheologiya*, 37-48. Minsk.
1987b The Neolithic in north-western Byelorussia. In: T.Wiślański (Ed.) *Neolit i poczatkii epoki brązu na ziemi chełmińskiej*, 429-440. Toruń.
1992 Mogilniki kultury sharapadobnykh amfar na Grodzenshchynie. In: *Z glybi vyakov. Nash Kray*, 5-15. Minsk.
1995 BY 1 Krasnaselsky, Grodna Province. By 2 Karpautsy, Grodna Province. Ancient flint mines in Belarus. *Archaeologia Polona* 33: 263-269.
- Charniauskyy M.M., V.Y. Kudrashov, V.L. Lipnitskaya
1996 *Starazhytniya shakhtsyory na Rosi*. Minsk.
- Chernysh E.K.
1982a Eneolit Pravoberezhnoy Ukrainy i Moldavii. In: *Eneolit SSSR*, 166-252. Moskva.
1982b Pamyatniki sinchronnykh Tripolyu kultur Yugo-Zapada SSSR. In: *Eneolit SSSR*, 253-263. Moskva.
- Childe V.G.
1925 *The Dawn of European Civilization*. London.
1930 *The Danube in Prehistory*. Oxford.
- Czebreszuk J.
1990 Late horizon of the Globular Amphorae culture versus other cultural structures of the Neolithic-Bronze Age interstage. Problem of system disintegration. In: *New tendencies in studies of Globular Amphora culture*. Archaeologia Interregionalis 14, 113-136. Warszawa-Kraków-Poznań.

Czebreszuk J., P. Makarowicz

- 1993 The problem of amber buttons with V-shaped perforation in the Bell Beaker culture. In: *Actes du XIIe Congrès International des Sciences Préhistoriques et Protohistoriques*, 1-7 Septembre 1991, vol.2, 529-532. Bratislava.

Dergachev V.A.

- 1982 *Materialy raskopok arkheologicheskoy ekspeditsii na Srednem Prute (1975-1976)*. Kishinev.
1986 *Moldavia i sosedniye territorii v epokhu bronzy*, Kishinev.

Dergachev V.A., I.V. Manzura

- 1991 Evropeyskiy komponent maykopskoy kultury v kontekste vzaimosvyazyey tsentralno- i vostochnoevropeyskikh obshchnostey. In: *Maykopskiy fenomen v drevney istorii Kavkaza i Vostochnoy Evropy*, 55-58. Leningrad.

Dinu M.

- 1960 K voprosu o kulture sharovidnykh amfor na territorii Moldavii. *Dacia* 4: 89-106.

Dolukhanov P.M., A.M. Miklayev

- 1979 Kulturno-istoricheskiye osnovy postroyeniya absolutnoy khronologii neolita i ranney bronzy v basseynе Zapadnoy Dviny. *KSIA* 157: 73-81.

Dolukhanov P.M., Tretyakov V.P.

- 1979 Dnepro-donetskiy neolit i kultura voronkovidnykh kubkov k severu ot Karpat. *AAC* 19: 37-50.

Gereta I.P.

- 1970 Noviye nakhodki kultury sharovidnykh amfor v zapadnom Podolye. *AO 1969 goda*, 231. Moskva.

Gereta I.P., E.A. Kharitonov

- 1970 Doslidzhennya novykh arkheologichnykh pamyatok v Zakhidnomu Podilli. In: *Materialy Tryetyoy Podilskoy Istoriko-Krayeznavchoy Konferentsii*, 153-158. Lviv.

Gimbutas M.

- 1956 *The Prehistory of Eastern Europe*, vol. 1, Cambridge.
1977 The First Wave of Eurasian Steppe Pastoralists into Copper Age Europe. *JIES* 4: 277-339.
1980 The Kurgan Wave #2 (c. 3400-3200 BC) into Europe and the Following Transformation of Culture. *JIES* 8: 273-315.
1985 East Baltic Amber in the Fourth and Third Millennium B.C. *Journal of Baltic Studies* 16(3): 231-256.
1991 *The Civilization of the Goddess. The World of Old Europe*, San Francisco.

Głosik J.

- 1968 Kultura strzyżowska. *Materialy Starożytne* 11:7-114.

Gorodtsov V.

- 1915 Kultury bronzovoy epokhi v Sredney Rossii. In: *Otchet istoricheskogo muzeya za 1914 g.* Moskva.

- Gurba J.
1957 Materiały do badań nad neolitem Małopolski. *Annales UMCS Sectio F* (1954) 9: 129-178.
- Gurina N.N.
1976 *Drevniye kremnedobyvayushchiye shakhty na territorii SSSR*. Leningrad.
- Halicki M.
1970 Cmentarzyska kultury amfor kulistych i kultury pucharów lejgowatych w Klementowicach, pow. Puławy na stanowisku IV. *Wiadomości Archeologiczne* 35(3): 303-325.
- Haüsler A.
1964 Die Gräber der ältesten Ackerbauern in der Ukraine. *Wissenschaftliche Zeitschrift der Martin-Luther Universität Halle-Wittenberg* 12(11/12).
1966 Die Gräber der Kugelamphorenkultur in Wolhynien und Podolien und die Frage ihres Ursprungs. *Jahresschrift für mitteldeutsche Vorgeschichte* 50: 115-140.
1974 Die Bestattungssitten des Früh- und Mittelneolithikums und ihre Interpretation. In: F.Schlette (Ed.) *Evolution und Revolution im Alten Orient und Europa*, 101-119. Berlin.
1989 Zur Problematik des Bestattungsrituals im Äneolithikum Mitteleuropas. In: *Das Äneolithikum und die früheste Bronzezeit (ca 3000-2000 BC)*. *Præhistorica* 15:163-166. Praha.
1994 Die Majkop-Kultur und Mitteleuropa. *Zeitschrift für Archäologie* 28: 191-246.
- Hensel W.
1974 *Ur- und Frühgeschichte Polens*. Berlin.
- Jahn A.
1956 *Wyżyna Lubelska. Rzeźba i czwartorzęd*. Warszawa.
- Jastrzębski S.
1989 *Kultura Cucuteni-Trypole i jej osadnictwo na Wyżynie Wołyńskiej*. Lublin.
- Kadrow S.
1995 Absolute chronology of the Sofievka type in the light of "wiggle matching" analysis. In: *Cemeteries of the Sofievka type: 2950-2750 BC*, BPS 3:141-147.
- Kadrow S., A. Kośko, M. Videiko
1995 Pottery stylistics of the Sofievka type, genetic-cultural qualification. In: *Cemeteries of the Sofievka type: 2950-2750 BC*, BPS 3:200-213.
- Kalechyts E.G.
1987 *Pamyatniki kamennogo i bronzovogo vekov Vostochnoy Belorussii*. Minsk.
- Kavalskaya K., M. Charniauski
1988 Starazhitnaye pakhavannye. In: *Pomniki gistorii kultury Belarussii*, 17-18. Minsk.

Kempisty E.

- 1971 Kultura amfor kulistych na Mazowszu i Podlasiu. *Materiały Starożytne i Wczesnośredniowieczne* 1: 7-34.

Kirkowski R.

- 1984 Z badań nad recepcją tradycji kulturowych strefy nadczarnomorskiej wśród społeczeństw Niżu Polski u schyłku III tysiąclecia p.n.e. *Archeologia Polski* 29(1): 57-67.

Kirkowski R., J. Sosnowska

- 1987 Kultura amfor kulistych na ziemi chełmińskiej. In: T. Wiślański (Ed.) *Neolit i początki epoki brązu na ziemi chełmińskiej*, 185-200. Toruń.

Kiyashko V.Y.

- 1974 *Nizhneye Podonye v epokhu eneolita i ranney bronzy*. Avtoreferat dissertatsii na soiskaniye uchenoy stepeni kandidata istoricheskikh nauk. Moskva.
1994 Mezhdru kamnem i bronzoy. Nizhneye Podonye v V-II tys. do n.e. *Donskiye drevnosti* 3:8-129. Azov.

Kiyashko V.Y., A.V. Kiyashko

- 1992 K voprosu o svyazyakh plemen Podonya-Priazovya i Kavkaza v bronzovom veke. In: *Istoricheskaya geografia Dona i Severnogo Kavkaza*, 3-8. Rostov.

Kokowski A., W. Koman

- 1984 Badania ratownicze na terenie gmin Hrubieszów i Horodło w woj. zamojskim. In: *Sprawozdania z badań terenowych Archeologicznego Ośrodka Badawczo-Konserwatorskiego w Lublinie w 1984r.*, 19. Lublin.
1985 Świerszczów, gm. Hrubieszów, woj. zamojskie, stanowisko 27. *Informator Archeologiczny*. Badania 1984, 38. Warszawa.

Kokowski A., J. Ścibior

- 1990 Bemerkungen zur regionalen Gliederung der Kugelamphorenkultur in Polen. *Acta Praehistorica et Archaeologica* 22: 37-55.

Kossinna G.

- 1910 Der Ursprung der Urfinnen und der Urindogermanen und ihre Ausbreitung nach Osten. *Mannus* 2: 59-108.

Kostrzewski J.

- 1948 Od mezolitu do okresu wędrówek ludów. In: *Prehistoria ziem polskich* (ed. 1939-1948), 118-359. Kraków.

Kośko A.

- 1979 *Rozwój kulturowy społeczeństw Kujaw w okresach schyłkowego neolitu i wczesnej epoki brązu*. Poznań.
1981 *Udział południowo-wschodnioeuropejskich wzorców kulturowych w rozwoju niżowych społeczeństw kultury pucharów lejkowatych*. Poznań.
1985 Influences of the "pre-Yamnaya" ("pre-pitgrave") communities from the Black Sea steppe area in western European cultures. In: *L'énéolithique et le début de l'âge de bronze dans certain régions de l'Europe*, 57-72. Wrocław-Warszawa-Kraków-Gdańsk-Łódź.

- 1990 The Migration of Steppe and Forest-steppe Communities into Central Europe. *JIES* 18(3-4): 309-329.
- 1991 The Vistula-Oder basins and the North Pontic region. *JIES* 19(3-4):235-257.
- Kovaleva I.F.
- 1978 Pogrebeniya zhivotilovskogo tipa v Prisamarye. In: *Kurganniye drevnosti stepnogo Podneprovya II-I tys. do n.e.*, 2:45-55. Dnepropetrovsk.
- 1991 Pogrebeniya s maykopskim inventarem v Levoberezhzi Dnepra (k vydeleniyu zhivotilovskogo kulturnogo tipa). In: *Problemy arkheologii Podneprovya*, 69-88. Dnepropetrovsk.
- Kovalyukh N., M. Videiko, V. Skripkin
- 1995 Chronology of the cemeteries of the Sofievka type: archaeological and isotopic one. In: *Cemeteries of the Sofievka type: 2950-2750 BC*, BPS 3: 135-140.
- Kowalczyk J.
- 1968 Dwa zespoły neolityczne datowane radiowęglem. *Wiadomości Archeologiczne* 33: 372.
- Kowalski A.
- 1988 Mit w obrzędzie pogrzebowym. Próby etnograficznej analizy materiału archeologicznego. *Lud* 72: 113-126.
- Kozłowski L.
- 1921 Groby megalityczne na wschód od Odry. *Prace i Materiały Antropologiczno-Archeologiczne i Etnograficzne* 2.
- 1924 *Młodsza epoka kamienna w Polsce*, Lwów.
- 1939 *Zarys pradziejów Polski południowo-wschodniej*, Lwów.
- Kruk J.
- 1980 *Gospodarka w Polsce południowo-wschodniej w V-III tysiącleciu p.n.e.* Wrocław-Warszawa-Kraków-Gdańsk.
- 1993 Rolnictwo pierwotne jako czynnik kształtowania krajobrazu. *Sprawozdania Archeologiczne* 43: 301-308.
- Kukawka S., J. Sosnowska
- 1994 Z badań nad kulturą amfor kulistych na ziemi chełmińskiej. In: *Neolit i początki epoki brązu na ziemi chełmińskiej*, 199-204. Grudziądz.
- Kukhareno Y.V.
- 1969 *Arkheologiya Polshy*. Moskva.
- Levickiy I.F.
- 1929 Pamyatki megalitichnoy kultury na Volini. *Antropologija* 2: 192-222.
- 1930 Domovina kinca neolitichnoy dobi na poberezhzy serednoy techi r. Sluchi (c. Kolodyazhnoye na Volini). *Zapiski vseukraïnskogo arkheologichnogo komitetu* 1: 159-178.

Loze I.

- 1988 *Poseleniya kamennogo veka Lubanskoy Niziny. Mezolit, ranniy i sredniy neolit*. Riga.

Machnik J.

- 1978 Wczesny okres epoki brązu. In: *Prahistoria ziem polskich. III. Wczesna epoka brązu*, 9-136. Wrocław-Warszawa-Kraków-Gdańsk.
- 1979a Krąg kulturowy ceramiki sznurowej. In: *Prahistoria ziem polskich. II. Neolit*, 337-411. Wrocław-Warszawa-Kraków-Gdańsk.
- 1979b Ze studiów nad kulturą ceramiki sznurowej w dorzeczu górnego Dniestru. *AAC* 19: 51-71.
- 1987 *Kultury z przełomu eneolitu i epoki brązu w strefie karpackiej*. Wrocław-Warszawa-Kraków-Gdańsk-Łódź.

Maksimenko V.E.

- 1973 Novije materialy po epokhe ranney bronzy na Nizhnem Donu. *SA* 1: 24-27.

Maleyev Y.M.

- 1971 Megalitichni grobnitsy na Ternopilshchini. *Arkheologiya* 2: 53-67.
- 1980 Vostochniye rubiezhы rasprostraneniya kultury sharovidnykh amfor. In: *Problemy eneolita stepnoy i lesostepnoy polosy Vostochnoy Evropy. Tezisy dokladov*, 30-31. Orenburg.
- 1986 Pokhovannya kulturi kulyastikh amfor na Khmielnichchini. *Visnik Kii-vskogo Universitetu. Istorichni Nauki* 28:98-103.

Maleyev Y.M., V.I. Yakubovskiy

- 1974 Raskopki grobnitsy kultury sharovidnykh amfor na Yuzhnom Buge. *AO 1973 goda*, 305.

Mallory J.P.

- 1991 *In Search of the Indo-Europeans. Language, Archaeology and Myth*. London.

Malyukevich A.E., V.G. Petrenko

- 1993 Usatovskiy kompleks s figurnymi pronizyami iz kurgana v nizovyakh Dnestra. In: *Drevneye Prichernomorye*, 25-30. Odessa.

Manzura I.

- 1990a O rasprostranienii gordineshtskikh kulturnykh elementov v Severnom Prichernomorye. In: *Arkheologicheskiye issledovaniya molodykh uchenykh Moldavii*, 25-39. Kishinev.
- 1990b *Perehodniy period ot eneolita k epokhe bronzy v Nizhnem Podniestrovye i Poprutye*. Avtoreferat dissertatsii na soiskaniye uchenoy stepeni kandidata istoricheskikh nauk. Kishinev.
- 1992 Stepniye vostochnoevropeyskiye obshchnosti eneolitaranney bronzy v khronologicheskoy sisteme Balkano-Dunayskikh kultur. In: *Materialy i issledovaniya po arkheologii i etnografii Moldovy*, 87-101. Kishinev.
- 1993 The east-west interaction in the mirror of the eneolithic and early bronze cultures in the Northwest Pontic. *Revista Arheologica* 1: 23-53.

- 1994 Cultural groups from the steppes of Eastern Europe in the Eneolithic period and Early Bronze Age. *Oxford Journal of Archaeology* 13(3): 265-277.
- Manzura I., E. Klochko, E. Savva
1992 *Kamenskiye kurgany*. Kishinev.
- Manzura I., E. Savva, L. Bogataya
1995 East-West Interactions in the Eneolithic and Bronze Age Cultures of the North-West Pontic Region. *JIES* 23(1-2): 1-51.
- Mazurowski R.F.
1983 Bursztyn w epoce kamienia na ziemiach polskich. *Materiały Starożytne i Wczesnośredniowieczne* 5: 7-130.
- Miclea I., R. Florescu
1980 *Preistoria Daciei*. Bucuresti.
- Miklayev A.M.
1992 *Kamenniy-zhelezniy vek v mezhdureche Zapadnoy Dviny i Lovati*. Avtoreferat dissertatsii na soiskaniye uchenoy stepeni doktora istoricheskikh nauk. Sankt Petersburg.
- Movsha T.G.
1972 Periodizatsiya i khronologiya serednogo ta piznogo Tripilla. *Arkheologiya* 5: 3-24.
1984 Khronologiya Tripolya-Cucuteni i stepnyye kultury epokhi rannego metalla v yeye sisteme. In: *Problemy arkheologii Podnieprovyia*, 60-83. Dnepropetrovsk.
1985a Pozdniy etap tripolskoy kultury. In: *Arkheologiya Ukrainiskoy SSR*, vol. 1, 223-263. Kiev.
1985b Vzaemovidnosyny Tripilla-Kukuteni s sinkhronnymi kulturami Tsentralnoy Evropy. *Arkheologiya* 51: 22-31.
1993 Vzaemovidnosyny stepovykh i zemlerobskikh kultur v epokhu eneolita-rannogo bronzovogo viku. *Arkheologiya* 3: 36-51.
- Nagel E.
1985 *Die Erscheinungen der Kugelamphorenkultur im Norden der DDR*. Berlin.
- Nechytailo A.L.
1991 *Svyazi naseleniya stepnoy Ukrainy i Severnogo Kavkaza v epokhu bronzy*. Kiev.
- Neustupny E.
1966 Kugelamphorenkultur. In: J.Filip (Ed.) *Enzyklopädisches Handbuch zur Ur- und Frühgeschichte Europas*, Band 1, 652-653. Praga.
- Nikolayeva N.
1981 Periodizatsiya kubano-terskoy kultury. Istoricheskiye sudby KTK v katakombnuyu epokhu. In: *Katakombniye kultury Severnogo Kavkaza*, 77-100. Ordzhonikidze.

Nikolayeva N., V. Safronov

- 1974 Proiskhozhdeniye dolmennoy kultury Severo-Zapadnogo Kaukaza. In: *Voprosy okhrany, klassifikatsii i ispolzovaniya arkheologicheskikh pamyatnikov*, 174-198. Moskva.

Nosek S.

- 1955 Kultura amfor kulistych na Lubelszczyźnie. *Annales UMCS Sectio F* (1954/-1955) 5:55-158.
1967 *Kultura amfor kulistych w Polsce*. Wrocław-Warszawa-Kraków.

Opłotowicz J., Z. Ślusarski

- 1962 *Muzeum w Krasnymstawie. Archeologia, historia, kultura ludowa (katalog)*. Lublin.

Passek T.S.

- 1945 Selishcha epokhi bronzы v rayone Kaneva. *Kratkiye Soobshcheniya Instituta Istorii Materialnoy Kultury* 25:14-28. Kiev.
1949 *Periodizatsiya tripolskikh poseleniy*. MIA 10.

Peleshchysyn M.A.

- 1976 Raskopki na Volini. *AO 1975 goda*, 376. Moskva.

Petrenko V.G.

- 1989 Pamyatniki eneolita i povorot epokhi k bronzovomu veku v Severno-Zapadnom Prichernomor'ye. In: *Istoriya i arkheologiya Nizhnego Podunavya*, 18-19. Reni.

Popandopulo Z.H.

- 1992 Pervomayskiy kurgannyi mogilnik u s. Primorskoye. *Drevnosti stepnogo Prichernomor'ya i Kryma* 3: 82-98.

Popova T.

- 1955 *Katakombnaya kultura*. Moskva.

Prinke D., M. Szmyt

- 1996 Ze studiów nad problematyką regionalizacji kulturowej w późnym neolicie na Kujawach. In: A. Koško (Ed.) *Z badań nad genezą regionalizmu kulturowego społeczeństw Kujaw*, 39-60. Poznań-Kruszwica-Inowrocław.

Rassamakin Y.Y.

- 1986 Eneoliticheskiye pogrebeniya r. Molochnoy i ikh otnositelnaya khronologiya. In: *Khozyaystvo i kultura doklasovykh i ranneklasovykh obshchestv*, 121-122. Moskva.
1987a Eneoliticheskiye pograbeniya basseyna r. Molochnoy. In: *Drevneyshiye skotovody stepey yuga Ukrainy*, 31-43. Kiev.
1987b K probleme izucheniya eneoliticheskikh podkurgannykh pograbeniy. In: *Aktualniye problemy istoriko-arkheologicheskikh issledovaniy*, 138-139. Kiev.
1988 Otnositelnaya khronologiya pozdneeneoliticheskikh pogrebeniy basseyna r. Molochnoy. In: *Noviye pamyatniki yamnoy kultury stepnoy zony Ukrainy*, 14-27. Kiev.

- 1991 O sootnoshenii stepnykh i novosvobodnenskikh pamyatnikov. In: *Maykopskiy fenomen v drevney istorii Kavkaza i Vostochnoy Evropy*, 52-55. Leningrad.
 - 1993 Eneolit stepnogo Prichernomorya i Priazovya (po pogrebalnym pamyatnikam). In: *The Fourth Millennium B.C.*, 5-28. Sofia.
 - 1994 The main directions of the development of early pastoral societies of the Northern Pontic zone: 4500–2450 BC (Pre-Yamnaya cultures and Yamnaya culture). In: *Nomadism and pastoralism in the circle of Baltic-Pontic early agrarian cultures: 5000–1650 BC*, BPS 2: 29-70.
 - 1996 Pozdneeneoliticheskiye komplekсы na Ingultse v svete novykh issledovaniy (in press).
- Rassamakin Y.Y., A. Kubyshev
- 1990 Ob odnoy gruppe pozdneeneoliticheskikh pogrebeniy v Priazovye s elementami tripolskoy kultury. In: *Rannezemledielcheskiye poseleniya-giganty tripolskoy kultury na Ukraine*, 72. Talyanki-Veseliy Kut-Majdanetskoye.
- Renfrew C.
- 1987 *Archaeology and Language. The Puzzle of Indo-European Origins*. London.
- Rezepkin A.D.
- 1987 K interpretatsii rospisi iz grobnitsy maykopskoy kultury bliz stanitsy Novosvobodnaya. *KSIA* 192: 26-33.
 - 1989 *Severo-Zapadnyy Kavkaz v epokhu ranney bronzy (po materialam pogrebeniy novosvobodnenskogo tipa)*. Avtoreferat dissertatsii na soiskaniye uchenoy stepeni kandidata istoricheskikh nauk. Leningrad.
 - 1991 Kurgan 31 mogilnika "Klady". Problemy genezisa i khronologii maykopskoy kultury. In: *Drevniye kultury Prikubanya*, 167-197. Leningrad.
- Rimantienė R.
- 1992a The Neolithic of the Eastern Baltic, *Journal of World Prehistory* 6(1): 97-143.
 - 1992b Neolithic hunter-gatherers at Šventoji in Lithuania. *Antiquity* 66: 367-376.
- Rimantienė R., G. Česnys
- 1990 The late Globular Amphora Culture and its Creators in the East Baltic Area from Archaeological and Antropological Points of View. *JIES* 18(3-4): 339-358.
- Rumjancev A.N.
- 1974 Geneza kultury środkowodnieprzańskiej i jej zwiazki ze strefą karpacką. *AAC* 14: 57-67.
- Safronov V.A.
- 1989 *Indoeuropeyskiye prarodiny*. Gorkiy.
- Serdyukova I.L.
- 1989 K voprosu ob izmenenii granits rasseleniya katakombnykh plemen. In: *Problemy istorii ta arkheologii davnego naselennya Ukrainskoy RSR*, 206-207. Odessa.

- 1994 Plemena katakombnoy kultury Nadporozhya i Lesostepnogo Podneprovya (manuscript). Kiev.
- Serova H.L., E.V. Yarovoy
1987 *Grigoryopolskiye kurgany*. Kishinev.
- Shaposhnikova O.
1971 O kulturnoy prinadlezhnosti poseleniy epokhi ranney bronzы Stepnogo Pridneprovya. *Materialy po archeologii Severnogo Prichernomorya* 7: 28-42. Odessa.
- Shcheglova V.V., Cherniavski M.M.
1976 Fauna iz mogilnikov kultury sharovidnykh amfor u pos. Krasnoselski Volkovyskogo rayona. In: *Doklady AN BSSR* 20(7): 627-629.
- Shchepinsky A.A.
1985 Kemi-obinskaya kultura. In: *Arkheologiya Ukrainskoy SSR*, vol.1, 331-336. Kiev.
- Shilov I.
1988 "Grot byka" po materialam drevneyshikh kurganov. In: *Noviye pamyatniki yamnoy kultury stepnoy zony Ukrainy*, 42-59. Kiev.
- Shmagliy N.M.
1966 Grodsko-volynskiy variant piznotripilskoy kultury. *Arkheologiya* 20: 15-37.
- Shmidt E.A.
1992a Mogilnik kultury kulyastykh amfor poblizu Smolenska u verkhivnykh Dni-pri. *Arkheologiya* 2: 120-124.
1992b Pogrebalniy kompleks kultury sharovidnykh amfor v verkhovnykh Dnepra. *Rossiyskaya Arkheologiya* 4: 156-162.
- Skibiński S.
1958 Znalezisko zabytków kultury amfor kulistych w Stadarni, pow. Chełm. *Wiadomości Archeologiczne* 24(4): 384-385.
- Sobczuk E.
1994 Najciekawsze odkrycia archeologiczne z Krasnegostawu i okolic. In: *Zapiski Krasnostawskie*, 9-18. Lublin.
- Stuiver M., P.J. Reimer
1993 Radiocarbon Calibration Program, ver. 3.0.3, University of Washington, Quaternary Isotope Lab. *Radiocarbon* 35: 215-230.
- Subbotin L.V.
1982 Dva kurgana epokhi bronzы v Bugo-Dnestrovskom mezhdurechie. In: *Arkheologicheskiye pamyatniki Severo-Zapadnogo Prichernomorya*, 100-110. Kiev.
1988 Megaliticheskoye pogrebeniye u s. Tatarbunary. In: *Noviye pamyatniki yamnoy kultury stepnoy zony Ukrainy*, 124-130. Kiev.
- Sulimirski T.
1959 *Polska przedhistoryczna*, t. 2, (1957-1959), Londyn.

- 1968 *Cord Ware and Globular Amphorae North-East of the Carpathians*, Londyn.
- 1970 *Prehistoric Russia*. An outline, Londyn.
- Sveshnikov I.K.
- 1957 *Megalitychni pokhovannya na Zakhidnomu Podilli*. Lviv.
- 1971 Kultura kulyastykh amfor. In: *Arkheologiya Ukrainskoy RSR*, vol. 1, 240-250. Kiev.
- 1973 Noviye pokhovannya kultury kulyastykh amfor u Rovenskiy oblasti. *Arkheologiya* 11: 69-72.
- 1974 *Istoriya naselennya Peredkarpattya, Podilla i Volini v kinci III — na pochatku II tis. do n.e.* Kiev.
- 1983 *Kultura sharovidnykh amfor*. Svod arkheologicheskikh istochnikov V1-27. Moskva.
- 1985a Kultura sharovidnykh amfor. In: *Arkheologiya Ukrainskoy SSR*, vol. 1, 280-291. Kiev.
- 1985b Gorodoksko-zdolbitskaya kultura na Volini. In: *Arkheologiya Ukrainskoy SSR*, vol. 1, 381-384. Kiev.
- 1990 Kultura sharovidnykh amfor. In: *Arkheologiya Prikarpatya, Volini i Zakarpattia (eneolit, bronz a i ranneye zhelezo)*, 43-49. Kiev.
- Sveshnikov I.K., Nikolchenko Y.M.
- 1982 *Dovidnyk z arkheologii*. Rovenska oblast. Kiev.
- Szmyt M.
- 1996 *Spolecznosci kultury amfor kulistych na Kujawach*, Poznań.
- Sztandar Ludu
- 1961 Ciekawe odkrycie archeologiczne w Łopienniku Dolnym. *Sztandar Ludu* (21.II.1961) nr 44 (5284). Lublin.
- Ścibior J.
- 1986 [rec.] Igor K. Svešnikov, Kultura šarovidnych amfor. *Sprawozdania Archeologiczne* 38: 348-365.
- 1991 Kultura amfor kulistych w środkowowschodniej Polsce. Zarys problematyki. In: J.Gurba (Ed.) *Schylek neolitu i wczesna epoka brązu w Polsce środkowowschodniej*, 47-65. Lublin.
- 1993 Die Trichterbecherkultur und die Tripolje-kultur auf der Wolynien-Hohebene. In: *Actes du XIIIe Congrès International des Sciences Préhistoriques et Protohistoriques*, 1-7 Septembre 1991, vol.2, 522-528. Bratislava.
- Ścibior J., A. Kokowski, W. Koman
- 1991 Zespoły grobowe kultury amfor kulistych z zachodniej części Wyżyny Wołyńskiej. *Sprawozdania Archeologiczne* 43: 79-108.
- Ścibior J., J.M.Ścibior
- 1990 Sandomierz 78 — wielokulturowe stanowisko z przełomu neolitu i epoki brązu. Badania ratownicze w 1984 roku. *Sprawozdania Archeologiczne* 42: 157-201.

Świeżyński K.

- 1966 Szczałki kostne z grobów zwierzęcych kultury amfor kulistych na Kuja-wach. In: Wiślański T., *Kultura amfor kulistych w Polsce północno-zachodniej*, 268-278. Wrocław-Warszawa-Kraków.

Tallgren A.

- 1926 La Pontide prescythique apres l'introduction des metaux. *Eurasia Septentrionalis Antiqua* 7: 5-246.

Telegin D.Y.

- 1971 Eneolitychni stely i pamyatky nizhniomikhaylovskogo tipu. *Arkheologiya* 4: 32-54.
1977 Ob absolutnom vozraste yamnoy kultury i nekotoriye voprosy khronologii eneolita yuga Ukrainy. *SA* 2: 5-19.

Terskiy S.V.

- 1993 Novi pamyatky pivnichno-zakhidnoho porubizh Trypils'koy kultury. In: *Trypilska kultura Ukrainy. Tezy dopovidey i povidomlen mizhnarodnoy konferentsii*, 64-66. Lviv.

Terskiy S., V. Terskiy

- 1994 Litopysna Peresopnitsa abo pry zabute misto nad Stublou. *Rodovid* 7: 47-53.

Toshchev G.N.

- 1991 Zapadniy areal pamyatnikov katakombnoy kultury. In: *Katakombnyye kul'tury Severnogo Prichernomorya*, 85-100. Kiev.

Weninger B.

- 1986 High-Precision Calibration of Archaeological Radiocarbon Dates. *Acta Interdisciplinaria Archaeologica* 4: 11-53. Nitra.

Wieliczko M.

- 1961 Łopiennik Dolny Kolonia, pow. Krasnystaw. *Z Otchłani Wieków* 27(3): 232.

Wiślański T.

- 1966 *Kultura amfor kulistych w Polsce północno-zachodniej*. Wrocław-Warszawa-Kraków.
1970 The Globular Amphora Culture. In: *The Neolithic in Poland*, 179-231. Wrocław-Warszawa-Kraków.
1979 Dalszy rozwój ludów neolitycznych. Plemiona kultury amfor kulistych. In: *Prahistoria ziem polskich, II. Neolit*, 261-299. Wrocław-Warszawa-Kraków-Gdańsk.

Yarovoy E.V.

- 1979 Nakhodka sharovidnykh amfor v Moldavii. In: *Problemy epokhi bronzы Yuga Vostochnoy Evropy*, 35. Donetsk.
1981 Pamyatniki yamnoy kultury Pruto-Dnestrovskogo mezhdurechya. In: *Aktualniye problemy arkheologicheskikh issledovaniy v Ukrainской SSR*, 33-34. Kiev.
1985 *Drevneyshiye skotovodcheskiye plemena Yugo-Zapada SSSR*. Kishinev.
1990 *Kurgany eneolita — epochi bronzы Nizhnego Podnestrovyia*. Kishinev.

Yelagina N., V.G. Petrenko

- 1968 Otchet ob arkheologicheskikh raskopkach, proizvedennykh Inguletskoy stepnoy ekspeditsey letom 1968 goda. (Nauchniy arkhiv Instituta Arkheologii Akademii Nauk Ukrainy, N 1968/54). Kiev.

Zaginailo A.I., I.T. Chernyakov, V.G. Petrenko

- 1987 Karolino-Bugazskiy mogilnik. In: *Noviye issledovaniya po arkheologii Severnogo Prichernomorya*, 99-108. Kiev.

Zakharuk Y.N.

- 1962 Voprosy khronologii kultur eneolita i ranney bronzы Prikarpatya i Volini. *KSI A AN USSR* 12: 48-52.
1971 Tripilska kultura. In: *Arkheologiya Ukrainskoy RSR*, vol. 1, 177-179. Kiev.

Zbenovich V.I.

- 1972 Khronologiya piznogo Tripilla. *Arkheologiya* 7: 3-25.
1976 Pozdneye Tripolye i yego svyaz s kulturami Prikarpatya i Malopolshi. *AAC* 16: 21-58.
1987 Mesto tripolskoy kultury v eneolite Prichernomorya. In: *Kavkaz v sistemie paleometallicheskh kultur Evrazii*, 109-119. Tbilisi.

Zhivopisnaya Rossiya

- 1882 Zhivopisnaya Rossiya. Litovskoye i belorusskoye Polesye. Sankt-Peterburg-Moskva.

LIST OF AUTHORS

Mikhail M. Charniauski
Institute of History
Academy of Sciences of Belarus
Minsk 220072
F. Skaryna Str. 1
Belarus

Stanisław Gołub
22-100 Chełm
Powstańców Warszawy Str. 3/26
Poland

Sławomir Kadrow
Institute of Archaeology and Ethnology
Polish Academy of Sciences
31-016 Kraków
Sławkowska Str. 19
Poland

Wiesław Koman
State Service of Preservation of Monuments
22-400 Zamość
Staszic Str. 29
Poland

Wanda Kozak-Zychman
Chair of Archaeology
Maria Curie-Skłodowska University
20-031 Lublin
M. Curie-Skłodowska Square 4
Poland

Mykola Kryvaltsevich
Institute of History
Academy of Sciences of Belarus
Minsk 220072
F. Skaryna Str. 1
Belarus

Yuriy Maleyev
Chair of Archaeology
State University
252033 Kiiv
Vladimirovskaya Str. 64
Ukraine

Yuriy Y. Rassamakin
Institute of Archaeology
Ukrainian Academy of Sciences
252014 Kiiv
Vydubitskaya Str. 40
Ukraine

Irina L. Serdyukova
Institute of Archaeology
Ukrainian Academy of Sciences
252014 Kiiv
Vydubitskaya Str. 40
Ukraine

Svyatoslav V. Shelomentsev-Terskiy
Museum of History
290038 Lviv-8
Rynok 6
Ukraine

Evgeniy A. Shmidt
214013 Smolensk
Kirova 15/19
Russia

Marzena Szmyt
Eastern Institute
Adam Mickiewicz University
61-734 Poznań
Nowowiejski Str. 55
Poland

Józef Ścibior
District Museum – Castle
22-600 Sandomierz
Poland

Vol.1: *Weapons of the tribes of the Northern Pontic zone in the 16th–10th centuries B.C.*, by Victor I. Klochko.

Vol.2: *Nomadism and pastoralism in the circle of Baltic–Pontic early agrarian cultures: 5000–1650 BC*, edited by Aleksander Koško

Vol.3: *Cemeteries of the Sofievka type: 2950–2750 BC*, edited by Aleksander Koško

Orders regarding B-PS should be addressed directly to the Editorial Office (Baltic-Pontic Studies, Institute of Prehistory, Św. Marcin 78, 61-809 Poznań, Poland).
--

The publication is carried out within the research project No 1 P108 067 04 financed in the years 1993-1995 by Committee for Scientific Research and supplied with funds of Ministry of National Education.

ISBN 83-86094-03-6

ISSN 1231-0344