# 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**

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

# EDITOR Aleksander Kośko

#### **EDITORIAL COMMITEE**

Sophia S. Berezanskaya (Kiev), Aleksandra Cofta-Broniewska (Poznań), Mikhail Charniauski (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**

VOLUME 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)
Mikhail M. Charniauski, MATERIALS OF GLOBULAR AMPHORA CULTURE IN BELORUS
Mykola Kryvaltsevich, GRAVE OF THE MIDDLE DNIEPER CULTURE FROM PRORVA, SITE 1 (GOMEL REGION, BELORUS)
ANALYSIS
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
Irina L. Serdyukowa, CONTRIBUTION TO THE ORIGIN OF THE BRONZE AGE IN THE MIDDLE DNIEPER REGION
References
List of Authors

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).

Yuriy Maleyev, Boris Pryshchepa

# GRAVE OF GLOBULAR AMPHORA CULTURE FROM TOVPYZHYN (DISTRICT OF RIVNE, UKRAINE)<sup>1</sup>

The tomb was accidentally discovered during field works in early October 1994. The finders damaged the western part of the structure by pulling a human skeleton, fragments of three vessels and two flint axes from the sepulchral cist. Later, the elements of assemblage were transferred to the museum in Mlynov. The same month, experts from the museums in Rivne and Mlynov took up the study of the tomb. In the autumn of 1995, B.A. Pryshchepa carried out additional excavations around the tomb that led him to the discovery of a pit located nearby and containing GAC material.

#### 1. GRAVE STRUCTURE

Situated at the edge of the bank of the river Styr, between villages of Tovpyzhyn and Khrinniki (Fig. 1), the tomb was rectangular and oriented along the W-E line (Fig. 2). The cist was made of eight large hewn stone slabs 0.2-0.3 m thick. Six of them formed the sides of the cist while the other two served as a cover. The cover rested 0.3 m below the today's ground surface. The dimensions of the slabs of the cover were 1.6 x 0.9 m (E slab) and 1.45 x 1.1 m (W slab). The length of the cist measured inside was 2 m (at the bottom) to 2.3 m (at the upper part), while its width was 1.0 m (at W part) to 1.1 m (at E part). The sides of the cist were made of six slabs. The longer sides (N and S) consisted of two slabs each. The slabs of the N side were 1.6 m (W) and 0.7 m (E) long, while the length of slabs of the S side was 1.6 m (W) and 0.8 m (E). The shorter sides (E and W) were made of single slabs of 1.25 m (E) and 1.4 m (W). The slab of the E side was obliquely placed with its upper part leaning to the outside. The inner surface of this slab was smooth. To stabilise the W side, small stones had been placed in corners between the slab and

<sup>&</sup>lt;sup>1</sup> This article is financed by Committee for Scientific Research (project No. 1 H01G 018 10).

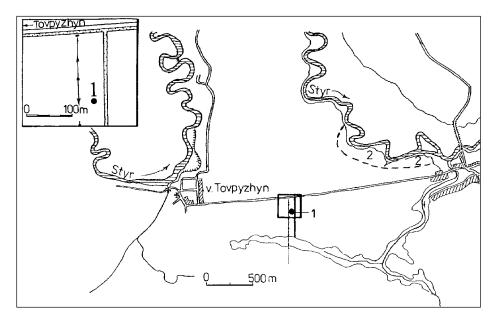


Fig. 1. Location of GAC sites in the area of Tovpyzhyn (1 - a grave)

the longer sides. Small stones filled also gaps between the sides and the cover. A larger amount of such stones was found on the outer side of the W slab of the N side. The bottom of the tomb had been dug in loamy sand (undisturbed soil) 1.3 m below the today's surface.

The slabs making up the longer sides of the cist were made of calciferous sandstone (containing 50-55% of sand), in which *Ezvilia* shells were present. Among small stones, filling the gaps in the structure, compact, fine-grained quartzitic sandstone of white colour was also identified. For the side slab coarse-grained, carbonate-free quartzitic sandstone, not too well cemented, was used<sup>2</sup>.

The identified materials occur on the surface only in the central part of the Povcha upland, extending between the Styr and Ikva rivers, south of the Ikva mouth. Consequently, the western range of these materials is located about 20 km east of the place where the tomb was discovered. If it is assumed that for the construction of the cist surface materials were used, the shortest distance over which they could be transported was 20 km.

In the tomb only one body, that of a 40-50 year old man, was buried<sup>3</sup>. Due to the damages mentioned earlier, the human bones were not *in situ* during exploration. Hence, the placement of the corpse can be reconstructed only from the information

<sup>&</sup>lt;sup>2</sup> Petrologic evaluation by Y.V. Popovich and V.K. Pyasetskiy (Exploratory Geological Expedition Rivne).

<sup>&</sup>lt;sup>3</sup> Anthropological evaluation of Tatiana Nazarowa of the Institute of Archaeology of Ukraine's National Academy of Science.

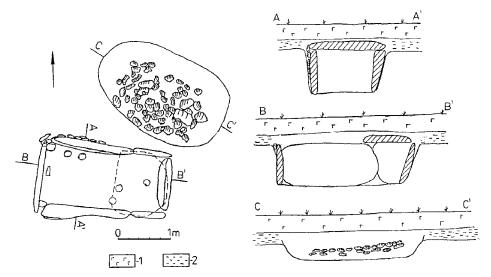


Fig. 2. Tovpyzhyn site 1. Plan and cross-sections of features. Legend: 1 - humus (arable layer), 2 - sandy clay

provided by the tomb's finders. According to their observations, the deceased was lying flexed on his side with the head close to the western wall of the cist. Over the deceased's chest, a pig's mandible rested. On the bottom, in the middle of the cist, fragments of two vessels, which were broken at the time of the tomb's discovery, were found lying *in situ* during the archaeological exploration (Fig. 4:1,2). In the western part of the cist, at the W side, two other vessels (Fig. 3:1,2) and two flint axes (Fig. 5:1,2) were found. The larger of the two axes was lying at the W side, next to the skull. In the same part of the cist and in the soil dug out from there, explorers discovered fragments of two broken vessels (Fig. 4:2,3), a bone chisel and fragments of a bone decoration (Fig. 5:3-4), four flint blades and animal bones. In the eastern part of the cist one vessel was found (Fig. 3:3).

Probably, a flint scraper found nearby was also connected with the tomb (Fig. 5:9).

#### Preserved grave-goods:

- 1. An amphora (Fig. 3:1) with a globular belly, flat bottom, cylindrical neck and four small, horizontally perforated handles on the vessel shoulder. The surface is carefully smoothed, shiny, black with patches of brown. The fracture is black. The clay contains broken sandstone. An ornament covers the neck and the upper portion of the belly. The ornament was made with impressions of a twofold cord forming multiple, horizontal lines and a herringbone pattern. Height of vessel: 29 cm, maximum diameter 26 cm, rim diameter 11 cm, bottom diameter 11 cm.
  - 2. An amphora (Fig. 3:2) with a globular belly, flat bottom, cylindrical neck

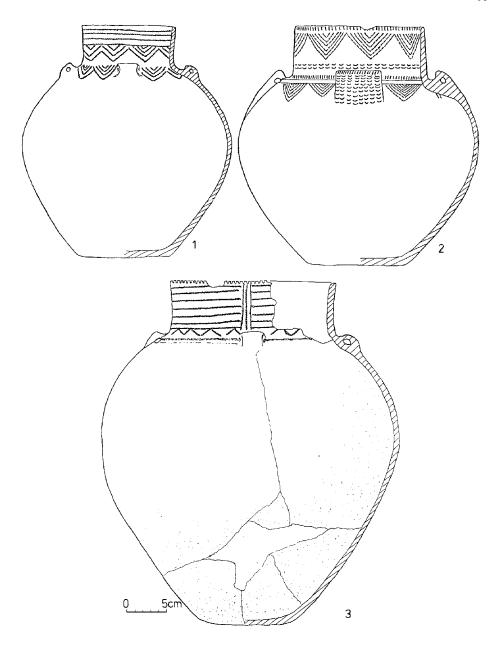


Fig. 3. Tovpyzhyn site 1. Vessels from the grave

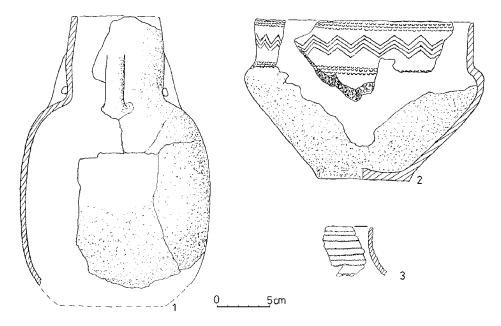


Fig. 4. Tovpyzhyn site 1. Vessels and a fragment of pottery from the grave

and four wide horizontally perforated handles on the vessel shoulder. The surface is carefully smoothed, shiny, black with patches of brown. The fracture is black. The clay contains sand and fine grains of sandstone. An ornament covering the neck, the upper portion of the belly and handles was made by impressing two dies, of which one left a straight mark (5 mm long) and the other an arched one. The impressions of the straight die form rows of columns and herringbones, while arches were used for multiple horizontal lines. The ornament was inlaid with white paste. Height of vessel: 30 cm, maximum diameter: 30 cm, rim diameter 16 cm, bottom diameter 12 cm.

- 3. An amphora (Fig. 3:3) with an egg-shaped belly, flat bottom, almost cylindrical neck and four small horizontally perforated handles on the vessel shoulder. The surface is carefully smoothed, shiny, black with patches of brown. The fracture is black. The clay contains coarse broken gravel of red colour. An ornament covers the rim and the neck of the vessel. The rim has deep incisions. The ornament on the neck consists of impression of a twofold cord forming multiple, horizontal lines that are crossed by triple vertical lines and a single row of zigzags. Height of vessel: 45 cm, maximum diameter: 37 cm, rim diameter: 21 cm, bottom diameter: 14 cm.
- 4. A fragment of an undecorated amphora (Fig. 4:1) with an egg-shaped belly and a neck slightly curved inwards. A long, narrow and horizontally perforated handle is located where the neck passes into belly. The surface is grey, carefully

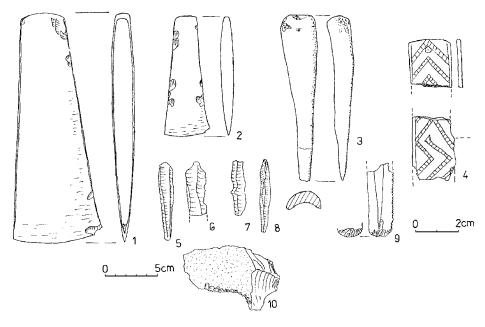


Fig. 5. Tovpyzhyn site 1. Grave-goods (1-2, 5-10 - flint, 3-4 - bone)

smoothed and shiny while the fracture is black. The clay contains a visible admixture of quartz and sandstone. The height of vessel is 29 cm, maximum diameter is 19 cm and rim diameter is 9.5 cm.

- 5. A fragment of a vase (Fig. 4:2) with a cylindrical neck and a protruding belly. The surface is light-brown, carefully smoothed and shiny. The clay contains an admixture of fine-grain gravel. An ornament covering the neck and the upper portion of the vessel s belly was made with impressions of two dies, of which one was straight and the other arched. The impressions of the straight die form a quadruple row of zigzags while arches are arranged in triple rows of horizontal lines. The ornament was inlaid with white paste. Height: 17 cm, maximum diameter: 22.5 cm, rim diameter: 21.5 cm.
- 6. A fragment of a vessel rim (Fig. 4:3) of dark brown colour decorated with multiple horizontal lines made of impressions of a twofold cord.
- 7. A flint axe (Fig. 5:1) made of dark grey material; wedge-shaped with a rectangular cross-section and a butt. Both cutting edge and butt are arched. The surface is carefully smoothed. Length: 22 cm, thickness: 2.2 cm, cutting-edge width: 9 cm, butt width: 4 cm.
- 8. A small flint axe (Fig. 5:2) made of grey material with black veins; wedge-shaped with a rectangular cross-section and a butt. The cutting-edge is arched while the butt is straight. The surface is carefully smoothed. Length: 11.5 cm, thickness: 1.3 cm, cutting edge width: 4 cm, butt width: 2 cm.

- 9. Two complete and two broken (effect of contemporary damage) flint blades, unretouched. Dimensions: 77 x 14 mm (Fig. 5:5), 52 x 21 mm (Fig. 5:6), 53 x 14 mm (Fig. 5:7), 72 x 10 mm (Fig. 5:8).
- 10. A blade scraper (Fig. 5:9) of black Volhynia flint; now broken. It is 24 mm wide.
- 11. A bone chisel (Fig. 5:3) with a widening butt (3.6 x 2.4 cm). The cutting edge is 1 cm wide.
- 12. Two fragments of a bone ornament in the shape of a flat "T" (Fig. 5:4) 2 cm wide and 2 mm thick. One of the surfaces is carefully smoothed and decorated with an angular pattern.

2. PIT

Immediately NE of the tomb a discovery of an oval pit  $2.55 \text{ m} \times 1.6 \text{ m}$  was made. The outline of the pit was uncovered 0.45 m below the ground against a clay layer of a light brown colour. This layer, about 20 to 30 cm thick, spread immediately below the arable layer at the depth from 0.3 m to 0.5-0.6 m (Fig. 2). Undisturbed soil, loamy sand of a light brown colour, was recorded at the level of 0.5-0.6 m. The bottom of the pit was excavated in the undisturbed soil and was located 0.9 m below the contemporary surface of the ground. In the content of the pit, there was a layer of stones about 0.2-0.3 m thick. The layer was made primarily of small bits sized ca  $5 \times 5 \text{ cm}$  to  $10 \times 5 \text{ cm}$  with only few of the stones reaching up to  $20 \times 30 \text{ cm}$ . The layer spread 0.10-0.15 cm above the pit bottom.

At the pit bottom, the find included a few dozen animal bones, single human bones (mainly of the skull and mandible), five fragments of pottery, lumps of scorched clay and a retouched flint flake (Fig. 5:10). Technological characteristics of the pottery found in the pit were similar to those of the pottery discovered in the tomb.

The pit must have been dug when the tomb was built. When the ceremony was over unused stones were deposited in it.

#### 3. COMPARATIVE ANALYSIS

Both construction features and the type of burial ritual, as well as grave goods, allow to relate the tomb, consequently the accompanying pit, too, to the GAC.

The construction of the tomb is typical of this culture. The closest territorial analogy is a tomb located in Ivanye, circuit of Dubno, district of Rovno [Sveshnikov

1983: 25-26, Fig. 4; see also Maleyev, Selected..., in this volume]. Similar structures were also found in other districts, e.g. Velikaya Slobodka, district of Khmelnitsk and Uvisla, district of Ternopol [Sveshnikov 1983: 42, 51, Fig. 11].

Amphorae with globular bellies and cylindrical necks have a wide range of occurrence. They are recorded both in the eastern group of GAC including Volhynia and Podolia (e.g. Ivanye, district of Rivne, Vilkhovye, district Lviv, Gorodnitsa, district Ternopol, Dovge, district Ternopol) [Sveshnikov 1983:Fig. 4, 6-7, 16:12, 17:11; Maleyev 1971:58, Fig. 2:19; see also Maleyev, Selected...] and in Belorus (Maly Yodkavichi) [Charniauski 1992:Fig. 1, 6-7; see also Charniauski, Materials..., in this volume], as well as in the Polish group of GAC (e.g. Inowrocław-Szymborze) [Nosek 1967:88, Fig. 36].

A similarly wide range of occurrence is shared by other types of pottery and ornament that were found in Tovpyzhyn. The closest analogy to the amphora with an egg-shaped belly and long, narrow handles is a vessel from a tomb in Aneta (district of Zhitomir) [Sveshnikow 1983:Fig. 9, 10]. We can find analogies to the same amphora and vase in Nikolayev, district of Lviv [Sveshnikov 1983:Fig. 3:5, 9, 10]. Ornaments analogous to the decorations of the vase from Tovpyzhyn occurred in tombs in Ivanye [Sveshnikov 1983:6,2] and in those of the Polish group (Kuczyna prov. of Włocławek, Smoszewo prov. of Płock, Chojewo prov. of Biała Podlaska) [Nosek 1967:Fig.108,3].

It is particularly often that smoothed flint axes are found in GAC sepulchral features. By contrast, it is very rarely that a bone chisel is found in the eastern group of GAC. A similar tool made of horn with a triangular cross-section and sharpened at one end occurred in a tomb in Khartonovtsy I (district of Ternopol) [Maleyev 1971:57, Fig. 2.5; Sveshnikov 1983:48, Fig. XXII, 4]. Other similar tools were found in Maly Yodkavichi (district of Grodno) [Charniauski 1992:Fig. 1,6,7] and in Mierzanowice prov. of Tarnobrzeg, which belongs to the Polish group [Nosek 1967:Fig. 118:2,3].

Analogies to fragments of the bone ornament in the shape of a "T", making possible its reconstruction, come from the area covered by the Polish group of GAC (e.g. Strzelce prov. of Bydgoszcz and Janiszewek prov. of Włocławek) [Nosek 1967:Fig. 44,2 and 63,4].

Finally, it should be mentioned that about 1 km to the north-east of site 1 there is (Fig. 1) a multicultural site (Tovpyzhyn site 2) where fragments of GAC and Corded Ware culture pottery were recorded (explorations of M. Peleshchyshyn) [Peleshchyshyn 1976:376].

The finds and research documentation are kept in the museum in Dubno.

Human bones from the sepulchre were submitted to the <sup>14</sup>C analysis [see Kadrow, Szmyt, Absolute..., in this volume].

#### 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 bronzy lesnoy polosy SSSR*, 35-51. Moskva.

#### Ayräpää A.

1933 Über die Streitaxtkulturen in Rüssland. Eurasia Septentrionalis Antiqua 8: 1-160.

#### Beier H.J.

1988 Die Kugelamphorenkultur im Mittelelbe-Saale-Gebiet und in der Altmark. Veröffentlichungen des Landesmuseums für Vorgeshichte in Halle, Band 41. Berlin.

#### Berezanskaya S.

1975 Neoliticheskaya stoyanka u khut. Grischevka na Sredney Desne. SA 2: 148-167.

#### Berezanskaya S., N. Bondar

1964 Poselennya epokhi rannoy bronzy 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 gistoryi i kultury Belarusi 4.
- 1979 Nealit Belaruskaga Paniamonnya, Minsk.
- 1987a Kamenniy i bronzoviy veka Poniemanya i Podvinya. In: *Belorusskaya Arkeologiya*, 37-48. Minsk.
- 1987b The Neolithic in north-western Byelorussia. In: T.Wiślański (Ed.) Neolit i poczatki epoki brazu 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.

#### Charniausky 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.
- 1982b Pamyatniki sinchronnych 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 territorrii 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 osnivy postroyeniya absolutnoy khronologii neolita i ranney bronzy v basseyne 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. Materiały 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 lejkowatych w Klementowicach, pow. Puławy na stanowisku IV. *Wiadomości Archeologiczne* 35(3): 303-325.

#### Haüsler A.

- 1964 Die Gräber der altesten 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). Praehistorica 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.

#### Jastrzebski 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.

#### Kavalskava 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 Mezhdu 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 wędrowek 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 Levoberezhyi 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 brazu na ziemi chełmińskiej*, 199-204. Grudziądz.

#### Kukharenko 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 poberezhy serednoy techi r. Sluchi (c. Kolodyazhnoye na Volini). *Zapiski vseukrainskogo 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 Noviye 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 rubiezhy rasprostranieniya 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 Kiivskogo 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 Perechodniy 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 Podnieprovya*, 60-83. Dnepropetrovsk.
- 1985a Pozdniy etap tripolskoy kultury. In: *Arkheologiya Ukrainskoy 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-ranniogo bronzovogo viku, *Arkheologiya* 3: 36-51.

#### Nagel E.

1985 Die Erscheinungen der Kugelamphorenkultur im Norden der DDR. Berlin.

#### Nechytailo A.L.

1991 Svyazi naselenya stepnoy Ukrainy i Severnogo Kavkaza v epokhu bronzy. Kiev.

#### Neustupny E.

1966 Kugelamphorenkultur. In: J.Filip (Ed.) Enzyklopädisches Handbuch zur Urund Frühgeschichte Europas, Band 1, 652-653. Praga.

#### Nikolayeva N.

1981 Periodizatsiya kubano-terskoy kultury. Istoricheskiye sudby KTK v katakombnuyu epokhu. In: *Katakombniye kultury Severnogo Kaukaza*, 77-100. Ordzhonikidze.

#### Nikolayeva N., V. Safronov

1974 Proiskhozhdeniye dolmennoy kultury Severo-Zapadnogo Kaukaza. In: *Vo-* prosy 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.

# Optołowicz J., Z. Ślusarski

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

#### Passek T.S.

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

#### Peleshchyshyn 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 Prichernomorye. In: *Istoriya i arkheologiya Nizhnego Podunavya*, 18-19. Reni.

#### Popandopulo Z.H.

1992 Pervomayskiy kurgannyj mogilnik u s. Primorskoye. *Drevnosti stepnogo Prichernomorya 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. Kośko (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 phenomen v drevney istorii Kaukaza 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 kompleksy na Ingultse v svete novykh issledovaniy (in press).

# Rassamakin Y.Y., A. Kubyshev

1990 Ob odnoy gruppe pozdneeneolitichieskikh 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-Zapadniy 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.

#### Rimantiené R.

- 1992a The Neolithic of the Eastern Baltic, Journal of World Prehistory 6(1): 97-
- 1992b Neolithic hunter-gatherers at Šventoji in Lithuania. Antiquity 66: 367-376.

#### Rimantiené 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 Indoevropeyskiye prarodiny. Gorkiy.

#### Serdyukova I.L.

1989 K voprosu ob izmenenii granits rasseleniya katakombnykh plemen. In: Problemy istorii ta arkheologii davnogo 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 bronzy 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 L.

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 verkhivyakh Dnipra. *Arkheologiya* 2: 120-124.
- 1992b Pogrebalniy kompleks kultury sharovidnykh amfor v verkhovyakh 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 bronzy 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 Corded 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 Zakarpatya (eneolit, bronza i ranneve zhelezo), 43-49. Kiev.

#### Sveshnikov I.K., Nikolchenko Y.M.

1982 Dovidnyk z arkheologii. Rovenska oblast. Kiev.

#### Szmyt M.

1996 Społeczności 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.) *Schyłek 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 XIIe Congrés 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 Szczątki kostne z grobów zwierzęcych kultury amfor kulistych na Kujawach. 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-zakhidnogo porubizh Trypilskoy kultury. In: *Trypilska kultura Ukrainy. Tezy dopovidey i povidomlen mizhnarodnoy konferentsii*, 64-66. Lviv.

# Terskiy S., V. Terskiy

1994 Litopysna Peresopnitsa abo pryzabute misto nad Stublou. *Rodovid* 7: 47-53. Toshchev G.N.

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

# Weninger B.

1986 High-Precision Calibration of Archaeological Radiacarbon 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 Nakhodki sharovidnykh amfor v Moldavii. In: *Problemy epokhi bronzy Yuga Vostochnoy Evropy*, 35. Donetsk.
- 1981 Pamyatniki yamnoy kultury Pruto-Dnestrovskogo mezhdurechya. In: Aktualniye problemy arkheologicheskikh issledovaniy v Ukrainskoy SSR, 33-34. Kiev.
- 1985 Drevneyshiye skotovodcheskiye plemena Yugo-Zapada SSSR, Kishinev.
- 1990 Kurgany eneolita epochi bronzy Nizhnego Podnestrovya, 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 bronzy Prikarpatya i Volini. *KSIA 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* paleometallicheskikh 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 Etnology 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 Kośko

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

Orders regarding B-PS should be adressed 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.