

THE WESTERN BORDER AREA OF THE TRIPOLYE CULTURE

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BALTIC-PONTIC STUDIES

V O L U M E 9 • 2000

BALTIC-PONTIC STUDIES
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ADAM MICKIEWICZ UNIVERSITY
INSTITUTE OF EASTERN STUDIES
INSTITUTE OF PREHISTORY
Poznań 2000
ISBN 83-86094-08-7
ISSN 1231-0344

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Cover Design: Eugeniusz Skorwider

Linguistic consultation: John Comber

Printed in Poland

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

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Editor's Foreword

The 'western borderland' of the Tripolye culture, appearing in the title of this volume of the 'Baltic-Pontic Studies', refers to the circle of neighbouring cultural systems of the Upper Tisza and Vistula drainages. As neighbours of the Tripolye culture such groups are discussed as Lengyel-Polgár, Funnel Beaker and, albeit to a much narrower extent, the Globular Amphora (cf. B-PS vol. 8) and the Corded Ware cultures. The papers discuss the reception of 'western' traditions by Tripolye communities as well as the 'western borderland' mentioned in the title.

Defined in this way, these questions have been only cursorily treated in the literature. The consequences of accumulated omissions in the study of the cultural surroundings of 'Tripolye' have been felt by us when we worked on this issue. Thus, we submit a greatly limited work as far as its subject matter is concerned hoping that it will open a sequence of necessary studies. Such studies should, in the first place, focus on the co-ordination of the 'languages' of taxonomy and then they should investigate different aspects of the mechanisms of the outlined processes of the 'cultural contact'.

Tamara G. Movsha

THE TRIPOLYE-CUCUTENI AND LENGYEL-POLGÁR CULTURES

The geo-political position of the Tripolye-Cucuteni cultures between the East and the West and their role in the ethnological history of the adjoining territories created for them all the necessary prerequisites to occupy a special place in the Eneolithic — Early Bronze epochs.

The Tripolye-Cucuteni culture (TCC) is regarded in modern science as a cultural-historical community consisting (from a sociological perspective) of a range of cultures. Its present division into two areas — eastern and western (in the course of time, the latter came to perform a particular role) — does not reflect the complexity of the ancient history of this agricultural population. To reduce the evolution of the Tripolye culture (TC) to two parallel lines, frequently intersecting on some of the territories, does not correspond to the reality of the development of this culture. Presently, a couple of genetic features, which correlate with the archaeological cultures with their own specific features, traditions, cultural-economic relations either inside the TCC community or outside it, may be clearly determined. In our opinion, it is presently conceivable to distinguish eight independent cultural formations: the Petreny (the Upper Prut, the Middle and the Upper Dniester and the middle part of the Southern Bug); the Tomashivka (the Bug and the Dniester rivers basin and, partially, the right bank of the Middle Dnieper); the Koshylivtsy (the Middle Dniester); the Zhvaniets (the Middle Prut, the Middle Dniester); the Sofievka (the Middle Dnieper territory as far as the mouth of the Teteriv in the North) the Kosenivka (basin of the Bug and the Dnieper rivers); the Usatovo (the western part of the Pontic steppes between the Danube, the Prut and the Southern Bug rivers basin); and the Kolomiyschchina (basin between the Bug and the Dnieper, and the Middle Dnieper towards the mouth of the Teteriv river in the North) [Movsha 1984:66; 1993:24-58]. The Kolomiyschchina culture is also known under the name of Eastern TC [Tsvetk 1985:31-40; 1989:106-117].

The high level of economic and cultural development of these cultures served as a reliable guarantee of their vast connections with the surrounding and distant foreign cultures and cultural-historical communities.

This research work considers their interactions with some cultures of the Polgár-Lengyel cultural complex of the closest neighbouring territories.

The finds of imports and their imitations in well-dated complexes makes it possible to give a temporally relatively accurate consideration of their connections and contacts with particular societies. The relations of the tribes of the different cultures of the TC community with the populations of territories characterised by rich resources of copper ore deposits still remains a problem which has yet to be satisfactorily examined, despite being associated with the names of a number of researchers. The interrelations of the population of the TC community with the cultures of the Middle Danube and the Tisza-Transylvania regions are distinctly fixed in the framework of the Balkan-Carpathian metallurgical province [Chernykh 1978a], the third and the fourth stages of the metal processing of south-eastern Europe, with six industrial regions [Ryndina 1993:25-32]. The Tisza-Transylvanian region (including the Polgár culture (PC) of the early Tiszapolgár stage; the Lengyel culture (LC) of the 3d stage; the PC of the further stages of the Bodrogkeresztúr I and the Bodrogkeresztúr II; and the Lengyel IV) played a particularly important role in these interrelations. Copper ore and ready-to-use articles were imported to the TC from the copper ore sources of these cultures.

1. CONNECTIONS BETWEEN THE TRIPOLYE AND THE TISZAPOLGÁR CULTURES

The PC, distinguished by Stanislav Šiška, occupied the territory of eastern Slovakia and the Tisza basin of eastern Hungary, north-western Romania and the territory to the west of the Carpathian Mountains in Ukraine. The materials of the third stage of the PC, which can be subdivided into the Tiszapolgár, the Bodrogkeresztúr and the Lažňany chronological periods, are important with regard to connections with the TCC. There are no Bodrogkeresztúr monuments known in Ukraine. Connections between the TCC and the PC have been determined in the huge territory occupied by the TCC population from the Siret River basin in the west to the middle part of the Dnieper in the east, and from the Upper Dniester and the Upper Prut in the north to the Middle Dnieper in the south-east. The population of the territory to the east of the area of the Carpathians — the Upper Prut and the Upper Dnieper, i.e. the closest neighbouring territory, occupied the primary place in the system of their connections. It is possible to assume that the interrelations were multilateral: not only cultural-economical, but also ethnic.

The investigation of these complicated interrelations is based on both previously available materials and on materials which have not been previously considered in this context. They appear at certain chronological cross-sections over the entire area of the above-mentioned territory, from west to east.

Connections between the TCC and the population of the Carpathian basin can be observed in Romanian Transylvania, at Ariuşd settlement on the River Rech. A vessel was discovered there dating back to the end of the Tiszapolgár stage [Szekely 1964:121-126, Fig. 2, 3; Dumitrescu 1969:87-100]. Connections with the PC of the Tiszapolgár culture (TPC) stage, or a separate culture on the territory of Ukraine, have been detected on settlements of diverse time periods of the B I stage, including Nezvysko II (according to the materials of K.K. Chernysh) and Krasnostavka (the A3 stage of the Cucuteni). In attributing characteristics to the pottery from Nezvysko II, the researcher paid special attention to the thick-walled kitchen pottery produced from a poorly-stirred clay mass with a high content of chamotte admixture: large vessels with wide mouths and conical plates decorated with moulded bosses and ear-shaped handles with horizontal holes [Chernysh 1962:32-36, Fig. 22:12, Fig. 1:5]. A remarkable quantity of monuments over a comparatively large territory, extending to the area between the Bug and the Dnieper basins (Krasnostavka), was involved in contacts with the Polgár population during the Tiszapolgár stage at the end of the TC B I / the Cucuteni A3 stages.

1.1. THE SOLONCHENY GROUP

The relations between the two cultures under consideration in the middle area of the Dnieper river basin are well represented by the significant amount of materials from the middle layer of the Solonchény 2 settlement in Moldova, which deserves a separate publication. The materials from the sealed complexes of dug-outs and semi-dug-outs, dated back to the end of the B I stage — the beginning of the B I — B II / Cucuteni A4, A-B 1 stages, are worth special attention. A deep conical bowl made from a pink mass with an insignificant admixture of fine-grained sand, chamotte, and small and medium-sized quartz grains can possibly be attributed to the imports from monuments of the TCP. Its external surface is lightly smoothed, whilst the inner surface, as well as the outer surface near the mouth, is thoroughly refined. The upper area is decorated on one side by short vertical incisions. The lower area down to the very bottom is decorated with three lines of button-shaped mouldings, located one under the other (Fig. 1:6) [Movsha 1994:45, 46]. An analogous pottery shape and ornamentation is encountered in the TCP monuments in Hungary (particularly in Deszek) [Bognár-Kutzián 1972:Table. XXIII:2], in Ukraine and in the Carpathians in Drysino, Mala Gora site [Potushnyak 1985:293, Fig. 76:12]: the fragments of conical bowls or bowls with rounded walls, vertical near the edge and narrowed in a cone towards the small bottom. The external surface of the bowls is decorated with different mouldings or ear-shaped handles with horizontal holes. They also have analogies in the Tibava settlement in Slovakia [Šiška 1968:Table VIII, XI], some specimens of which bear traces of a thin covering of white paint over the entire surface.

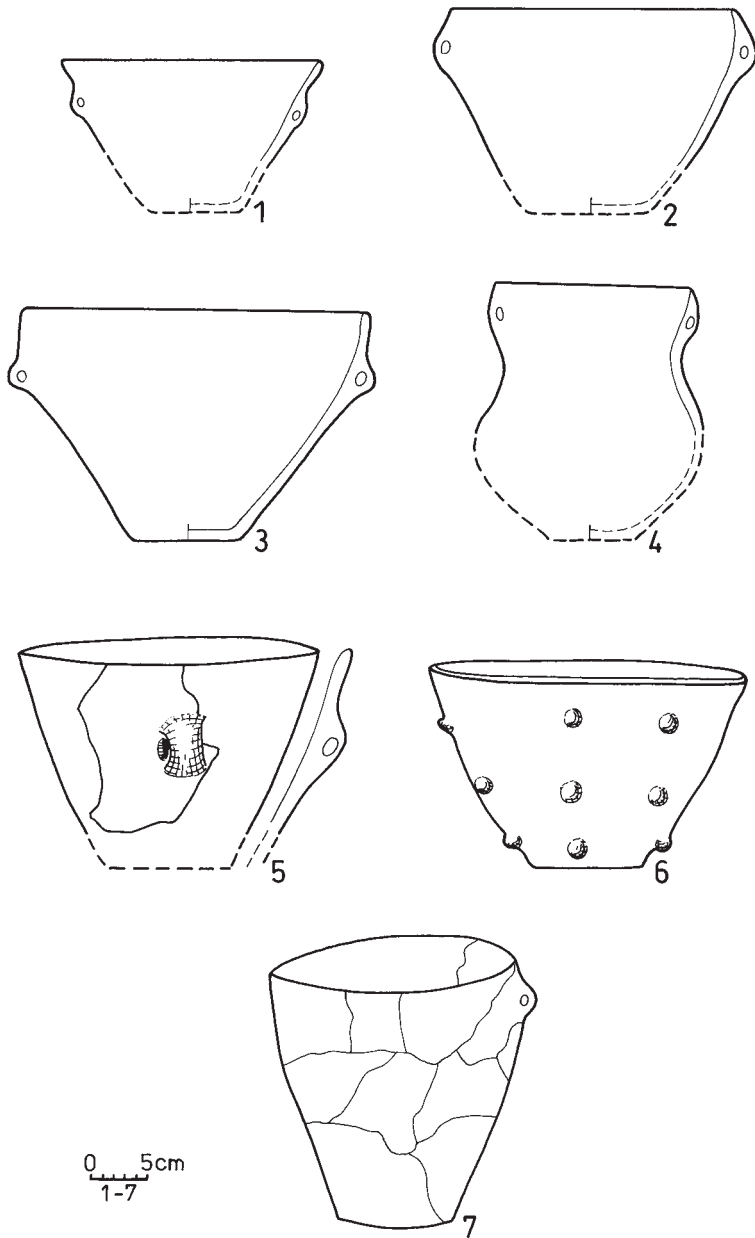


Fig. 1. Ceramics with elements of the Tiszapolgár culture from the Tripolye-Cucuteni settlements: 1-4 Buchach; 5 - Nezvysko II; 6 - Solonchey 2, middle layer ; 7 - Glubochok.

A special interest deserve the fragments of grain containers (so-called *korchagi*) — large vessels produced from a roughly-mixed lumpy clay with a large admixture of chamotte, fine-grained sand, and either lime grains or a red substance. The pottery is often evenly-baked. The colour of the surface and in the cross-sections is of different shades: from greyish, through light brown and reddish, to pink. The external surface is carelessly smoothed by hand and left rough, frequently covered with an engnobe layer. Only the external surface and the area near the edge is carefully fashioned, and occasionally polished. Two types of thick-walled grain containers can be distinguished: 1 — vessels with rounded shoulders and a curve towards a straight wide mouth; 2 — vessels with rounded shoulders and with no curve towards the mouth. The lower parts of the walls are sharply or slightly narrowed towards the small bottom. The lip of the mouth is horizontal or obliquely cut. The external surface of both types of vessel is decorated with plastic ornamentation. The shoulders and the lower area of the belly are covered with different types of mouldings: flat and semi-circular, elongated, knobby, beak-shaped and horn-shaped. The pottery group with large phallic and beak-shaped mouldings, occasionally covered with bosses, is especially interesting. As a rule, they do not possess any perforations in the bottom. A vessel wall fragment with a vertically-perforated beak-shaped moulding, and some walls with horizontal holes in the mouldings placed on them are exceptional in this context. A comparatively small range of fragments of large vessels are decorated with loop-shaped ear-handles with holes (Fig. 2:1-8).

The majority of the pottery examined is of local origin, and follows the traditions of TC, B I stage / Cucuteni A4 stage ceramics, with an extensive occurrence of roughly-made kitchen pottery. At the same time, Soloncheny potters had accepted new, foreign elements of ornamentation under the influence of the Tiszapolgár stage of the PC of Transylvania. The beak-shaped mouldings, bosses, handles with holes and other plastic elements of ornamentation are characteristic of the monuments of the classic stage of the Polgár IIIb in eastern Slovakia, such as the cemetery in Tibava [Šiška 1968:Table VIII:8, 12, 14; Table X:5, 10, 13; Table XI:2, 16]. The Soloncheny handles are similar to the perforated beak-shaped handles distinctive for the TPC pottery from Herpály III in Hungary [Titov 1984:Fig. 5:1-4, 7] and for the TPC in Hungary in general [Bognár-Kutzián 1963; 1972]. Stanislav Šiška has synchronised the classical stage of Polgár IIIb with the B2 stage of the TC, drawing on the similarity in shapes and mouldings between the TC and the TPC [Šiška 1968:145]. The TPC influence was distributed in the TC monuments on the territory of the Upper and the Middle Dnieper basin. This data has already been partially presented in scientific literature. The settlement in the Glubochok village in the Borschiv District of Ternopil Region, dated back to the end of the BI stage, is one of the new monuments which reflects such contacts and relationships. The deep bowl-shaped form with attached ear-shaped handles was discovered there. This vessel was made from a rough paste with a chamotte admixture. The external surface is roughly fashioned by hand, especially in its lower part (Fig. 1:7)

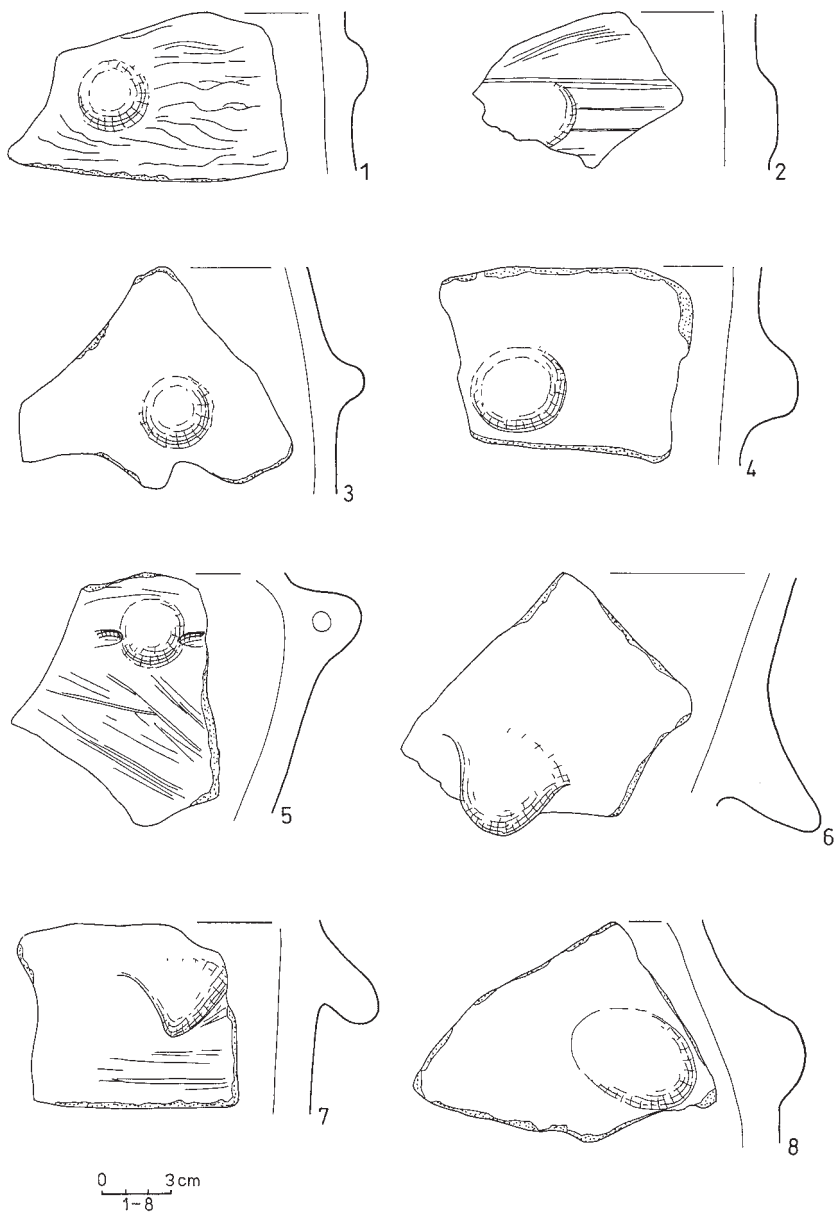


Fig. 2. Ceramics with elements of the Tiszapolgár culture from the settlement in Solonchény 2 (middle layer).

[Sokhatskiy 1993:10; Fig. 4:6]. Analogies to this vessel can be found in the pottery of the TPC monument in Hódmezövásárhely-Bodzáspart [Bognár-Kutzián 1972:Plate XLIV:5].

1.2. THE PETRENY CULTURE OF THE MIDDLE AND THE UPPER DNIESTER

The fragments of TPC vessels, decorated with button-shaped mouldings and pin decorations, have been discovered in upper and lower Nezvysko settlements (Chernyatyn of the B I-II stages and Viktoriv, the later periods of B II-C I stages) [Kruts, Ryzhov 1997:26].

The deep rounded cup found in the settlement of the B II stage in Nezvysko II deserves a particular mention [Chernysh 1982:205]. It has wide vertical walls near the brim, rounded shoulders and a lower part which narrows sharply towards a small bottom. The external surface is rough; the internal surface smooth. The ornamentation is plastic, covering the surface with several chequered lines. The upper part is decorated with ear-shaped handles with horizontal holes; the lower part is covered with beak-shaped mouldings (Fig. 3:1) [Kozłowski 1939:23, Table VII, II; Movsha 1994a:45]. The shape of the Nezvysko vessel and the mixture of two types of plastic ornamentation are specific features of the TPC, as further exemplified by the similarly-shaped vessel from Tiszaug-Kisrértpart [Bognár-Kutzián 1972:163, Fig. 18].

The large vessel found in the Holigrady settlement (Chervonograd) is worth noting in the context of relationships between the TC and the cultures of the Middle Danube basin. It has high shoulders, a wide mouth, undeveloped brim and conical walls narrowed towards the bottom. Four lines of wide handles with horizontal holes are placed in a chess-board arrangement on the shoulders (Fig. 3:2) [Hadaczek 1914:Fig. 42]. The shape and plastic ornamentation of the Holigrady vessel corresponds to the Chaskhal type [Bognár-Kutzián 1972:Plate XIII:3].

The pottery from the TC settlement of Kadyivtsy-Bavky in the Kamyanets-Podilskiy District of Khmelnytskyi Region illustrates the interactions with the population of the TPC. According to the data of M.Y. Rudinskiy [1927:123-133], some researchers consider this settlement to be a monument of two chronologically-close layers [Vinogradova 1983:36], attributing the second layer to the B I-II stages. Passing over this question, we will focus on an entirely-preserved vessel found in this settlement — a large grain container (62.7 cm), which appears to be attributable to the same horizon as the painted vessels with vertical S-shaped ornament. The grain container is produced from roughly mixed clay, with a chamotte admixture, and is pink in colour. The external surface is generally carelessly smoothed by hand in different directions, only well-smoothed under the rim. The shape is traditional, with a wide mouth, and rounded shoulders narrowing

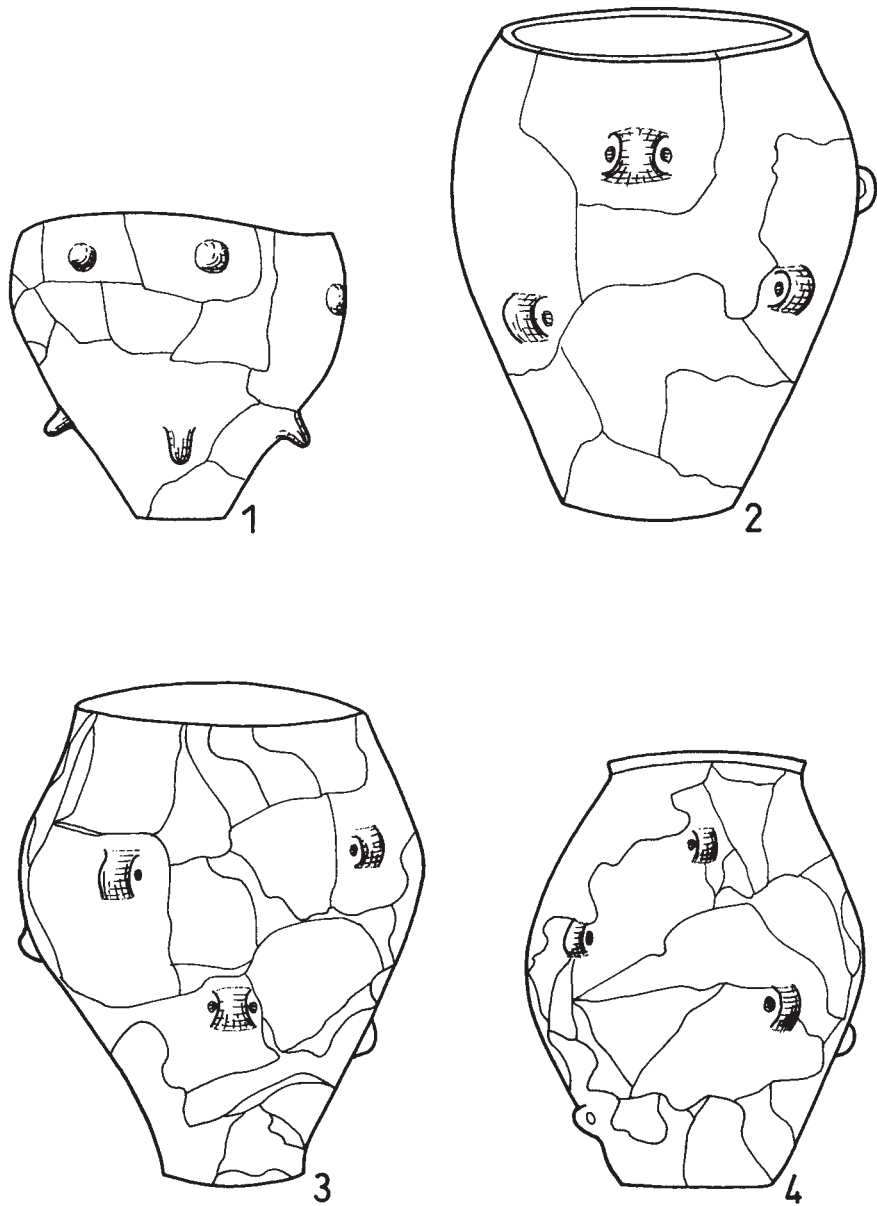


Fig. 3. Large vessels with elements of the Tiszapolgár and the Bodrogkeresztúr cultures from the settlements in: 1 - Nezvysko III; 2 - Holigrady; 3 - Kadyivtsy-Bavky; 4 - Petreny.

sharply towards a small bottom. The external surface from the broadest part of the shoulders down is decorated with plastic ornamentation in the form of wide handles and mouldings. The handles are placed in two lines and have horizontal holes. Individual conical-shaped mouldings are placed in the spaces between them and lower down (Fig. 3:3) [Rudinskiy 1927:123, Plate XXIX:30].

The TPC imports can be correspondingly traced in the table pottery from Buchach in the Dniester River basin (Fig. 1-3) [Kozłowski 1924]. The connections between the representatives of this monument and the population of the Carpathian basin are confirmed by the recent excavations in this settlement held by Maryna Yagodynska and Oleksandr Sytnyk, during which they discovered a large vessel with plastic mouldings.

In the light of this information, one could surmise that the Middle Dniester monuments, where the pottery with kind of painted and deeply incised ornamentation reveal genetic connections with the following development of the settlement of the Ozaryntsi type in Mogyliv-Podolia region, will play a key role in the future in solving questions regarding contacts between the TC and the TPC. An illustrative specimen in this context is the vessel fragment with a beak-shaped attachment from field research carried out in the lower layer settlement in the village of Gremyach, Monashky site, in the Kamianets-Podilskyi District [Movsha 1994a:30].

1.3. THE KOLOMYSHCHINA CULTURE OF THE SOUTHERN BUG AND THE DNEPER RIVERS

The TC communities from the Bug and the Dnieper rivers basin came into contact with the TPC at the end of the B I stage of the Tripolye / Cucuteni A3, A4. Imported pottery produced from clay with sand, lime and quartzite admixtures, and emulations thereof, was discovered in Krasnostavka. The vessel presented in publication by T.D. Belanovskaya is shown here at Fig. 4:8 [Belanovskaya 1957:31-39]. TPC and TC elements were combined [Tsvek 1985], with the former represented particularly in the handle shape and point incisions. The TPC influence can be traced in the monuments of the following B II stage of the TC, and is particularly present in new shapes, such as the bowls with hole ornamentation and bowls with a double row of loop-shaped handles found in Vesely Kut and Shkarivtsy [Tsvek 1985:39, 1989:112-114, Table 5]. Analogies to some of these forms are to be found also in the Carpathian region (Dedovo — Khompalok site) [Potushnyak 1985:Fig. 77:12].

The most easterly find, connected with the Tiszapolgár stage of the PC, originates from the cemetery in the village of Orlyk, in the Poltava Region [Lugova, Rassamakin 1985:53-57].

From the end of the B I stage of the TC / Cucuteni A4 onwards, the connections of the TCC population with the representatives of the Carpathian basin cultures became

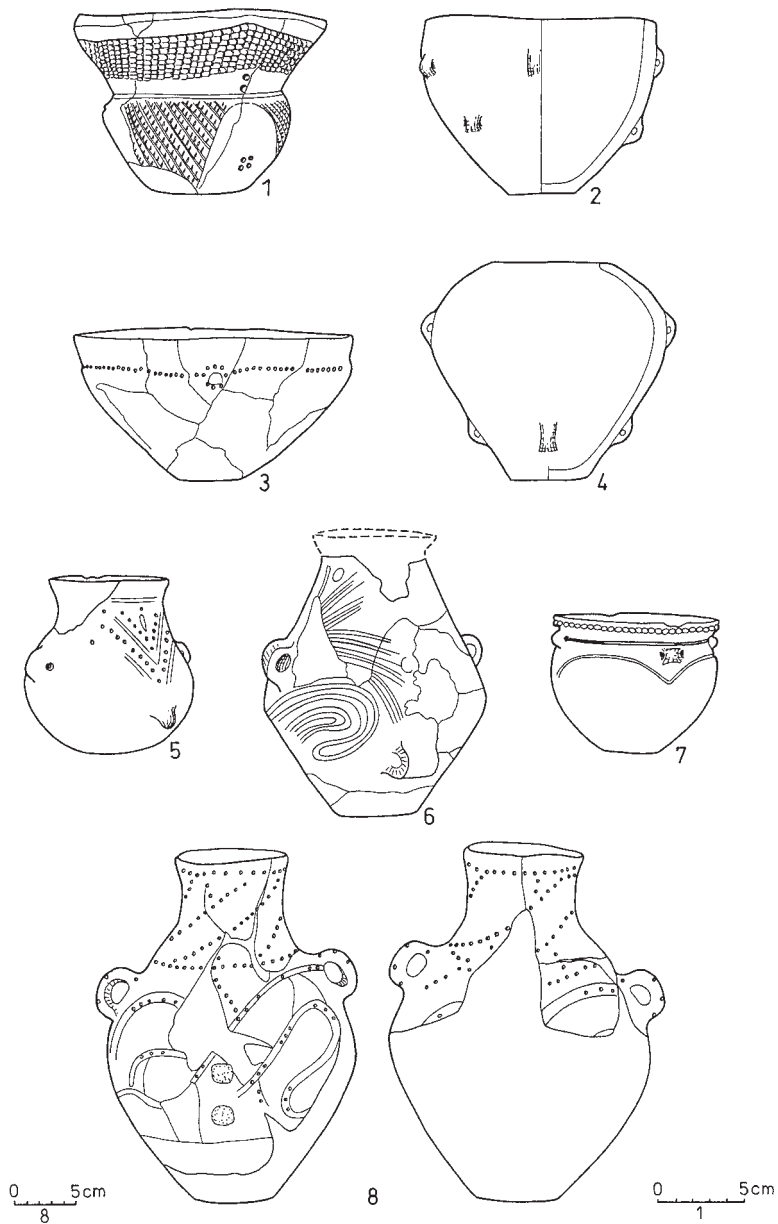


Fig. 4. Pottery with elements of the Tiszapolgár and the Bodrogkeresztúr cultures from the settlement in: 1,3 - Vesely Kut; 2 - Stara Buda; 4 - Klishchiv; 5-7 -Veremya; 8 - Krasnostavka.

constant. The artifacts from the TC settlement of the B I-B II stages (according to T.S. Passek — B II stage) in the middle area of the Dnieper river basin are of particular importance in the question of TC links with the region under consideration, in other words, in determining the period of inhabitation of this territory by the TC population. Among the artifacts discovered were not only items of pottery, but also different shaped axes, originating from the later settlements of northern Moldova: Brynzeny-Tsyganka and Soroki, Michurin farm. The researchers compare these axes to the tools of the Bodrogkeresztúr stage of the PC, which P. Patay attributes to the Sakhalkat type [Titov, Markevich 1974:150-164]. In particular, the broadsword-axe from the Michurin farm is compared to the broadsword-axe from the Bachokert settlement of the PC [Patay 1959:145, Fig. 41].

Evidence of the Carpathian-Transylvanian origin of a significant amount of the above-mentioned tools and the apparent use of metal from this region in the production of artifacts is provided by concurrent finds of pottery featuring elements of the TPC. Additionally, a number of artifacts originate from the same sites on the territory of the Middle Dnieper basin as the above-mentioned metal broadsword-axes. First of all, attention should be drawn to a collection of unbroken beakers from the excavations of V. Khvoiko. They are of two types: 1 — vessels with low, rounded shoulders, a cylindrical neck smoothly curved near the brim, and a lightly-profiled bottom (Veremya), 2 — vessels with slightly higher, rounded shoulders, and a conical upper part narrowing towards a small mouth. Loop-shaped handles with vertical holes are placed in the upper part of the shoulders. Two pseudo-flutes joining over the beak-shaped moulding or hanging ear-shaped handle with horizontal hole are outlined over the handles on one beaker and under them on the other (Fig. 6:1). On the single beaker from Veremya, the ornamentation with pseudo-flutes is placed over the beak-shaped moulding, imitating a phallus decorated with hollow tube prints (Fig. 4:5). Analogies to this ornamentation are present in the TPC in the Carpathian basin, including the ornamental motifs of the vessel from Hódmezővásárhely-Bodzáspart [Bognár-Kutzián 1972:39]. Other analogous beakers come from Deszek (Plate XX:4; XXII:6; XXVI:3; Hódmezővásárhely-Kotacpart, grave 7, Plate XVI:2; Ószentiván, Table VIII, grave 8, Plate IVIII:1). The vessel from the settlement of the B II stage in Veremya village [Kozlovska 1926, Fig. 18] with a conical, narrowed upper part is noteworthy for its shape and ornamentation in which, as in Krasnostavka, typical Tripolyan ornamentation and Polgár elements were combined. Two wide moulded handles are placed on the shoulders. A handle placed near the bottom of the vessel imitates a phallus. There is a small button moulding on the shoulders (Fig. 4, 6). The beaker with low, rounded shoulders and a small, slightly concave bottom, decorated with wide pseudo-channellures and a horn-shaped protuberance, is horizontally cut at the top. The surface of the beaker is covered with a thin layer of dark brown engobe and is well smoothed and polished. The ceramic mass contained an admixture of sand and herb fibre (Fig. 6:3).

2. CONNECTIONS BETWEEN THE TRIPOLYE-CUCUTENI AND THE BODROGKERESZTÚR

The new population group of the Bodrogkeresztúr culture appeared at the end of the B II stage of the Tripolye / Cucuteni A-B1. It occupied the territory of eastern Hungary, western and north-western Romania, and eastern Slovakia. Several sites have been identified in the eastern regions of the Carpathian basin in Poland. There is no data available concerning its presence in Ukraine.

The contacts and connections between the TCC and the Bodrogkeresztúr population are traced within the same territorial borders of the TCC as with the TPC population of the previous stage until TC C I and Cucuteni B1 inclusive. Evidence of cultural exchange is provided by pottery and metal artifacts. Data from the excavations in Reci in Romania, where both TPC and Bodrogkeresztúr pottery was discovered in one complex of the Ariuşd culture [Szekely 1964:123-124, Fig. 2; Dumitrescu 1969:87-100], testifies to the partial co-existence of monuments of two different stages of the PC. Traces of this phenomenon can be found in the settlement in Vesely Kut [Tsvek 1989:112-114].

The nearest contact area of direct relationships was the Ukrainian Carpathian Mountains — the Upper Prut area and the Dnieper River basin (the upper and the northern reaches of the Middle Dnieper). Bodrogkeresztúr influence, emulation and impulses can be observed in many settlements.

2.1. THE BYSTRY TSA RIVER REGION IN ROMANIA. THE PETRENY CULTURE OF THE UPPER PRUT, THE MIDDLE AND THE UPPER DNIESTER. THE TOMASHIVKA CULTURE OF THE SOUTHERN BUG AND DNEIPE R BASIN

The find of a golden pendant and a large vessel in the Romanian settlement of Traian-Dealul-Fântânilor III is believed to provide evidence of active relations between the above-mentioned cultures [Dumitrescu 1969:87-103, 1976:231-232, 1981: 23-35, Fig. 1]. The vessel has high shoulders, a narrow mouth and an oblong lower part smoothly narrowing towards the base. The external surface is carelessly smoothed and decorated with beak-shaped mouldings with horizontal holes placed in several rows. V.S. Titov correlated this vessel with the pottery of the Hunyadihálom group in eastern Hungary, Lažňany in eastern Slovakia and monuments in the Carpathian Mountains. Furthermore, basing on their distinctive handles, he outlined analogies with the Salcuța IV and Petrești IV, paying special importance to the Traian finds [Titov 1971:1-7].

V. Dumitrescu has noted Bodrogkeresztúr ornamental traditions in the unique vase with four petalled lips and two moulded ear-shaped handles from Calu Piatra Șoimului

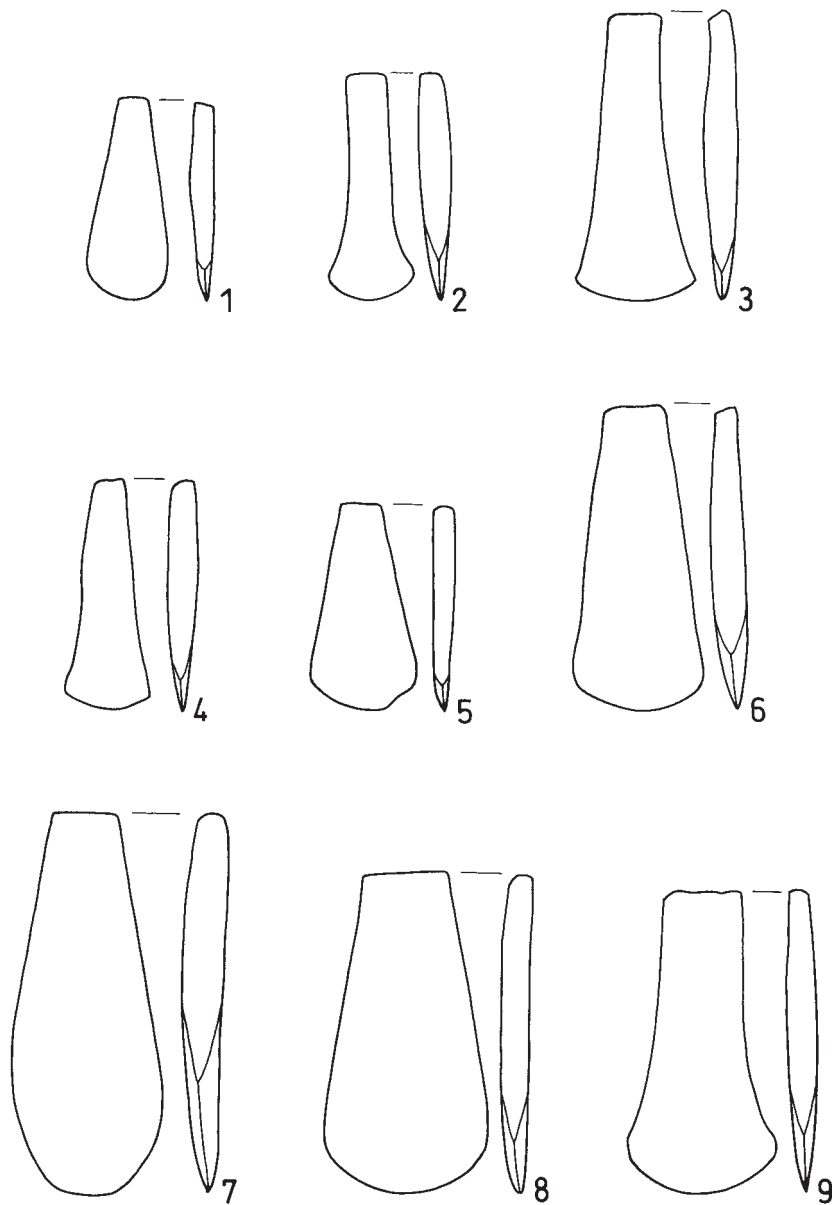


Fig. 5. Copper axes from the Tripolye settlements in: 1,8,9 - Shcherbanivka; 2,4,5 - Veremya; 3 - Gorodnytsa II; 6,7 - Tripolye.

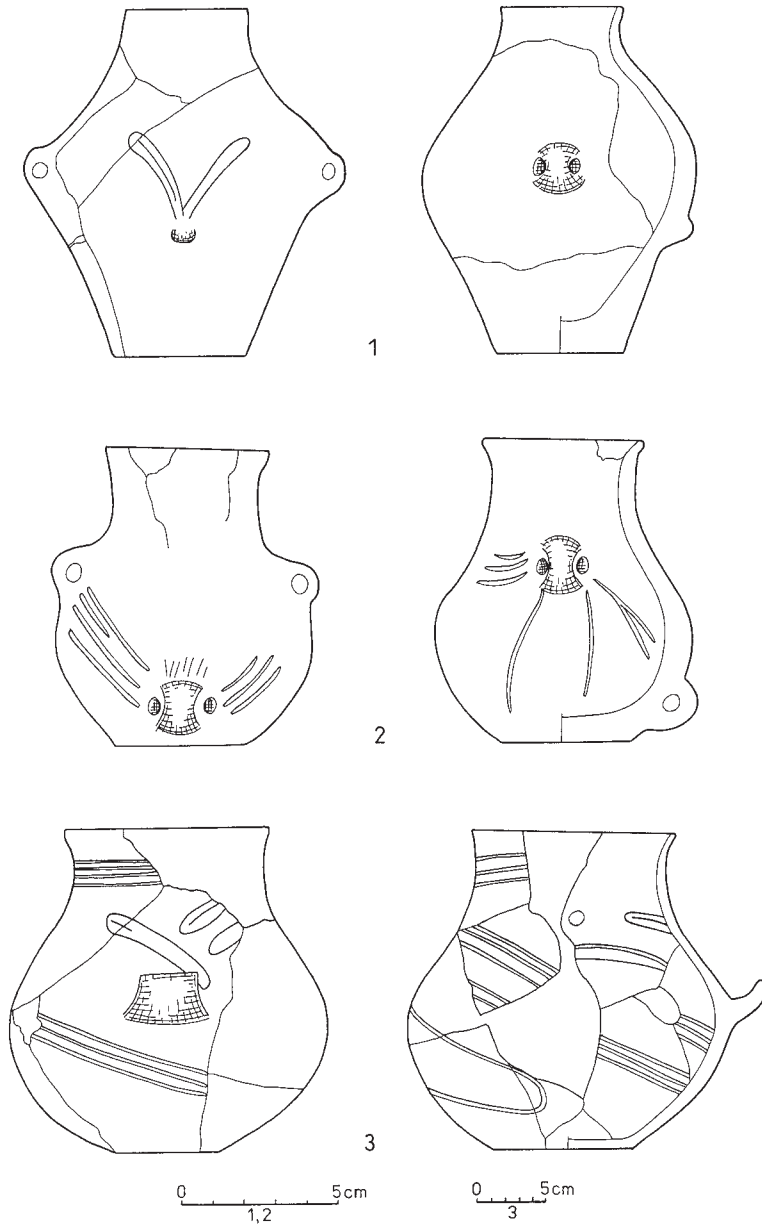


Fig. 6. Beakers from the Tripolye culture settlements: 1 - Stayky-Zhukivtsy; 2,3 - the Middle Dnieper basin territory with the Tiszapolgár and the Bodrogkeresztúr elements.

settlement of the Cucuteni A-B stage. At the same time, the ornamented vessel from the settlement in Draguşeni of the Cucuteni A4 period he attributes to the TPC [Dumitrescu 1974:Fig. 140, 1976:356].

By the B2 stage of the TC, the traditional Bodrogkeresztúr net ornamentations, had reached the area between the Bug and the Dnieper river basins. They were used to cover local pottery of the crater type [Tsvek 1989] (Fig. 4:1). The connections with the Bodrogkeresztúr culture of the second stage are observed on the territory of the Southern Bug. One notable example is a bowl/cup, with rounded shoulders and moulded handles with horizontal holes, found in the settlement of the Tomashivka cultural group in the village of Stara Buda [Kruts, Ryzhov 1997] (Fig. 4:2). Imported elements include vessels of a new pear-like shape, with an undeveloped brim and a small mouth, such as one of the vessels from the settlement of the B2 stage in Klishchiv village, which is decorated with moulded handles placed at the broadest point of the shoulders and in the lower part [Zayets, Ryzhov 1992] (Fig. 4:4). Pear-shaped vessels bearing imported elements of ornamentation later became the most widely-spread vessels in settlements of the Kolomyshchina culture in the TCC community on the territory of the Middle Dnieper basin. This will be discussed below.

The settlement of the Upper Prut basin which fully demonstrates influences and, possibly, impulses of the Polgár cultural complex at the Bodrogkeresztúr stage is the Shypintsy settlement in the Chernivtsi Region at the TC CI stage. The materials from the upper layer of this settlement — Shypintsy B — are presented below, in accordance with the monograph of Oleg Kandyba [1937]. They include a large vessel (72 cm high) with a narrow mouth and rounded, conical shoulders narrowed towards the brim, and smoothly narrowing down to the bottom. The external surface is decorated with moulded handles with horizontal holes placed in five rows in a chess-board arrangement [Kandyba 1937:Fig. 119] (Fig. 7:8). In addition, the table pottery of TC type shapes from this Shypintsy monument bears elements from the PC: a cup with rounded shoulders and a lower part sharply narrowing downwards, and diverse pots decorated with four ear-shaped handles placed in a single row are characteristic (Fig. 7:2-6).

Bodrogkeresztúr elements of ornamentation also cover the pottery of the C I stage settlements of the adjoining territory of the Middle Dnieper River basin. Worth noting in this context is a vessel from Melnytza-Podilska in Ternopil Region, which has rounded shoulders smoothly narrowing towards a wide mouth, with undefined brim and bottom. It is externally decorated with three rows of handles with horizontal holes (Fig. 7:1) [Kruts, Ryzhov 1997]. The unique cave in Bilche Zolote (Verteba) is another example of a Middle Dnieper monument whose pottery bears signs of Polgár cultural complex influence. Among the parallels to the large Shypentsi vessels, O. Kandyba mentions a large grain container (78 cm high) with five rows of moulded loop-shaped lugs [Kandyba 1937:38].

From the region close to the Carpathians there are known large vessels found in the settlement of the C I stage in Petreny in the north of Moldova. These vessels are

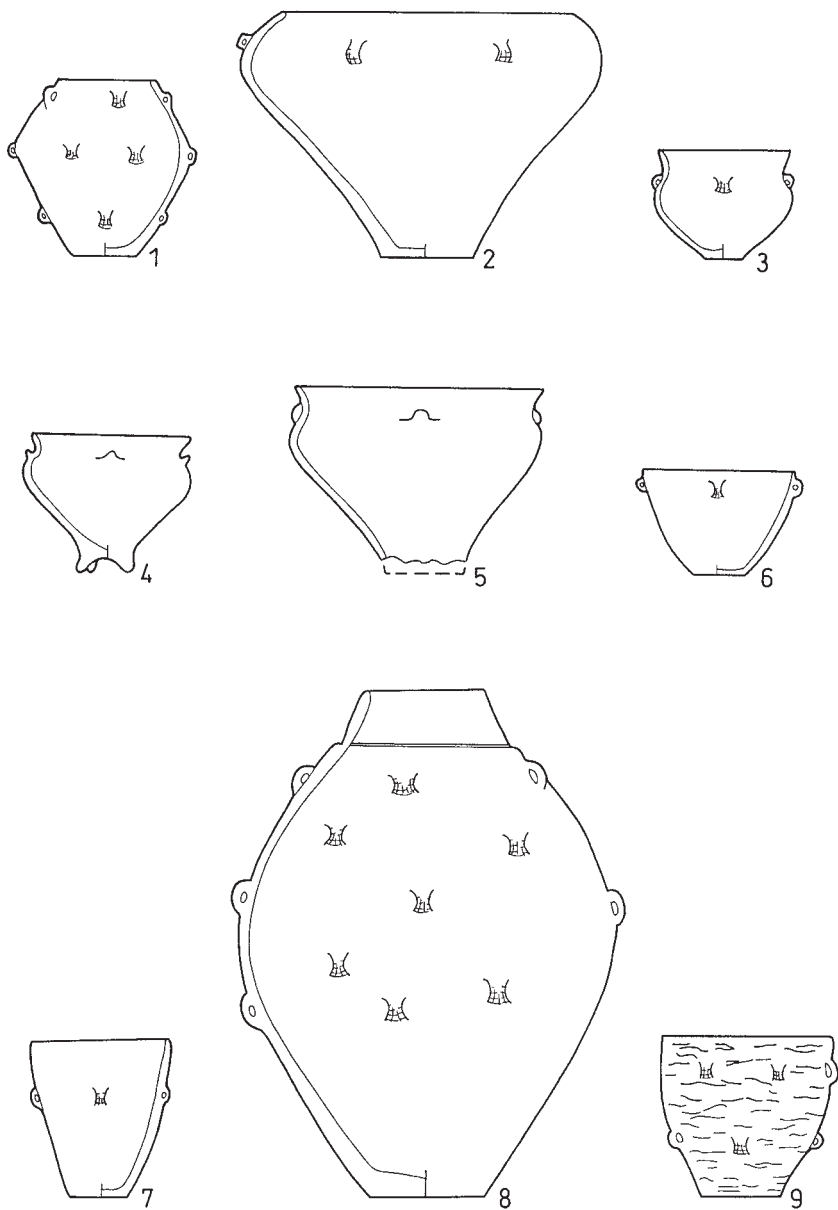


Fig. 7. Pottery with features of the Polgar influence from the settlements in the Dnieper and the Bug rivers basins: 1 - Melnytsa-Podilska; 2,3,5,7,8 - Schypentsi; 6 - Kunysivtsi; Odaiv; 9 - Viktoriv.

oblong in shape, with broadened, angular shoulders narrowing towards a wide mouth with a short, slightly bent brim. Most of the external surface is decorated with four rows of loop-shaped ears in a chess-board arrangement (Fig. 3, 4) [Shtern 1906:Table XI:3].

Finds of this sort of ceramics in the settlements of the Ukrainian Carpathians can be partly explained by impulses from the eastern territory of the Carpathian basin, as well as by the direct relations between the TC population from the basins of the Upper Prut and the Upper Dniester rivers, which we attribute to the Petreny culture in the TCC community, and the representatives of the Bodrogkeresztúr II culture.

Copper hammer-axes and cross-axes occupy an important place in studies of the cultural and economic relations of the TCC with the cultures of the Polgár cultural complex. In the opinion of R. Pittioni, their production was connected with the territory of Transylvania and Slovakia [Pittioni 1953:16]. Although the majority of finds were incidental, some of the specimens derive from monuments dated according to the pottery presently available. The number of such axes available for research has recently increased from fourteen to eighteen. Here, we have included the specimens from the following settlements: Gorodnytsa II of the B II stage from Ternopil Region [Sulimirski 1961]; Zalissa I, Lysa Gora site, of the B II — beginning of the C I stage of the Kamyanets-Podilskiy District of Khmelnytskyi Region (the author of the article specifies that the axe here comes from the upper layer of the settlement); and Ryngach of the C I stage in Chernivtsi Region [Zbenovich 1969:135-141]. There are also two tools from new sites: an axe-adze found in the B II stage settlement in Korzhova in Ternopil Region [Maleyev, Konopla 1985:311] and a hammer-axe from the settlement of the B II — C I stage in Victoriv site 21 in Ivano-Frankivsk Region [Krushelnitskaya, Konopla 1985:300-301] (Fig. 8:1-6).

To sum up, both the new and the previously-known axe-type tools originate from TCC settlements located in the region adjoining the territory of the Transylvanian — Carpathian copper ore basin.

According to R. Pittioni, two unbroken axes, found in two hoards discovered in Gorodnytsa II and Brad, can be attributed to the imports from the Transylvanian or Slovakian centres. They have been typologically compared to the cast axes with inlets, originating from burial places of the late stage of the Bodrogkeresztúr in Decea Muresului and Jászladány [Ryndina 1971:133-134, 138].

An axe-adze from Gorodnytsa II, reliable for dating purposes, found together with other metal artifacts in a painted vessel, is characteristic for settlements of the B2 stage of the TC, which, according to our studies, was a part of the Petreny culture [Movsha 1984; 1993:24-58]. The hoard also contained other copper artifacts: an adze with semicircular blade, a knife, nine oblong barrel-shaped beads and a fragment of a diadem or neck adornment decorated with stamp ornamentation [Sulimirski 1961:91, 92, Table 1].

The axes under consideration are attributed by scientists to the Jászladány type, which was connected with the Bodrogkeresztúr culture. However, this opinion is considered to be erroneous, as the territory of distribution of these instruments was much

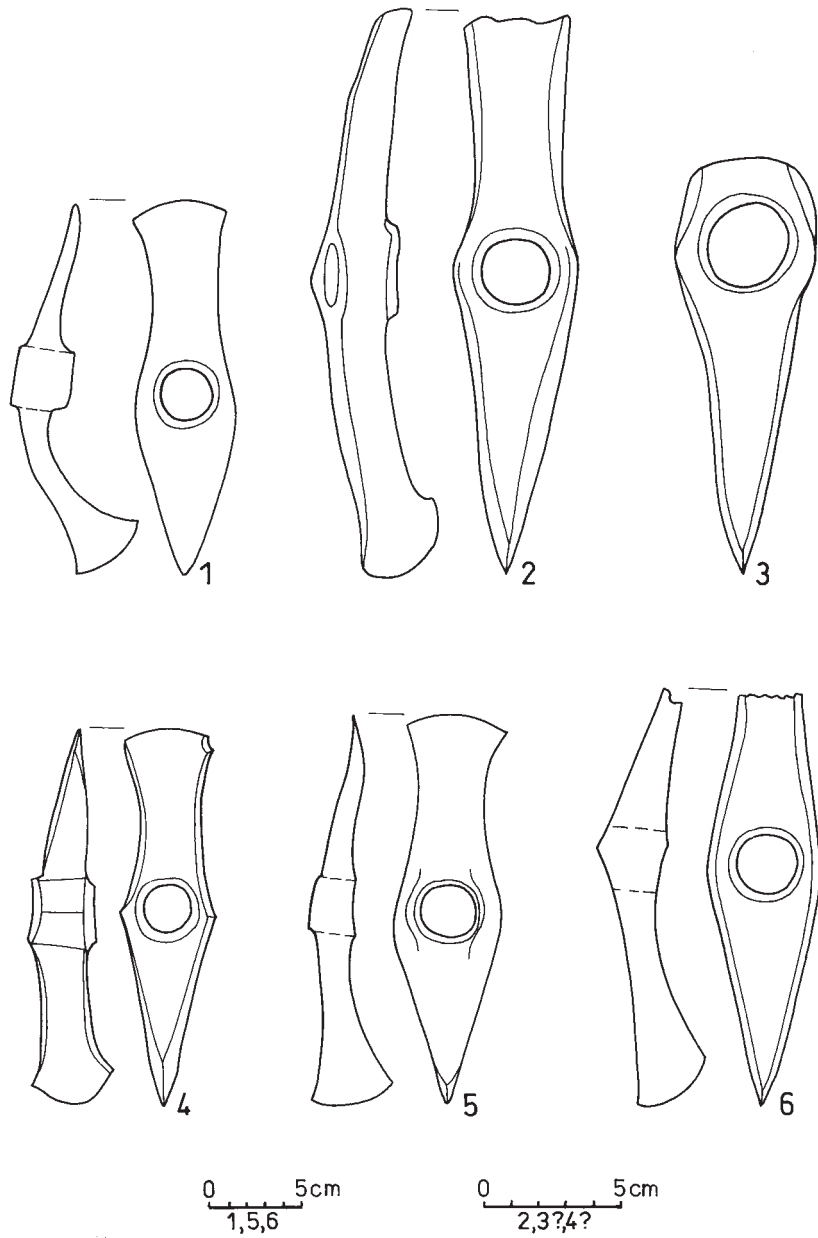


Fig. 8. Copper hammer-axes from the Tripolye settlements.

larger and exceeded the borders of the Bodrogkeresztúr monuments. Additionally, their largest concentration is to be found on this territory [Bognár-Kutzián 1963:493, 494]. V.S. Titov has dated the axes with cross-shaped blade back to the B I - B II - C I stages / Cucuteni A-B, B. They first appeared in Hungary at the end of the TPC (V.S. Titov later extended the dating of this culture to the C I - C II stages), and were then used during the Bodrogkeresztúr. The lower limit of their appearance is, however, still unknown [Titov 1971:1-7].

In our opinion, it is very important that the above-mentioned axes, as well as the large vessels and vessels of other shapes mentioned, which were discovered in the settlements of the Petreny culture in the TCC community, such as Nezvysko III, Kadyivtsy-Bavky, Petreny, Gorodnytsa II and Zalissa I, confirm the interrelations with TCC population.

2.2. THE KOLOMIYSHCHINA AND SOFIEVKA CULTURES OF THE MIDDLE DNIEPER

Foreign Bodrogkeresztúr elements in the Middle Dnieper basin are present on the vessels of pear-like shapes, flat or oblong with a narrow mouth and small bottom.

Their brims are of several shapes: undeveloped (Grebeny); short and cylindrical (Kolomiyschchina I); and slightly externally bent (Veremya, Dovzhyk site) [Khvoiko 1901; Passek 1949:Fig. 67; Tsvek 1964:Fig. 1]. The surface is covered with a layer of engobe, and smoothed, on some vessels even polished (Grebeny). It is of a terracotta, brownish or occasionally greyish-black colour. The ceramic mass is rough, with an admixture of coarse-grained sand, and grains of white and red substances. The deeply incised ornamentation traditional for the eastern region is combined on these vessels with plastic mouldings in the form of loop-shaped handles, which decorate the upper part of the shoulders and the lower bellies close to the bottom.

The territory of distribution of the above-mentioned type of grain containers covers the area of the right bank of the Middle Dnieper basin. Its chronological range lies between B II and C I. The unbroken specimens from the listed settlements represent the entire range (Fig. 9:1-7), although there are also some interesting fragments from the excavations of V. Khvoiko in Zhukivtsy (Fig. 9:3) and from other unidentified sites (Fig. 9:4, 5). The large (63 cm high), round vessel (grain container?) from Grebeny can be attributed to the early vessels. Spirals and schematic anthropomorphic elements of ornamentation are accompanied by two rows of symmetrically-placed, loop-shaped handles [Tsvek 1964, Fig. 1].

The two large grain containers from the Kolomiyschchina I settlement are not the least important in terms of research into the relations of the TC population in the Dnieper River basin and the representatives of the Polgár cultural circle at the Bodrogkeresztúr II stage. On one of the containers, the tree of life is deeply engraved. On the other, this

feature is more stylised and is surrounded by columns composed of short horizontal lines. Both grain containers are decorated with two rows of 'ears', four in each row (Fig. 9:1-2) [Passek 1949:Fig. 67]. The grain container from the excavations of V. Khvoiko with solar and lunar signs has only two 'ears' under the brim (Fig. 9:5). The rounded vessel from the Dovzhyk site in the village of Veremya has an ornamentation featuring complex symbolism, and four large, symmetrically-positioned, loop-shaped handles, distinctive for the Polgár cultural circle (Fig. 9:6). Such loop-shaped handles, this time placed in two rows, in an asymmetric arrangement, cover the upper part of a further grain container, decorated with lunar symbols, trees of life and wave-shaped bands, which derives from an unknown settlement in the Dnieper basin (Fig. 9:4).

It is apparent from analysis of the above-mentioned materials of the B II and CI stages that Polgár elements are present in many settlements on this territory. Pear-shaped grain containers are different in proportions, shoulder-shapes, and in the type, number and position of handles. It is worth mentioning the less frequent occurrence here of large loop-shaped handles, and the apparent absence of knee-shaped handles. In the Polgár of Hungary and Slovakia, such grain containers are extremely rare. There is no doubt that part of the grain containers from the Middle Dnieper basin were produced by TC potters, who introduced alien traditions of the population as provider of metal. What had been their exchange relations? It is difficult to decide whether the initiative and its realisation belonged to representatives of communities of the Carpathian basin cultures, or whether TC people came to some locations of cultural exchange on their own initiative. Ethnographers have distinguished two systems of exchange. In the opinion of V.A. Shnilerman, the relations with distant neighbours, linked to the organisation of special expeditions [Shnilerman 1986:341-345], corresponds to the second system of exchange in locations of valuable natural resources.

According to one recently expressed opinion, the TC population of the Southern Bug and Dnieper rivers basin accomplished an intermediary function in the process of impulse transmission of the Polgár cultural circle to the Middle Dnieper basin [Kadrow, Koško, Videiko 1995:207]. In the light of this supposition, it is worth adding that communities which had migrated from settlements in the basin of the Bug and Dnieper rivers to the right bank of the Middle Dnieper and had founded there monuments of the B II stage of the TC (period division of T.S. Passek) i.e. Veremya and Shcherbanivka, continued, in turn, to preserve connections with the Polgár population. It is distinctly possible that these links were maintained without recourse to intermediaries, with special expeditions organised to search for metal. The find of an extremely valuable female statuette from the Kolomiyschchina II settlement of the B II stage testifies that special worship rituals, involving specific types of plastics, took place before the departures of such expeditions. The Kolomiyschchina statuette is schematic, reclined, with a thin metal plate placed near the bosom in the purposely-enlarged stomach [Movsha 1969:32].

The exchange relations may have taken place at the level of tribal government. This institution regulated not only the relations between the communities of one population.

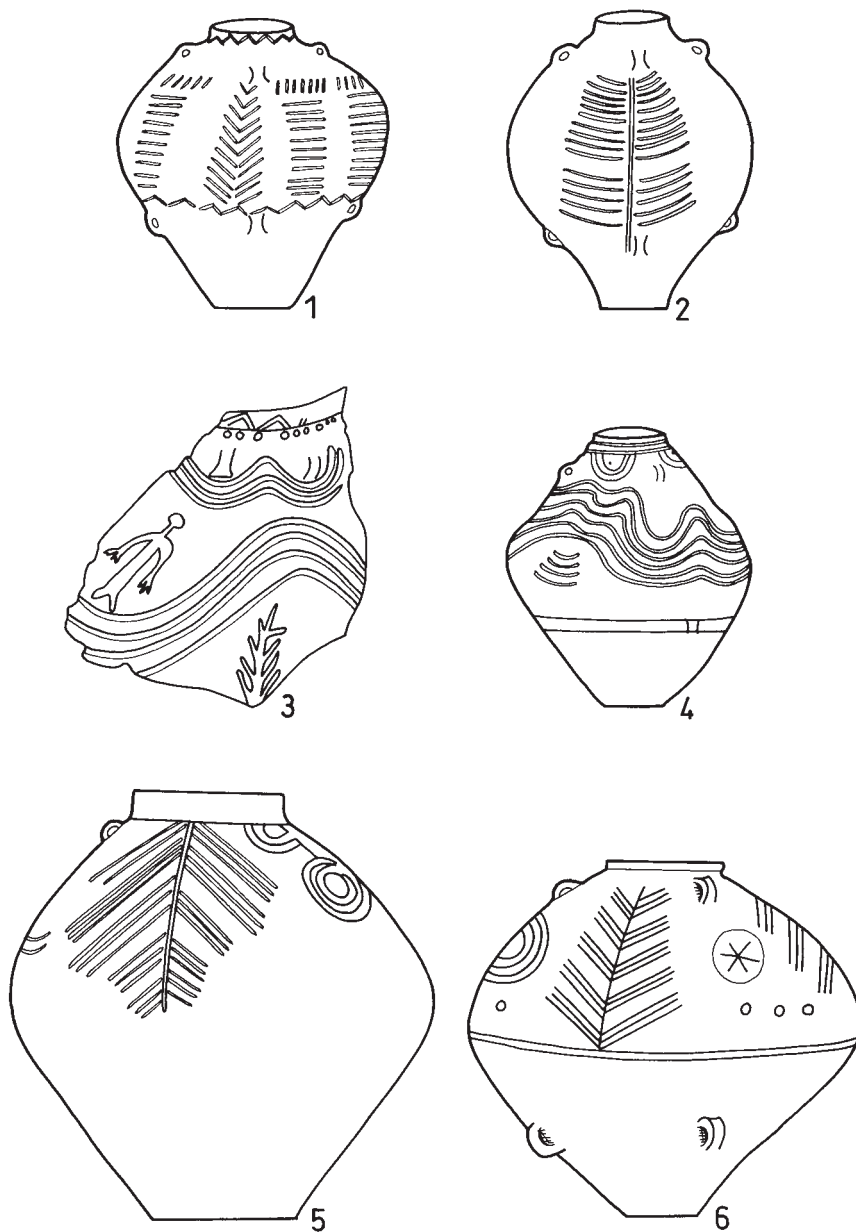


Fig. 9. The Tripolye pottery with elements of the Bodrogkeresztúr II culture: 1,2 -Kolomiyshchina I; 3 Zhukivtsy; 4-5 - the Middle Dnieper basin; 6 - Dovzhyk.

In the opinion of O.G. Kolesnikov, the functions of the tribe that left monuments of the Kolomiyschchina culture in the TCC community included the regulation of the exchange relations with the Volhynian population. The Kolomiyschchina population received flint and slate for use in adze and mattock production from Eastern Volhynia [Kolesnikov 1993:104, 105]. Presently, it is possible to identify a further function of this tribe in the regulation of relations with the representatives of the Polgár cultural circle (Polgár IV according to S. Šiška). Moreover, their predecessors of the same eastern branch of development as Kolomiyschchina, in the Middle Dnieper basin, had already maintained relations with the TPC population of the Polgár II stage.

This is testified to by the fragment of a carelessly made vessel with moulding near the bottom found in the lower layer of the Gremyach settlement, Monashky site, in the Vinkivtsi District of Khmelnytskyi Region [Movsha 1994a:30].

The influence of the Polgár cultural circle on the TC of the Middle Dnieper basin region has also been traced at the C II stage in the pottery of the burial monuments of the Sofievka culture (SC): for example, vessel shapes of the late Polgár stages of the B and C phases encountered in Krasny Khutor, Sofievka, Chernin and Zavalivka. Moreover, impulses of the Baden, Kostolac-Coțofeni II/III — Cernavoda II, Bronocice IV cultures are observed in finds of vessels from the Hunyadihálom and the Lažňany horizons [Kadrow, Koško, Videiko 1995:200-213]. At the same time, the authors have underlined that the Polgár cultural circle elements were dominant here.

3. TRIPOLYE-CUCUTENI CONNECTIONS WITH THE LENGYEL CULTURE

The relations with the LC were of great importance in the life of the TCC. The majority of the LC territory was situated in the Middle Danube and the Tisza-Transylvanian region, whence the populating of Ukraine and Poland began. In the process of recent research in western Volhynia and north-eastern region before the Carpathian mountains, it has been determined that the monuments of the Kostyanets stage (Hoszczka-Werbkowiec) are early, and the monuments of Zimno-Złota stage are late, which corresponds to the period division of Y.M. Zakharuk [1962:48-52, 1971a:214-216]. At the Zimno-Złota stage, the population extended to the basin of the Styr and had reached the upper reaches of the Horyn river [Konopla 1990:11-17].

The Kostyanets group can be compared with the Malice group in Poland, which is considered by Polish researchers to be a separate culture [Kadrow 1988:5, 8, 29; 1996:51-70; Zakościelna, Gurba 1997:201-209; Zakościelna 1996:5-265]. In Ukraine, it is regarded as part of the Malice culture [Konopla 1990:17]. The monuments of western Volhynia and Podolia bear classical features of the Rzeszów group as well as TPC

elements, with elements of the Tiszaug group of Tiszapolgár stage A. Analogies to these monuments are present in the B stage on the territory of Hungary and in the Pleszów group in Poland. Hence, imports of Rzeszów stage ceramics are encountered in Hoszcza-Werbkowitz settlement of Kostyanets group [Kadrow 1996:22, 24, Fig. 12:1-13]. The Rzeszów group played the role of the first site for the transmission of cultural influences from the Upper Tisza area to the north and north-east of the Carpathian mountains [Konopla 1990:17].

The concentration of late Malice settlements in the western Volhynian Highlands is attributed by researchers to the demand for Volhynian flint, which was used for exchange [Zakościelna 1996:5-265; Kadrow 1996:26], and by the copper ore deposits in the village of Velykiy Midsk in Rivne Region available for development [Malkowski 1931:384-402; Konopla 1990:14].

The Zimno group of monuments appeared as the result of the second wave of populating. It corresponds to the related Lublin-Volhynia culture on the territory of Poland. It is a sort of symbiosis of the Malice culture and the Ludanice group (Lengyel IV) of Slovakia [Konopla 1990:17]. A similarity has been distinguished between Zimno group pottery and flint artifacts and those of the Lublin-Volhynia culture [Zakościelna 1981:6; 1986:35-45; Kruk, Milisauskas 1985:52-65].

The monuments of the Zimno group were simultaneous with the TC B II — beginning of the C I stage, and the Bodrogkeresztúr 2 culture, Balaton — Lasinja I. The Kościaniec and Zimno cultures were assimilated by the TC population. As a result, a distinct TC appeared, with certain specific features of its own [Konopla 1990:17].

The earliest TC contacts with the LC (the Cucuteni contacts on the territory of Romania are unknown) have been fixed in the Upper Dniester river basin in the Gorodnytsa settlement of the B II stage, where a painted vessel was found [Zakharuk 1962:48-52], and in the Bukivna 28 settlement [Kruts, Ryzhov 1997:27, Fig. 12]. In the Upper Prut basin, traces of these contacts are present in the settlement of the C I stage of the Petreny culture in Shypintsy B (Fig. 10:1) [Kandyba 1937].

3.1. THE KOLOMIYSHCHINA CULTURE OF THE MIDDLE DNEPER RIVER

Elements of the influence of the Polgár-Lengyel cultural complex are evident in the monuments of the B II — C I, C II stages on the territory of the right bank of the Middle Dnieper. This influence is revealed, above all, in the four-petalled cups and conical bowls from the settlements of the Kolomiyshchina cultural group of different time periods. The earliest known cup was found in Grebeny (Fig. 10:9) [Bibikov, Shmagliy 1964], internally decorated in the area under the brim with short incisions. V.V. Khvoiko found two cups with six semicircular juts at the brim, in the C I stage settlement in the

village of Khalepye (Fig. 10:5, 6). The cups are of a dark brown and brown/brick-red colour. The ceramic mass contained a sand admixture. The surface is externally covered with a layer of engobe, and is polished. The rim is thick and bent outwards. The bottoms are small in size, and slightly concave. The cup in Fig. 10 has an obliquely-cut rim, with 6 semicircular petalled protuberances. The external surface is smoothed in bands. The cup in Fig. 10:6 also has semicircular protuberances, positioned in a different manner, i.e. both individually and in pairs on opposite sides. Internally, the cup is smoothed. Analogies to six-petalled cups in other cultures are not well-known. The cups and bowls with four-petalled brims were encountered in other TC settlements in the Middle Dnieper territory. It is worth noting the cup from the Grebeny settlement, decorated inside with short vertical incisions, and the cup from the Chapaevka settlement of the C I stage [Kruts, Ryzhov 1997:Fig. 4:4].

The conical, four-petalled bowls are an integral constituent of the vessel goods of cultural groups on the territory of Poland. In the Samborzec-Opatów group (Kraków Pleszów) in Małopolska, they are found both with and without saucers [Kamieńska, Kozłowski 1990:Table 1, 3, 5a]. Bowls of both types (with and without saucers) were widespread in the Lublin-Volhynia culture of the late stage. They are distinctive of the fourth group of pottery from the settlements II, III in Bronocice. The fifth group of pottery in Bronocice cemetery contains bowls with four-petalled brims, with saucers [Kruk, Milisaukas 1985:59, 25, Fig. 12:1].

The four-petalled bowls in the Malice culture appeared in the Rzeszów phase. They are found in the Zimno settlement, and also in the Kostyanets group [Konopla 1990].

The type of bowl with a four-petalled brim encountered in the Bükk culture [Korek 1970:Fig. 10:5] was relatively widespread in the TPC of Slovakia: a prime example being those found in both the settlement and the cemetery in Tibava [Šiška 1968:Fig. 12:9; 13:8; 14:9, 10]. However, in contrast to the bowls depicted above, these were decorated with beak-shaped mouldings and rectangular handles. In Ukraine, bowls with a four-petalled brim are encountered in monuments of the early Drysin stage of the PC in the Carpathians (Drysino, Mala Gora site) [Potushnyak 1985:293, 294, Fig. 76:9]. The researchers attributed the Cucuteni four-petalled vase from the settlement of the A-B stage in Calu-Piatra Șoimului to Bodrogkeresztúr I [Dumitrescu 1974:135, Fig. 140]. This testifies to the complexity of the interrelations between the Polgár and the Lengyel cultures and of their relations with the TCC. Within the group of grain containers from the Middle Dnieper, special attention is due to a large vessel of globular shape with a short mouth, and a narrow neck decorated with plastic and deeply incised ornamentation, from the settlement of the CI stage in Kolomiyschchina I. The ornamentation covers the upper part of the shoulders down to their broadest part, and is underlined with four circumferential lines. The surface is divided into metopes by vertical stripes, each stripe consisting of four engraved lines. Externally, the stripes are outlined by small, round die incisions. Mouldings in the form of lugs with horizontal holes are placed over the shoulders (Fig. 10:5). The Kolomiyschchina vessel possibly has distant genetic origins in a

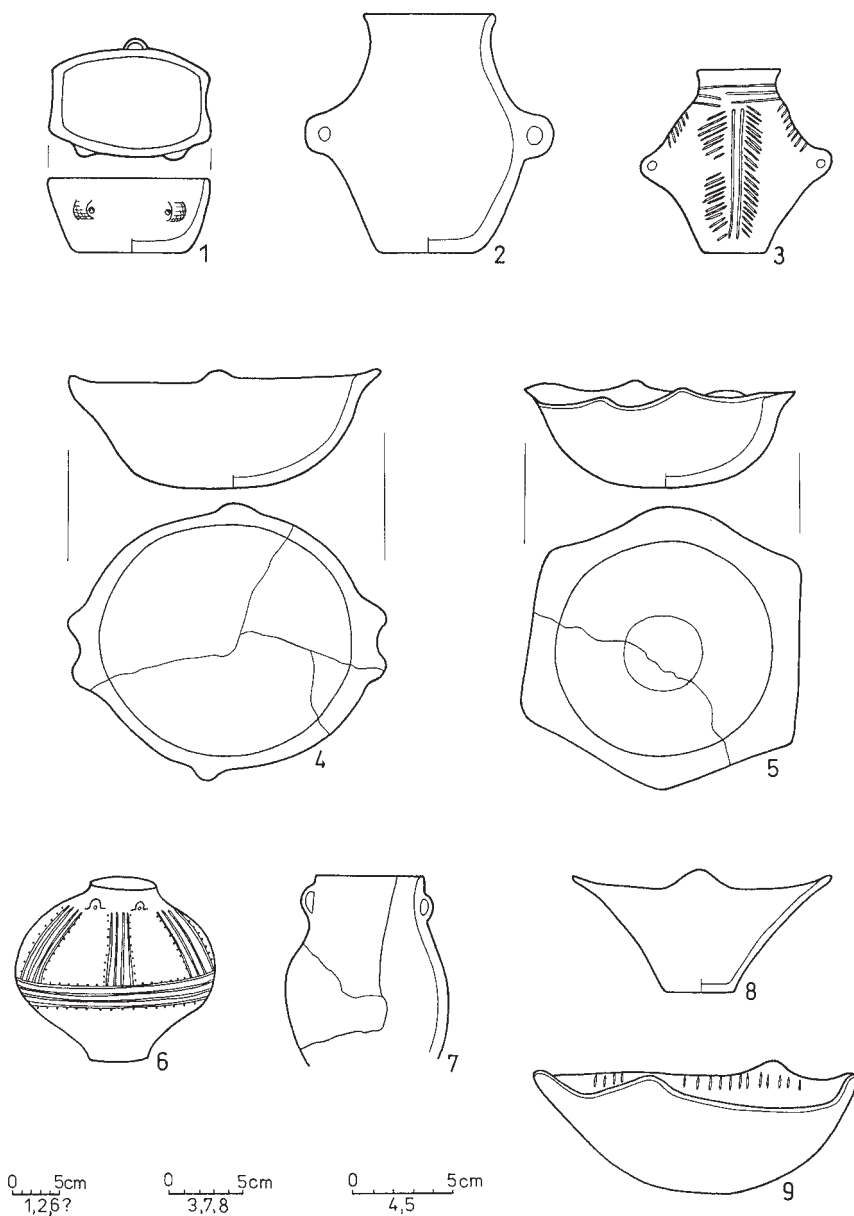


Fig. 10. Ceramics with features of the Polgár and the Malice influences from the Tripolye settlements: 1 - Shypintsi; 2 - Kazenna Gromada; 3 - Litky; 4 - Kolomiyschchina I; 5, 6 - Khalepye; 7 - Bukivna; 8 - Chapaevka; 9 - Grebeny.

significantly earlier monument of the LC (Lengyel I) in Zengővárkony, in the eastern part of the Danube basin on the territory of Hungary [Dombai 1960:Table XXXV:8; XXIV:8; XVI]. However, there exists significant difference between them and a substantial distance in time. The above-mentioned grain container has certain analogies in another vessel from Zengővárkony, decorated with paint [Dombai 1960:CVI, colour print]. In addition, the deeply incised point elements and similar globular vessels are also encountered in the Polgár cultural complex. For instance, the squat globular vessels with handles attached near the brim and beneath the maximum belly diameter are distinctive to the early TPC, as illustrated by vessels from Velké Raškovce, simultaneous to the Nitranski Hradok group (Lengyel I) [Šiška 1968:Fig. 18:5]. The point incision elements and hollow tube prints are indispensable features of ornamentation in the TPC in general (Tiszaug-Kisrépart; Debrecen-Nyulas, Fig. 18, 20, Table VII) [Bognár-Kutzián 1972]. At the same time, the point ornamentation is similarly distinctive of the Malice culture — an ancient group which had appeared from the Polgár-Lengyel circle (the Rzeszów phase), Rzeszów, Las Stocki and others [Kadrow 1988:6-17, Fig. 2, 1996:Fig. 3:1, 7; 6; Zakościelna, Gurba 1997:201-209]. The elements of the ornamentation of the Kolomiyschchina grain container as exogenous Balkan-Carpathian stylistic features appear in the burial monuments of the later SC in the TCC community [Kadrow, Koško, Videiko 1995:Fig. 8, 9].

3.2. THE KOSHYLIVTSY CULTURE OF THE MIDDLE DNIESTER

LC influences can be seen in the poorly-examined original Koshylivtsy culture on the territory of the Middle Dnieper. K.K. Chernysh has expressed an assumption that the LC population participated in the forming of the Koshylivtsy phenomenon (usage of white and red paint; certain ornamentation elements; the find of an original animal figurine with two small heads, with analogies found in LC monuments by T.M. Tkachuk [1998:16]). The find of a bowl with two moulded handles in the Koshylivtsy settlement in Kunysivtsy, Ivano-Frankivsk Region, is evidence of the relations between the two cultures (Fig. 7:6) [Kruts, Ryzhov 1997:Fig. 3, 14]. At the same time, also traced in the Koshylivtsy monuments are the significant influence and impulses of the Zhvaniets population from the Middle Dniester. The Zhvaniets monuments are typologically close to the Brynzeny monuments on the territory of the left bank of the Prut.

Certain vessel shapes, ornamentation, and anthropomorphic and zoomorphic plastics are similar for Koshylivtsy Oboz and Zhvaniets-Schovb and Brynzeny-Tsyganka [Movsha 1990:40]. It is worth recalling that Polish researchers synchronise the Zhvaniets and Brynzeny monuments with the most prominent settlement of the Lublin-Volhynia culture in Bronocice of the II, III stages [Kruk, Milisauskas 1985:119-120]. The transitional route of connections with the TC is considered to have lain along the line of the Dnieper, and

this channel was presumably used in the distribution of pottery throughout the territory of the Bug and Dnieper basin [Peleschysyn 1989]. Imported pottery and pottery with foreign influence was found in Vesely Kut, Shkarivtsy in this region [Tsvek 1989:115]. According to the researcher, a cup fragment with red paint ornamentation similar to the cup from Zimno was found in Shkarivtsy.

4. THE INFLUENCE OF THE LENGYEL-POLGÁR CIRCLE ON THE GORODSK AND KASPERIVTSY GROUPS OF THE ZHVANIETS CULTURE AND THE SOFIEVKA CULTURE

Significant materials for the studies of the influences of the Polgár cultural complex and the Balkan culture have also been discovered during excavations of late TC settlements of the C II stage in the forested-steppes and Volhynian woodlands. Relatively widespread amphorae with elbow-shaped and loop-shaped handles placed on the shoulders have been taken from monuments of different time periods in the following sites: Gorodsk [Movsha 1971a:6]; Lozy [Peleshchysyn 1973:Fig. 3:8]; Nova Chartorya [Zakharuk 1956: Table 1, 9]; Zvenyachyn and Sandraki 2 [Zbenovich 1976:Fig. 1:12, 5:15]; and Lystvyn [Peleshchysyn 1974a:30, 35]. Among amphorae with loop-shaped handles, of particular note are the globular painted amphorae with a narrow cylindrical mouth from the Tsviklivtsy settlement in the Kamyanets-Podilskiy District of Khmelnytskyi Region [Movsha 1964:Fig. 3:3]. These elbow-shaped and loop-shaped handles frequently had single and double horn-shaped juts. They were found in Mali Virmeny, Gorodsk [Movsha 1971a:Fig. 4:8; 6:9] and other sites (Fig. 11). Some of the loop-shaped handles are close to the Baden culture. Their typology has been developed by V. Němejcová-Pavúková [1981:Table 4:7-17].

It is possible that the amphora from the Gorodsk excavations of 1940 was an import from the Polgár cultural complex. It has a strongly bent brim and two elbow-shaped handles. Two round mouldings are placed on opposite sides in the upper part of the shoulders. The surface is brownish with black spots, occasionally polished. The ceramic mass has an admixture of crushed burnt flint (Fig. 11:2). It is presented here according to the picture and description made by T.S. Passek. It is worth noting that the predecessors, but not the population of the monuments of Sofievka and Gorodsk types were the first to enter into contact with the Balkan-Carpathian cultures. For the Gorodsk group, they were genetically the representatives of monuments of the Pavoloch and Troyaniv types. The red, white or yellow eguobe covering of the vessels from Lozy, Gorodsk and Sandraki can presumably be considered as LC features.

The head of a horn mattock, accidentally found in a left bank suburb of Kiev, not far from the famous cemetery in Krasny Khutor, is among the new finds related to the SC, testifying to their interactions with the LC. The mattock is produced from a large

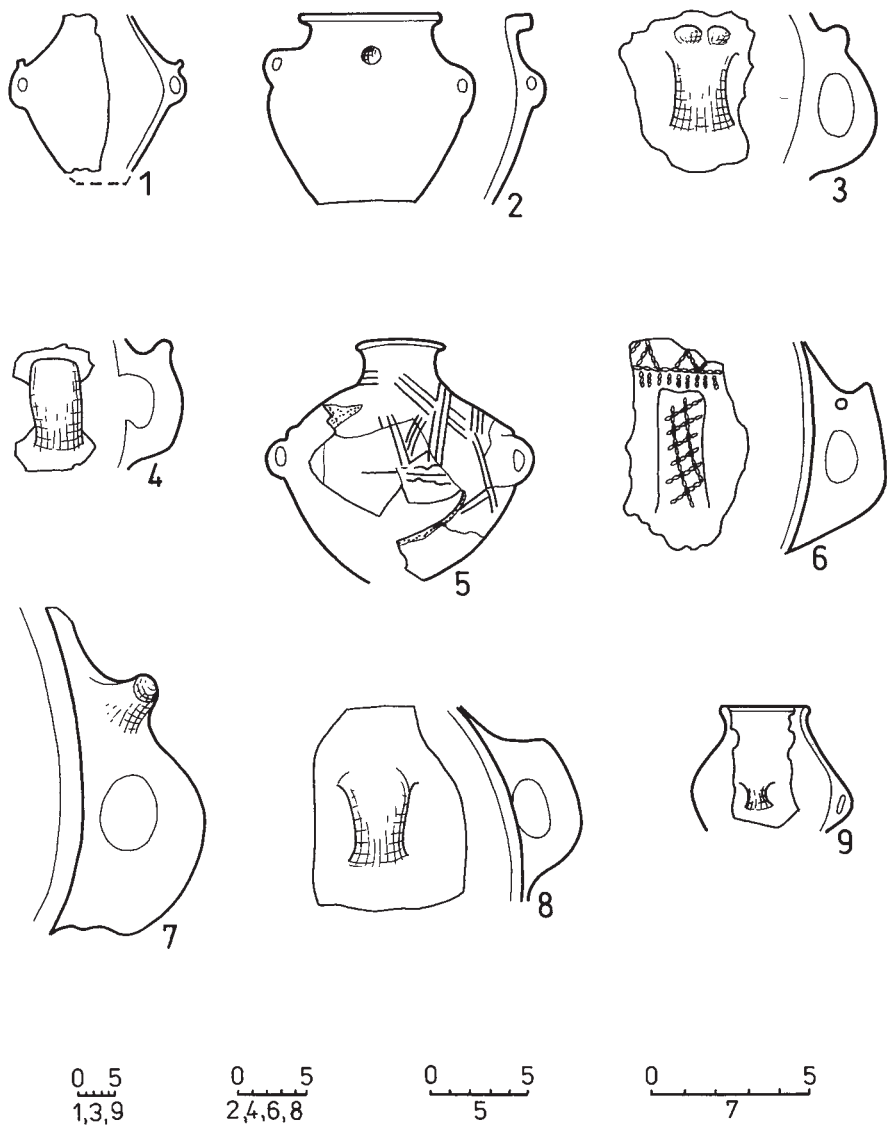


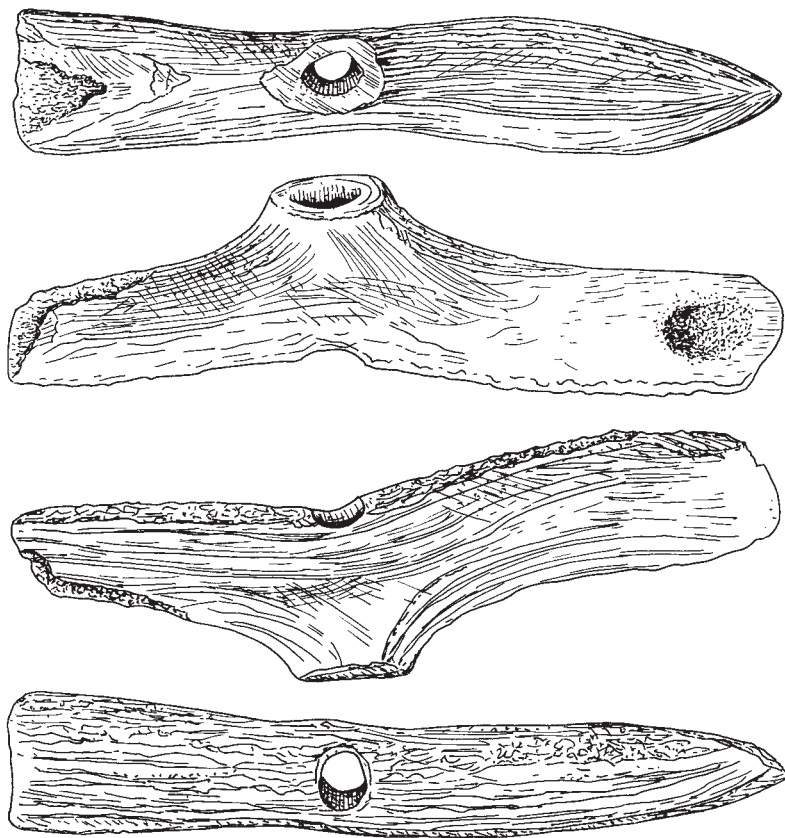
Fig. 11. Ceramics with the Polgár and the Lengyel features from the late Tripolye settlements: 1 - Nova Chartorya; 2,6 - Gorodsk; 3 - Zvenyachyn; 4 - Sandraki; 5 - Tsviklivtsy; 7, 9 - Lozy; 8 - Mali Virmeny.

horn spur. The oblong blade is obliquely cut towards the spongy middle, was polished in the process of work, and is of a grey-brown colour. The opposite end is semi-circularly cut. The handle inlet is made through the middle, and bears traces of smoothing. The artifact is 29.3 cm long; the working part 10 cm; and the inlet diameter 2 to 3 cm (Fig. 12). The closest analogies originate from the cemetery in Goyeva Gora in Zvenygorod District [Sveshnikov 1956:Fig. 24:1; 25:12].

The cremation funeral ceremony, distinctive for the SC in the TCC community, is of great importance to studies of the interrelations of the TCC with the above-mentioned circle of cultures.

Recently, diverse opinions have been expressed concerning the broad cultural-chronological aspect [Koško, Videiko 1995:247-258]. The PC, the TPC at the Polgár III stage and Bodrogkeresztúr culture at the Polgár IV stage, as well as the Lažňany group are considered to be the centres of distribution of the cremation ceremony in different epochs [Šiška 1964:339, 340; 1966:62]. In the Lažňany group, cremations comprise 35% of all funeral ceremonies. The Baden culture, and the SC in the TCC in particular, is considered the centre of the distribution of the cremation ceremony. The cremation ceremony is assumed to have appeared in the Middle Dnieper territory at the B II stage under the strong influence of the TPC [Koško, Videiko 1995:256]. In other words, it was brought by people from Central Europe. This opinion is shared by the authors of the present work. However, there exists an alternative interpretation, according to which the appearance of the cremation ceremony in the cemeteries of the SC is explained by the existence of the TC population in the Polgár environment. A similar phenomenon is characteristic for the LC [Kruts, Ryzhov 1997:29]. Accordingly, the graves with inhumations on the territory of the Middle Dnieper are considered to be the result of infiltration. Different opinions exist concerning the existence of the cremation ceremony in Central Europe. The neglected hypothesis of its Asia Minor/Mesopotamian origin is worth noting in this context [Sherbakivskiy 1926:129].

It is worth briefly mentioning the origin of the monuments of the Sofievka group (or 'culture', as defined by V.M. Danilenko — an opinion which we share). The thesis of V.G. Zbenovich concerning the certainty of the genetic connection between the Sofievka and Chapaevka/Lukashi monuments [Zbenovich 1976:40] requires important additions. The infiltration of the population of the different origin took place in the period between the existence of Chapaevka and Lukashi. Some researchers consider that the inhabitation spread from the settlements of the Brynzeny type in the area of the Prut basin [Dergachev 1980]. The other opinion is that it began with the settlements of the Zhvaniets type, the closest territory to the left tributaries of the Middle Dniester [Movsha 1985:235; 1994a:30-36; 1993:24-58], as indicated by the materials from Kolodyazhyn in eastern Volhynia. The ceramic pottery and anthropomorphic plastics from Kolodyazhyn bear specific Zhvaniets elements. It was the population of the Zhvaniets cultural group which changed the ethnological-cultural situation in the TCC, including the North Pontic area, eastern Volhynia and the territory of the Middle Dnieper basin. The influx of the new



0 3 cm

Fig. 12. Horn mattock from the suburbs of Kyiv in Krasny Khutor.

population is clearly traced in the ceramic materials from the excavations of the settlement in Bortnychi village on the left bank of the Dnieper [Amburger, Bilanovska 1956:Table 1:1-2]. In particular, the find of clay spinners for a spindle, decorated with deeply incised ornamentation outlined in the form of rays is noteworthy. Bortnychi reveals the process

of the assimilation of the Kolomiyschchina population by the incoming population from the Middle Dniester. The migration to the basin of the Sluch river took place at the end of the B II stage. The theories expressed help to understand the Polgár cultural influences on the material culture of the monuments of the SC local group or separate culture.

5. THE INFLUENCE OF THE TRIPOLE-CUCUTENI ON THE LENGYEL-POLGÁR CIRCLE

The reverse influence of the TCC on the Polgár cultural circle, which initiated from the painted ceramics environment, according to J. Bognár-Kutzián, has been mentioned by a number of researchers [Bognár-Kutzián 1972].

Anna Zakościelna has distinguished clear TC influences on the Polgár cultural complex in the flint industry, emphasising that these influences were not distributed directly, but rather through the Malice culture communities which inhabited the territory of western Volhynia and Podolia [Zakościelna 1996]. Also established is the reverse influence of the Koshylivtsy population (Koshylivtsy phase of the C I stage) on the Lublin-Volhynia culture [Kamieńska, Kozłowski 1990].

6. THE CHRONOLOGY AND SYNCHRONISM OF THE TRIPOLYE-CUCUTENI WITH THE LENGYEL-POLGÁR COMPLEX

The synchronism and chronology of the compared cultures is a key element in determining their interrelations. One of the first theories was proposed by J. Bognár-Kutzián, who has regarded the Polgár and the Lengyel cultures in the broad context of central and south-eastern Europe. In the monograph published in 1972, the TPC of the A and B stages is synchronised with the A3 and A4 stages of the Cucuteni / TC end of the A and the B I stages, and the Bodrogkeresztúr culture with the end of the Cucuteni A4, Cucuteni A-B, B. In the opinion of the researchers, the absolute chronology for the TPC is from 4400/4300 to 4100/4000 BC, according to the radiocarbon method [3600/3300-3300/3200 bc; Bognár-Kutzián 1972:202-211]. V. Dumitrescu considered that the Tiszapolgár Csőshalom-Oborin in Hungary and Slovakia corresponds to the Cucuteni A1-A2, the Tiszapolgár culture — to the Cucuteni A3 and the first phase of the Cucuteni A-B I. The first phase (I) of the Bodrogkeresztúr culture is synchronised with the Cucuteni A-B2, the beginning of the Cucuteni B [Dumitrescu 1976:355-362]. According to P. Roman, the beginning of the Bodrogkeresztúr is synchronised with the end of

the Gumelnița culture, and the classical stage of the Bodrogkeresztúr 'A' is attributed to the Cucuteni A-B — Cucuteni B, Cernavoda I, and Salcuța II-IV [Roman, Nemeti 1978:219-220]. V.S. Titov proposed the synchronism of the TCC with the Neolithic and Eneolithic cultures of Hungary. He attributed the imports of the early Tisza culture to the Proto-Cucuteni and the end of the TC A. The Csőshalom-Oborin and the entire TPC horizon occupies the chronological gap between the Tisza and the Bodrogkeresztúr. The late phase of the TPC and the Bodrogkeresztúr culture is synchronised with the TC B I - B II (B II stage according to T.S. Passek), C I, the Cucuteni A-B 1 and Cucuteni B. This supposition is based on the metal artifacts, including axes with cross-shaped blades. However, the period of their appearance is questionable. This kind of axe appeared in Hungary at the end of the TPC and was especially widespread in the Bodrogkeresztúr culture. According to the find of a large vessel with handles attached to the belly, which was found in the Romanian settlement in Traian - Dealul - Fântânilor, the researcher synchronises the TC, B II stage / the Cucuteni A-B with the eastern Hungarian Hunyadyhálom and the eastern Slovakian Lažňany groups [Dumitrescu 1981]. V.S. Titov observes simultaneity between the Cucuteni A-B 2, Salcuța IV and Petrești IV. Furthermore, he has added substantial specifications in the synchronism between the TCC and the Copper Age culture of the Great Hungarian Plain (Alföld) — the TPC [Titov 1971:1-7]. The new ceramic materials with typical TPC beak-shaped lugs, found in the late TC settlements of the C I - C II stage in Costești IV and Brynzeny-Tsyganka, extended the dating of connections between the TCC and the TPC. Analysts compare them with the ceramics from Gora Dedovo in the Carpathians, Tibava cemetery in Slovakia and Tisza Polgár-Basatanya in Hungary [Titov, Markevich 1974:150-164]. V.S. Titov has also outlined a three-level division of the LC on the territory of Hungary: from the middle of V millennium BC to the middle of IV millennium BC (the first half of IV millennium BC — the beginning of the III millennium BC).

With relation to the problem of the synchronisation of the cultures interrelated with the TCC, it is worth presenting the period division of the TPC and its chronological correlation with the LC on the territories of several neighbouring countries. The Tiszapolgár Herpály group located in the Danube basin had contacts with the LC. This is revealed in the combination of shapes and ornamentation elements with those of the Csőshalom group. Pottery typical of the TPC A was found in the Lucska group in Slovakia. The decorative elements of the Lucska group were also traced in the TPC B (the TPC and the Bodrogkeresztúr cultures are divided into two different time phases — A and B) [Bognár-Kutzián 1972].

The system of synchronisation of the PC and the TCC proposed by Stanislav Šiška is worth special attention in this respect. He returned to its development on several occasions.

Accordingly, some of the vessels from the TPC of Slovakia (bowls on high legs), the mountain area of the Tisza basin and south-western Slovakia were compared with the vessels of the Pre-Cucuteni stage (settlement in Izvoare II1), the TC B I (Sabatinovka),

and the Cucuteni A3 stage (settlement in Izvoare II 2 and Hăbășești I). Such bowls on high legs in the Polgár-Lengyel complexes (with the exception of the Tripolye-Cucuteni) existed until these cultures disappeared. It is worth emphasising the similarity of covers, typical for the Polgár of the II ab stage from Lucska and Oborin vessels and the covers from Sabatinovka I and Kadyivtsy. Also the slate axes from Kolomiyschchina II has been analogously attributed [Šiška 1968:145, 154, parcel 354].

Certain ornamentation elements testify to the simultaneity of the TPC and the TCC: for example, the narrow mouldings placed on the brim of the pot from Volodymyrivka; and round mouldings on the pottery from Polivaniv Yar [Šiška 1968:145, 148]. These mouldings are supposedly similar to those on the vessels of the Proto-Tiszapolgár phase of Lucska-Viničky, the Tiszapolgár phase of the settlements in Tibava, Csóshalom-Oborin, cemetery in Oborin [Šiška 1968:Table VI:16, 17, 19, 20; Table VII:9] and others. Nevertheless, this similarity appears to be only external. These were not bosses moulded onto the outside of the vessel, but ‘pearls’ squeezed out from inside, decorating the Sredni Stog vessels of the Strilcha Skelya-Stog development branch [Movsha 1961:186-199; 1984:64-72; 1994a:46, 47]. These ‘pearls’ are an element borrowed from the Pre-Maikop culture of the Svobodne settlement type (which has been recently distinguished), through the intermediary of representatives of monuments of the Strilcha Skelya type [Movsha 1994a:46]. This ornamentation also became very popular in the TC: in Penyozhkovo [Himner 1933]; in Veremya [Kozlovska 1926]; in Polivaniv Yar [Passek 1961:Fig. 52:1-5] and in many sites.

The synchronism of the southern Slovakia cultures with the cultures of the Lengyel-Polgár circle has also been studied in Poland, with the LC I (Nítriński Hrádok group) being synchronised with the Velké Raškovce group; the LC II (the Pečeňady group) with the Csóshalom-Oborin (the Polgár II); the LC III (the Brodzany-Nitra group) with the TPC (the Polgár III); the LC IV (the Ludanice group) with the Bodrogkeresztúr (the Polgár IV); and the Bajč-Retz group with the Lažňany group [Šiška 1986:251-255].

7. CONCLUSIONS

Taking into consideration the analysis of materials and existing synchronisation tables, it is possible to formulate some brief conclusions. The earliest connections with the Polgár IIa of the Tiszapolgár cultural complex are supposedly attributed to the period of existence of the Nezvysko settlement in the upper reaches of the Dnieper. Reliable evidence of interactions are represented in the settlement in Soloncheny 2 of the Cucuteni A4, A-B1 stages on the territory of the Middle Dnieper basin. The pottery essentially imitates the TPC ceramics of the classical Polgár III b stage, and bears elements typi-

cal for the Tibava. The radiocarbon date (5355 ± 100 BP) for the nearby settlement in Dragușeni in Romania approximately determines the time of their interrelations. The population of the majority of monuments of the Upper and Middle Dniester basin, located in the vicinity of the Middle Danube basin entered into relations with the communities of the TPC culture in the second half of V millennium BC. Notable among these are the inhabitants of Nezvysko III, Holigrady and Kadyivtsy-Bavky (the lower horizon).

The ornamentation of the pottery found in these sites displays the influence of the classical TPC. In turn, the notable contacts and interrelations of the TPC of the Polgár III ab stage with the LC III, which had taken place in the northern region of Slovakia, influenced the pottery of the TC.

The first contacts and connections with the population of the Southern Bug basin and the Bug and Dnieper rivers basin (the settlements in Krasnostavka, Vesely Kut and Shkarivka) appeared approximately in the end of V millennium BC.

The relations of the Middle Dnieper population with the Polgár cultural complex began during the B II stage of the TC (Veremya, Shcherbanivka, TC, Grebeny and others). The contacts and connections with the TPC at the Polgár IIIa and IIIb stages and the LC III, IV stages had presumably been maintained without intermediary elements, which were supposed to be the TC peoples from the basin of the Bug and Dnieper rivers. The considerable quantity of copper adzes concentrated in the monuments of the Shcherbanivka local group appears to provide evidence for this theory. It is possible that they had been organising special expeditions in search of metal.

The population of the Bodrogkeresztúr culture of the Polgár IVa phase appeared at a historical stage in the TC B II / Cucuteni A-B2 — about 4350-4000 BC. Its influence is clearly visible in the pottery of monuments of practically the entire TCC. Presently, the ceramic materials from the settlements of the CI stage located on the territory of the Prut basin (Shypinty B), the Dniester basin (Petreny) and the Middle Dnieper basin (Kolomiyschchina I, Zhukivtsy, Dovzhyk and others), which synchronise with the Bodrogkeresztúr II, the Polgár IVb phase, the Bronocice II phase of the Lublin-Volhynia culture, and the Lažňany Group (Bajč Retz), are being broadly utilised in research.

The radiocarbon dates for Chapaevka (4870 ± 100 BP) and for Evminka (4890 ± 60 BP) allow these relations to be dated back to 3700-3600 BC.

The cartography of heavy metal axes-mattocks and axes with cross blades which are connected with the Bodrogkeresztúr culture, as well as that of new finds testifies to their concentration on the territory adjoining the Carpathians basin which was mainly connected with the Petreny culture in the TCC community. Part of the materials from the monuments of the CI stage of the TC (Shypinty B, Khalepye and others) testify to the simultaneous relations of the PC of the TPC and the Bodrogkeresztúr II with the LC circle of the Lublin-Volhynia culture at the Rzeszów phase.

The imported Tisza ceramics from the settlements located on the territory of the left bank of the Prut (Costești IV, Brynzeny-Tsyganka), synchronises these monuments with the Lublin-Volhyni culture of the end of the Bronocice II phase — the beginning of

Bronocice III, and is dated back to approximately 3400 BC, according to the radiocarbon dating.

The ceramics from the settlements of the final TC of the C II stage of the Gorodsk and the Kasperivtsy local groups are believed to provide evidence of active connections with the population of the Polgár IV c, the cultural complex of the Pleszów group, the late Lublin-Volhynia culture of the Bronocice III phase, the Baden Ia culture and Cernavoda III. This hypothesis is based on the typology of handles, which have one or two juts on the top. Taking into consideration the monuments of different periods, the period of relations is dated back to 3250-2950 BC.

The author of this research work regards the TCC community as a range of cultural communities, closely interrelated with one another and simultaneously with neighboring and distant foreign tribes of ethnically different cultures. The artifacts reflect not only the active influence of the cattle-raising societies of the Khvalynsk — Sredni Stog community, but also the groups of the Lengyel-Polgár cultural complex.

Generally speaking, the question of the relations of the representatives of the TCC complex with the population of the Middle Danube basin and the Carpathian Mountains basin is an important new issue, which has only recently begun to be discussed. In this work, we have simply made the first attempt to simultaneously consider the available materials of the entire territory — from the Siret in the north to the Middle Dnieper in the east — at given chronological junctures.

Translated by Maria Ogiyenko

ABBREVIATIONS

AP	– Archeologia Polski, Warszawa
APS	– Archeologia Polski Środkowowschodniej, Lublin
BPS	– Baltic-Pontic Studies, Poznań
KSIA	– Kratkiye soobscheniya Instituta Arkheologii, Moskva
KSIA AN USSR	– Kratkiye soobscheniya Instituta Arkheologii Akademii Nauk Ukrainskoy SSR, Kiev
KSIIMK	– Kratkie soobshcheniya Instituta Istorii Materyalnoy Kultury Akademii Nauk SSSR, Moskva.
MIA	– Materialy i issledovaniya po arkeologii SSSR, Moskva
NA IA NANU	– Naukovy Arkhiv Instituta Arkheologii Natsionalnoi Akademii Nauk Ukrainy, Kiev
SA	– Sprawozdania Archeologiczne, Kraków
SCIVA	– Studii și Cercetări de Istorie Veche și Arheologie, Bucarest
WA	– Wiadomości Archeologiczne, Warszawa
Zapiski NTS	– Zapiski Naukovogo Tovarystva imeni T. Shevchenka, Kiev

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The publication is carried out within the research project No. 1H01G05912 financed by Committee for Scientific Research and supplied with funds of Ministry of National Education and Adam Mickiewicz University Foundation.

ISBN 83-86094-08-7

ISSN 1231-0344