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## POTTERY STYLISTICS OF THE SOFIEVKA TYPE, GENETIC-CULTURAL QUALIFICATION

Any attempt at cultural or genetic classification must take into account two perspectives: (A) endogenous, i.e. within the system of the Tripolye culture, and exogenous, i.e. „extratripolyan” which falls into two ranges of identification. The first (B), called „Balkan”, including cultures directly originating from the Balkans and the Carpathian Basin and the second (C), „circumbaltic”, originating from the forested area of eastern Europe or related to the cultures of the Central European Lowlands. The pottery from the Sofievka type cemeteries reveals the prevalence of endogenous design features.

A. In order to establish the cultural and genetic position of the Sofievka type materials, sedimentation and sepulchral sources have so far been analyzed together. The results are available as two, significantly different theories [cf. Videiko, *Cemeteries. . .*, in this volume].

The first assumes that the type discussed here developed endogenously on the Dnieper [Zakharuk 1954; Kruts 1977]. The Sofievka type is considered to be yet another stage in the development of the local Tripolye culture. Under this assumption the morphology and ornament of the Sofievka pottery would be directly related to the Lukashi type, i.e. its roots would reach back to the Chapayevka and Lukashi types [Kruts 1977:136].

The second theory developed by V. Dergachev, while not rejecting the role of local background, draws attention to the existence of a component which does not fit into the Lukashi type traditions [Dergachev 1980:142]. This component is the prevalence of round amphorae with handles on their shoulders, vessels with tall, conical and tapering lips as well as bulbous forms with decorations on lips (up to 50% of all vessels). This is believed to be the evidence of the intensity of influence of the Troyanov and partially of the Gorodsk types. The impact of the Dniester and Prut variety of the Tripolye culture, specifically of the Brynzeny type, can be noticed as well. In sum, the Sofievka type pottery stylistics would be a synthesis of various Tripolye traditions originating in different regions: local (Lukashi type) and imported ones (Fig.1).

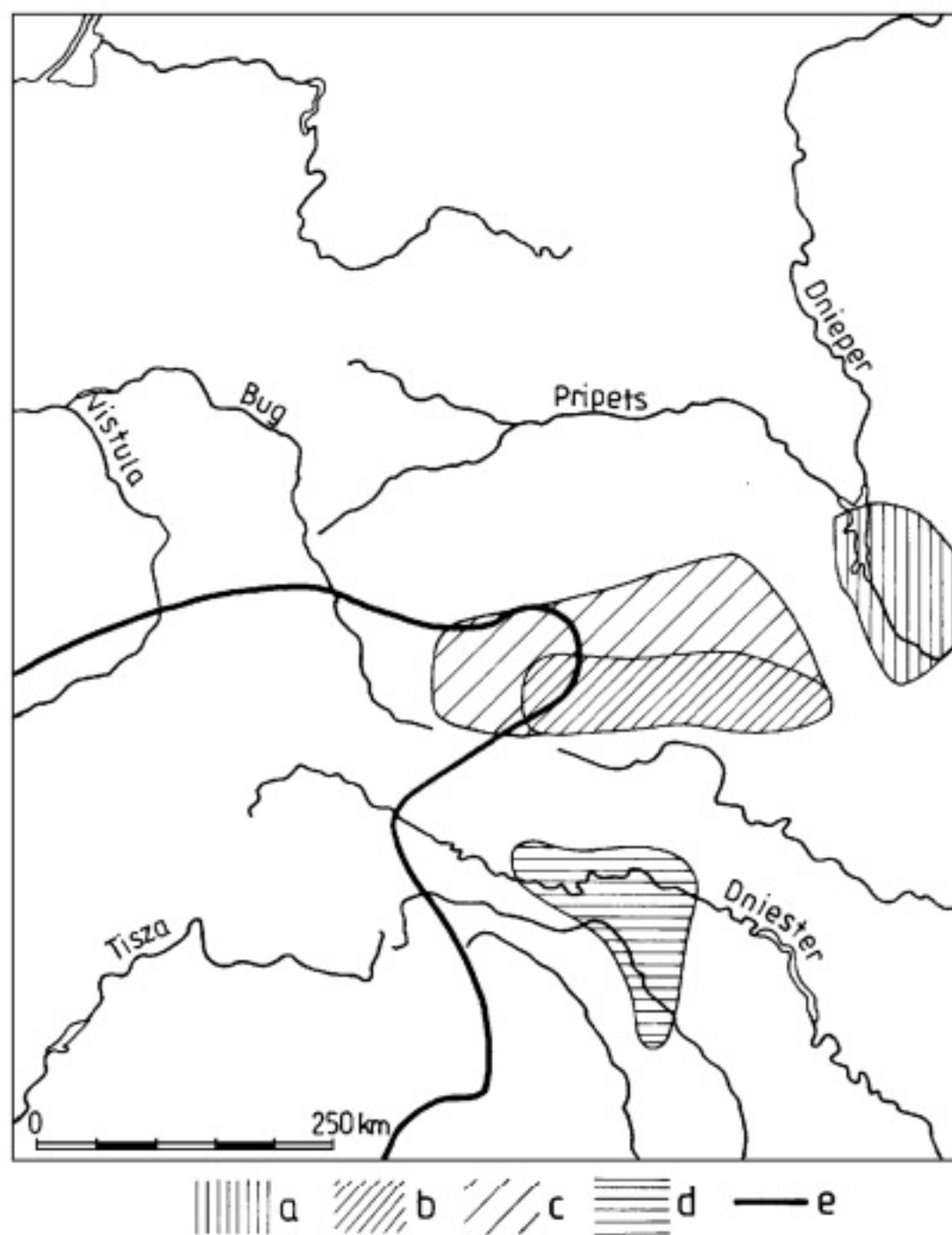


Fig. 1. Context of groups (types) of the Tripolye culture related to the origins of the Sofievka type. Legend: a-d - range of Tripolye culture types (a - Sofievka, b - Troyanov, c - Gorodsk, d - Bryzheny); e - northwestern range of the Polgár circle (Bodrogkeresztúr, Malice, Lublin-Volhynia cultures).

A re-analysis of these theories involving a detailed review of features of sepulchral pottery justifies the stressing of significant differences between the Lukashi and Sofievka types [cf. the hiatus theory advanced earlier: Zbenovich 1976:40]. It can be even suggested that in the case of the Sofievka type we deal with the effects of migration.

All researchers into the Sofievka type agree that it was a short-lived phenomenon. Thus it is difficult to isolate „early” or „late” stages in it [see in this volume: Kovalyukh, Videiko, Skripkin, *Chronology...*, Kadrow, *Absolute...* and Budziszewski, *Flint...*]. It should be also added that a genetic explanation of this phenomenon only within the framework of the Tripolye culture seems to be impossible now.

B. The set of „Balkan-Carpathian” features of the Sofievka type sepulchral pottery is relatively small. This component is made up of the following elements: (a) types of shoulder-placed handles of developed contours, in particular when seen in profile (Fig.2:1-3), (b) a handle placed on the edge and ornamental elements in form of „lumps-handle” raised above the lip edge (Fig.2:4), (c) edge decorations giving the effect of a wavy brim (Fig.2:5), (d) decorations located along the border of the above-edge and external under-edge zones (Fig.2:6-7), (e) belly or rather shoulder decorations, most often in the form of horizontal lines pressed with a „point-like” die (Fig.2:8-9), (f) belly decorations, also mainly on shoulders in the form of „points”, „bars” or „lines” often notched with a finger or die (Fig.2:10-13). The widest assortment of the above-named features was found at the cemetery in Sofievka (features: a, c, d, e, f). However, they can be also found at the other burial grounds in Krasny Khutor (a, b, e, f), Chernin (a, e) and Zavalovka (b, f).

The genetic identification of the outlined set of features admits of an assumption about the existence of two chronologico-cultural levels of their reception. The early level is defined by Polgár analogies, mainly late ones, which matches the „classic” dating of the Sofievka taxon [cf. Videiko, *Cemeteries...*, in this volume and the remarks on the „endogenous perspective” made above]. The later level is marked by the references to the horizon of late Baden-Kostolac-Coțofeni II/III-Cernavoda II, matching the latest radiocarbon chronology of such objects [cf. Kovalyukh, Videiko, Skripkin, *Chronology...* and Kadrow, *Absolute...*]. We have found it justified to outline here both references quoted above in the form of (1) a register of typological analogies in pottery stylistics and (2) a genetical-cultural identification of the adaptation process of „Balkan-Carpathian” features.

1. The register of analogies includes these elements of the „Balkan-Carpathian” component that have been earlier deemed diagnostic (a-f).

a. Such handles belong to the most frequently encountered elements characteristic of the whole Polgár circle and related cultures. They appear already in the Tiszapolgár [e.g. Bognár-Kutzián 1972; Šiška 1968]. An unusual abundance of such handle forms is observed in the Bodrogkeresztúr culture [e.g. Bognár-Kutzián 1963]. They also sporadically survive in cultural complexes of the Hunyadihalom-Lažňany horizon [Budinský-Krička 1963:Fig.224:8, 10 - Male Zalužice-Lažňany]. However,

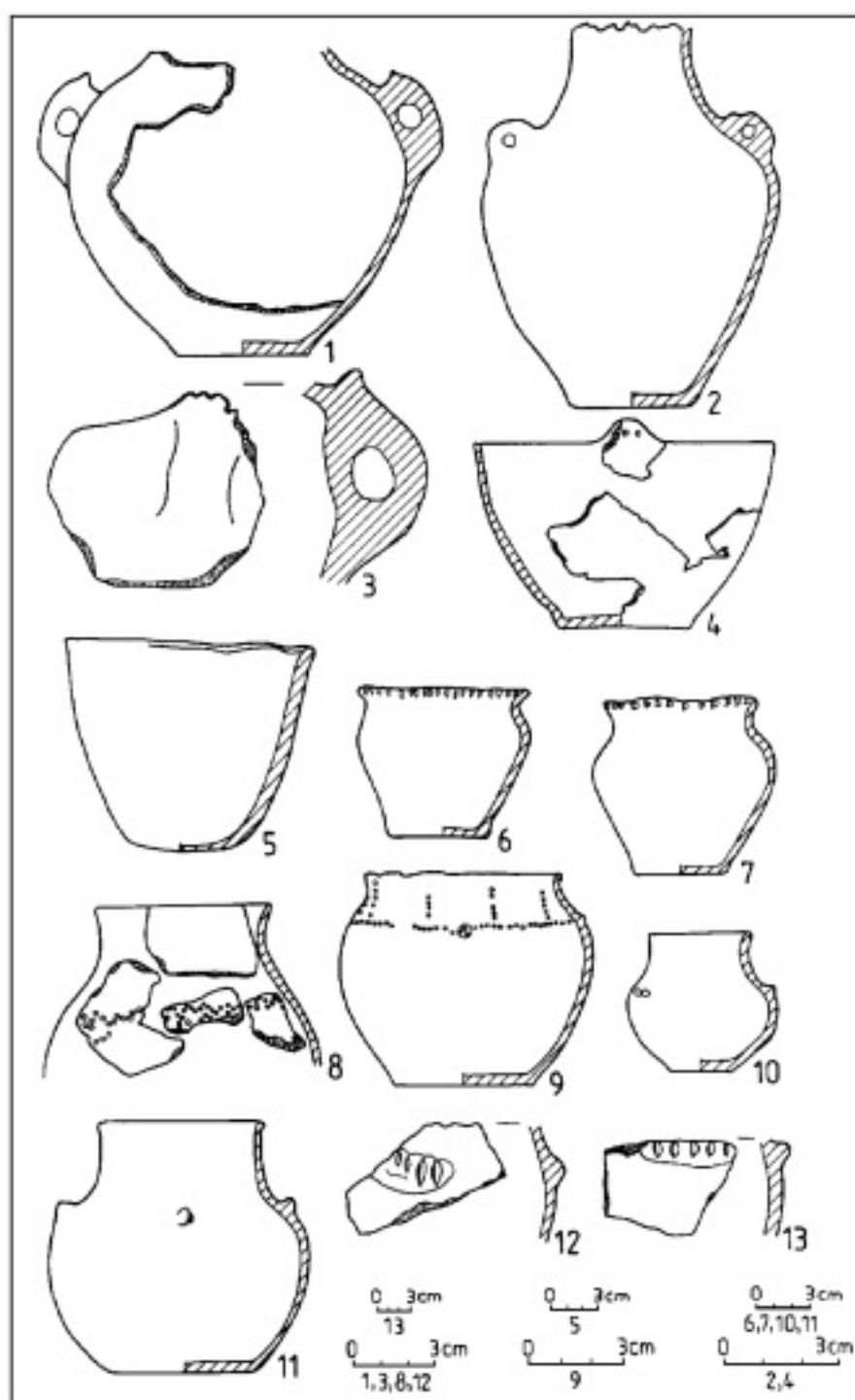


Fig. 2. Exogenous, Balkan-Carpathian stylistic features of the sepulchral pottery of the Sofievka type.

they are typical for postclassical - meaning without white painting - complexes of the Lublin-Volhynia culture [Kadrow, Kłosińska 1989: Fig.5:b, d, e, g, i, j - Łańcut; Kruk, Milisauskas 1985: Fig.22:b2, b3, c1, c3 - Bronocice]. It is also worth mentioning that they are a frequent component of the complexes of the late Band Pottery culture of phase III in the Kuiuavia region [Czerniak 1980: Fig.22:1, 23:1; Grygiel 1986: Fig.23:2, 25:6].

The same type of handles is recorded in late Baden, both in the Carpathian Basin [Kalicz 1963: Fig.VI:4 - Center] and in Małopolska [Godłowska 1968: Fig.XXVI:6; 1979: Fig.187:7 - Kraków-Nowa Huta-Ześlawice] as well as in the Coțofeni culture in phases I-III [Roman 1976: Fig.50:2,3, 53:4 - Locusteni; 75:2, 3, 5: 77:9 - Herculane „Peștera Hoților”]. It has to be stressed, however, that they are quite rare in these materials in stark contrast to the wealth of applications of this element in late Polgár designs. It does not seem either that individual types of these handles have any value as precise chronology indicators.

Shoulder-placed handles of developed contours were recorded in the material from cemeteries in Sofievka (graves 14, 44, 112, 139), Krasny Khutor (graves 27, 47, 52) and Chernin (18, 19, 39, 47, 48, 58).

b. Handles placed on edges and „lumps-handle” reised above the lip edge are a characteristic elements of many types of vessels of the Bodrogkeresztúr culture [e.g. Bognár-Kutzián 1963], of the Hunyadihalom-Lažňany horizon [Budinský-Krička 1964: Fig.6:1 - Male Zalužice-Lažňany; 1968: Fig.3:4,9,10 - Šebastovce; Bruckner 1970: Tab.II:2 - Vajska; Bognár - Kutzián 1969:34, Fig.1, 2:1, 3, 7 - Hunyadihalom] and of the Lublin-Volhynia culture [Kadrow 1989: Fig.7:4, 10 - Strzyżów; 1992: Fig.7:c,q,k, 8:d - Kosina; Kadrow, Kłosińska 1989: Fig.8:d,f,h; 9:c - Łańcut; Zakościelna 1986: Fig.8:1; 9:1, 5; 10:3, 5; 12:8; 13 - Wąwolnica].

This form of handles is also occasionally encountered in the late Baden of the Carpathian Basin [Roman, Nemeti 1978: Fig.5:3, 9 - Sinnicolau Mare „Șaliște”] and Małopolska [Godłowska 1968: Fig.XXVI:15 - Kraków-Nowa Huta-Ześlawice]. They are also found in the Kostolac culture [Tasić 1979: Fig.XXVIa:2 - Pivnica kod Odžalca] and in the Coțofeni culture [Roman 1976: Fig.55:3, 5, 8, 9 - Locusteni].

This type of handles was found only at cemeteries at Krasny Khutor (grave 80) and Zavalovka (grave 1).

c. Lip edge notching, or edge decorations giving the effect of a wavy brim due to incising, pressing with various dies or fingers, appears already in the decline of the classic phase of the Malice culture [Kamieńska 1973: Tab. II, IV, VI, XI; Kadrow 1988: Fig.10:3, 5, 6; 1990: Fig.11:n, o], and occurs infrequently in the Rzeszów phase of the said culture [Kadrow 1988: Fig.3:3, Komorowski 1958: tab. CV-CVII; Masson, Merpert 1982: Tab. XCIV]. This way of finishing edges is characteristic of certain complexes of the Lublin-Volhynia culture [Kadrow, Kłosińska 1989: Fig.7 - Łańcut; Kruk, Milisauskas 1985: Fig.22a, 23 - Bronocice; Zakościelna 1986: Fig.9:1, 5 - Wąwolnica; Kadrow 1992: Fig.7:e, f; 8:a, e, f - Kosina] and of groups of the Hunyadihalom-Lažňany horizon [Budinský-Krička 1968: Fig.3:4, 10 - Šebastovce].

Only rarely was this form of finishing edges identified in the late Baden of the Carpathian Basin [Roman, Nemeti 1978: Fig.12:4 - Ciumești III; 62:1, 2, 7, 8 - Cehalu] and Małopolska [Godłowska 1968: Fig.V:4; XXVIII:27 - Kraków-Nowa Huta- Zesławice; Kozłowski 1966: Fig.IV:39 - Witkowice; 1968: Fig.XIX:13, 14, 15] as well as in the Kostolac [Tasić 1979b: Fig. XXVIa - Pivnica kod Odžalca] and Coțofeni [Roman 1976: Fig.48:2; 59:8 - Locusteni; 68:6, 7, 9 - Nandru „Peștera Curata”] cultures.

This form of edges can be observed only at the cemetery in Sofievka (graves 3, 94 and from the surface).

d. Decorations located along the border of the above-edge and external under-edge zones are known primarily from late, post-classic complexes of the Lublin-Volhynia culture [Kruk, Milisauskas 1985: Fig.22a, 23 - Bronocice; Kadrow, Kłosińska 1989: Fig.7 - Łańcut; Kadrow 1992: Fig.7:e, f - Kosina].

Analogous decorations can be observed in late Baden in the Carpathian Basin [Kalicz 1963: Fig.V:1 - Center; Roman, Nemeti 1978: Fig.62:1, 2, 7, 8 - Cehalu] and in Małopolska [Godłowska 1968: Fig. XXVIII:27 - Kraków-Nowa Huta-Zesławice] as well as in the Coțofeni culture [Roman 1976: Fig.48:6 - Locusteni].

Such decorations were found at the cemetery in Sofievka (graves 88, 94, 99).

e. Belly or rather shoulder decorations, most often in the form of horizontal lines (less frequently in the form of more complicated patterns) pressed with a „point-like” die, are already known in the decline stage of the classic phase of the Malice culture [Kamieńska 1973: tab. IV, V, VIII, XI; Kadrow 1990: Fig.11:b, e, f]. Occasionally such decorations also occur in the beginning of the Rzeszów phase [Moskwa 1964: Fig.19 - Rzeszów; Bronicki, Kadrow 1988: Fig.9:10 - Majdan Nowy; Kruk, Milisauskas 1983:9 - Bronocice; Masson, Merpert 1982: Tab. XCIV - Volhynia sites]. In the classic complexes of the Rzeszów phase [Kadrow 1988: Fig.2:4, 8 - sites in Rzeszów] these decorations take the form of the so-called suspended triangles or grape clusters which are characteristic primarily of the Tiszaug group of the Tiszapolgár culture in its B phase [Bognár-Kutzián 1972:176-178, Fig.20:5, 8, Tab. LXXIII]. Quite occasionally this type of decorations is encountered on vessels from the classic phase of the Lublin-Volhynia culture [Zakościelna 1981: Fig.6, 7 - Wąwolnica; 1982: Fig.5 - Las Stocki]. In later complexes of this culture this type of decorations is even less frequent. It occurs as quite large, round, shallow dents forming triangles. Sometimes such dents accompany handles which are raised above the lip edge [Kadrow 1992: Fig.7c, 8 - Kosina; Kadrow, Kłosińska 1989: Fig.5a, 8f, g, 9g - Łańcut]. In Bronocice, at a settlement dated to the decline of the Lublin-Volhynia culture, decorations in the form of horizontal lines made with a „point-like” die experience a renaissance [Kruk, Milisauskas 1985: Fig.22a1, 23].

The type of decorations analyzed here was also recorded in the late Baden of the Carpathian Basin [Novotný 1958: Fig.XLVI:3-5 - Nitransky Hrádok; XLVIII:4 - Hurbanowo; Kalicz 1963: Fig.VI:5 - Center; Roman, Nemeti 1978: Fig.3:6-11, 14, 15, 20 - Arad „Gai”; 17:4-6; 18:1, 2 - Berea; 46:1, 3-5 - Salacea „Dealul Vida”] and of Małopolska [Kozłowski 1966: Fig.IV:37; 10:h, k, l, - Witkowice II; Godłowska 1968:

Fig.III:5; IV:13; XIII:5, 12 - Kraków-Nowa Huta-Zesławice] and in the Kostolac [Milojčić 1953: Fig.10:1 - Bubanj; Tasić 1979b: Fig.XXV:3 - Gomolava; XXVIa:6, 8, 10 - Pivnica kod Odžalca] and Coțofeni [Roman 1976: Fig.60:6 - Locusteni; 79:4 - Herculane „Peștera Hoților”] cultures.

Decorations of this type are encountered at cemeteries in Krasny Khutor (graves 74, 78), Chernin (graves 45, 64) and Sofievka (graves 4A, 26, 44).

f. Belly decorations, mainly on shoulders, in the form of „points”, „bars” or „line sections”. Dome-like bumps [e.g. Ścibior 1993: Tab. VII:5; XII:7, 15], as well as conical, elongated, corrugated ones, etc. are observed on vessels of the Lublin-Volhynia culture and the whole Polgár circle.

This type of decorations was also recorded in the late Baden of the Carpathian Basin [Novotný 1958: Fig.XLIX:1 - Želna-Drevenik; Roman, Nemeti 1978: Fig.4:7] and of Małopolska [Kozłowski 1966: Fig.IV:2; Godłowska 1968: Fig.II:13; XIII:5, 12; XXVII:3 - Kraków-Nowa Huta-Zesławice] and in the Kostolac [Tasić 1979b: Fig.XXV:5 - Gomolava; XXVI:7-10 - Karlovci] and Coțofeni [Roman 1976: Fig.47:14-29; 48:1-14; 80:2] cultures. An unusual abundance of this type of decorations was recorded at the sites of the last-mentioned culture.

Such bumps appear at the cemetery in Sofievka (graves 3, 32, 37, 100 and from the surface), Chernin (graves 32, 45, 64, 66), Krasny Khutor (graves 4, 8, 15, 16, 17, 26, 29, 53, 61, 78).

All the above-mentioned elements (a-f) occur quite frequently at a settlement in Cernavoda of the Cernavoda II culture [Berciu, Morintz, Roman 1973].

Besides the above-mentioned features, lids could be counted - with certain reservations - among Polgár elements (Krasny Khutor - graves 101, 116; Sofievka - grave 32) since they are very typical of the Carpathian Basin [Bognár-Kutzián 1972:133- 134; 1963:Tab. CXXIIB]. The same can be thought of vessels resembling „canula” (Sofievka - graves 17, 26, 44, 95; Chernin - graves 19, 48) which are so very characteristic of the Bodrogkeresztúr culture. Polgár analogies are displayed also by pot-shaped vessels of group I according to Kruk and Milisauskas [1985: Fig.23] known from cemeteries in Sofievka (graves 3, 15, 32, 87, 94), Chernin (graves 33, 34), Krasny Khutor (graves 6, 15, 23, 41, 42, 74). In the Lublin-Volhynia culture, vessels shaped like a half-barrel are popular. Single specimens of such vessels were found in Zavalovka (grave 1) and Chernin (grave 48).

2. The examples quoted above prove the obvious ties of Sofievka type sites with the circle of „Balkan-Carpathian” cultures. First and foremost, with late Polgár cultures of the Hunyadihalom-Lažňany horizon or/also with the cultures of the late Baden-Kostolac-Coțofeni II/III-Cernavoda II horizon. The doubt admitted to here arises from the assessment of „Balkan” ties of the Tripolye culture. Having grown from the Balkan cultural environment it was almost throughout its development the environment's Northern Pontic outpost. Therefore, it can be assumed that despite growing autonomy of development, particularly noticeable in phase C, south-western contacts fostered by various mechanisms were continued, albeit to a

different, generally decreasing, degree. This is evidenced by the stylistics of Tripolye pottery. Therefore, it can be assumed that the „Balkan-Carpathian” set of features recorded at Sofievka type cemeteries is a „conglomeration” of: (a) recessive forms of late Polgár designs, borrowed in the transition period between phases B and C, and (b) more recent impulses from the circle of the Baden-Kostolac-Cotofeni II/III-Cernavoda II cultures. The proportions in which both traditions should be viewed are temporarily difficult to determine. It is a result of the current state of research into the North Balkan and Central European contacts of the Tripolye culture and of methodological barriers in such research.

a. The absence of grooved or painted ornaments in the above-mentioned materials or of „*scheibenförmige*” handles, typical of the Carpathian Basin of the Hunyadialom-Lažňany horizon, draws attention to the late complexes of the Lublin-Volhynia culture in Małopolska. It seems that the greatest number of elements in common with the Dnieper sites have sites of the Lublin-Volhynia culture in the vicinity of Rzeszów (Łańcut, site 10 and Kosina, site 35). However, one should first and foremost mention Bronocice where almost all the elements listed above in the context of Sofievka materials as typical of the Polgár circle are present. Uneven and selective saturation of the Dnieper sites with Polgár elements points to the complex nature of their reception. Similarly as in the case of eastern influence on the eneolithic cultures of the Carpathian Basin [Ecsedy 1979:11-13, 47-58] one has to take into account various forms of inter-cultural contacts. These include penetration by single individuals or mainly by small groups as well as multifaceted, long-lasting and functionally complex ties.

Stressing the crucial role of the Lublin-Volhynia culture in its late phase in these interactions, one should not forget their „deeper” background i.e. earlier, not necessarily direct, contacts with the environment of the Tiszapolgár culture. Polgár inspirations in the development of groups of the Tripolye culture have been reported already many times. In case of the Gorodsk-Troyanov or Brynzeny type materials Tiszapolgár imports (settlements Brynzeny-Tsyganka and Kosteshty) and stylistic borrowings [settlement Troyanov and others; cf. Titov, Markevich 1974] were recorded. Clear Tiszapolgár influence was identified in the eastern part of the Tripolye culture. It was even assigned the function of one of the generators of this group [Tsvek 1985; 1989]. The said impulse would be noticeable in this case already at stage B of the Tripolye culture (4200-4000 BC) in numerous imitations of Tiszapolgár pottery. The groups of eastern borderland of the Tripolye culture, located between the rivers Southern Bug and Dnieper, formed a genetic substratum for the agglomeration around Kiev [cf. Kruts 1994:10 and older literature quoted there]. They were at the same time an intermediate link in the process of transmitting here Tiszapolgár impulses.

The period of influence of the late Lublin-Volhynia culture is contemporaneous with the Hunyadialom-Lažňany horizon, which is synchronized with the late phase of the Bodrogkeresztúr culture [Bognár-Kutzián 1969:40-42] and the beginnings of the Baden culture. Alternatively, it is placed in a separate, narrow time horizon

between the decline of the former and the beginning of the latter culture [Pavúk, Šiška 1980: 139, 147-148]. This corresponds approximately to the years 3650-3550 BC. Both the direction of transmission and its chronology clearly isolate this stage of „polgarization” of the Tripolye culture from the traditional framework of „Balkan” references of the said culture i.e. from the period of phases A-B. The latter period was dominated by references to the basins of the Tisza and Danube.

Besides pottery the range of ties between the late Tripolye and Polgár cultures is also documented by other sources coming from Sofievka cemeteries. Among them are knives [cf. Šiška 1972:140-143 and in this volume: Klochko, Koško, Weapons. . ., Klochko, Copper. . .]. It must be also emphasized that Tripolye features are identified in late Polgár materials like small triangular flint arrowheads in the Bodrogkeresztúr culture [Kaczanowska 1980:39] or the frequent use of troughlike retouching in the Lublin-Volhynia culture [Kadrow 1989:27].

b. The aggregate of quoted references defined as younger ones focuses our attention at the basin of the Tisza, the areas on the Danube at the mouths of the Drava and Sava rivers and at its lower course. It was there that the Baden culture developed in its late phase [Dimitrijević 1979], namely Baden IV [acc. to Němejcová-Pavúková 1981] or Baden IIb [acc. to Sochacki 1980]. Other cultures that developed in the same area are Kostolac [Tasić 1979a] and Coțofeni, phases II and III [acc. to Roman 1976; 1977; Tasić 1979b] - Fig.3. The absolute chronology of this period extends from 3000 to 2600 BC [cf. also Breuning 1987: Fig.22, 23]. On the scale of contacts of the Tripolye culture with the Balkan-Carpathian environments outlined above this stage would mean a return to the „sources of inspiration” from the times of the Tiszapolgár culture.

In the cultural environment of the Carpathian Basin it is yet another period of the exposure of steppe and eastern European influences, in this specific case of the Yamnaya culture (Pit-Grave culture), Fig.4. This is related to the migration of a part of its western branch [cf. Shaposhnikova 1985] towards the interior of the Basin. According to I. Ecsedy [1979:56]: „the spreading of the majority of pit-grave kurgans must have occurred in the period directly preceding Coțofeni and its early phase, and it must have been afterwards that closer connections with local populations began to establish (Coțofeni, Foltești, and Protoglina)”. After about 3100 BC the Yamnaya culture develops an extensive zone of multidirectional transmission of cultural patterns of the Baltic-Pontic dimension [cf. Koško 1991:244-250]. Cultural patterns were transmitted not only in the western direction [e.g. Gimbutas 1986; 1991:384-387; cf. also Fig.4]. Due to the mechanism of contact strengthening certain fringe elements of certain cultures reached the Dnieper. These cultures included Baden IV-Kostolac-Coțofeni II/III-Cernavoda II. At the same time the Yamnaya culture appeared there. The problem of the assumed „reverse current” has not been analyzed yet. Sources supporting it have not been catalogued, either [cf. Potushnyak 1985: 301-305]. Thus it is difficult to present a more substantive version of the hypothesis.

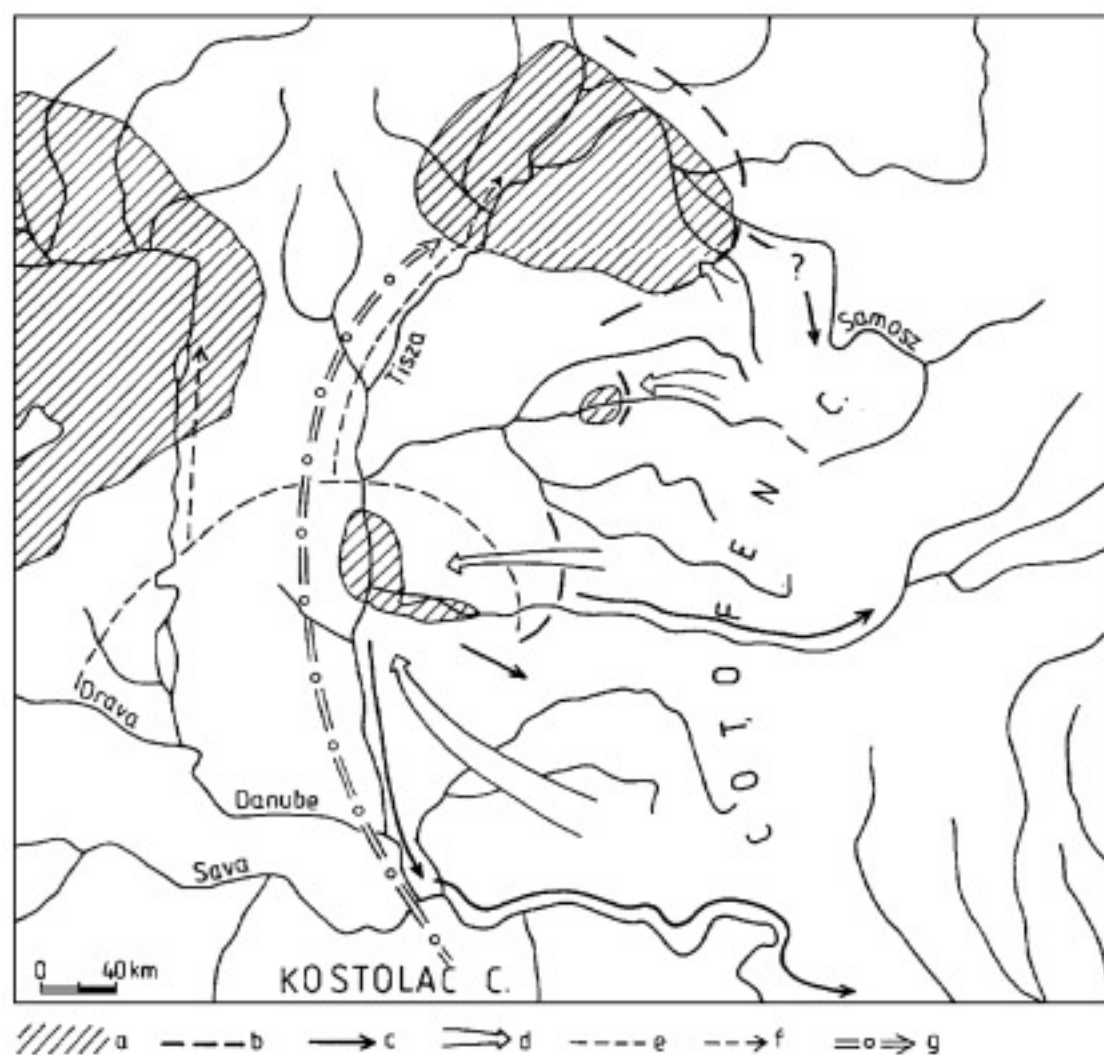


Fig. 3. Contact zone of the Baden, Kostolac and Coțofeni cultures in the period immediately preceding the hypothetic transmission of this circle's features in the direction of the middle Dnieper. Following Z. Sochacki with modifications and additions by the authors. Legend: a - the range of closed Baden culture settlement; b - the maximum eastern range of dispersed Baden culture settlement; c - directions of permeation of dispersed Baden culture elements in to the range of Coțofeni culture; d - directions of influence of Coțofeni culture on Baden culture; e - the northern range of intensive influence of the Kostolac culture on the Baden culture; f - directions of the farthest range of influence of the Kostolac culture on the Baden culture; g - the principal direction of influence of Anatolia on the Baden culture.

C. The set of features that are classified as „circumbaltic” includes relatively few decorative elements. These are: (a) a belly motif of an incised zigzag - xB-18 [cf. Koško 1981] (Fig.5:1), (b) an analogous motif of a „bird's feather” - xH-96 (Fig.5:2) and (c) mainly under-edge motifs of a „hole” - /x/S- ... (Fig.5:3). The widest as-

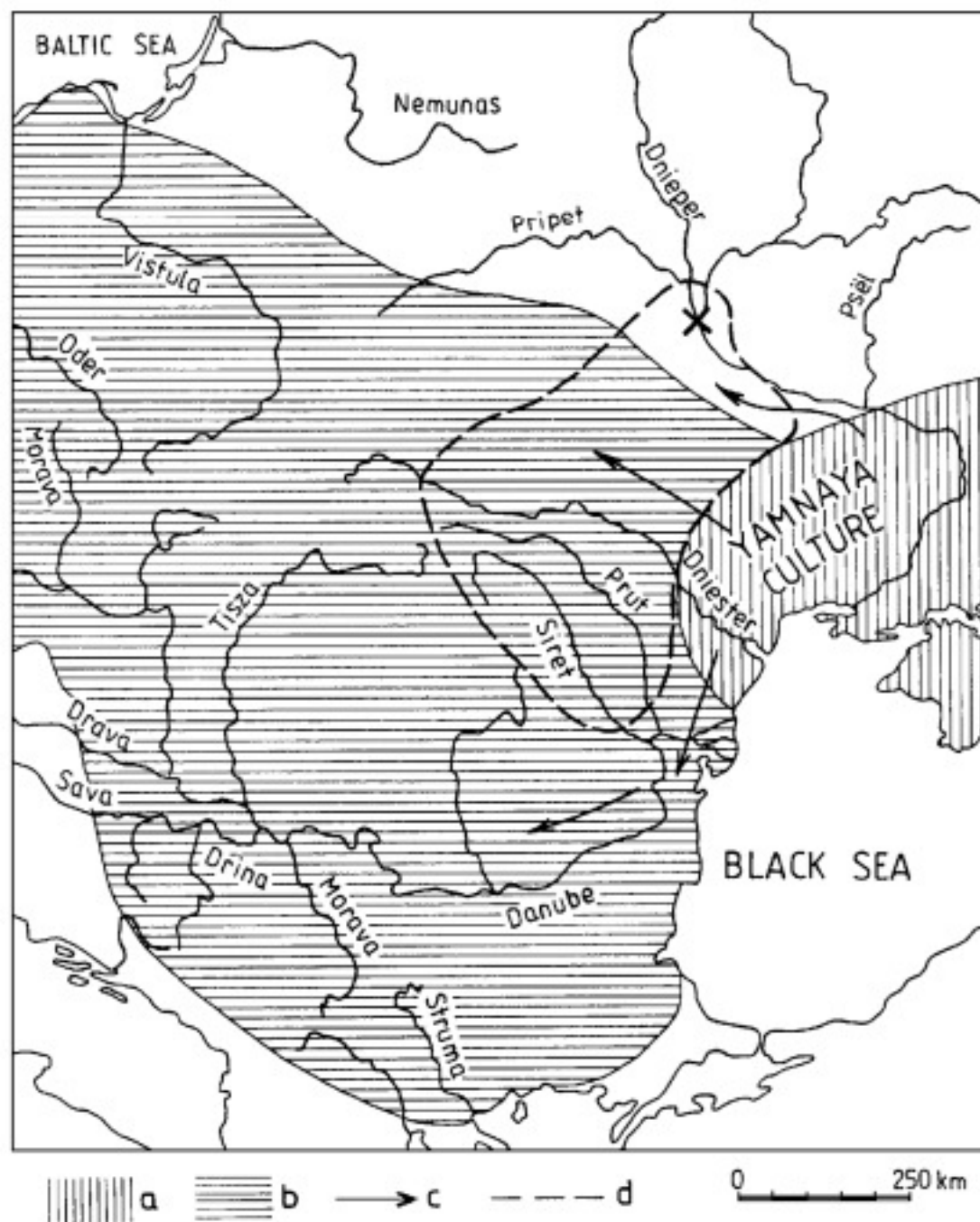


Fig. 4. Cultural context of the occidental migration of the Yamnaya culture following M. Gimbutas with additions by the authors. Legend: a - Yamnaya culture; b - Balkan and Central European cultures under the influence of the Yamnaya culture; c - influence of the Yamnaya culture (#2 Kurgan Wave); d - Tripolye culture area (x - Sofievka type)

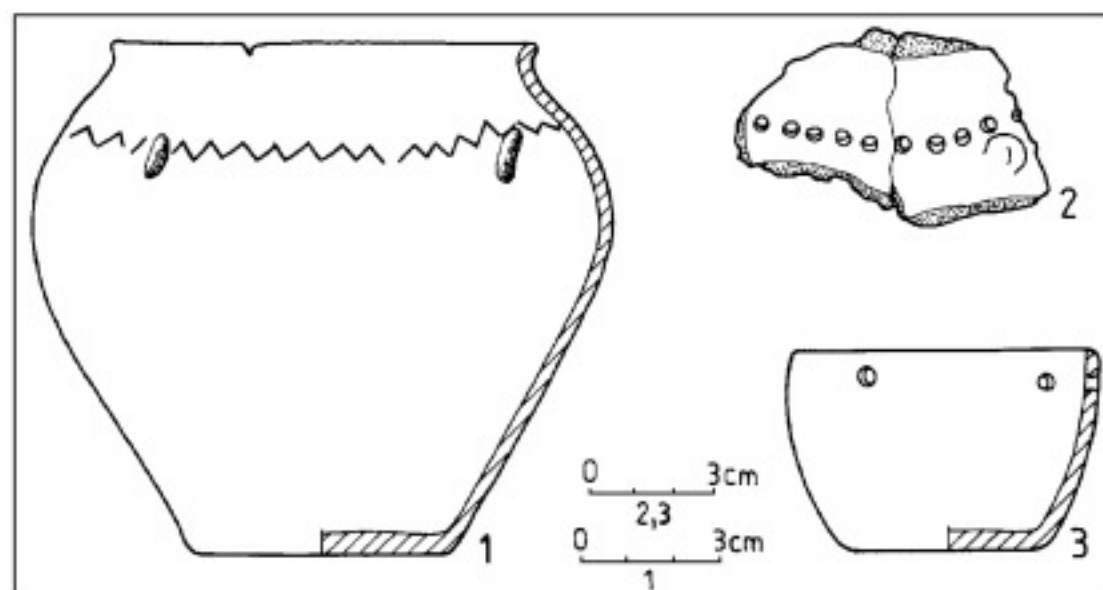


Fig. 5. Exogenous, circumbaltic features of the sepulchral pottery of the Sofievka type.

sortment of the above-mentioned elements was found at the cemetery in Krasny Khutor (features a, b) and at locations in Chernin and Sofievka (c).

The above-named features very frequently occur in cultures genetically related to the sphere of the Central European Lowlands (Funnel Beaker culture, Globular Amphora culture). It must have been from there that they were adapted (features a, b) into the Dnieper-Donets culture [Dolukhanov, Tretyakov 1979]. According to the cited authors, the Funnel Beaker culture exerted about 3700 - 3150 BC „a great influence on the neolithic cultures located in the western part of the Russian Lowland”. The reception of its features is a mark of the „late stage” of the Dnieper-Donets culture. According to V.F.Isayenko this process should be tied to sub-period IIB of the Pripets neolithic in Polesie by dating it somewhat after 3150 BC [Isayenko 1976:115]. Thus it is difficult to identify the direct sources of the stylistic innovations in the Tripolye culture. This opinion is supported by the fact of chronological placement of the Sofievka type cemeteries in the period when the impact of „forest” - East European communities on the „loess” cultural environments (from 3700/3600 and specifically from 3150 BC) was particularly strong. The impact is visible both in the area of the upper Vistula [cf. Kruk, Milisauskas 1985: Tab. VII] and on the middle Dnieper [Kruts 1977:147].

Besides pottery the ties between late Tripolyan and „circumbaltic” cultures are documented by the stone axes of the Sofievka type, hammers [cf. Klochko, Koško, Weapons. . .] and amber beads (Krasny Khutor, graves 8, 53, 170; Zavalovka, grave 1) [cf. Videiko, Archaeological. . ., in this volume].

As far as the detailed cultural and chronological identification of better known taxons of the Polish Lowlands is concerned, it must be said that out of three features referred to above as „northern” only the first two can be classified with any greater detail. In both cases of „zigzag” and „bird’s feather” it is possible to relate to the periodization schedule of the Funnel Beaker and Globular Amphora cultures.

a. The motif of an incised zigzag located on the belly appears on the Polish Lowlands not earlier than 3650 BC. What is specifically meant here are materials of the Funnel Beaker culture of the Kuiavia IIIB phase [Koško 1981:47] and less chronologically certain phase I of the Globular Amphora culture [Szmyt 1996]. The same motif appearing under the edge is dated a little earlier at about 3850 BC. It must be observed, however, that the incision technique combined with a zigzag is not a frequent design in the area in question, at least not in phase IIIB of the Funnel Beaker culture. These conclusions are not contradicted by observations from other areas of Central Europe bordering on the eastern part of the continent. It is impossible to make these conclusions any more specific on the basis of data from the „forest” - Eastern European zone.

b. The so-called „bird’s feather” is a stylistic marker of the Globular Amphora culture. This motif appears already in the oldest complexes of sources of this culture coming from phase I [Szmyt 1996] dated at circa 3850 - 3500 BC. It is characteristic that only very slowly did it permeate other non-amphora environments, e.g. it reached the Funnel Beaker culture only in the Kuiavia phase V [after 3150 BC - Koško 1981:47n.].

Little is known about the transmission of this feature to the region of Eastern European forest. It is known there from certain groups included in the complex of cultures characterized by comb-pierced pottery, e.g. „Listvin type” stylistics [authors’ observations]. The position of these groups is not precisely determined.

More informative for our discussion is the radiocarbon review of the beginnings of the Volhynia-Dnieper penetration route of the Globular Amphora culture and of the lower limit of the Sofievka type. Such a review justifies a relatively close synchronization of the two phenomena at the period from 3000 to 2950 BC. In this light it is admissible to perceive the Globular Amphora culture as the main (single?) medium of the „circumbaltic” complex of features.

Keeping in mind the above remarks it must be said that both stylistic elements reveal a certain horizon of contacts of the Dnieper communities with Central European environments, primarily from the Lowlands, at the threshold of the 3rd millennium BC, more precisely between 3000 and 2700/2650 BC.

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The stylistic-genetic assessment of pottery presented here does not exhaust the subject of the topogenesis of the Sofievka variety of Black Sea neolithic. However, it is a meaningful contribution towards its explication. The main conclusions of the analyses can be formulated as follows:

- Sofievka pottery stylistics (specifically its sepulchral variety) cannot be treated

as a simple continuation of earlier links in the development of pottery of the Dnieper Tripolye culture (Lukashi type);

- the common feature of identified exogenous components is their occidentalism or ties with western borderlands of Tripolye, primarily with the basins of the Tisza and the Vistula rivers;
- the dominant „external tradition” is the „Balkan” component (southern) viewed as a „conglomeration” of traditions of such cultures as Tiszapolgár, Lublin-Volhynia (late phase), Baden IV, Kostolac, Coşofeni II/III, that is those that are located in the basins of the Tisza/lower Danube and to a lesser degree of the upper Vistula.
- far less clear is the influence of the circumbaltic zone (the north), the borderland between the catchment areas of the two seas, identified as a hypothetical component of the Globular Amphora culture.

These conclusions correspond to the topogenesis of other innovations in the development of the Dnieper Tripolye culture observed in flintworking, stoneworking - weaponry or in copper working [cf. in this volume: Budziszewski, Flint. . . , Klochko, Koško, Weapons. . . and Klochko, Copper. . .].

*Translated by Piotr T. Żebrowski*