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MESOLITHIC ORIGINS OF THE FIRST INDO-EUROPEAN CULTURES IN EUROPE ACCORDING TO THE ARCHAEOLOGICAL DATA



The article refers to the common Meso-Neolithic basis of Ukrainian ancient Indo-European cultures (Mariupol, Serednii Stih) and Central Europe (Funnel Beaker and Globular Amphorae cultures) of the fourth millennium BC. Archaeological materials show that the common cultural and genetic substrate of the earliest Indo-Europeans in Europe was forming from the sixth to the fourth millennia BC due to migration of the Western Baltic Mesolithic population to the east through Poland and Polissia to the Dnipro River middle region and further to the Siverskyi Donets River.

Key words: the Indo-Europeans (hereinafter referred to as IE), Mesolithic substrate, Baltic cultural province, Maglemosian culture, Mariupol culture, Serednii Stih culture, Funnel Beaker culture, Yamna culture.

In 1786, the British linguist William Jones published the results of a language comparative study of the descendants of legendary Indian conquerors (the Aryans). The proximity of basic vocabulary of many languages in Europe and West Asia has given reasons for distinguishing the IE family of languages. Linguistic affinity is explained by originating from a common ancestor that lived in a limited area, IE homeland, about 6–7 thousand year ago.

For more than 200 years, several generations of Indo-Europeanists from different countries are looking for the IE homeland. This refers to the country, from which in the period from the fourth to the second millennia BC the ancestors of allied IE peoples settled to Europe and Western Asia. Since namely IE were the founders of the leading in today's world European civilization, different countries compete for the honorable right to be called the IE homeland.

Even though most modern scholars include the territory of Ukraine, to some extent, to the ancestral IE homeland, IE studies, unfortunately, have not yet become a priority issue for the Ukrainian

archaeologists, palaeoethnologists, and linguists. IE studies were founded as a branch of linguistics, though nowadays, are more and more drawn to archaeological evidence. Linguistic sources are limited, compared with archaeological which number is growing in geometric sequence.

Due to the efforts of various scholars including the archaeologists, in the second half of the 20th century, there appeared two powerful centres of settling the earliest IE: The Black Sea and the Sea of Azov in Ukrainian southern steppes and Central Europe (the territories of present-day Germany, Czech Republic, Austria) (fig. 1) (Залізник 2012, с. 242; Zaliznyak 2005, p. 24). The question arose: how closely the related peoples could settle from two different and distant from each other by 2 000 km, centres? The concept of Baltic cultural and historical province of Central and Eastern Europe allows becoming closer to understanding and solving the problem (Залізник 1997; 1998, с. 268–270; 2006, 2009, с. 206–213; 2012, с. 446–466, 2016).

Baltic cultural and historical province of Central and Eastern Europe

The historians and archaeologists are very knowledgeable about functioning of the great Eurasian steppe from Mongolia in the east to the Black Sea northern region and the Danube region in the west as a migration corridor for the past three millennia. Periodic waves of the nomads moving from Central Asia through the south of Ukraine to the Danube are bored in mind. The determining factor in the direction of the movement was the search for the best pastures by the earliest cattle-breeders. Indeed, the farther to the west, the higher is the climate humidity and the better is thick-growing grass.

Among the nomadic peoples moving from the beginning of the first millennium BC through this corridor from east to west, sometimes reaching the steppes of the Danube River lower and middle regions, the Cimmerians, the Scythians, Sarma-

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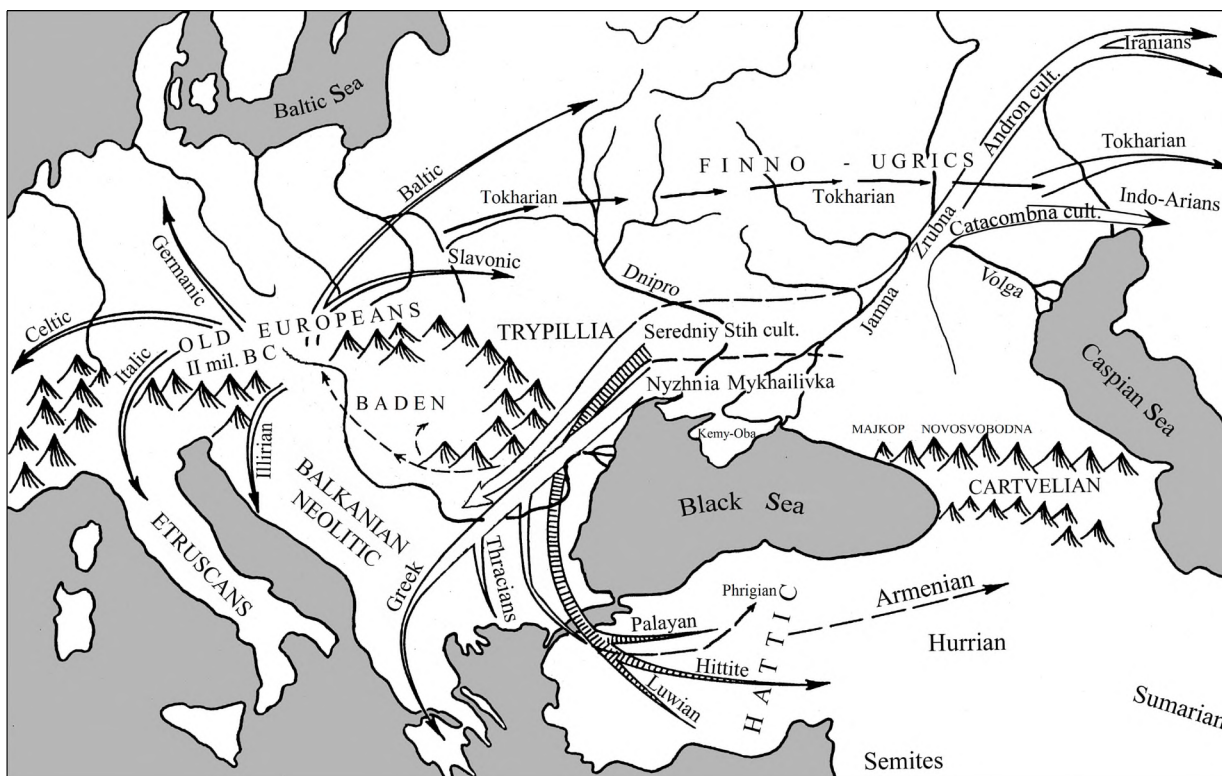


Fig. 1. The settling of the early Indo-Europeans in the period from the 4th to the 2nd millennia BC

tians, Huns, Avars, Bulgars, Khazars, Hungarians, Pechenigs, Torks, Cumans, Mongols, Kalmyks, and the Bashkirs can be called. This historical phenomenon is known in the literature as steppe cultural and historical province of Eurasia (Залізняк 1997; 2006; 2012).

Much less is known about similar migration corridor, but with a reverse migration from west to east, which functioned in Central and Eastern Europe since the end of the glacial age (Залізняк 1997; 2006; 2012). It refers to the periodic waves of migration which created in the area between the Rhine and the Elbe, and sometimes in the South-Western Baltic from the final Palaeolithic, at least from 12 500 years ago and rolled through Central European lowlands (German, Polish, Polissia) into the Neman, Prypiat, Dnipro and Desna basins. Sometimes these migrations from Central Europe and Southern Baltic to the east direction even reached the Volga River upper middle region (Fatianovo culture of Corded Ware Ceramics) and the Siverskyi Donets River.

This corridor of ethno-cultural waves spreading was called the Baltic cultural and historical province (Залізняк 2006) and, depending on the historical period, functioned in different modes: migrations, diffusions, as well as military and economic expansion in the Middle Ages.

Due to extensive research of Mesolithic sites at South Western Baltic (Clark 1936; 1975), Po-

land (Kozłowski 1973; 1975; Prahistoria... 1975; Wiecewska 1973), Lithuania (Римантене 1971; Кольцов 1977), and Northern Ukraine (Залізняк 1976; 1978; 1989) in the last quarter of the 20th century, conclusive archaeological evidence about migration through Middle European lowlands to the east in the Mesolithic, and even in the final Palaeolithic was received (Залізняк 1976; 1978; 1984; 1989; 1991).

Traces of the most ancient migration from Northern Germany through Poland to the basins of the Neman and Prypiat Rivers are traced through the spread of typical Hamburgian shouldered point dated 12 500 years ago. There is much more convincing data on migration of Lyngby culture population (Jutland) from lowland corridor from south-western Baltic through the Vistula and Neman basins to the Dnipro and even the Volga upper regions 11 000 years ago (fig. 2) (Залізняк 1989; 1999; 2005, с. 45). They settled Middle European lowlands just released from the glacier, launching genetically related reindeer hunters' cultures: Ahrensburg of Northern Germany, Krasnosillia and Swider of the Vistula, Neman, Prypiat, and the upper region of the Dnipro basins (Залізняк 1989; 1999; 2005, с. 45). These reindeer hunters of the last millennium glacial age, when sharp warming occurred at about 10 thousand years ago, gone far north to the territories of Scandinavia freed from the glacier and



Fig. 2. The distribution of Bromme-Lyngby culture. 1 – Lyngby culture sites; 2 – separate Lyngby culture points; 3 – directions of Lyngbian migrations on Allerod/Yang Dryas verge; 4 – south and east borders of Grate European Lowlands. The sites: 1 – Norre Lyngby; 2 – Langa; 3 – Bro; 4 – Bromme; 5 – Storsbjerg; 6 – Zegebro; 7 – Tolk; 8 – Jaglisko 1; 9 – Vojnovo; 10 – Ridno X; 11 – Vilnius; 12 – Ezeryno 8, 15, 17; 13 – Maskaukos; 14 – Bogatery Lisny 2; 15 – Derezhnycha 31; 16 – Kovalivka; 17 – Krasnosilsk 5; 18 – Lutka 10; 19 – Velykyi Midsk; 20 – Anosovo; 21 – Berestenovo; 22 – Troitske 3; 23 – Podol III

to the north of Eastern Europe and launched the Post-Swiderian Mesolithic of Eastern Europe forest north (fig. 3). It seems that the population was involved in the formation of the Finno-Ugric ancestors. It is evidenced not only archaeologically, but also anthropologically (Залізняк 1989, с. 83, 2005, с. 104–107; Zaliznyak 2002; 2006).

Abandoned by the deer hunters Middle European lowlands, in the border of the Final Palaeolithic and Mesolithic, were populated by the new wave of immigrants from the West, because of the melting of the Great Glacier. Huge masses of glacial melt water got into the ocean and led to a significant increase of its level. Due to the flooding of vast areas between Britain and Scandinavia, the North Sea was formed. The flooding also caused the movement of the Early Mesolithic forest hunters from flooded areas to the Middle European lowlands to the east. These Early Mesolithic settlers from the West formed the Duvensee cultural unite (fig. 4), formerly known as Maglemose culture, in the 8th and 7th millennia BC. It consisted of genetically related cultures of Starr-Carr (England), Duvensee (Germany), Melsted (Jutland), Komornica (Poland), Kudlaivka (Polissia), and the Neman basin (Kozłowski 1973, p. 338–341; Залізняк 1976; 1991, с. 12, 13).

At the end of the Mesolithic, due to archaeological data, a new wave of Post-Maglemosian migration from Western Baltic to the east is marked and is represented with such cultures as Svaerdborg (Jutland), Chojnice-Pienki (Polish Pomerania), Janislawice (the Vistula, Neman, Prypiat and the Dniro middle area basins) (fig. 5; 6). According to the spreading of peculiar Janislawice points in the Dniro rapids region and Eastern Ukraine, the Post-Maglemosian Baltic migrants reached the Siverskyi Donets basin (fig. 7).

In the second half of the 6th millennium BC, the Linear Pottery culture bearers moved through the south of Poland to Volyn area. They were followed by the population of Funnel Beaker culture moving from the west to the Sluch River (fig. 8). The population of Globular Amphorae culture moved the same way to Polissia and to Kyiv Dniro region and even to the Desna and the Dniro regions in the third millennium BC. There were several waves of Corded Ware culture through Poland to the east which reached the Volga River upper and middle regions across the Dniro region in the late third and the beginning of the second millennia BC, where they are known as Fatianovo culture (fig. 9). Lev Klein assumes that the ancestors of the Tocharian moved from Central Europe far to the east with mi-

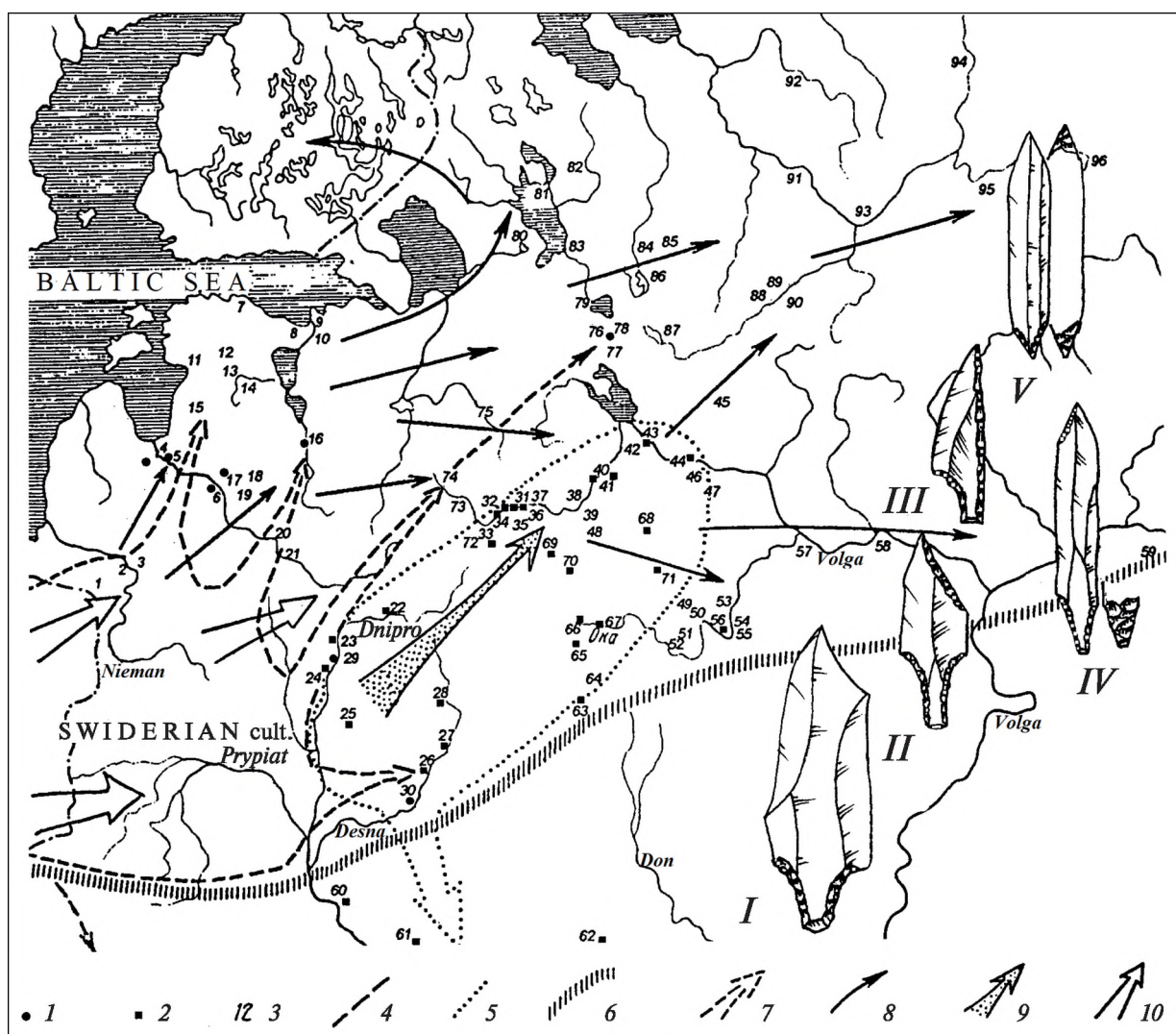


Fig. 3. The map of spreading of Post-Swiderian and Post-Krasnosillian sites in Mesolithic of Eastern Europe in the 8th millennium BC. Arrow points: I – Lyngby; II – Krasnosillia; III – Grensk; IV – Swidry; V – Post-Swiderian points. 1 – Northernmost Swiderian sites; 2 – Post-Krasnosillian Mesolithic sites; 3 – Post-Swiderian Mesolithic sites; 4 – the border of Swiderian culture; 5 – the border of Post-Krasnosillia unity (Pisochnyi Riv and Yenevo cultures); 6 – the south border of forest zone in the Early Holocene; 7 – the direction of the Swidry culture population's migration in the very beginning of the Holocene; 8 – the direction of Post-Swiderian population's migration in the first part of the Mesolithic (8th and 7th millennia BC); 9 – migration of the Krasnosillian population on the Pleistocene and Holocene border; 10 – migration of the Kudlaiyka and Janislavice cultures population in the Preboreal and Boreal periods. Sites: 1 – Pashtuva; 2 – Lampedzhay; 3 – Kanyukay; 4 – Laukskola; 5 – Lielrutuly; 6 – Selpils; 7 – Kunda; 8 – Siverts; 9 – Tirvala; 10 – Narva; 11 – Pully; 12 – Lepakoze; 13 – Jalevere; 14 – Simusare; 15 – Zvienieky; 16 – Ivantsev Bor; 17 – Zvidze; 18 – Osa; 19 – Lubana Lake; 20 – Krumplevo; 21 – Zelenyi Khutir; 22 – Katyn; 23 – Borovka; 24 – Koromka; 25 – Grensk; 26 – Pisochnyi Riv, Gridasovo; 27 – Komyagino; 28 – Cheristovo; 29 – Barkalabovo; 30 – Smyachka; 31 – Yenevo, Starokonstantinovska IV, Cherna Gryaz, Dmitrovska, Titovo I; 32 – Zhuravets; 33 – Vysokino; 34 – Butovo; 35 – Koshevo; 36 – Krasno VI; 37 – Lukino; 38 – Sobolevo; 39 – Skniatino; 40 – Altinovo; 41 – Bogoiavlenie; 42 – Koprino; 43 – Penkovo 2; 44 – Seltso; 45 – Umilenie; 46 – Nekrasovo, Kostroma; 47 – Mordovskoie; 48 – Ivanovska III; 49 – Mikulino; 50 – Petrushino; 51 – Rusanovo III; 52 – Gorki; 53 – Yelin Bor; 54 – Novoshino; 55 – Ugolno; 56 – Istoc; 57 – Stara Pustin; 58 – Yandashevo; 59 – Milliayrovo; 60 – Zagay I; 61 – Viazivok 4A; 62 – Zymivnyky, Sabivka; 63 – Zhabin; 64 – Gremiachee; 65 – Ladzhino III; 66 – Bragino; 67 – Mitino; 68 – Yelovka, Shiltseva Zavod; 69 – Dalny Ostrov; 70 – Zaozerie; 71 – Belev; 72 – Nastasino; 73 – Sukontsevo; 74 – Lanino; 75 – Borovich; 76 – Yagorba; 77 – Lotova Gora, Listvenka III; 78 – Marino IV; 79 – Lake Belaye; 80 – Pindushy XIV; 81 – Olenii Ostrov; 82 – Ilexa III; 83 – Muromskoie 7; 84 – Nizhne Veretye I; 85 – Popovo; 86 – Sukhoie; 87 – Bor; 88 – Jasnopska; 89 – Yedenga; 90 – Kolupaievska; 91 – Priozerna 4; 92 – Yavronga; 93 – Filichaievska; 94 – Vis; 95 – Pezmog I; 96 – Parch, Pozheg, Petrushinska

gration wave of Corded Ware culture (fig. 1; 9). In the researcher's opinion, the known Fatianovo culture in the Volga River upper and middle regions

had been left by the Proto-Tocharian bearers on their way from the South Baltic area through Eastern Europe to Central Asia (Клейн 2007).

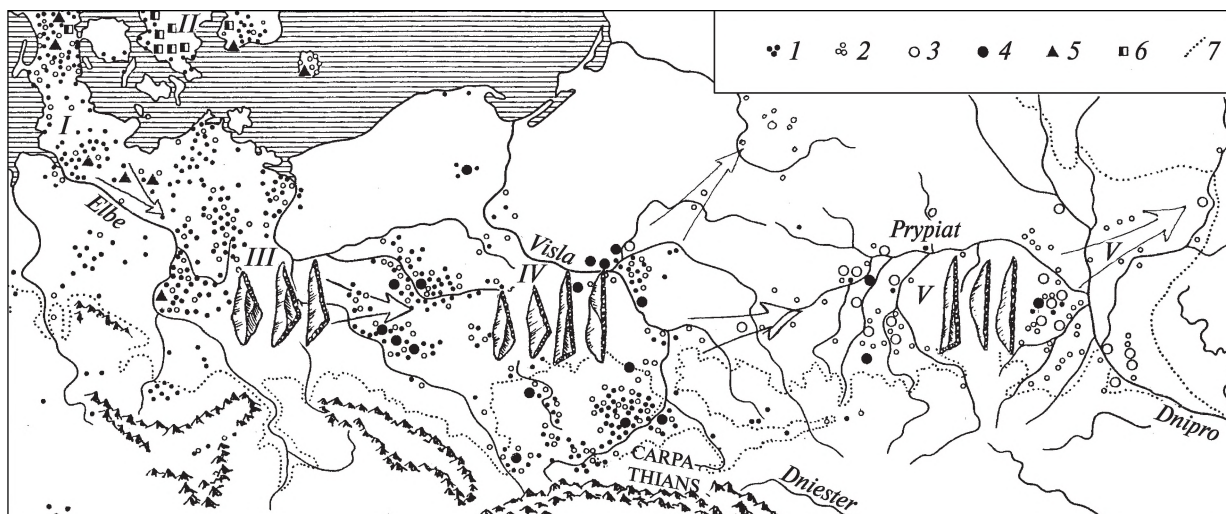


Fig. 4. Duvensee (Maglemose, after G. Clark) culture group of the 8th and 7th millennia BC: I – Komornica triangles and points; 2 – Kudlaivka points; the sites: 3 – Kudlaivka; 4 – Komornica; 5 – Melsted and Duvensee; 6 – Svaerdborg culture; 7 – the border of Middle Europe lowlands. Cultures: I – Melsted; II – Svaerdborg; III – Duvensee; IV – Komornica; VI – Kudlaivka

In the second millennium BC, Post-Corded Tshynets-Komarivka and akin to it Sosnytsia cultures spread from the Vistula to the Desna, and in the first millennium BC, the population of Mylohrad culture, in which some researchers see the undivided Balts-Slavs, moved from the Neman to the Desna and Ros Rivers.

Later, three waves of Germanic tribes – Jastorf, Pshevor (the Vandals), and Wielbark (the Goths) cultures rolled from the west to Ukraine. The latter came from the Baltic Sea region to the Black Sea coast and the Crimea (fig. 10) and launched Cherniakhiv culture in the 3rd–4th centuries AD, which nowadays is interpreted as an archaeological analogy to the Ermanaric Empire by Gothic chronicler Jordan. From the Early Mediaeval times, the Baltic

province changes its historic form and operates in military and economic expansion of the Normans, Teutonic Knights, Lithuania and Poland states.

Thus, mass archaeological material and written sources of the Early Mediaeval times give grounds to speak about the periodic waves of migration from Central Europe through the Vistula basin to the east starting at least from the Final Palaeolithic to historical times. The migration waves of the Mesolithic epoch created a single ethno-cultural background that was spread almost on 2 500 km from Jutland in the west to the Dniro River middle region and the Siverskyi Donets River in the east where the earliest Indo-European cultures of the 5th and 4th millennia BC Europe appeared.

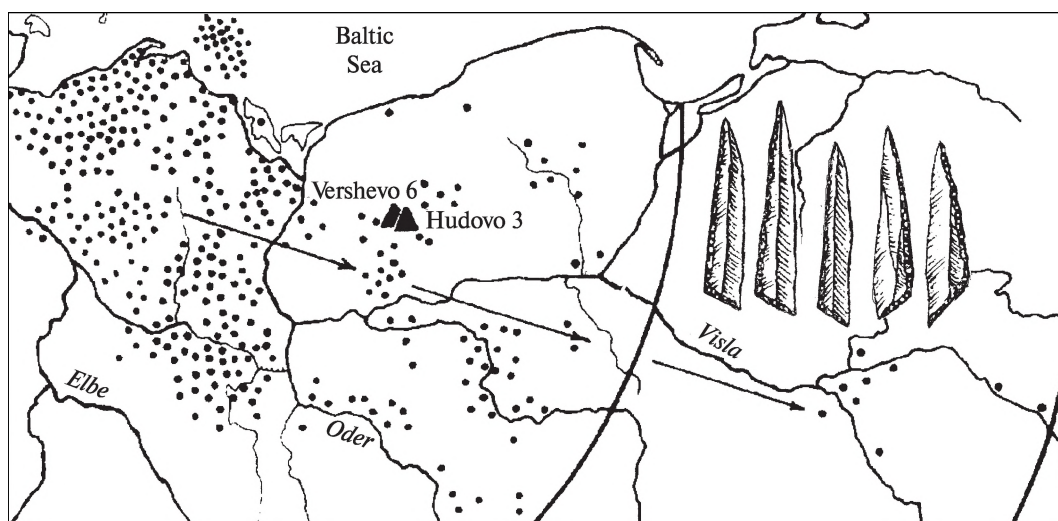


Fig. 5. Distribution of Svaerdborg points into the territory of Poland in the 7th millennia BC, after Z. Bag-niewski (1993)

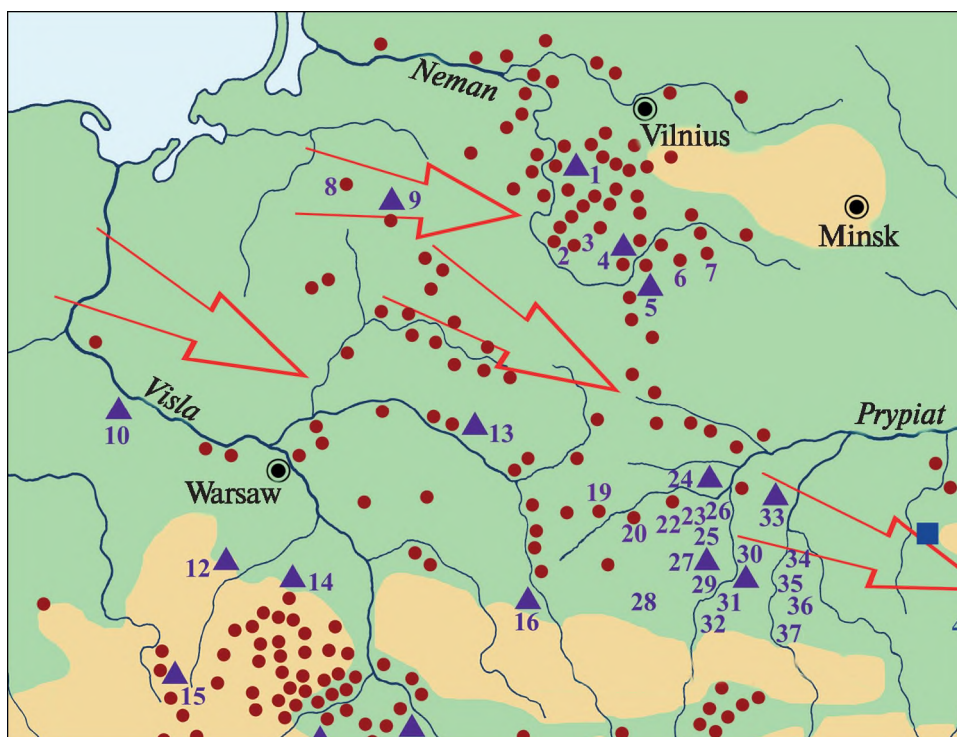


Fig. 6. Map of distribution of Janislawice culture sites. *Neman basin*: 1 – Maximonis 4; 2 – Dubichay 2; 3 – Niatisiay; 4 – Belitsa 2; 5 – Nyasilovichy; 6 – Babinka; 7 – Chereslia. *Poland*: 8 – Perkunove; 9 – Sosnia; 10 – Wistka Szlachecka III; 11 – Weliszow XIII; 12 – Janislawice; 13 – Grzybowa Gora VI; 15 – Dibrowka; 16 – Neborove; 17 – Jawornik Charna; 18 – Gwozdziec. *Polissia*: 19 – Tur; 20 – Nevir; 21 – Glusha; 22 – Liubiaz; 23 – Perevoloka; 24 – Omyt; 25 – Nobel; 26 – Senchytsi 5a; 27 – Mulchytsi; 28 – Hrushvytsia; 29 – Babka; 30 – Nepirets; 31 – Balakhovychi; 32 – Mala Osnytsia; 33 – Rudnia; 34 – Krynytsia; 35 – Tutovychi; 36 – Poliana; 37 – Sarny; 38 – Rudnia Ozerianska; 39 – Pischane; 40 – Prybir; 41 – Kovshylivka; 42 – Protereb, Obolon, Dibrovka; 43 – Stakhanove; 44 – Krapyvenka; 45 – Teteriv; 46 – Kukhari 2; 47 – Pryborsk 3; 48 – Rudyi Ostriv; 49 – Borodianka; 50 – Vyshhorod; 51 – Peretichok; 52 – Krasnovka 1B; 53 – Gorodok 4; 54 – Stara Lutava; 55 – Konetspol; 56 – Kamianytsia. *Marks*: 1 – Janislawice points; 2 – Janislawice culture sites; 3 – Rudyi Ostriv type sites

Post-Maglemosian ethno-cultural community of the Late Mesolithic

The formation of the abovementioned background of the earliest IE in Central European lowlands began with the Holocene warming. Huge masses of water from melting glaciers got into the World Ocean raising its level up to more than 100 m. Shallow areas of continental shelves were flooded, including a huge plain between Britain and Scandinavia in place of the modern North Sea. This process tightened for two thousand years and lasted the entire first half of the Mesolithic period. First, the North part of the plain was flooded, while the south part of the North Sea remained to be a land (Doggerland) inhabited by Mesolithic hunters and fishermen. Among the scholars, there are many supporters of the hypothesis that Doggerland was flooded about 6200 BC because of the catastrophic tsunami waves that arose due to the landslide on the coast of Norway.

Probably Duvensee (Maglemose) cultural region emerged in the Early Mesolithic (fig. 4) due to population migration to the east because of flooding of parts of the plain between Britain and Scandinavia at the beginning of the Mesolithic in the 8th millennium BC. Doggerland flooding at the end of the 7th millennium BC led to a new migration eastward and arising of Post-Maglemosian cultures region (fig. 5–8).

In 1936, an eminent British archaeologist Graham Clark called the western part of the mentioned Early Mesolithic settlers from the flooded North Sea areas Maglemose culture (Clark 1936), which means «the great marsh» in Danish. In the middle of the Mesolithic (Boreal), Svaerdborg culture developed in Jutland on the Maglemose background. Due to the Doggerland flooding by another sea transgression, Svaerdborg population was moving to the east and became the basis of post-Maglemose cultures community of the 6th and 5th millennia BC (fig. 8). In the 1970s, a famous Polish researcher S.K. Kozłowski added to this communi-

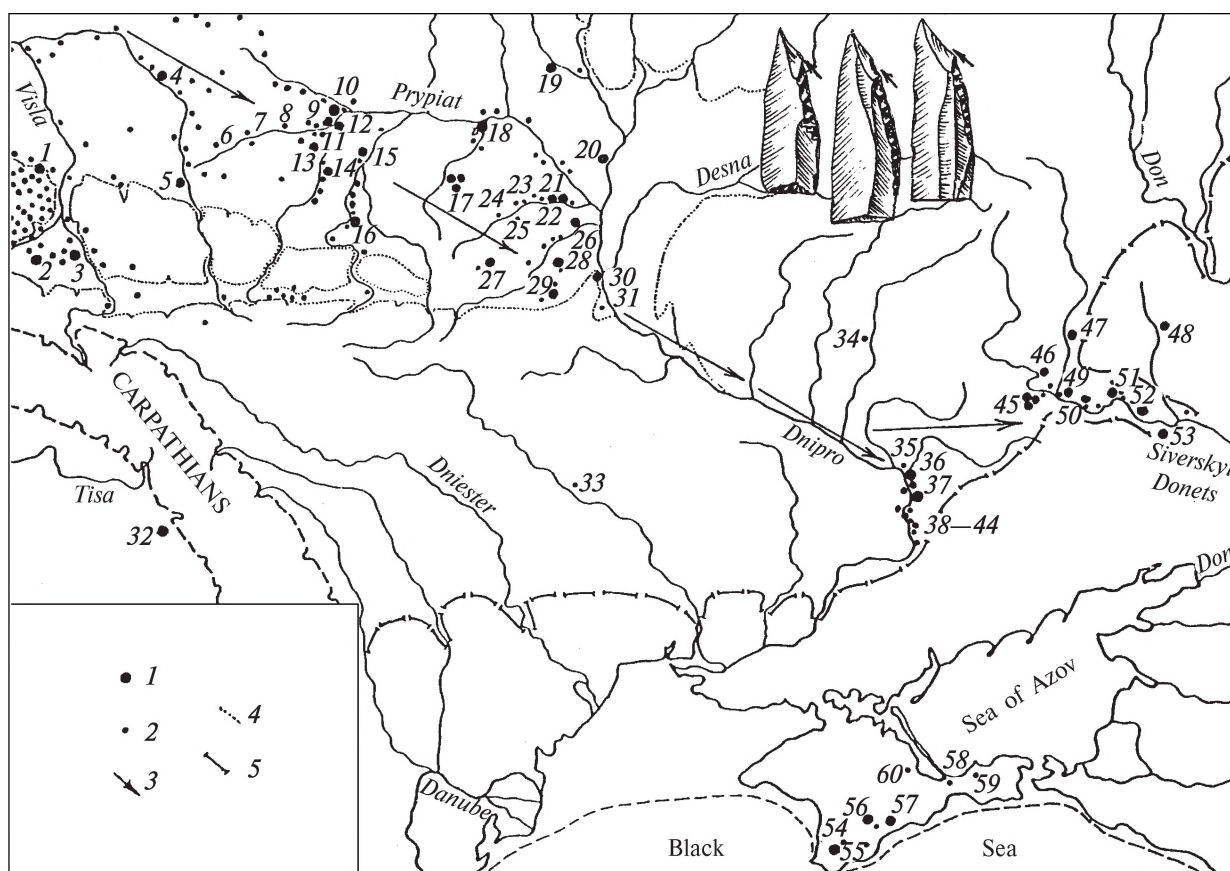


Fig. 7. Map of distribution of Post Maglemose Janislawice culture points sites: 1 – sites with series of Janislawice points; 2 – sites with 1–3 points; 3 – migrations of the Baltic population in the period from the 7th to the 5th millennia BC; 4 – Polissia lowland border; 5 – south border of the forest zone in the Atlanticum period. The sites with Janislawice points: 1 – Grzybowa Gora IV; 2 – Javornik Charna; 3 – Gvozdec; 4 – Czerwony Borek; 5 – Neborove; 6 – Tur; 7 – Nevir; 8 – Liubiaz; 9 – Perevoloka 2; 10 – Omyt; 11 – Nobel; 12 – Senchitsy; 13 – Mulchitsy; 14 – Nepirets; 15 – Rudnia; 16 – Poliana; 17 – Rudnia Ozerianska; 18 – Moiseevichy; 19 – Krasnovka 1B; 20 – Stara Lutava; 21 – Obolon; 22 – Protareb; 23 – Koshylivka; 24 – Pischane; 25 – Prybir; 26 – Pryborsk 3; 27 – Stakhanove, Krapiyvenka; 28 – Rudy Ostriv; 29 – Borodianka; 30 – Vyshhorod; 31 – Peretichok; 32 – Kamianitsa; 33 – Konetspol; 34 – Bila Gora; 35 – Popiv Mis; 36 – Ohrin 8; 37 – Kizlevy 5; 38–44 – Chaplyne, Sursky, Nenasytets, Terlianska Krucha, Vovnihy, Sobachky, Vovchok; 45 – Petrivske 4, 10, 28; 46 – Vilkhova 5; 47 – Petrovo-Orlovske; 48 – Pelahiivka III; 49 – Pryshyb; 50 – Drobysheve; 51 – Shevchenkove; 52 – Borovske I; 53 – Horikhove-Donetske; 54 – Shan-Koba, Fatma-Koba; 55 – Balyn-Kosh; 56 – Ala-Chuk; 57 – Su-At III; 58 – Frontove; 59 – Leninske; 60 – Oleksiivska Zasukha

ty the cultures deriving from Svaerdborg culture: Leyen-Varten, Oldesloe, and Chojnice-Pienki of the northern Germany, Denmark and Poland correspondingly (Kozłowski 1975, p. 45–50, 252).

Professor of Wrocław University Z. Bagniewski wrote about Svaerdborg population spread from the Baltic Sea western region to Poland. His research allowed talking about two phases of development in Poland Mesolithic traditions of western Baltic Svaerdborg culture that emerged on Maglemosian background (fig. 5). Flint assemblage of Vershevo 6 typologically meets materials of the late stage of Svaerdborg culture in Denmark and is dated by the 6th millennium BC. Long triangles and Maglemosian type lancets, and some Svaerdborg type points are typical for it. Later Svaerdborg industry in Poland transformed into

Hudove 3 assemblage type, which typologically resemble materials of Oldesloe culture type of Germany and North Jutland of the 5th millennium BC. In Poland, such monuments are separated in Chojnice-Pienki culture (Bagniewski 1993) (fig. 5).

In the 1980s and 1990s, most specialists acknowledged Post-Maglemosian character of Janislawice culture of the Vistula, Neman, and Prypiat basins (fig. 6) (Залізняк 1978; 1984; 1991, с. 38–41; 2009, с. 206–210). Based on the archaeological and anthropological data, on the territory of Ukraine, this expansion of the Baltic hunting population in the 6th and 5th millennia BC reached the Middle Dniipro region, Dniipro rapids area and even the Siverskyi Donets River (fig. 7). This fact is persuasively evidenced by a map of spreading of the

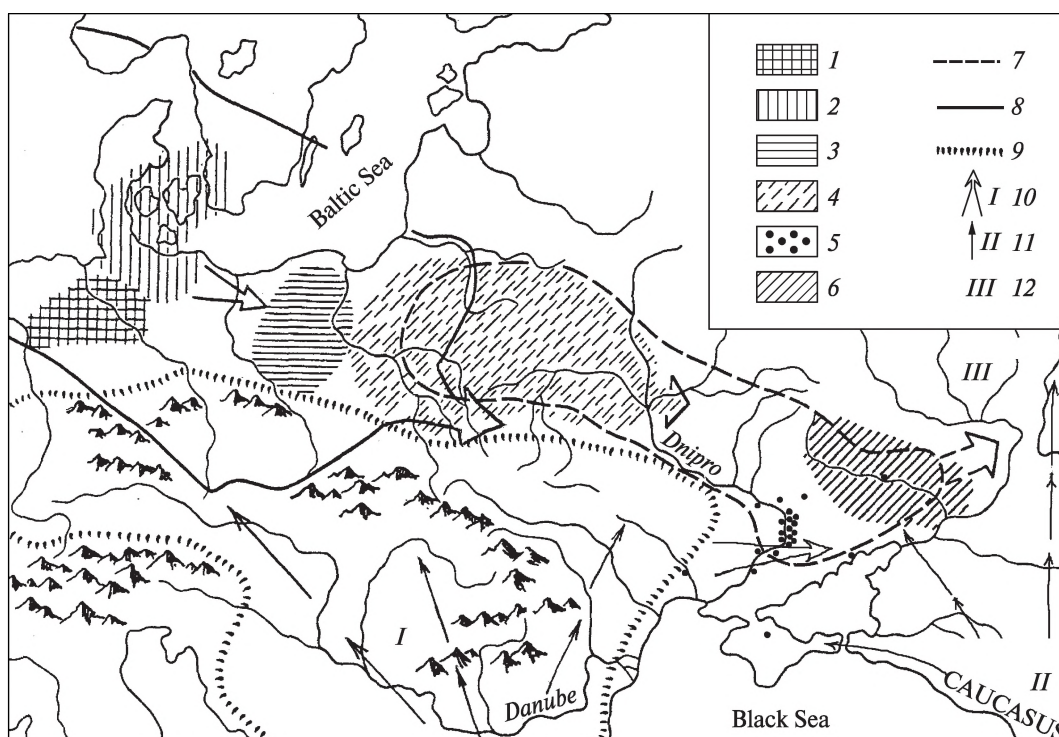


Fig. 8. The Late Mesolithic and Neolithic substrate of the Indo-Europeans. *Late Mesolithic cultures*: 1 – De-Leien-Warten; 2 – Svaerdborg; 3 – Chojnice-Pienki; 4 – Janislawice; 5 – Mariupol cemetery; 6 – Donets culture. *Neolithic cultures*: 7 – cultures with combed pottery; 8 – Funnel Beaker culture; 9 – Balkan Neolithic; 10 – Near East population; 11 – the Pra-Cartvels; 12 – the Pra-Ugro-Finns

peculiar for Janislawice culture points (Залізняк 1991, с. 40, 41; 1994, с. 89, 97, 98).

The process of forest hunters' penetration from the Baltic through Polissia lowland to the south was probably stimulated by broadleaf forests' proliferation on river valleys because of the general climate moisturizing at the end of the Mesolithic. Due to the spread of forest and forest-steppe biotopes with relevant fauna on river valleys up to the Black Sea and the Sea of Azov shores, the conditions for the advancement of forest Janislawice culture hunters from Polissia to South-Eastern Ukraine were created.

Thus, in the 6th millennium BC, the formation of Post-Maglemosian Late Mesolithic unity was completed; it spread to the east from Jutland to 2 000 km and reached the Dniro and the Siverskyi Donets Rivers regions (fig. 8). It included the Late Mesolithic archaeological cultures: Leyen-Varten and Svaerdborg (Denmark, Northern Germany), Chojnice (Poland), Janislawice (the Vistula, Neman and Prypiat Rivers basins) and Donetsk (the Siverskyi Donets River basin). Flint inventory of these cultures indicates their genesis and connection on the Baltic Mesolithic basis. Numerous finds of typical flint tools (primarily Janislawice points) in the Dniro rapids area and even in the Siverskyi Donets basin suggest that the migrants from the Baltic reached the Sea of Azov re-

gion (Залізняк 1991, с. 40, 41; 1994, с. 89, 97, 98; 2005, с. 109–111).

In the 5th millennium BC, a group of forest Neolithic cultures formed on this Baltic origin basis, but under the influence from south of cultural communities of the Balkan-Danube Neolithic: Ertebolle of the South-West and Tsedmar of the South Baltic, Dubychay and Neman of the Neman River basin, Volyn culture of the Prypiat basin, Dniro-Donets of the Dniro middle region and Donets basin (fig. 8). It should be noted that these Volyn and Neman cultures are, in fact, the ceramic phase of Janislawice Late Mesolithic culture. At least Early Neolithic monuments of these cultures have typical Janislawice flint tools (Zaliznyak 1994; 1998). Among Neolithic donors of abovementioned cultures of the forest Neolithic of German, Polish, Polissia lowlands and the Dniro region, Linear Pottery culture, Buh-Dniester and Cucuteni-Trypillia cultures played a special role.

The presence of cultural and genetic community in lowland area from the Rhine to the Donets in the 6th and 5th millennia BC, in the author's opinion, is confirmed with hydronyms data. Specifically, it seems not coincidental an already known fact of spreading IE hydronyms on the territory of the Rhine in the west and of the Dniro in the east, which generally coincides with the territory of Post-Maglemosian unity of the 6th and 5th millennia BC.

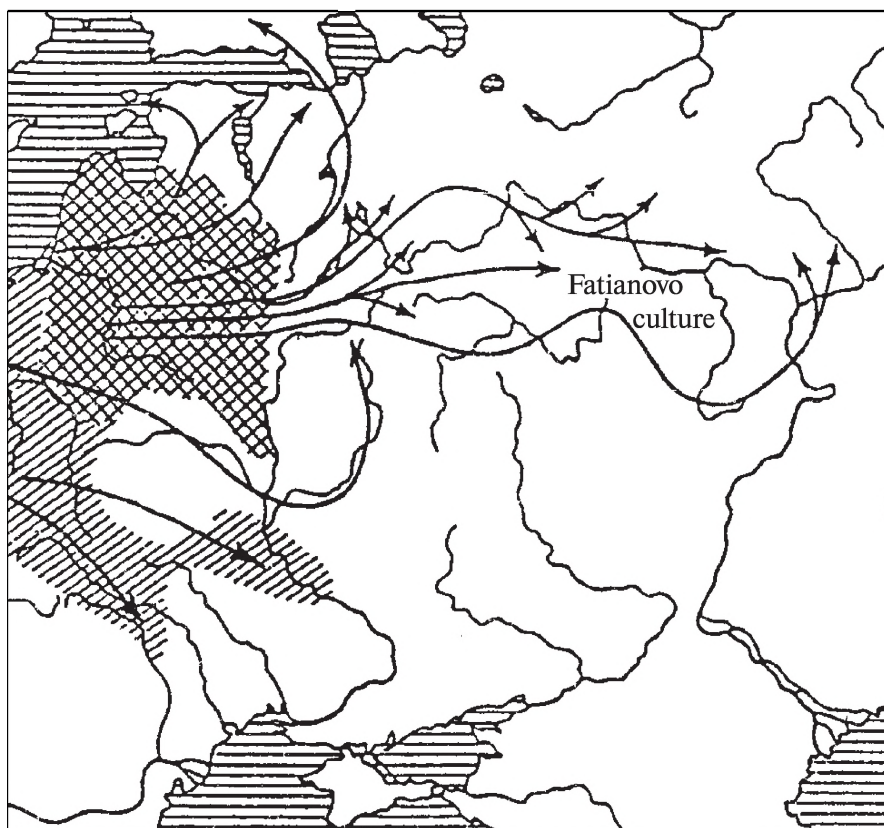


Fig. 9. Settling of the Corded Ware cultures population in the 3rd and 2nd millennia BC (Археология СССР 1978, с. 72)

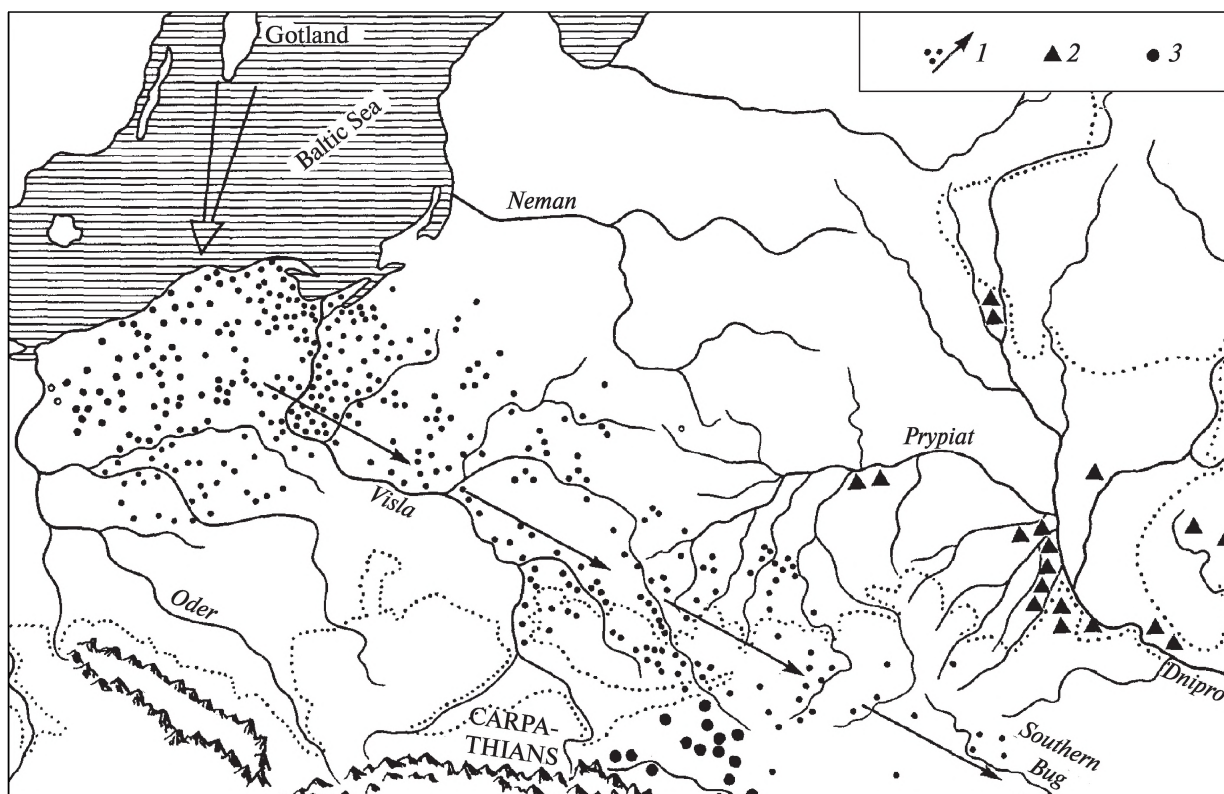


Fig. 10. Migration of the Goths tribes in the 2nd and 3rd centuries AD: 1 – Wielbark culture (the Goths); 2 – Kyiv culture; 3 – Zubrytska groupe, after V.D. Baran



Fig. 11. Mariupol type burial of the massive north Europids. Alexandria, the Siverskyi Donetsk River

The abovementioned cultural unities of the Middle European lowlands and the Dnipro region were linked to each other not only by a single type of forest hunting husbandry and material culture, but also by the anthropological type of the population. There is an abundance of compelling anthropological facts that indicate intense penetration of Baltic residents from the north to the Dnipro River middle and lower regions in the Mesolithic and Neolithic, as the anthropologists have repeatedly written (Гохман 1966; Кондукторова 1973; Потехина 1999, с. 134, 142). Comparison of the materials from the Mesolithic and Neolithic burials of the Dnipro region of the 6th–4th millennia BC with synchronous burials of Jutland shows not only particular cultural, but also genetic relationship of people that left them. There were similar burial rituals and anthropological type of the buried. They were tall and very massive with square faces northern Europids, buried in elongated position on the back (fig. 11–13) covered with red ochre.

In 1998, at the Mesolithic conference in Krakow, the author of these lines had a conversation with I.I. Gokhman, a classic of Soviet anthropology, who had already returned from an academic trip from Denmark. «In 1960s–1970s I thought that anthropological series from Mariupol Ukrainian burials and Meso-Neolithic burials of Denmark are similar. And now I am sure that this is the same population», – said the famous anthropologist.

Hundreds of burials with unbend massive northern Europeoids are explored in numerous collective sepulchres of Mariupol type in the Dnipro rapids area (Vasylivka II, Vovnyhy, Yasynovatka, Volnianka, Mykils'kyi) and the Sea of Azov region (Mariupol) (Телегин 1991; Потехина 1999, с. 134, 142). In the 5th millennium BC, this population

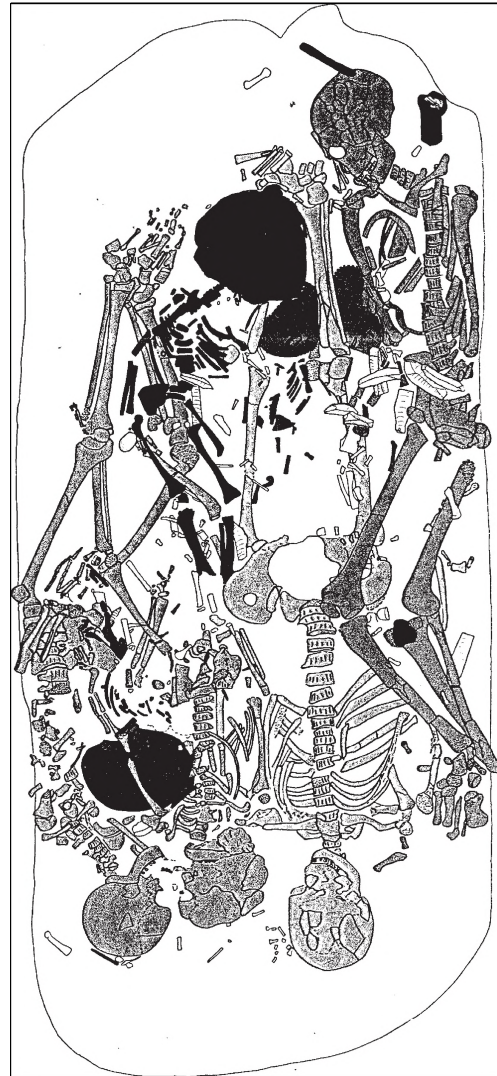


Fig. 12. Collective burial of the massive north Europids. Stroby Egede cemetery, Danmark (Brinch Petersen 1988)

moved through forest-steppe line from the Left-bank Ukraine to the east on the Volga River middle region (Siezzhe cemetery) forming the so-called Mariupol cultural unity. A derivative of that northern anthropological array is a humanity of early IE unities of the 5th–3rd millennia BC: Serednii Stih and Yamna cultures of Ukrainian forest-steppe zone (Потехина 1999, с. 157, 163).

It should be noted that nowadays, the steppe Eneolithic of Ukraine, formerly known as Serednii Stih culture, with Yu.Ya. Rassamakin's efforts (2004) was divided into the number of cultural groups: Skelianska, Kvitianska, Stohivska, Dereivka, Novodanylivka, etc. According to anthropological data, this population shows a direct genetic connection with the massive northern Europids from Mariupol type burials in the Dnipro rapids area and the Sea of Azov region (Потехина 1999, с. 157, 163).

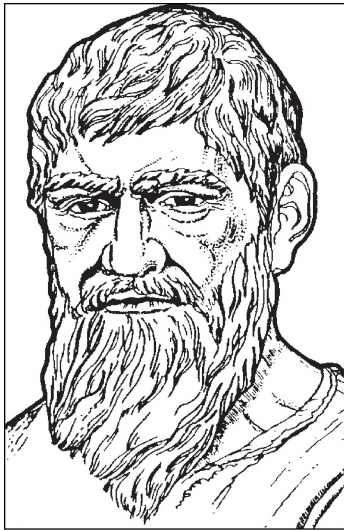


Fig. 13. Ancient Indo-Europeans. Reconstruction based on the skull from Mesolithic cemetery Vasylyivka II from the Dnipro rapids area, after G. Lebedynska

Thus, in the period from the 7th to the 5th millennia BC, Northern European hunting population, which since the end of the ice age lived over a widespread lowland forest area of the South Baltic and Polissia, moved through the left bank of the Dnipro basin to the Siverskyi Donets basin. Therefore, a huge ethno-cultural community appeared which was spread from Jutland to the Donets River for 2 000 km and consisted of related cultures of hunters and fishermen. Under the influence of Balkan-Danube agricultural cultures from the south, Post-Maglemose Mesolithic community turned to the Neolithic stage of development. Due to the spread of steppes because of the aridification, mentioned aboriginal societies of northern Europids began to turn to the cattle breeding and transformed into the most ancient IE cultures of the end of the 5th and the 4th millennia BC. While in the south-east of Ukraine, at the northern Europids basis, several steppe Eneolithic cultures formed (Stohivska, Dereivka, Novodanylivka, Skelianska, Kvitianska, and Nyzhniomykhailivka), in Central Europe, Funnel Beaker culture appeared.

The most ancient IE of the 4th and the 3rd millennia BC, namely, the population of the steppe Eneolithic of Ukraine and derivative Yamna culture emerged from the Dnipro-Donetsk and Mariupol cultures of Ukraine. Funnel Beaker and Globular Amphorae cultures of Central Europe are the descendants of Ertebolle culture. Their Neolithic ancestors belonged to the northern European anthropological type which is genetically associated with the Baltic Mesolithic. However, the progressing gracilization of the skeleton can be traced on the bearers of all the above-mentioned early IE cul-

tures, indicating that their formation was based on local northern Europids in the conditions of certain influx of more gracile non-IE population from the agricultural centres of the Danube region.

Anthropological evidence about northern Europid anthropological type of the early IE can be confirmed with mythology and written sources that affirm light pigmentation of the IE of the 2nd millennium BC. Thus, according to *Rigveda* the Aryans are characterized by epithet «svitnya», which means «light», «light-skinned». The heroes of a famous Aryan epos the *Mahabharata* often have eyes of «blue lotus» colour. According to the Rigvedic tradition, a true Brahman should have brown hair and grey eyes. In the *Iliad*, Achaeans have golden blond hair (Achilles, Menelaus, and Odysseus), Achaean women and even the goddess Hera are fair-haired. The god Apollo was represented as golden-haired too. On the Egyptian reliefs of the Thutmose IV times (1420–1411 BC), Hittite charioteers (marianna) have Nordic appearance, unlike their Armenoid armour-bearers. Fair-haired descendants of the Aryans from India allegedly visited the Persian court in the middle of the 1st millennium BC (Јелеков 1982, с. 33).

According to the Ancient Greek authors, the Celts of Central and Western Europe were tall blonds. Moreover, the legendary Tocharians from Xinjiang in western China, curiously enough, belonged to the northern Europid type. This is evidenced by their mummified bodies that are dated about 1200 BC and Tocharian wall murals of the 7th or 6th century AD. Ancient Chinese chronicles also indicate blue-eyed blonds that in ancient times lived in the deserts of Central Asia.

Belonging of the most ancient IE to the northern Europids conforms to the localization of ancestral home between the Rhine and the Siverskyi Donets, where according to archaeological data, in the 6th and 5th millennia BC, ethno-cultural community was formed (fig. 8), which gave rise to the most ancient IE cultures (Mariupol, Serednii Stih, Yamna, Funnel Beaker, Globular Amphorae).

To summarize, it should be noted that there is a good reason to talk about the Baltic cultural and historical province of Europe, which for the last 12 000 years had been developing on the Middle European lowlands, spreading from the Lower Rhine to the Desna and Siverskyi Donets. Since the end of the glacial era to the Early Middle Ages, that is in prehistoric and early historical times, it functioned in a periodic waves of migration mode that were born in the South-Western Baltic and Central Europe, and rolled away to the east, reaching the Dnipro, Desna, and sometimes the Upper Volga basins.

The reason for these large-scale migrations directed eastwards is not fully understood and requires a separate research. Obviously, the Mesolithic population's migrations eastwards in the Early Holocene were predetermined by powerful transgressions of the North and Baltic Seas. Probably, a certain role in the millennial migration waves of the ancient population within a narrow corridor of Central European lowlands, played the fact of belonging the latter to a single natural landscape zone of mixed forests. It directed the migration flow of the population with a certain type of forestry (hunting or agricultural and cattle breeding) namely through this corridor. Moreover, that migration way was limited by natural barriers: the Baltic Sea in the north and Middle European plateaus and mountains with other natural landscape conditions in the south. In conditions of constant demographic pressure from the south, from constantly more developed Mediterranean in comparison with Europe, the excess of initial European population could merge only in the east direction. Movement to the North bounded by North and Baltic Seas and the Scandinavian Peninsula had very limited resources, unfavourable cold climate, and mountainous relief. Therefore, Eastern Europe with its endless spaces, natural resources and non-numerous hunting and fishing population has for a long time played a role of a peculiar reservoir for outflowing of the excess population from Central Europe and the Baltic.

The consequence of such migrations within the Baltic province was a periodic formation of large ethno-cultural communities of genetically related people. Primitive inhabitants of the Baltic province, in accordance with its position on the map of Europe, were tall, massive northern Europeans, descendants of the glacial period Cro-Magnons. That is clearly evidenced by the numerous anthropological studies. Archaeological correspondences of these communities are numerous areas of related cultures that share common material culture generalities and the type of primitive economy.

One of these Baltic province cultural areas was Post-Maglemosian of the 6th and 5th millennia BC (fig. 8), which included the initial groups of people united by common origin from the Baltics, massive Cro-Magnon anthropological type, common cultural tradition, the type of economy, and therefore very likely common ethno-linguistic characteristics.

Namely on that ethno-cultural substrate appeared not only the most ancient IE communities of the Central Europe (Funnel Beaker culture), but the South Ukrainian Eneolithic of the 4th millennium BC.

The formation of large-scale Post-Maglemosian ethno-cultural unity of the 6th–5th millennia BC was just one from similar historical episodes that happened periodically within the Baltic cultural and historical province of Europe. It all started with a regular migration from the interfluvies of the Rhine and Elbe or Western Baltic to the east and concluded with the formation within the Central European lowlands, and sometimes even wider, a scale ethno-cultural region of genetically related people. Post-Maglemosian unity is the third similar ethno-cultural unity within the Central European lowlands after a region of cultures with final Palaeolithic arrowheads on blades (Lyngby culture, Ahrensburg, Swider, Krasnosillia) (fig. 2; 3) and the Duvensee (former Maglemose) culture grope of the early Mesolithic (Star Car culture, Duvensee, Melsted, Komornica, Kudlaivka) (fig. 4).

The appearance on the same principle of such large communities within the lowlands of Central and Eastern Europe had taken place later too. For example, in the Bronze Age, a region of Corded ware cultures arose in Central Europe, from where it spread 3 000 km up to the east to the Middle Volga (fig. 9).

Post-Maglemosian ethno-cultural unity of the 6th and 5th millennia BC looks like genetic substratum of the oldest IE of Central and South-Eastern Europe, because of arousing the last ones on the Post-Maglemosian base according to archaeology data. And Post-Maglemose unity has its roots in Maglemose culture at the very beginning of the Mesolithic epoch in the 8th–7th millennia BC in South-West Baltic region. Consequently, the genetic roots of the IE on the Central European lowlands from the Low Rhine to the Dnipro are the deepest in Europe and reach back to the 8th millennia BC. The nature reality of this territory corresponds to early IE vocabulary and shows that its native speakers lived in temperate European climate zone. Oldest IE hydronyms and toponyms concentrate on the same territory between the Rhine and the Dnipro. IE onomastic substratum was absent in this region before. Therefore, there are warrants to assume that lowlands between the Lower Rhine and the Dnipro were the kernel of Indo-European motherland.

The first Indo-European herdsmen of the Sea of Azov and the Black Sea steppes

Numerous archaeological and anthropological evidences strongly affirm that the genetic roots of the IE peoples are reaching the Neolithic and Mesolithic of lowland spaces of the Rhine in the west to the Middle Dnipro and South-Eastern Ukraine in

the east, which from the beginning of the Mesolithic (10 000 years ago) were settled by related indigenous population, far descendants of the Cro-Magnons of the end of the glacial period. In other words, the homeland of the ancestors had probably been German, Polish, Polissia, and the Dnipro region lowlands up to the Donets River basin (fig. 8). At the end of the Mesolithic in the 6th and 5th millennia BC, these expanses were settled by massive northern Europeans from the Baltic. On their genetic basis, a group of related Neolithic cultures that have evolved under the influence of Balkan's agricultural proto-civilization and the Danube region (LBK, Trypillia culture) was formed in the 5th millennium BC. The result of contacts with the latter in terms of aridization and steppes spread was the transformation of aboriginal Indo-Europeans into their own IE early mobile cattle-breeding society (Залізняк 1994, с. 96–99; 1998, с. 216–218, 240–247; Zaliznyak 1997, p. 117–125; 2005). Archaeological marker of this process was the emergence of a barrow obsequial rites (a barrow, a burial with painted in red and twisted skeletons, anthropomorphic stone steles depicting weapons and pastoral attributes, traces of wheel worship, ox, horse, weapons, fire, etc.) in the steppes of the Black Sea coast and the Sea of Azov region at the end of the 5th and in the 4th millennia BC.

With the first signs of herdsman cattle-breeding at the end of the 5th millennium BC, its bearers (Mariupol and Serebnii Stih which presently split into several cultural groups) are beginning to settle from South-Eastern Ukraine through steppes not only to the west to the Lower Danube, but also to the east to the Volga region where their analogies occurred (Siezzhe and Khvalynsk). Among some researchers, there is a tradition to see the origins of the earliest IE herdsmen in the Volga region. It started in the 1970s when Maria Gimbutas considered the Middle Volga as the IE homeland (Gimbutas 1970). Despite the harsh criticism of her theories by the opponents (Конча 2001), a part of the Indo-Europeanists continues to search for the first IE cattle-breeders' roots not in the Sea of Azov and the Black Sea steppes, but in the Volga region.

Doubts about the possibility of the pastoralism's emergence at the Volga had been expressed long ago (Залізняк 1994, с. 91). Cattle-breeding does not appear in the steppe by itself, but branches off from the integrated agricultural and cattle-breeding Neolithic proto-civilized entities economy such as Trypillia. In the Ukrainian Eneolithic (Chalcolithic) such centre bordered with the steppe, while in the Volga region, there was nothing similar. In addition, Mariupol unity of the 6th and 5th millennia BC, based on which the earliest IE herdsmen

of the steppe Eneolithic formed, has deep roots in Ukraine going down to the period from the 8th to the 6th millennia BC, i.e. to the Neolithic and even the Mesolithic. It refers to the numerous Neolithic and even Mesolithic burials of South-Eastern Ukraine that were genetic ancestors of Mariupol type cemeteries. The Siezzhe cemetery doesn't have so deep roots in the Volga region.

In the south-east of Ukraine (mainly in the Dnipro rapids region) there are over 20 collective Mariupol type burials (fig. 8; 11; 13) with hundreds of burials (Телегин 1991) which are genetically related to the much older Mesolithic ones (Vasylyvka I, II, III). On the Volga, only one collective Mariupol type burial is known (Siezzhe – 16 skeletons in all) and a few scattered individual burials at various sites and no Neolithic predecessors.

A similar pattern is seen at steppe Eneolithic and Yamna culture sites, which has a special place in the IE origin and settlement issues. While the steppe Eneolithic in Ukraine is presented by several archaeological cultures (Skelianska, Post-Mariupol, Kvitianska, Stohivska, Novodanylivka, Dereivka, Nyzhniomykhailivka, etc.) with numerous burials and settlements, their analogy on the Volga (Khvalynsk culture) is known by only a few sites.

In Ukraine, among thousands of Yamna culture burials, there are about ten local variants allocated, each of which is known by hundreds and sometimes by over a thousand burials under numerous large burial mounds with complicated structures. On the Volga, there are much less studied burials of the abovementioned culture than in Ukraine; and small mounds with poor burials are only several hundred in total. When the steppe Eneolithic and Early Bronze Age eastern steppe sites are mapped, the main bunch of them will be in the Sea of Azov and the Black Sea steppes, whereas the Volga region will look like steppe Eneolithic periphery of Eastern Europe.

Notably, steppe Eneolithic was emerging and developing under a powerful cultural influence of Balkan-Danube Neo-Eneolithic proto-civilizational centres. Namely from here the future IE herdsmen were receiving cultural innovations, especially animal husbandry skills, and later steel, copper, bronze metallurgy, and also the most prestigious metal things. Copper of the Carpathian and Balkan origin is the defining feature of the steppe Eneolithic of the Sea of Azov and the Black Sea, and the Danube regions. Proximity to cultural centres determined the priority development of the Sea of Azov and the Black Sea steppe Eneolithic in comparison to the Volga region.

Mentioned above gradual gracilization of early IE skeletons from the Black Sea and the Sea of Azov steppes is linked to contacts with farmers of Balkan-Danube origin, including populations of Trypillia culture. This is evidenced by the so-called «steppe Trypillia», meaning Zhyvotylivsko-Vovchanska type burials of the second half of the 4th millennium BC investigated in the Black Sea and the Sea of Azov steppes and even in the north of the Crimea. They contain late Trypillian ceramics and, according to T.H. Movsha, M.Yu. Videiko, and Yu.Ya. Rassamakin (Рассамакін 2004), were abandoned by the late Trypillian population, repressed to the steppes by the new waves of farmers that moved to the east from the Prut-Dnister interfluvium. Finding themselves in a steppe, Trypillians were forced to turn to early forms of distant-pasture cattle-breeding, affecting the steppe Eneolithic. Mingling with the descendants of Mariupol culture (Skelianska, Kvitianska, Stohivska cultures) they made their massive anthropological type more gracile. Something similar happened at the beginning of the 3rd millennium BC with Usatove tribes in the steppes of the Black Sea region.

In the material culture of the steppe Eneolithic of the 4th millennium BC, some impacts of Maikop-Novosvobodna culture of Ciscaucasia can be also observed (Рассамакін 2004). On this basis, some Russian colleagues deduce Mariupol communities – Siezzhe and Serednii Stih – Khvalynsk from the Volga region, but not from the South-Eastern Ukraine, where there is the biggest number of such monuments and they are the oldest. The idea of the eastern Volga-Caspian origins of the first pasture cattle breeders in Eastern Europe is not new and its roots go back to the 1970s. It relates to such names as M. Gimbutas, V.M. Danylenko, and M.Ya. Merpert (Даниленко 1974; Рассамакін 2004). Arguing her concept of the origin of the first IE herdsmen from the Middle Volga region, M. Gimbutas directly referred to the numerous nomadic invasions from the east: the Scythians, nomads of the late Middle Ages, and even Genghis Khan (Gimbutas 1970; Рассамакін 2004).

Nowadays, to replace the questionable «Genghis Khan argument» in favour of the eastern origin of the steppe Eneolithic and Yamna culture, «Caucasus argument» came. It is assumed that cattle-breeding (and therefore its IE bearers) originated in the Middle Volga due to the strong influence of the Caucasus. Caucasus impacts on the steppe indeed can be observed from the 4th millennium BC on the monuments of «steppe Maikop» of the Ciscaucasia (Manych basin) and in the Sea of Azov and the Black Sea steppes.

V.M. Danylenko (1974) wrote about Caucasian impacts on the Southern Ukrainian Eneolithic in the 1970s. He singled out two lines of Eneolithic development: northern forest-steppe (Serednii Stih and Yamna) and southern steppe (the Sea of Azov and the Black Sea). While cattle-breeding dominated in the forest-steppe economy, sheep breeding did it in the steppe one. Yamna culture ancestors, according to V.M. Danylenko, were Serednii Stih culture bearers, who came from Mariupol culture bearers. The researcher genetically linked more gracile Nyzhniomykhailivka culture bearers of the steppe line to the Ciscaucasia Maikop. Thereafter, this southern line of steppe Eneolithic development influenced the formation of Kemi Oba culture, and perhaps to some extent, Catacomb culture too.

Without denying the specific effects of the Caucasus on the steppe, it should be noted that in the Sea of Azov and the Black Sea steppes they are less visible, if compared with the Carpathian-Danube steppes. In this case, how could the Caucasus, which had relatively little effect on near located Southern Ukrainian Eneolithic, identify the priority development of the Samara's Volga region that was located three times farther from Caucasus than Eastern Ukraine?

Even if we accept the priority of Caucasian influence on the formation of the steppe Eneolithic to Carpathian-Danubian one, geographically South-Eastern Ukraine is three times closer to the Caucasus than the Samara, where Volga monuments of Siezzhe and Khvalynsk types are focused (fig. 8). In other words, if the Caucasus was the catalyst for the spread of cattle-breeding in the Eastern Europe steppes, according to the distances, its influence on the south of Ukraine should be much stronger than on the remote from it Middle Volga. If so, then the origin of cattle-breeding under Caucasian influence should have happened in Southern Ukraine rather than in the Middle Volga. Moreover, Southern Ukrainian Eneolithic, in contrast to the Samara's Volga region, developed under the influence not only of the Caucasus, but also of powerful Carpathian-Danubian centre of reproductive economy.

It should be noted that since the middle of the 20th century, G. Clark, L. Klein, V. Safronov, and A. Rezepkin genetically linked leading Novosvobodna culture of Ciscaucasia Eneolithic with Funnel Beaker and Globular Amphorae cultures of Central Europe. Recently, this assumption of well-known archaeologists was confirmed by genetic studies of anthropological remains from the burial Klady near Novosvobodna (Недолужко et al. 2014). Thus, Baltic cultural province influences in

the south-east direction in the 4th millennium BC were so powerful that reached the Caucasus (fig. 8) and participated in the formation of steppe Eneolithic, i.e. the oldest IE of the Eastern Europe.

Therefore, a new Caucasus argument in favour of the Volga or Caucasian origin of steppe pastoralism of the 5th–4th millennia BC (hence the Indo-Europeans too) are not more persuasive than the old «Genghis Khan argument» of M. Gimbutas.

It is worth mentioning that the leading expert of the steppe Eneolithic of the Volga region I.B. Vasylyev admitted the very Carpathian-Danubian, instead of Caucasian, sources of material culture defining elements of Siezzhe and Khvalynsk monuments types of the Volga region: copper and typical products made of it, so-called «horsehead sceptres», jewellery moulds, some ceramics elements, etc. (Васильев 2003).

If the oldest Central European IE (Funnel Beaker, Globular Amphorae, and Corded cultures) and the Dnipro and Volga steppes (Mariupol culture, Serednii Stih, and Yamna culture) come from opposite ends of Europe (from German territory and the Volga region or the Caucasus, between which there is about 2–3 thousand km), how can they be genetically related and be included to the same IE language family? Consequently, the recognition of the Volga region or the Caucasus as the homeland of the steppe Eneolithic (and therefore the IE too) raises questions that have no answers. While the presence of a single Baltic ethno-cultural substrate of the oldest IE cultures of Central Europe (Funnel Beaker) and the Black Sea region (Mariupol, Serednii Stih, and Yamna) explains the affinity of western IE (the Germans, Balts, Slavs, Celts, Italics, Illyrians) with eastern ones (the Indo-Iranians, Hittites, Greeks, Phrygians).

In other words, the most ancient herdsman form of cattle-breeding as the motive force of IE settling was obviously born in the Sea of Azov and the Black Sea steppes, and from there it spread to the entire Eurasian steppe, including the Volga region.

* * *

The concept of the joint oldest IE substrate of Central Europe with common Baltic origin (Funnel Beaker culture and the Sea of Azov and Black Sea steppes Eneolithic: Mariupol, Skelianska, Kvitianska, Stohivska, and Yamna cultures) formulated by the author of these lines more than a quarter of a century ago (Залізник 1978; 1984; 1991, c. 38–41; 1994, c. 89, 96–99; 1998, c. 216, 217, 240–243; 2009, c. 206–210; Zaliznyak 1994, p. 33; 1997, p. 121–125; 1998) recently received an unexpected

confirmation due to the data of biomolecular analysis (Haak, Lazaridis et al. 2015). The genetic relationship of the oldest IE of the 4th–3rd millennia BC of Central and South-Eastern Europe became clear. Recently discovered parallels between gene pools of Yamna and Corded cultures' bearers enabled the geneticists to take out the first ones from the latter, that once again revived the famous steppe version of the IE origin. In other words, the geneticists confirmed the hypothesis by M. Gimbutas about the spreading of IE languages in Europe because of mass Yamna culture bearers' migration from the Eastern Europe steppes to the west in the 3rd millennium BC (Gimbutas 1970).

The stumbling block on the way to the final victory of the steppe IE origin version was the fact discovered by the same geneticists of a significant genetic contribution of Yamna culture bearers in the Baltics and Scandinavia, where there are no archaeological evidences of their stay, and their much less genetic influence in the south, particularly in Hungary, where there are numerous Yamna culture burial mounds (Haak, Lazaridis et al. 2015). This contradiction can be removed by the above-mentioned concept of a common genetic substrate of the oldest Europe IE, formed in the 6th and 5th millennia BC due to the Cro-Magnon population migration of the Western Baltic through Poland and Polissia to the Middle Dnipro and even farther to the Dnipro rapids area and Siverskyi Donets regions (fig. 8).

Lately, the Central-European conception of IE origin collects popularity among the researchers again. For instance, this point of view is defended in recent years by the known archaeologist-theorist L. Klein who expounds doubts concerning the steppe version of IE's origin and possibilities of Yamna culture's influences on forming of Corded Ware cultures in Central Europe (Клейн 2015; 2016a; 2016b). The Ukrainian researcher S. Koncha (2017) offered the series of persuasive linguistic arguments in support of Rhine-Dnipro-Donets substrate of the oldest IE offered by L. Zalizniak at the end of past century (Залізник 1994, c. 89, 96–99; 1998, c. 216, 217, 240–243; 2009, c. 206–210, 2016; Zaliznyak 1994, p. 33; 1997, p. 121–125; 1998).

While the author of these lines considers the singled out by S. Koncha Post-Maglemosian Mesolithic unity as the Proto-Indo-Europeans, who were the substrate on which the IE properly formed, S.V. Koncha considered Post-Maglemosian unity as the already formed IE, but before their disintegration into separate ethno-linguistic branches (fig. 1). According to his thoughts «we have good reasons to date IE community by the Early

Mesolithic (the 8th–7th millennium BC), and the beginning of its decay can be associated with the beginning of Janislawice population settlement to the east in Polissia and further to the Donets basin in the 6th–5th millennia BC». The researcher believed that the determining cultural set of the earliest IE (pastoralism, barrow burial rites, the sun-wheel cult, ox, horse, weapons, and patriarch warrior and herdsman cults) were acquired by them later, after the collapse of the great IE community in the 4th–3rd thousands BC (Конча 2004, с. 191–203).

Anyway, on the Lower Rhine lowlands in the west to the Middle Dnipro and farther to the Donets in the east, according to archaeological and anthropological data, and hydronyms, there can be traced the cultural and historical community which began to form at the end of the glacial era 10 thousand years ago and which was probably involved in the formation of IE family of nations as its genetic substrate. At least this obvious for the archaeologists and the anthropologists fact should be considered by the Indo-Europeanists, linguists, and geneticists.

Conclusions

Thus, in the 5th millennium BC, on the eve of the first IE's appearance on prehistoric arena, Europe was divided into two different worlds: agricultural of Balkan-Danube origin and the world of indigenous hunters and fishermen of Central European lowlands (fig. 8). The natives-hunters closely contacted with the vanguards of Neolithic settlers of the Danube in the south, i.e. the population of Linear Pottery and Trypillia cultures of the Central Europe middle zone and Right-Bank Ukraine. A direct consequence of these contacts was the Neolithization of the Mesolithic middle European lowlands hunters, who borrowed from the progressive southern neighbours the skills of the first ceramic production, agriculture, and cattle-breeding.

Environmental depletion with the climate aridization was the causes of social and economic collapse of the proto-civilization of Balkan-Danube Neolithic farmers. The offensive of the steppes stimulated the role of cattle-breeding increase in native communities' periphery of the collapsing Old agricultural Europe. Particularly intensive transition to the primitive forms of pasture cattle-breeding took place on the border between Old agricultural Europe and Eurasian steppes in the Sea of Azov and the Black Sea regions.

Fundamental changes in the primitive economy led to a radical transformation of society, life-

style, ideology, material and spiritual culture. Distinguishing cattle-breeding into a specific sector of the economy radically transformed the primitive groups, marked the beginning of their property differentiation. Fundamentally new social order was born; it was headed by militant patriarchal leaders, mobile, tribal groups, the basis of economy of which was pastured cattle-breeding. Archaeological marker of the radically new social order creation was the formation of the burial mound complex in the Sea of Azov and the Black Sea steppes from the end of the 5th millennium BC (burial mound, covered with ochre twisted skeletons, traces of wheeled vehicles cults, sun-wheel, draft animals, tribal leaders, herdsman warrior, weapons, fire, etc.).

Extensive form of cattle-breeding, necessity in new pastures, militancy, and mobility of the ancient herdsman in conditions of social and economic collapse of the agricultural world in the Danube region and the Balkans, have created conditions for the expansion of the first cattle-breeders of the Sea of Azov and Black Sea steppes to the neighbours' territories. These factors led to a rapid and large-scale resettlement of the oldest IE cattle-breeders firstly to the steppe, and later to the forest-steppe, forest and Mediterranean natural areas of Eurasia.

Thus, we can speak of two enormous migration waves that rolled Southern Europe and Western Asia in the periods from the 7th to the 5th and from the 4th to the 2nd millennia BC. While the economic mechanism of Neolithic colonization of Europe by grain farmers of the Balkans was agriculture, the driving forces of the early IE settlement were early forms of cattle-breeding.

It seems that IE homeland was a kind of native periphery of the relatively developed Old agricultural Europe. In the 5th millennium BC, colonized by the Balkan-Danube farmers, Central Europe was surrounded from the north and the east with the autochthonic primitive population of Baltic origin – the substrate of the future IE (fig. 8). The collapse of the Balkan-Danube agricultural proto-civilization due to environmental problems, aridization, and the transformation of the autochthonic neighbors into disposed to expansion and mobile groups of cattle-breeders caused their advancement to the Danube region, the Balkans, Asia Minor, and other regions of Eurasia. The settling of the IE in Central and Southern Europe resembles a kind of Reconquista – the autochthonic population's recover of territories formerly colonized by non-IE population of the Balkans (fig. 1).

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