THE ARCHAEOLOGY OF THE OCCUPATION OF THE EAST EUROPEAN TAIGA ZONE AT THE TURN OF THE PALAEOLITHIC-MESOLITHIC

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Abstract

This article addresses the complicated issues of the primary population of the forest zone in Eastern Europe at the turn of the Pleistocene-Holocene and the forms of its occupation by humans.

Key words: East Europe, Palaeolithic, Mesolithic, Lyngby Culture, Swiderian Culture, population.

During the second half of the 20th century significant successes in the study of ancient populations in the northern part of Eastern Europe were achieved, reflected in numerous works by famous experts in the Late Palaeolithic and Mesolithic archaeology of this region (Indreko 1948; Гурина 1956; Taute 1965; Римантене 1971; Schilde 1975; Kozlowsky 1975; Кольцов 1977; Панкрушев 1978; Ошибкина 1983, 1997; Зализняк 1984, 1986, 1989, 1995, 1998, 1999; Zagorskis 1987; Zagorska 1996; Калечиц 1997; Ксензов 1988; Сорокин 1990; Копытин 1977, 1992, 2000; Sulgostowska 1989; Szumchak 1995; Синицына 1996; Koltsov, Zhilin 1999; Ostrauskas 1998, 2002; Kravtsov 1999; Залізняк 1989, 1995, 1999, 2002). Important information was obtained in the course of anthropological research of the Oleny Ostrov, Zveinieki, Popovo burial grounds (Денисова 1975; Гохман 1984, 1986; Zagorskis 1987; Ошибкина 1994, 1997; Potekhina 1999).

The large source base and the copious analytical research mentioned give a clear enough idea about the ancient population of the forest zone in Eastern Europe and about the forms of its occupation. There are three versions of the direction of the primary population of the East European north: from the east (Брюсов 1952), from the west (Indreko 1948; Римантене 1971; Kozlowsky 1975; Зализняк 1984, 1986, 1989), and from the south by descendants of mammoth hunters from the Desna and Middle Dnieper basins (Копытин 1977, 1992, 2000). The old dispute between the supporters of the primary settlement of this region from the east, headed by A.Brusov (1952), and from the west seems to be over, with the victory of the latter.

During the Mesolithic two separate cultural and historical communities emerged in the woodlands of Eastern Europe: Postlyngby and Postswiderian. Postswiderian Culture of the early Holocene is dated 8,000 to 5,000 years BC and covers cultures such as Kunda of the eastern Baltic, Sukhona and Oleny Ostrov of the territories near Lake Onega, and regions to the east of it, Butovo of the Upper Volga and Oka, Valdai, and also Postswiderian monuments of Karelia, the western Dvina, and Pechora from the eastern Baltic up to the northern Urals. The Postswiderian community of Eastern Europe is genetically connected through Preboreal monuments of Pulli type and Late Swiderian of Laukskola type with typical Swiderian Culture of the Nieman, Pryp'yat and Vistula river basins, which is dated as Dryas III, ie nine thousand years BC (Зализняк 1989, 1999: 232–248).

The Postlyngby cultural community of the late Palaeolithic and Mesolithic in Eastern Europe is also known as Eastern Ahrensburgian, Protoahrensburgian, and Krasnosillya Culture. In the Mesolithic it covered the cultures of Grensk of the Upper Dnieper region, Pisochny Riv of the Desna basin, and Ienevo of the Upper Volga and Oka basins. Postlyngby Mesolithic of the mentioned territories in the centre of Eastern Europe is genetically connected through Krasnosillya Culture monuments of Dryas III (Krasnosillya E, Krasnoselsk 6, Velyky Midsk, Borovka, Khvoina, Ust-Tudovka I) with typical Eastern Lyngby monuments of the end of Alleröd/the beginning of Dryas III (Anosovo I, Podol III, Krasnoselsk 5). The last appeared in Eastern Europe as a result of the advance of bearers of typical Lyngby traditions from the southwest Baltic (Fig. 1) at the beginning of Dryas III when Swiderian Culture just began to form (Зализняк 1989, 1999: 211–224).

According to archaeological information, the origins of ancient populations are traced in a retrospective way in the cultural and historical community of reindeer hunters of the south and southeast Baltic, components of which were Lyngby, Ahrensburgian, Swiderian and Krasnosillya cultures of the Alleröd and Dryas III periods (10,000 to 9,000 years BC). The up-to-date state of sources allows us to reconstruct in a general way the process of the advance of the mentioned population to the north of Eastern Europe as it was setting itself free from glacial phenomena in the early beginnings of the Holocene.

Archaeological information is the best evidence of powerful migratory waves which moved during the last 13,000 years in the corridor between the Baltic and the Carpathians from west to east into the forest zone of Eastern Europe (Залізняк 2001). In the south, waves of these migrations periodically poured over northern Ukraine (the Poliss'ya lowland, lands near the Carpathians, Volyn). But the main wave of migration moved in a northeast direction around the Baltic Sea. The oldest of these migrations are concerned with the primary settlement of northern Europe in connection with the retreat of the glaciers. Taking into account the newest facts of archaeology, anthropology and palaeolinguistics, we can conclude that they are directly related to the forming of the genetic background of the Saami in the north and the Finno-Ugric peoples in the north of Eastern Europe (Zaliznyak 2002).

About 13,000 years ago the southern Baltic was freed from the Scandinavian glacial shield. Boundless lowlands that stretched over 2,500 kilometres from Britain in the west up to Desna in the east were covered with cold tundra-steppe and numerous herds of reindeer, and became good for settlement by glacial hunters from the south. At that time, a large amount of water was locked in the body of the glacier, which is why the level of the world's oceans was many times lower than at present. There was no North Sea between Britain and Norway, and boundless lowlands, the North Sea continent, stretched over this area (Fig. 1).

The first inhabitants of these middle European glacial lowlands 13,000 to 12,000 years ago became the reindeer hunters of Hamburgian Culture. The formation of this culture is connected with the advance of Magdalenian hunters to Holland, Britain and the Hamburg area (Rust 1937; Burdukiewicz 1987: 176–180). Archaeology gives us information about the migration of small groups of Hamburgian populations east across the Polish lowland. However, if in the basin of the Oder significant remains of Hamburgian Culture (Olbrachitse 8, Sedlnitsa 17, Linu) are known, then only single Hamburgian points are found in the basins of the Vistula, Nieman, Pryp'yat, and Upper Dnieper in the Novy Mlyn III, Rudnya, Kashetos, Odrizshyn and Pribor sites. Obviously, this is evidence of the occasional penetration of bearers of Hamburgian Culture into Eastern Europe (Залізняк 1989, 1999a: 208–211).

During the Alleröd, Magdalenian descendants of Kromagnonians of glacial Europe took part in forming Lyngby Culture in the western Baltic. The abrupt fall of temperatures at the beginning of Dryas III about 11,000 years ago caused the retreat of the Lyngby population from the western Baltic (Jutland) in a southeast direction and its further migration across north German, Polish, Poliss'ya lowlands, the Nieman and Upper Dnieper basins, right up to the source of the Volga (Fig. 2). This explains the appearance of typical Lyngby Culture complexes in the Nieman (Krasnoselsk 5, Vilnius 1) (Fig. 4), and Upper Dnieper (Anosovo, Beresteneve) basins, near the source of the Volga (Podil III) (Залізняк 1989, 1999: 41, 210–216; Синицына 1996).

On the genetic basis of Lyngby Culture in Dryas III, three related cultures of reindeer hunters with arrowheads made on blades were formed. We mean Ahrensburgian Culture in northern Germany, Swiderian Culture of the Vistula, Pryp'yat and Nieman basins, and Krasnosillya Culture of the Nieman, Pryp'yat and Upper Dnieper basins (Fig. 3). Exactly these descendants of the Kromagnonians of glacial Europe inhabited the north of the continent, which became free of glaciers at the turn of the Pleistocene and Holocene.

The bearers of cultures with arrowheads made on blades (Ahrensburgian, Swiderian, Krasnosillya) were the most northern inhabitants of the continent during the last thousand years of the Pleistocene. To the north of the Middle European lowlands occupied by them in Dryas III stretched the cold and unsettled glacial deserts or waters of the cold Baltic Glacial Lake. Abrupt warming at the turn of the Pleistocene and Holocene made climatic conditions in northern Europe better. The forest-tundra climatic zone moved far to the north. The hunters of Lyngby, Ahrensburgian, Swiderian and Krasnosillya cultures also moved after herds of reindeer to the north around the west and the east of the Baltic (Fig. 1). Having played the leading role in occupying the north of Europe, these bearers of cultural traditions of arrowheads made on blades became the genetic basis of ancient cultural and historical communities in the forest zone from Norway to the northern Urals.

After the abrupt warming which was caused by the breaking of the cold waters of the Baltic Glacial Lake into the ocean (the Billingen catastrophe), the west coast of Norway became free of ice, whereas the centre

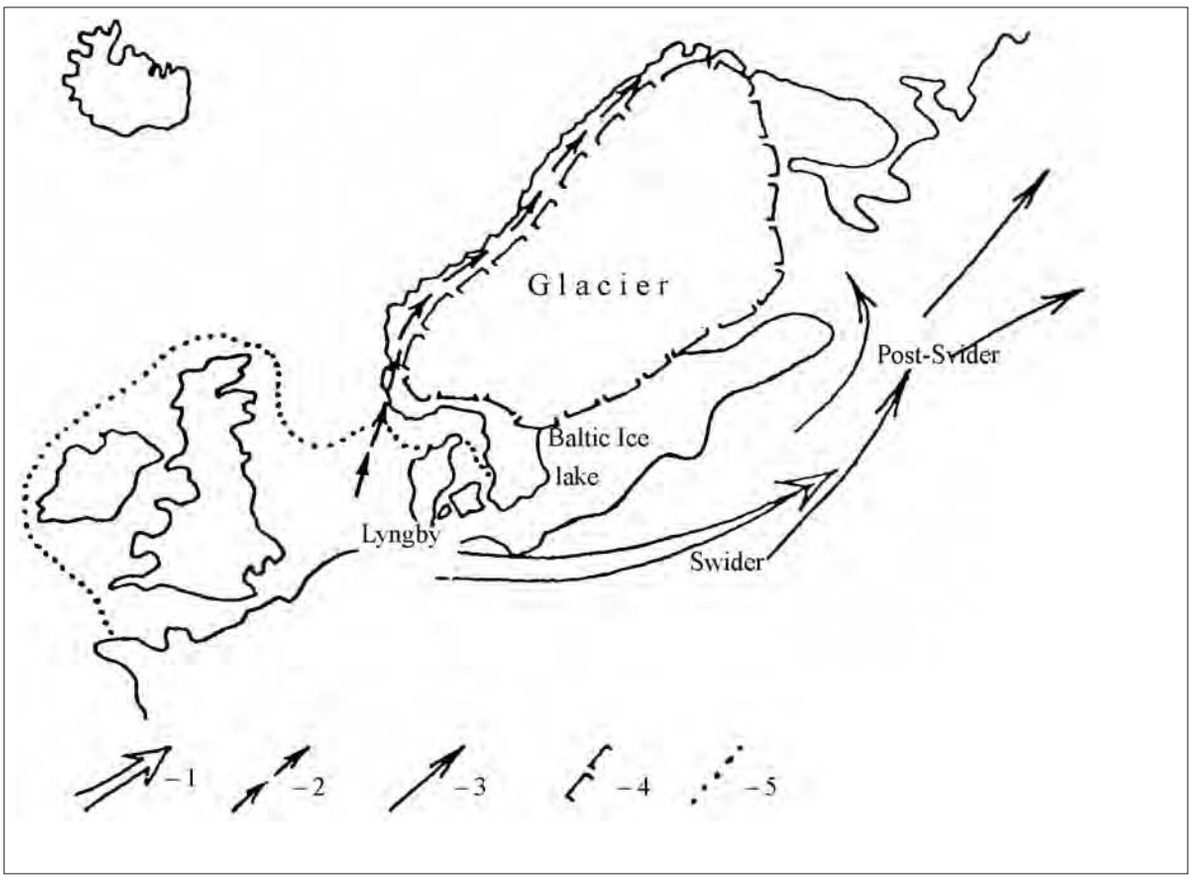

Fig. 1. Northern Europe at the turn of the Pleistocene and Holocene: 1 the migration of people of Lyngby Culture 11,000 years ago; 2 Ahrensburgian ancestors of the Saami; 3 Postswiderian ancestors of Finno-Ugric peoples 9,000 to 10,000 years ago; 4 the size of the glacier; 5 the European coast 10,000 years ago

of the peninsula was occupied by glaciers. It resembled the present Greenland, where only the coastal regions are free of ice. Across the west coast of Norway from the North Sea continent the population of Postlyngby Ahrensburgian Culture moved to the north. This migration of Lyngby hunter descendants was stimulated by the gradual flood of the land between Britain and Denmark, which was caused by the rapid thawing of the glacier and the raising of world sea levels (Fig. 1). So, as a consequence of Postlyngby Ahrensburgian peoples' migration to the north from the North Sea continent and Jutland in the Preboreal (8,000 years BC), ancient early Mesolithic communities formed in southern Sweden and Norway: Fosna and Komsa (Clark 1936, 1975; Larson 1994).

The second flow of migrants to the north of Eastern Europe passed around the Baltic to the east. In fact, at the turn of the Pleistocene and Holocene three mentioned waves of migrants passed this way. The first were hunters of Hamburgian Culture, who more than 12,000 years ago, according to single points of Hamburgian type, reached the East Nieman, Pryp'yat, and maybe the Upper Dnieper. The next powerful wave of Lyngby people moved about 11,000 years ago across the Nieman and Upper Dnieper basins up to the source of the Volga (Fig. 2, 4). During Dryas III the Lyngbian traditions transformed in East Europe into Krasnosillya Culture with tanged, sometimes asymmetric, arrow-points (Fig. 5). But the leading role in occupying the north of Eastern Europe was played by bearers of Swiderian Culture.

Swiderian Culture formed in the first half of Dryas III on the basis of Lyngby traditions in the basins of the Upper Vistula, Western Bug and Pryp'yat, rich in high-quality flint. In the second half of Dryas III, Swiderian people occupied the Vistula, Pryp'yat and Nieman basins. Their eastern neighbours were the descendants of an ancient Lyngby wave of migrants, Krasnosillya people from the Prip'yat and Upper Dnieper basins and the source of Volga. At the beginning of Preboreal Swiderian, reindeer hunters of the Nieman and Pryp'yat basins moved after their prey, which went north because of the rise in temperatures.

The Krasnosillya people in the Upper Dnieper region compelled the Swiderians to pass around this area to the northwest. This is why the main stream seems to have moved across the Daugava up to the north of the Upper Volga region, to the Lake Onega region (Fig.

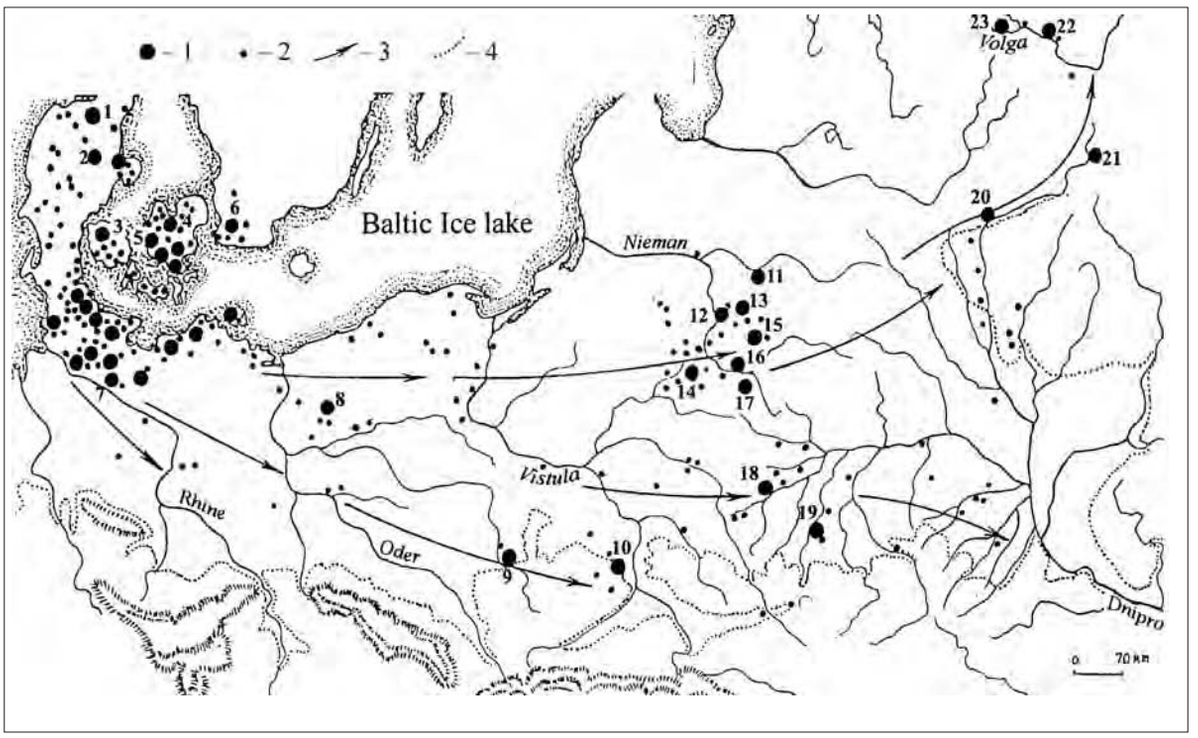

Fig. 2. The distribution of sites of Bromme-Lyngby Culture: 1 Lyngby and East Lyngby Culture sites; 2 separate Lyngby Culture points; 3 directions of Lyngbian migrations on the Alleröd/Young Dryas verge; 4 the south and east borders of the Great European Lowlands.
Sites: 1 Norre Lyngby; 2 Langa; 3Bro; 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 Dereznycios 31; 16 Kovalivka; 17 Krasnosilsk 5; 18 Lutka 10; 19 Velyky Midsk; 20 Anosovo; 21 Beresteneve; 22 Troitske 3; 23 Podol III

6). In the Upper Dnieper basin only single Swiderian remains are known (Yanovo, Barkolabovo). During the whole of the Mesolithic, this region remained an original refuge of direct descendants of Eastern Lyngby (Grensk, Pisochny Riv cultures). The same population had lived in the Upper Volga region since Terminal Palaeolithic (Podil III, Ust-Tudovka I). In the Mesolithic it was transformed into bearers of Ienevo Culture traditions. They were met in the Upper Volga and Oka regions by Postswiderian migrants, who came to the region from the west in the first half of the Preboreal (Fig. 6).

It looks as if many bearers of classic Swiderian traditions came to the Upper Volga (Mar'ino IV). Mainly Postswiderians with Pulli-type traditions moved (Zaborov'ya 2) this way from the eastern Baltic. Exactly on their basis in the middle of the Preboreal, Butovo Culture of the Upper Volga was formed.

The chronology of Swiderian and Postswiderian cultures in Eastern Europe is irrefutable evidence of the fact that this population moved in exactly a northeast direction. The more to the northeast, the later is the dating of the most ancient monuments of the Swiderian tradition. Thus, the most ancient Swiderian sites in the Pryp'yat and Nieman basins are dated as Dryas III, sites in the outfall of the Daugava (Laukskola) as the beginning of the Preboreal, Postswiderian sites in the eastern Baltic (Pulli type) as the first half of the Preboreal, sites of Butovo Culture in the Upper Volga as the middle of the Preboreal, Sukhona sites near Lake Onega as the end of the Preboreal, Postswiderian sites in Karelia and southern Finland as the beginning of the Boreal, and Pechora sites (Sandebu 1) as the end of the Mesolithic.

Accordingly, the bearers of Swiderian Culture, after passing around the Upper Dnieper in the north, occupied the north of Eastern Europe from Finland and Estonia up to the River Pechora during the Early Mesolithic (8,000 to 6,000 years BC). The rapid thaw of the glacier resulted in an abrupt rise of world sea levels and the flooding of the North Sea continent. Mesolithic hunters in the western Baltic had to migrate across the Polish lowlands in an eastern direction. In this way, at the beginning of the Holocene, the forest hunters of the Duvensy Culture region, who left in the Pryp'yat and Nieman basins monuments of Kudlaevka Culture of the Early Mesolithic, moved across the Vistula basin to the east (Залізняк 1991; Zaliznyak 1997). In T. Ostrauskas' (1998, 2002) opinion, this population replaced the northeast bearers of Postswiderian traditions of Pulli type from the Nieman basin. Apparently, the new wave of migrants from the West was an additional

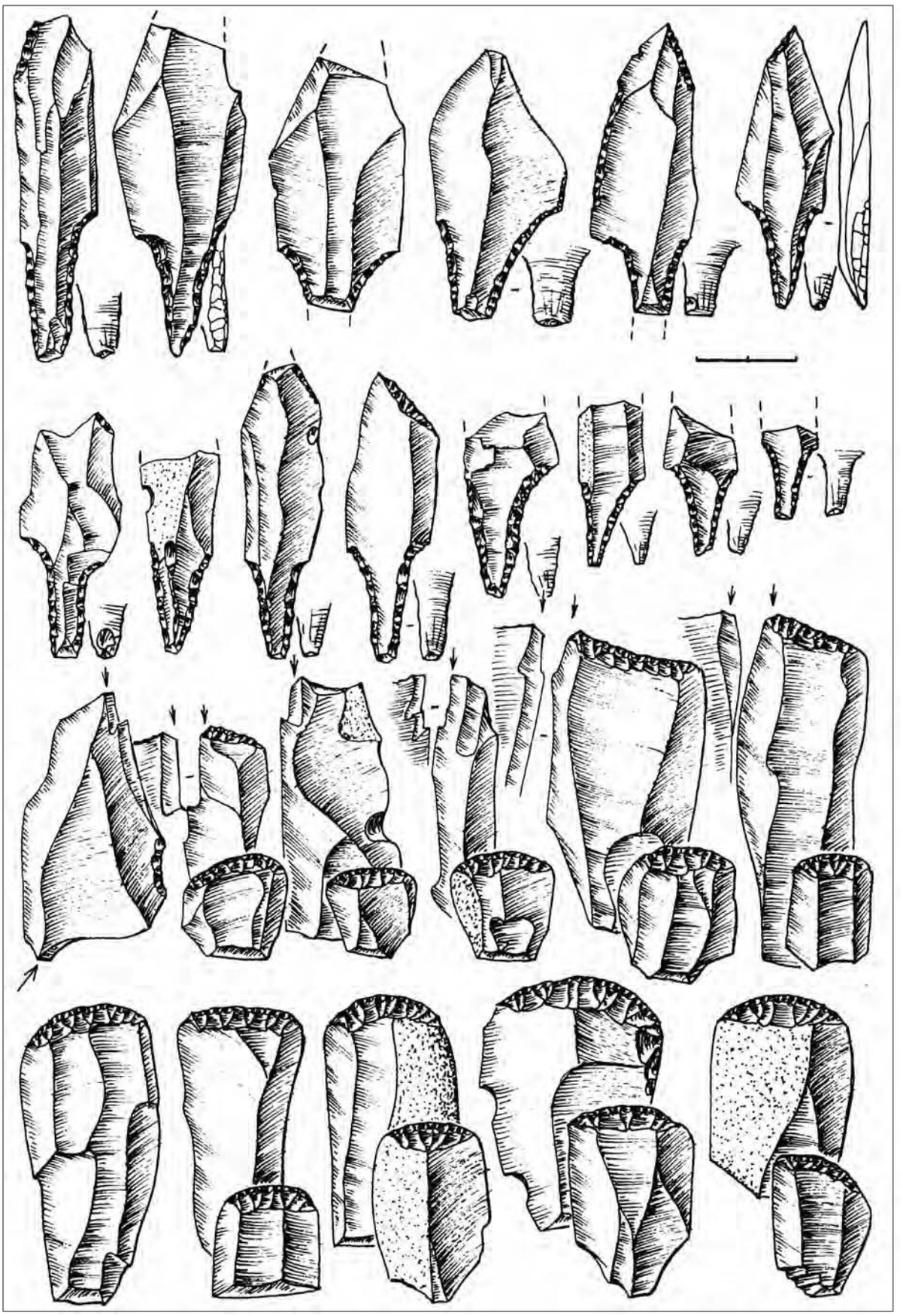

Fig. 3. Arrowheads of Postswiderian (1–3) and Postlyngby (4–8) types in the Eastern Europe forest zone of the Mesolithic Age, and of the Lyngby (16–18), Swiderian (9–11), and Krasnosillya (12–15) cultures of Late Palaeolithic

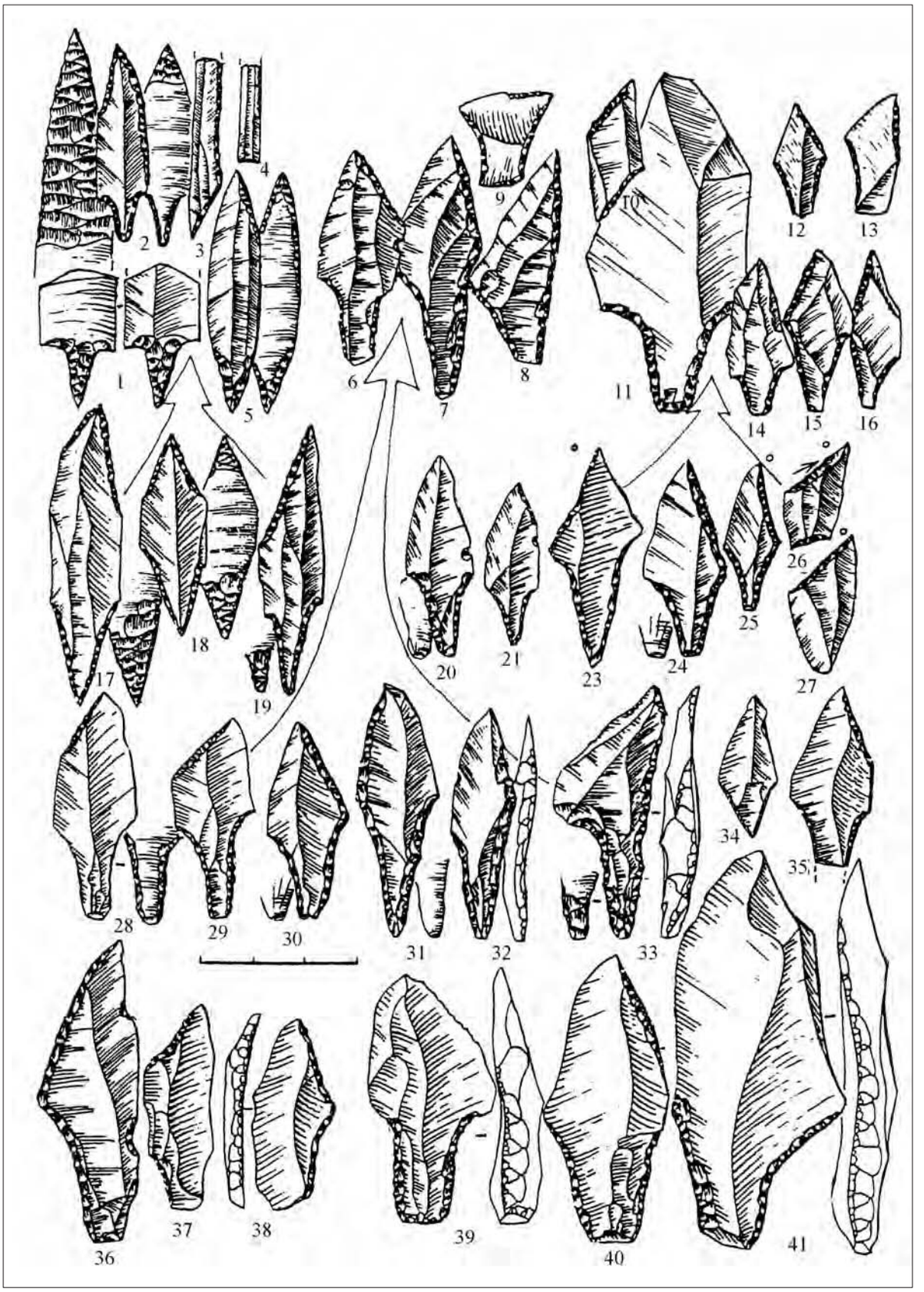

Fig. 4. Lyngby Culture: Krasnosilsk 5 flint implements, (after O. Lipnitskaya and V. Kudryashov)

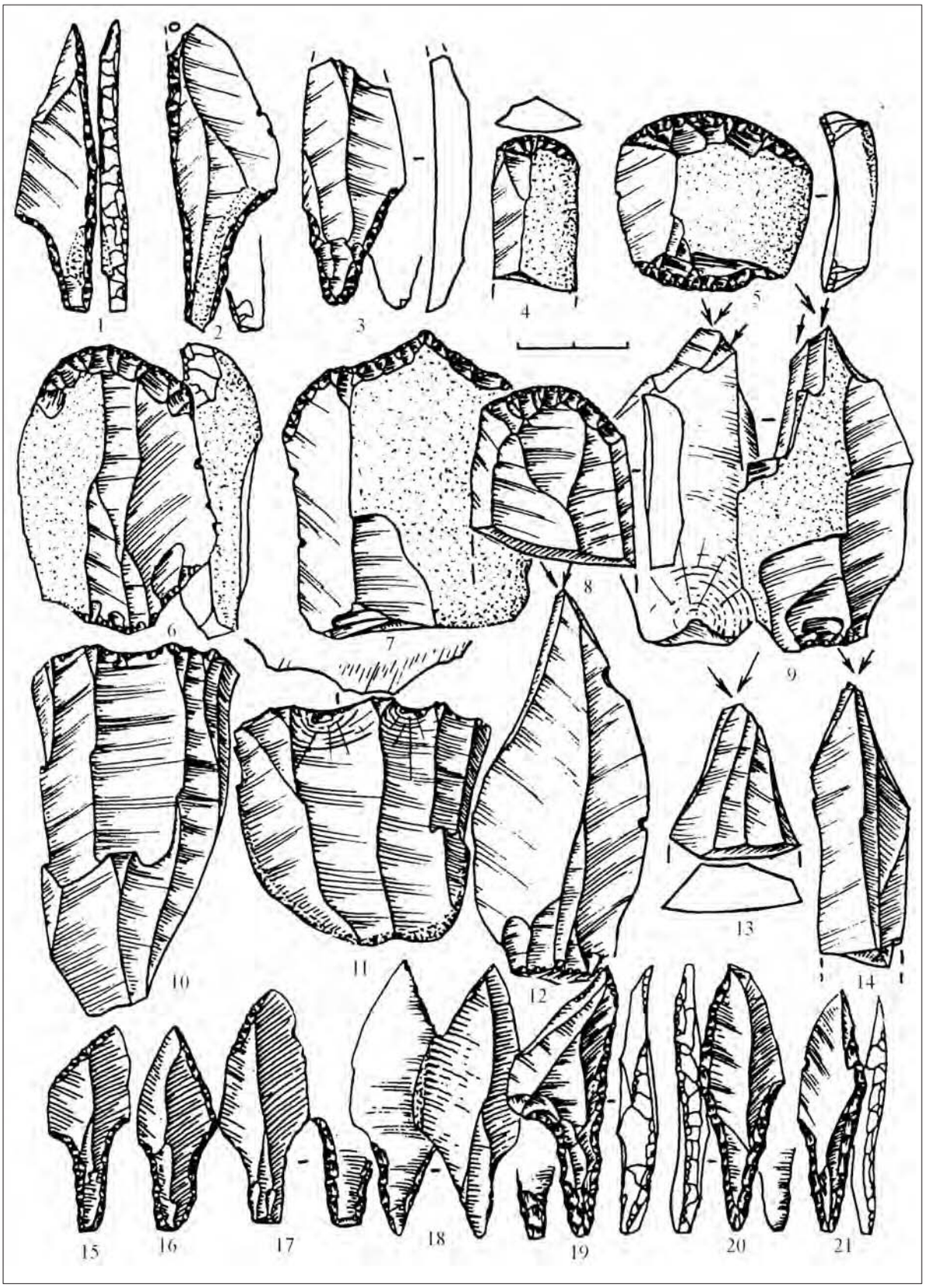

Fig. 5. Krasnosillya Culture: Flint implements from the Pticha 3 (1–14) and Krasnosillya (15–21) sites. Volynia region, north Ukraine

stimulus for the intensive movement of Postswiderians in a northeast direction up to the Lake Onega region, the Upper Volga, North Dvina, and Pechora basins, and possibly to Trans-Ural areas (Fig. 6).

In this way, a group of Mesolithic Postswiderian cultures in the taiga zone of Eastern Europe was formed. The process of the occupying of Eastern Europe's northern regions by Swiderian hunters from the Nieman and Pryp'yat basins has repeatedly been rated in literature (Залізняк 1989: 80–89, 1999a: 232–248; Кольцов 1996; Сорокин 1990; Koltsov, Zhilin 1999).

But apart from West (from the Baltic region) and East (from the Urals) versions of the primary population of the East European north, there was a third autochthonic one.

So far, the destiny of the indigenous population of Eastern Europe in the Terminal Palaeolithic remains mysterious. We mean the mammoth hunters, who 15,000 to 14,000 years ago, inhabited the Upper Don region (sites near Kostenky and Borshevo), and the Middle Dnieper and Desna basins (Mizyn, Mezshyrichi, Dobranichivka, Hintsi, Tymonivka, Yudynove). Their flint implements of Epigravettian type do not find a direct genetic continuation in Terminal Palaeolithic and Mesolithic cultures of Easten Europe. This fact does not allow us to connect this ancient population of the forest zone between the Baltic and north Urals with the mentioned mammoth hunters of the Middle Dnieper, Desna and Don basins.

The question of disappearing Epigravettian tradition bearers at the beginning of the Final Palaeolithic period from southern and eastern Poliss'ya populated by them requires investigation. Before, in the Late Ice Age, Epigravettian sites were known in Ukraine from the Black Sea to Poliss'ya and even to the Upper Desna (Barmaky, Sholomky, Misyn, Yurovychi, Yudynove, Yelyseyevychi, Tymonivka). For a long time, different researchers were searching for traces of these Late Glacial mammoth hunters in Final Palaeolithic and Mesolithic materials of the Upper Dnieper. Especially great efforts in this context were made by V.F. Kopytin (1977, 1992, 2000), who for many years defended the genetic relationship of Early Mesolithic Grensk Culture of eastern Belorussia with Upper Palaeolithic Misyn mammoth hunters. The proponent of this opinion today is A.H. Kalechyts (Еловичева, Калечиц 2000: 11).

So, the only researcher who for 30 years has firmly taken the position of the origin of Upper Dnieper Mesolithic as Grensk Mesolithic Culture, directly from the mentioned mammoth hunters, is V.F. Kopytin (1977, 1992: 59, 2000: 134). The main monuments of the Terminal Palaeolithic and Mesolithic Age for understanding the mentioned historical processes in the central part of Eastern Europe were explored by him. I mean the famous sites from the Upper Dnieper region, Borovka, Khvoina, Grensk, Koromka, etc. In spite of the fact that most experts in these issues connect their genesis with Lyngby migrants from the West (R.K. Rimantienė, S.K. Kozlowski, L.V. Koltsov, L.L. Zaliznyak, V.P. Ksenzov, O.N. Sorokin, M.G. Zhilin, G.V. Sinitsina, O.E. Kravtsov, T. Ostrauskas and others), Kopytin considers them to be direct descendants of the Mizyn Culture population or of the Upper Palaeolithic Middle Dnieper community. Since in the Terminal Glacial period people were moving mostly from south to north, the population of Terminal Palaeolithic in the Middle Dnieper, according to Kopytin (2001: 5), probably resettled to the Upper Dnieper from the south but not from the west. The Epigravettian bearers of Mizyn Culture traditions became the basis of Grensk, and Ienevo and Pisochny Riv Mesolithic cultures related to it. In his opinion (Копытин 1992: 47), "Grensk Culture takes an intermediate position between late Magdalenian monuments of the Middle Dnieper culture region and monuments of Ienevo and Desna cultures, which were formed on its basis."

It is not inconceivable that Kopytin is right in considering that the Middle Dnieper community of Terminal Palaeolithic was if not the genetic basis then at least in a certain way had an influence on forming early Mesolithic cultures of the forest and steppe-forest regions between the Dnieper, Upper and Middle Volga. In particular, it concerns the recently discovered in eastern Ukraine Zimovniky Culture and the typologically close to it Ust-Kama culture of the Middle Volga region. Researchers have repeatedly pointed at their possible roots in Terminal Palaeolithic monuments, such as the upper level of Borshcheve II, the lower level of Altynovo (Залізняк 1984: 15, 1986: 124, 1998: 147, 159; Кольцов 1996: 71; Кравцов 1998: 207; Залізняк, Гавриленко 1996: 13; Галимова 2001: 149). They are connected first of all with crescent-like microliths of Federmesser type and knives with butts. There are similar artefacts in Pisochny Riv and Ienevo Culture flint implements of the Early Mesolithic in the Desna, Oka and Upper Volga basins. Their genesis could originate from western Lyngby cultural traditions, but under a certain influence of local remains of Borshchevo II type with crescent-like microliths. These sites are dated to about 12,000 to 13,000 years ago (Alleröd or a little bit earlier) and it looks as if they represented the last stage of the development of Epigravettian traditions of the mentioned mammoth hunters in the Middle Dnieper and Don regions.

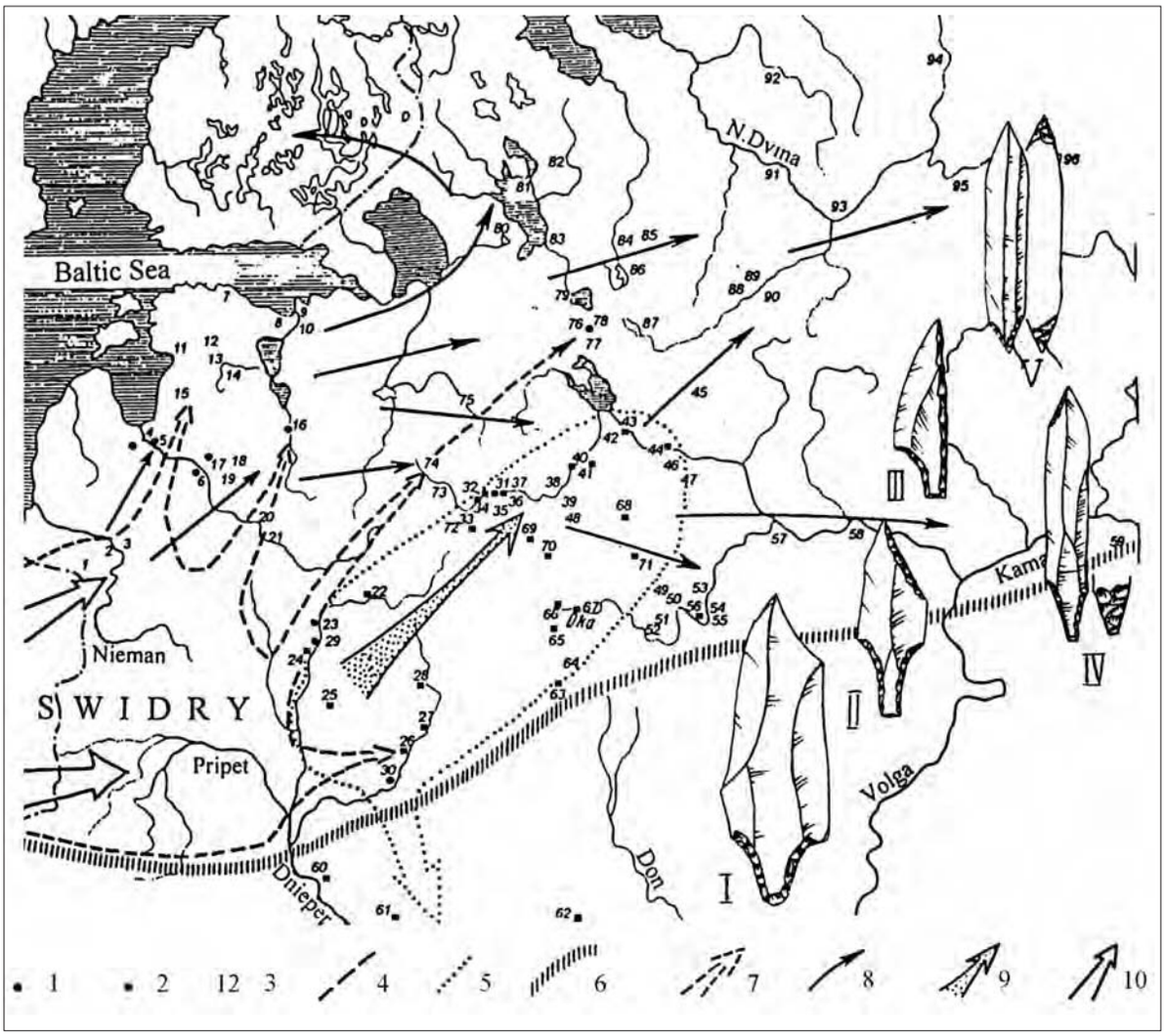

Fig. 6. The spread of Postswiderian and Post-Krasnosillian sites in Mesolithic Eastern Europe: I Lyngby; II Krasnosillya; III Grensk; IV Swider; V Postswiderian points.
1 The furthest north Swiderian sites; 2 Post-Krasnosillian Mesolithic sites; 3 Postswiderian Mesolithic sites; 4 the border of Swider Culture; 5 the border of Post-Krasnosillya unity (Pisochny Riv and Ienevo cultures); 6 the southern border of the forest zone in the Early Holocene; 7 the direction of migration of Swider Culture peoples at the very beginning of the Holocene; 8 the direction of migration of the Postswiderian population in the first part of the Mesolithic (8th to 7th millennium BC); 9 the migration of the Krasnosillian population at the turn of the Pleistocene and Holocene; 10 the migration of Kudlayivka and Yanislavitsa Culture populations in the Preboreal and Boreal periods.
Sites: 1 Pashtuva; 2 Lampedzhay; 3 Kanyukay; 4 Laukskola; 5 Lielrutuly; 6 Selpils; 7 Kunda; 8 Sivertsy; 9 Tirvala; 10 Narva; 11 Pully; 12 Lepakoze; 13 Jalevere; 14 Simusare; 15 Zvienieky; 16 Ivantsev Bor; 17 Zvidze; 18 Osa; 19 Lake Lubana; 20 Krumplevo; 21 Zeleniy Khutor; 22 Katin; 23 Borovka; 24 Koromka; 25 Grensk; 26 Pisochny Riv, Gridasovo; 27 Komyagino; 28 Cheristovo; 29 Barkalabovo; 30 Smyachka; 31 Ienevo, Starokonstantinovska IV, Cherna Gryaz, Dmitrovska, Titovo I; 32 Zhuravets; 33 Visokino; 34 Butovo; 35 Koshevo; 36 Krasnovo VI; 37 Lukino; 38 Sobolevo; 39 Sknyatino; 40 Altinovo; 41 Bogoyavlenie; 42 Koprino; 43 Penkovo 2; 44 Seltso; 45 Umilenie; 46 Nekrasovo, Kostroma; 47 Mordovskoe; 48 Ivanovska III; 49 Mikulino; 50 Petrushino; 51 Rusanovo III; 52 Gorky; 53 Yelin Bor; 54 Novoshino; 55 Ugolnovo; 56 Istoc; 57 Stara Pustin; 58 Yandashevo; 59 Milliyarovo; 60 Zagay I; 61 Vyazivok 4A; 62 Zimivniky, Sabivka; 63 Zhabin; 64 Gremyachee; 65 Ladizhino III; 66 Bragino; 67 Mitino; 68 Yelovka, Shiltseva Zavod; 69 Dalny Ostrov; 70 Zaozerye; 71 Belevo; 72 Nastasino; 73 Sukontsevo; 74 Lanino; 75 Borovichy; 76 Yagorba; 77 Lotova Gora, Listvenka III; 78 Marjino IV; 79 And Ozero M; 80 Pindushy XIV; 81 Oleny Ostrov; 82 Ilexa III; 83 Muromskoe 7; 84 Nizhne Veretye I; 85 Popovo; 86 Sukhoe; 87 Bor; 88 Yasnopolska; 89 Yedenga; 90 Kolupaevska; 91 Priozerna 4; 92 Yavronga; 93 Filichaevska; 94 Vis; 95 Pezmog I; 96 Parch, Pozheg, Petrushinska

As has been mentioned, the vast majority of modern specialists, basing themselves on powerful sources, see the genetic origins of Grensk and all other cultures of the Final Palaeolithic and Mesolithic periods of northwest Eastern Europe with the Upper Dnieper, including the west Baltic region, but not in the local Misyn Culture of Upper Palaeolithic mammoth hunters (Римантене 1971; Кольцов 1977; Зализняк 1989, 1999). It seems that despite the rapid glacier degradation in the final Palaeolithic, the Epigravettian population of the Kyiv and Desna river regions not only moved in a northern direction but, on the contrary, fell back to the south from the Poliss'ya lowland and the Upper Dnieper made uninhabitable in the Late Ice Age. Based on archaeological material left by them, terrains of lowlands of East Europe in the middle of the Final Palaeolithic period were occupied by migrants from the West, namely reindeer hunters from the western and southern Baltic region with a specific arrowhead on the blades (Hamburg, Lyngby, Krasnosillya, Swider cultures). Hereupon, in the Final Palaeolithic and Mesolithic periods, Epigravettian traditions developed on the loess plateau of central Ukraine and the Black Sea region, at the same time as they were broken in Poliss'ya in connection with the changing population.

Such a change in the cultural-historical orientation of Poliss'ya and the Upper Dnieper, which in the previous epoch of the Late Ice Age were occupied by the Epigravettian population, has its nature-climatic and socio-economic reasons. Palaeographic data testifies that in the early Dryas period Poliss'ya changed to an uninhabitable arctic desert with many lakes and a rigorous climate because of the change of water regime cased by glacier degradation (Вознячук 1973: 62; Якушко, Мохнач 1973: 79). The hydro system was only at the beginning of its formation and the insufficient cut of the riverbeds of Poliss'ya rivers prevented the drainage of sandy low-lying areas. Boundless Poliss'ya lakes in the glacial moraine zone practically cut the Epigravettian population of the Loess plateau of Ukraine from the sandy lowlands of Eastern Europe.

The essential reason that stipulated the reorientation of the direction of cultural-historical relationships of the Final Palaeolithic population of glacial low-lying areas of Eastern Europe to the southern Baltic was the change of the fauna in the region. The extinction of the mammoths, the hunting of which was the base of the economy of the Epigravettian population of Poliss'ya and the Upper Dnieper, stipulated the unprecedented spread of reindeer. Reindeer hunting developed more in the west of glacial Europe (Magdalenian hunters, 17th to 12th millennium BC), while on the loess plateau of Eastern Europe till the Raunis warming that preceded the beginning of the final Palaeolithic period (13.5th millennium BC) mammoth hunters lived (Mezhyrich, Dobranichivka, Hintsi, Jeliseyevychi, Judynove, Tymonivka). Therefore, with the extinction of the mammoths and the spread of reindeer Poliss'ya and the Upper Dnieper region were occupied not from the south by the successors of Epigravettian mammoth hunters, but from the west by the descendants of Magdalenian reindeer hunters, people of the Hamburg and Lyngby cultures of the northwest Baltic region.

This happened only in the middle of the Final Palaeolithic period with the improvement of natural-climatic conditions in the northwest of East Europe that until this time, as has been mentioned, presented a treeless sub-arctic desert with lots of lakes and not suitable for human habitation because of the severe climate.

Bölling and especially Alleröd warming caused the spread of pine-birch forests far north and encouraged the occupation of the sandy lowlands of Eastern Europe that were finally free of glacial phenomena. This became possible due to the essential cut of river valleys in the Alleröd that caused the drainage of glacial lakes and formed the first river terraces. The dry sandy first terraces were covered with pine forests and were convenient for settlement.

Thus the extinction of the mammoths at the beginning of the Final Palaeolithic period and the sharp deterioration in natural-climatic conditions on the glacial lowlands of East Europe, in particular in Poliss'ya, caused the desolation of the last Dryas I and the moving of Epigravettian mammoth hunters to the south. The improvement in the natural-climatic conditions during Bölling and especially Alleröd warming created favourable conditions for the reoccupation of the region in the middle of the Final Palaeolithic period. The cut of river valleys caused the drainage of the Poliss'ya lowland, and the appearance of dry pine forest terraces, convenient for settlement by humans. The general warming influenced the development of vegetation freed from the glacial lowlands and the spread of reindeer. Favourable conditions for reindeer hunters to move from the southwest Baltic through the Polish lowlands to the Pryp'yat, Nieman and Upper Dnieper basins formed. It seems that this economic-cultural type became firmly settled earlier in Western Europe than in Eastern Europe, where judging by the dates of Dobranichivka, Gintsi, Mezhyrichchya, Tymonivky and Yelyseyevychi, Epigravettian mammoth hunters lived till the very beginning of the Final Palaeolithic.

So, despite the position of V.P. Kopytin, who rejects unconditionally any possibility of the penetration of bearers of Lyngby Culture from the West to the Upper Dnieper, and their participation in forming Mesolithic cultures in Central Eastern Europe, most experts

believe that the north of Eastern Europe was settled by the offspring of Terminal Palaeolithic Lyngby and Swiderian reindeer hunters. The evidence of this is not only archaeological, but also anthropological information, which allows us to solve the complicated question of the origin of Saami, Finnish, and of other Ural language families in northern Eurasia.

Anthropological material gives reason to suppose that the descendants of the Glacial Europe Kromagnonians, who at the turn of the Palaeolithic and Mesolithic moved across the west coast of Norway to the north, were the ancestors of the Saami people, and Postswiderians in the north of Eastern Europe became the basis of the Finno-Ugric peoples (Zaliznyak 2002). DNA genetic research testifies that Saami and Finnish peoples of the north are separate but related populations of European origin and are genetically connected with the Glacial Europe Kromagnonians (Cavalli-Sforza et al 1994). Their genotype is West European and not east Siberian, because 75% of Finnish people's genes are of European but not Siberian origin (Carpelan 1997: 2).

According to the evidence of paleoanthropology, the first Postglacial inhabitants of the north of Eastern Europe were massive, broad-faced Europeans of an archaic type who are morphologically related with the European Kromagnonians of the Upper Palaeolithic. We mean anthropological material from the ancient burials of Oleny Ostrov near Lake Onega, Zveinieki 2 in Latvia, and Popovo in the Archangelsk region. Human bone remains were found in the above-mentioned Mesolithic cemeteries together with typical flint arrowheads of Postswiderian type. For example, massive northern europoids with flattened faces had been buried with numerous arrowheads of a Postswiderian type in the oldest burials of Oleny Ostrov cemetery (Gurina 1956) (Fig. 7). The radiocarbon date of the oldest burial N 100 from Oleny Ostrov cemetery is 9910±80 BP (9480–9040 BC cal.) Gin 4836. The wide-faced anthropological type from this cemetery is interpreted now as an archaic northern europoid of Eastern Europe (Денисова 1975; Гохман 1984, 1986; Ошибкина 1994: 55, 1997: 152; Potekhina 1999: 333–336).

The skull from the oldest level Zviynieky 2 site from Latvia belonged to a massive, wide-faced northern europoid archaic type. The further development of this human type is traced in later Neolithic burials from the same cemetery (Загорскис 1987; Денисова 1975; Потехина 1999). According to I. Gokhman (1984) the Popovo Postswiderian cemetery near Lake Onega featured massive, tall, wide-faced northern europoids (Гохман 1984, 1986; Ошибкина 1994: 55, 1997: 152).

It looks as if such anthropological features of the remote forerunners of Finnish peoples in the taiga zone of Eastern Europe arise from their genetic connection with Swiderian Culture population which, through Lyngby Culture, was connected with the Glacial hunters of Europe (Залізняк 1999а: 244, 2001: 51–54).

The first inhabitants of the northern region of Norway, the remote ancestors of the Saamis, were genetically connected with Magdalenian Kromagnonians in France, through the same Lyngby Culture perhaps. It is not by accident that the anthropological type and genetics of the Saami make them related to some of the most archaic populations of present-day European people who are considered by some experts to be the remote descendants of the Glacial inhabitants of Palaeolithic Europe. We mean the Alpian type of the Massif Central in France, the Alps, the Apennines, some groups of Basques, the Irish, and the Welsh (Тищенко 2001: 78).

Hence the facts of modern archaeology and anthropology confirm that the Terminal Palaeolithic population of the western and southern Baltic is a genetic ancestor of the Saami and Finnish peoples in the north of Europe. As is well known, Saami, Finns, Ugric and Samodians make up the Ural family of peoples which inhabit the north of Scandinavia, Eastern Europe and western Siberia. However, it would be early to confirm unambiguously that Protoural dialects were brought to the north exactly by Ahrensburgian and Swiderian people in their advance after the glaciers.

The point is that language changes are not always accompanied by changes in the material culture or in the anthropological type of a population. The spread of a new language can entail both radical changes in the composition of the population due to numerous newcomers, and settling among aboriginals that are few in number but dominating groups of people whose language insensibly displaces the local dialects. In the last case, a radical change in the material culture or anthropological type may not happen. That is why archaeology and anthropology fix migratory processes much better than language transformations. In other words, the reconstructed process of occupying the north of Europe at the beginning of the Holocene probably reflects the coming of the genetic ancestors of the present-day Saami and Finnish peoples rather than the appearance of the appropriate languages which could spread later without a radical change in the population and culture.

This is why even now the classic version of the spread of Finnish languages from their native land, the bounded region of Eastern Europe or even trans-Ural territory, remains actual (Напольских 1997). Most linguists consider that the fatherland of the peoples of the Ural family is the Middle Volga region, which is bordered by steppe in the south and by a large part of the Volga

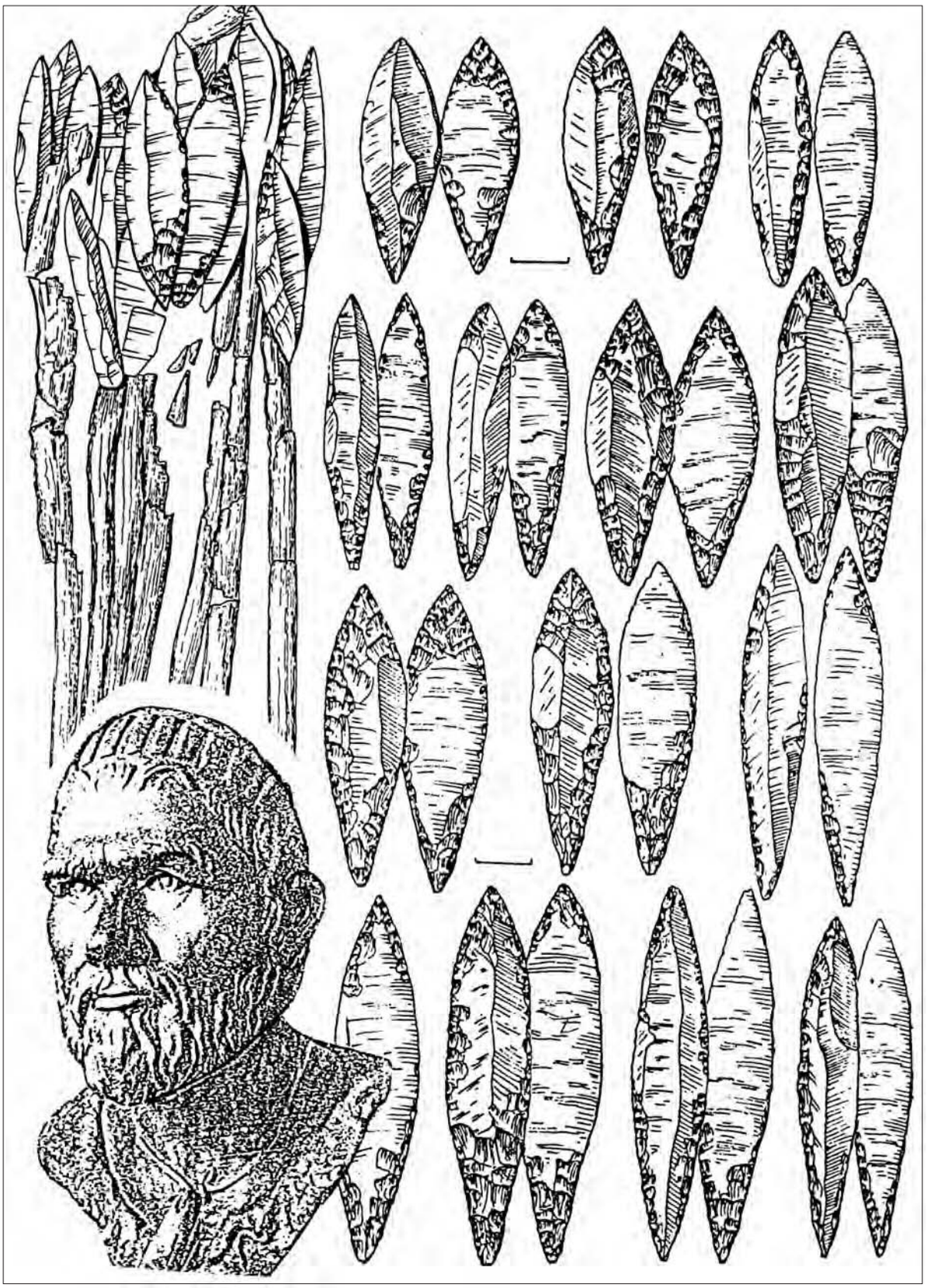

Fig. 7. Oleny Ostrow cemetery. Flint arrow-points of Postswiderian types from the oldest burial N 100 (after N. Gurina). The massive, wide-faced northern europoid (reconstruction by M. Gerasimov) to the left should be attached to the oldest inhabitants of the East European north of Postswiderian cultural unity

in the north, where a great concentration of Finnish languages is fixed. Most archaeologists traditionally connect the spread of Finno-Ugric languages with Neolithic pit-comb ceramic culture of 4,000 to 3,000 years BC, and, derivative from it, the Volosovo and textile ceramic cultures of 3,000 to 2,000 years BC.

Meanwhile, the mentioned conclusions of archaeologists and anthropologists concerning the initial settlement of the north of Europe and southern Baltic impel some researchers to look for the origins of the Ural languages in the Terminal Palaeolithic of Central Europe.

Some linguists (Тищенко 2001: 79–81) see the traces of the Protofinnish language substratum in the Celtic (Irish, Welsh, Breton) and Germanic (English, German) languages. This is explained by the ancient contacts of Protofinns with the aboriginals of Central and Western Europe. If the linguists are not mistaken, then in our opinion these contacts took place as far back as the Terminal Palaeolithic 13,000 to 10,000 years ago, when the community of cultures with arrowheads on blades (Lyngby, Ahrensburg, Swider, Krasnosillya) formed on the basis of Magdalenian Culture of Western and Central Europe in the Middle European lowlands from Britain up to the Upper Dnieper. As has been mentioned, these people, as the result of migration to the north because of postglacial warming, became the remote genetic ancestors of the Saami and the Finns in northern Europe. It looks as if in the process of the settling of the Swiderian population from the Nieman and Pryp'yat basins in northeast Europe in the Mesolithic (8,000 to 5,000 years BC), the disintegration of the Ural parent language and the separation of the Samodians from it happened. The forming of the parent Finnish language separate from Proto-ugric and its following disintegration is evidently connected in some way with the spread 4,000 to 3,000 years BC in the forest zone of Eastern Europe of Neolithic pit-comb ceramics.

Recurring new waves of migrants from the West to the forest zone of Eastern Europe (Kudlaevka Culture, about 9,500 years ago, Yanislavitsa Culture 8,000 years ago, Funnel Beaker Culture 6,000 years ago, Globular Amphora Culture 5,000 years ago, Corded Ware Ceramic Culture 4,000 years ago) constantly pushed the ancestors of Ural peoples in a northeastern direction, which finally caused the occupation by them not only of the north of Eastern Europe but also trans-Ural territory.

In the future many of the above reconstructions of the primary population of the East European north will be defined more exactly, as new material is being collected and the methods of scientific interpretation are being improved.

Summary

The most northern inhabitants of Europe in the Final Palaeolithic, reindeer hunters from cultures with arrowheads on blades (Lyngby, Ahrensburg, Krasnosillya and Swider), played a leading role in conquering the vast territories of northern Europe left by the glaciers. At the turn of the Pleistocene-Holocene, they left the Middle European lowlands, following reindeer herds in northern and northeastern directions. They soon adapted to the recently formed forest landscape of northern Europe and managed to make use of the forest zone from Scandinavia up to the northern Urals. In such a way, the Post-Lyngbian cultural unity was formed in Scandinavia (Fosna, Comsa) and in the regions of the Upper Dnieper (Krasnosillya, Pisochny Riv Grensk) and the Upper Volga (Ienevo). The Postswiderian cultural unity was formed in the east Baltic region (Pullitype sites) and populated taiga zone from the Gulf of Bothnia to the northern Urals.

So, about 10,000 years ago, the north of Eastern Europe was populated by descendants of Lyngbian and Swiderian hunters from the Baltic region. According to anthropological data, the primary Mesolithic population of the East European north consisted of massive europoids quite similar to the Late Palaeolithic Kromagnonians of Central Europe. The reason for such a likeness was the origin of the Lyngbian and Swiderian population on the genetic base of Central European Upper Palaeolithic.

Modern archaeological and anthropological data allows us to confirm that the Terminal Palaeolithic population of the western and southern Baltic is a genetic ancestor of Saami and Finnish peoples in the north of Europe. A reconstruction of the occupation of the north of Europe at the beginning of the Holocene probably reflects the coming of the genetic ancestors of the present-day Saami and Finnish peoples rather than the appearance of the relevant languages which could have spread here later without a radical change in the population and culture.

Many of the above reconstructions of the primary population of the East European north call for some additional arguments.

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ARCHEOLOGIJOS DUOMENYS APIE RYTŲ EUROPOS TAIGOS APGYVENDINIMĄ PALEOLITO IR MEZOLITO SANKIRTOJE

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Santrauka

Šiauriausi Europos finalinio paleolito kultūrų su įkotiniais antgaliais (Lyngby, Arensburgo, Krasnoseljės ir Svidrų) gyventojai – šiaurės elnių medžiotojai – buvo pagrindiniai didžiulių, iš ledynų išsilaisvinusių, teritorijų apgyvendinimo proceso dalyviai. Pleistoceno ir holoceno sankirtoje jie migravo iš Vidurio Europos lygumų paskui šiaurės elnių kaimenes šiaurės ir šiaurės rytų kryptimis. Greitai jie prisitaikė prie besiformuojančios Šiaurės Europos miškų aplinkos ir išmoko gyventi miškų juostos nuo Skandinavijos iki Šiaurės Uralo gamtinėje aplinkoje. Taip Skandinavijoje (Fosna, Komsa) ir Dnepro aukštupio (Krasnoseljė, Pesočnyj Rovas, Grenskas) bei Volgos aukštupio (Jenevo) regionuose susiformavo vėlyvoji Lyngby kultūrinė grupė. Vėlyvoji Svidrų kultūrinė grupė susiformavo rytiniame Pabaltijyje (Pullio tipo gyvenvietės) ir apsigyveno taigos zonoje nuo Botnijos įlankos iki Šiaurės Uralo.

Maždaug prieš 10 tūkstančių metų Rytų Europos šiaurinė dalis buvo apgyvendinta Baltijos regiono Lyngby ir Svidrų kultūrų palikuonių. Remiantis antropologiniais duomenimis, ankstyviausi mezolito gyventojai Rytų Europos šiaurėje buvo stambūs šiaurės europoidai, iš dalies panašūs į Centrinės Europos vėlyvojo paleolito kromanjoniečius. Tokiam panašumui įtakos turėjo Lyngby ir Svidrų kultūrų populiacijų kilmė iš Centrinės Europos vėlyvojo paleolito genetinio fondo.

Šiuolaikiniai archeologijos ir antropologijos duomenys rodo, kad Vakarų ir Pietų Pabaltijo finalinio paleolito pabaigos gyventojai yra saamių ir suomių Šiaurės Europoje genetiniai protėviai. Rekonstruoti Šiaurės Europos apgyvendinimo holoceno pradžioje procesai greičiau atskleidžia dabartinių saamių ir suomių genetinių protėvių atsikraustymą nei kalbų paplitimą. Kalbos galėjo paplisti vėliau su radikaliais populiacijų ir kultūros pokyčiais.

Suprantama, kad šią Rytų Europos šiaurės pirminio apgyvendinimo rekonstrukciją reikėtų papildyti naujais duomenimis.