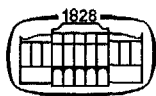


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FOREST AND STEPPE: A DIALOGUE OF CULTURES

ON ARCHAEOLOGICAL MATERIALS FROM THE KAMA REGION

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The paper focuses on the contacts between the populations in the forest of the Kama region and the southern steppe region during the Iron Age (8th c. BC–5th c. AD) and early Middle Ages. The research was primarily based on archaeological material. The ramified river systems of the Volga, Kama, Vyatka and Belaya actually provided the main routes for contact between the forest of the Kama region and the southern steppe. During the period in question, new technologies, household activities, and elements of material and spiritual culture penetrated the forest of the Kama region through the trade routes of antiquity and by the mediation of various ethnic groups speaking Iranian, Finno-Ugric and Turkic languages.

Key words: contacts between forest and steppe, Kama, archaeology, trade.

Contacts between peoples that inhabit neighbouring historical, cultural and geographical zones represent a most powerful factor in stimulating the progress of ancient societies. It is known that many human advances were first made in the southern regions with all the necessary preconditions. These eventually reached remote northern areas. Since the Mesolithic Epoch, the Kama region has been covered by mixed fir-deciduous forest, including lime, birch and nut trees and the climate was rather harsh. The ramified river system of the Volga, Kama, Vyatka and Belaya in its modern state was also formed in that period. They actually provided the main routes for contact between the forest of the Kama region and the southern steppe region. Certainly, borderlines between the forest, forest-steppe and steppe regions shifted from one historical epoch to another, but on the whole their correlation was constant.

The present paper does not deal with the first contacts between forest and steppe populations that took place as early as the Stone, Chalkolithic and Bronze Ages. New technologies, household activities, and elements of spiritual culture penetrated the forest of the Kama region through the mediation of various ethnic groups

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during that period following the trade routes of antiquity. The role of the latter grew in importance with the spread of iron production techniques.

During the early Iron Age (the Ananyino–Pyanoborye community, 8th c. BC–5th c. AD), the population of the Kama region developed iron production from marsh ore creating a variety of iron articles. The Finno-Perms first obtained skills in iron production and treatment from the Iranian peoples. Finno-Ugric languages borrowed the word “iron” from Iranian (Abaev 1972, p. 29). The production of tools and arms from iron led to a revolution in material industry and the art of war. They managed to clear large areas of forest and improve land cultivation and harvesting. At the end of the 1st millennium BC, new forms of armaments appeared, such as long swords, fighting axes, chain armour, helmets and coats of mail.

Iron contributed to the formation of a more productive economy and as a result the population grew, trade developed, and both technical skills and cultural achievements spread. The large-scale development of iron finally destroyed the standards of primitive society and promoted its stratification and early class relations.

In the 6th century BC, the unstable situation of the Kama region and attempts to protect property and stores of valuables from enemies led to the formation of fortified settlements. Most of them were administrative, military and cult centres. It is probably no coincidence that fortified settlements were first founded at the border with the forest-steppe – the Volga and lower part of the Kama region – and spread north only later. They must have been the first defensive outposts against invasion from the steppe people.

As a result of contacts with the Scythians and Sarmatians, the population of the Kama region obtained samples of nomadic-type arms on a regular basis, but still they preferred local universal models of close combat – short spears and celts. The tense situation and social stratification there promoted the institution of the chief. Stone steles depicting a male figure with a weapon were registered in cemeteries. At the village of Galanovo, Karakulino district, they found a unique bronze parade pole-axe (Figure 1). This attribute of a military chief is decorated with a wolf's head with bared teeth and an owl – a bird of prey. The pole-axe from Galanovo is the eighth of the Ananyino pole-axes known in archaeology. A wolf's head with bared teeth is pictured on the back of most pole-axes and the end of the bush features the head of a griffin. Each pole-axe is unique and bears no resemblance to any other. Kuzminykh (1983, p. 145) dates them to the 6th–4th centuries BC. Many scholars believe the motif of a large-toothed predator, the wolf, is characteristic of the Ananyino forest and nomadic Sarmatian peoples. The Ananyino population was characterised by an original “feral” style, in which Scytho-Siberian motifs (deer, panther, and snow leopard) were used together with images of forest fauna (elk, bear, wolf, and birds). Researchers are unanimous in their belief that the “feral” style of the Volga–Kama population in the early Iron Age was developed under the powerful influence of various Eurasian artistic centres. But it is these very Scytho-Sarmatian artistic devices and the stylistics of the images on local items (combs, whorls, knife handles, and pole-axes) that show most clearly how intensively the forms and subjects characteristic of steppe art were acquired and developed.



Figure 1. Bronze pole-axe from the village of Galanovo (Udmurtia)

During the Ananyino period the Kama region boasted its own independent and rather developed metallurgical centre. Its products (articles of local types were celts, spearheads, adzes, and ornaments) spread from Northern Sweden to the Irtysh River (Kuzminykh 1983, p. 174, fig. 91). The centre dealt with local ("pure" copper) and imported (tin bronze and antimony-arsenic copper-base alloys) metals from the Urals. The Ananyino metal-working methods were influenced by the Caucasian metallurgical centre through the steppe in the 8th–6th centuries BC and through nomads from the southern part of the region west of the Urals, as well as from Kazakhstan and Central Asia beginning in the 6th–5th centuries BC (Kuzminykh 1983, pp. 178–179). At the turn of the 5th–4th centuries BC, bronze was excluded from the production of tools and arms.

Numerous decorations (Figures 2 and 3) and silver ware brought from the Mediterranean and East represent proof of the increase in trade at the first half of the 1st millennium AD. In the 3rd–5th-century graves of the central area of the Kama region, archaeologists excavated shells from the Indian Ocean that had been used as belt decorations. An analysis of beads found in the region west of the Urals shows that they were imported from the Caucasus, Syria, Egypt and other countries.

Import routes into the Urals varied. Byzantine silver ware and coins as well as beads from Syria, Egypt, and the Caucasus were probably brought from the northern littoral of the Black Sea through the Don and Volga steppes as well as from the Transcaucasian region by the Volga and Kama. Goods from the great civilisations of Eurasia were delivered to the Urals by land routes through the steppes of Northern Kazakhstan and by the Ural, Belaya and Kama Rivers.

The large number of imported goods indicates the regular and smooth nature of trade. Such trade could only have been possible in a well-developed society that had its own specialised economy and additional goods in sufficient number for trading. The expansion of commerce resulted in the use of new articles as an equivalent for trading goods. Such articles could have been necklaces made from bear teeth, beads, cowries, metal bars, cattle, honey, wax, and furs.

Materials from Ural settlements dated to the 1st millennium AD clearly show the high level of fur hunting: sable, marten, squirrel, and beaver. Bones of fur-bearing animals prevail among bones of wild animals in cemeteries of the early Iron Age as well as the 1st millennium AD. Among arrowheads of that period we can see blunt-pointed samples specially adapted for fur hunting. The fact that pelts were used as a main equivalent for trading operations is proved by the term "ur", meaning "squirrel", in the old Komi monetary system. In Udmurt a kopeck is "kon'y" (squirrel) and money is "kon'don" (the cost of one squirrel).

Recent analysis of the materials from the Kama region from the 3rd–5th centuries (during the great migrations) has uncovered an increasing number of facts that turn our attention not only to eastern and southern parallels, but also to western ones as well. Matveeva was probably the first researcher to show an interest in contacts between the region west of the Urals and the Slavonic-German world. She noticed the resemblance between the Volga Imenkovo-type antiquities and materials from the *Przeworsk* and *Zarubinskaya* cultures. She managed to prove the genetic simi-

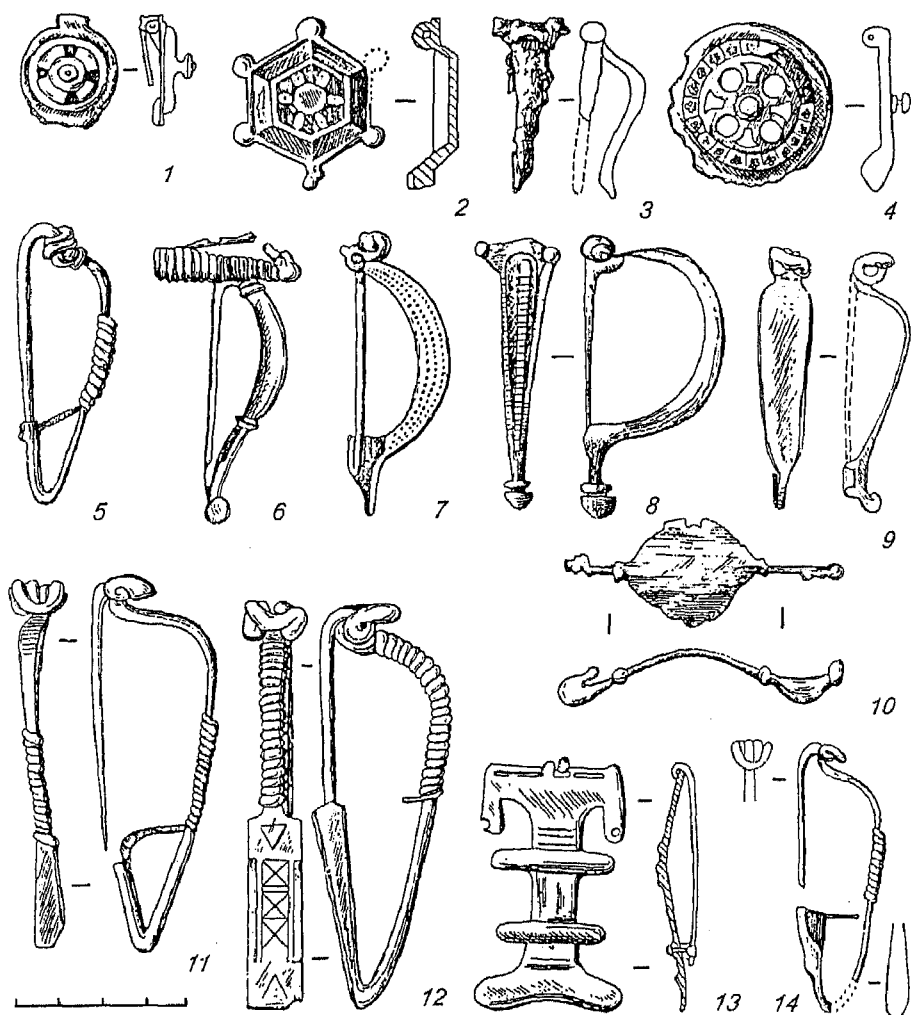


Figure 2. Imported fibulae from the Kama cemeteries: 1, 2, 5, 9, 11, 12 – Tarasovskiy;
3 – Turaevskiy; 4, 14 – Oshkinskiy; 6, 10 – Nyrgynda I; 7 – Nyrgynda II;
8 – Novosasykul'skiy; 13 – Pokrovskiy

larity between the Imenkovo and pra-Slavonic cultures and to register several waves of Slavonic penetration into the Volga region.

Sedov registered three waves of Slavonic penetration into the Volga and Kama regions from the area of the *Cjernjakov* culture (the northern littoral of the Black Sea). The first wave (2nd–3rd centuries AD) left Slavkino-type monuments in the Samara part of the Volga region. In his opinion, this was connected with the first Velbark (Gothic) migration. The second wave (3rd–4th centuries AD) resulted in the appearance of Lbisch-type monuments in the Volga region. The monuments had traces of both *Cjernjakov* and *Przeworsk* antiquities. Finally, the third wave of the

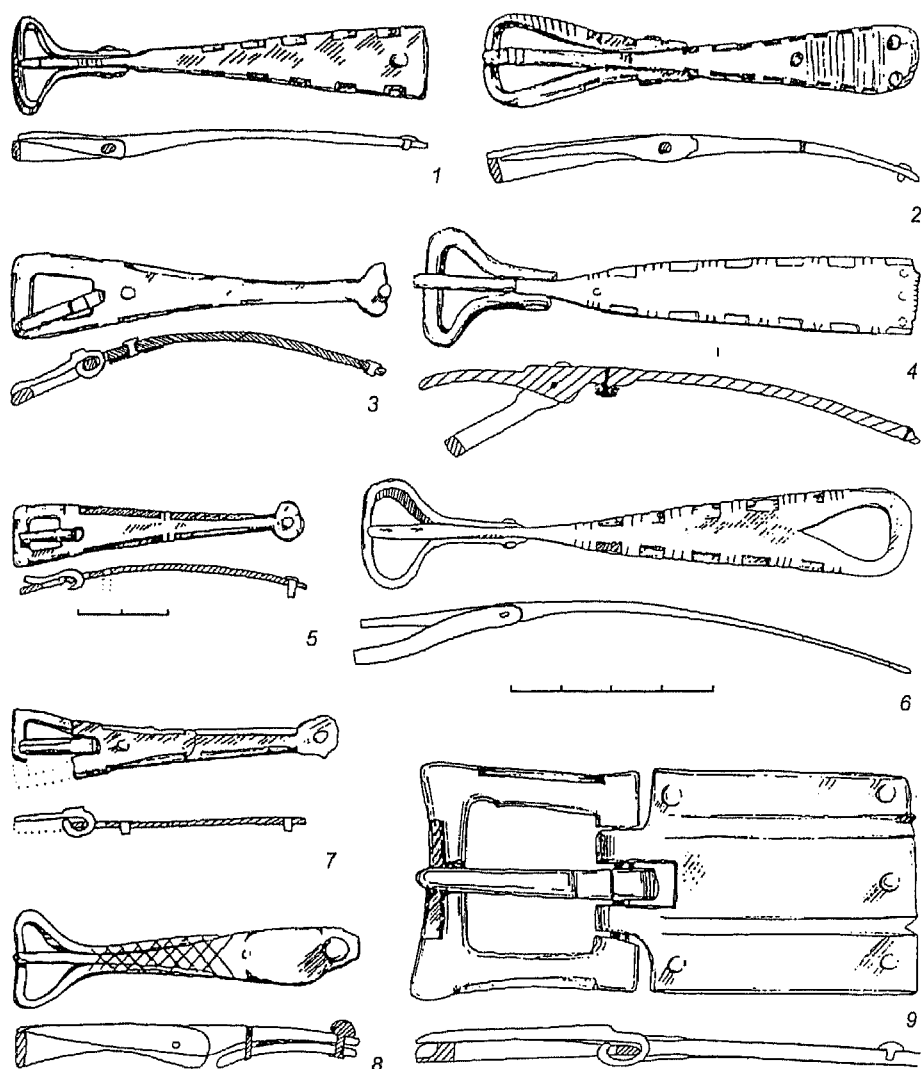


Figure 3. Bronze buckles from the Tarasovskiy cemetery: 1 – grave 391; 2 – grave 359; 3 – grave 358; 4 – grave 1779; 5 – grave 243; 6 – grave 1529a; 7 – grave 199; 8 – grave 765a; 9 – grave 727

Cjernjakov migrants was the most intensive, and it became a base for creating the Imenkovo culture in the lower part of the Kama region and adjoining Volga regions at the end of the 4th century. This culture lasted until the 7th–8th centuries (Sedov 1994, pp. 309–315).

Most probably, it was the second wave (3rd century) that brought an alien population to the Vyatka and middle Kama regions (Figure 4). They left barrow cemeteries (Azelinskiy, Suvorovo) and unusual warrior burial places in the Khudyaki (grave 88) and Nivskiy (grave 80) cemeteries.

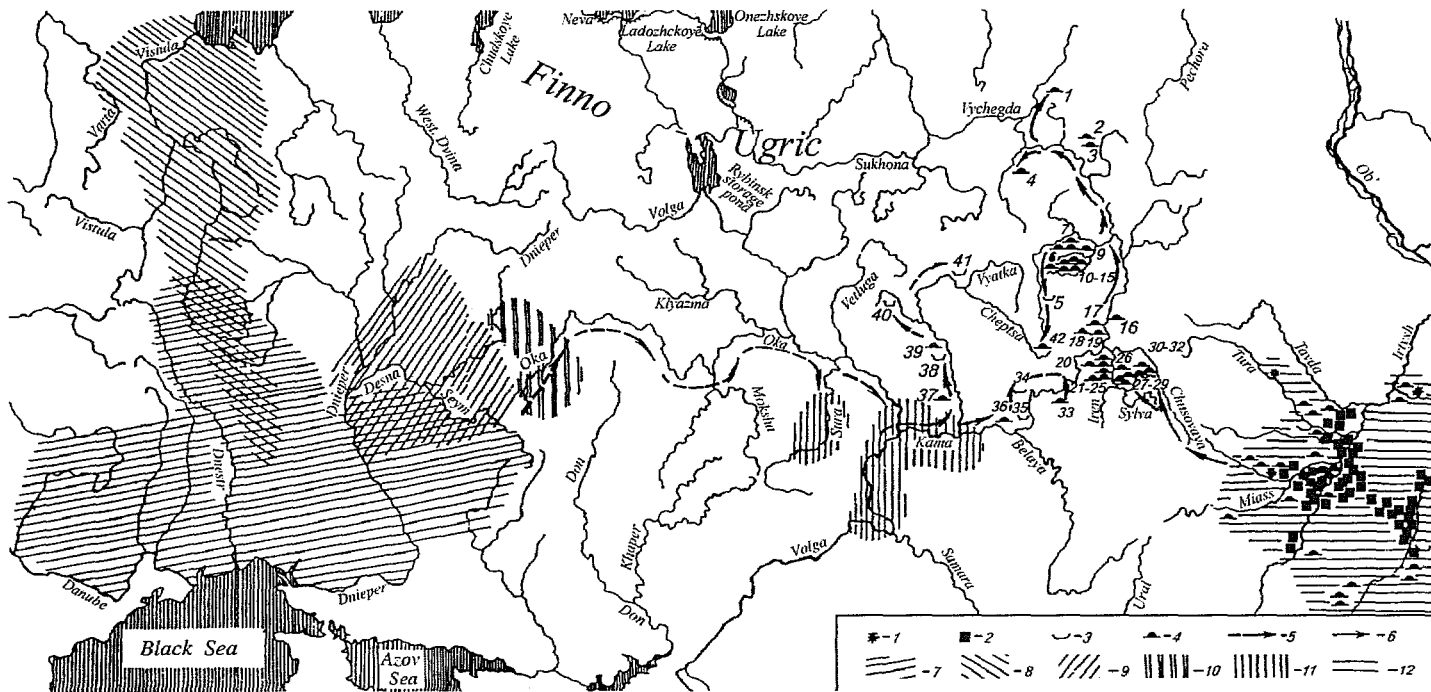


Figure 4. Map of the main cemeteries west of the Urals from the epoch of the great migrations (3rd–6th centuries AD) and synchronous cultures – sources of migrations. 1 – finds; 2 – settlement; 3 – cemetery; 4 – barrow; 5 – supposed direction of the Slavs' movement; 6 – supposed direction of the Ugric movement; 7 – Cjernjakov culture; 8 – Velbark culture; 9 – Kiev culture; 10 – Moschinskaya culture; 11 – Imenkovo culture (according to Matveeva); 12 – eastern variant of the Sargat culture (according to Koryakova). 1 – Veslyana I; 2 – Borganol; 3 – Yavana-Yag; 4 – Shoyna-Yag; 5 – Averino; 6 – Burdakovo I; 7 – Pyshstayn; 8 – Kharino; 9 – Agafonovo; 10 – Belkovo; 11 – Mitino; 12 – Peklayb I; 13 – Peklayb II; 14 – Chazevo I; 15 – Chazevo II; 16 – Bolshe-Visim; 17 – Poludenka; 18 – Beklemishevka; 19 – Burkovo; 20 – Kachka; 21 – Mokino; 22 – Saltanaikha; 23 – Kalashnikovo; 24 – Zaborye; 25 – Lake Dikoye; 26 – Kurmanaevo; 27 – Spasskoye; 28 – Brody; 29 – Plekhanovo; 30 – Verkh-Saya; 31 – Kopchikovo; 32 – Klyapovo; 33 – Kudash; 34 – Nivskiy; 35 – Tarasovskiy; 36 – Turaevskiy; 37 – Azelinskiy; 38 – Tyum-Tyum; 39 – Suvorovo; 40 – Khudyaki; 41 – Pervomay; 42 – Varni

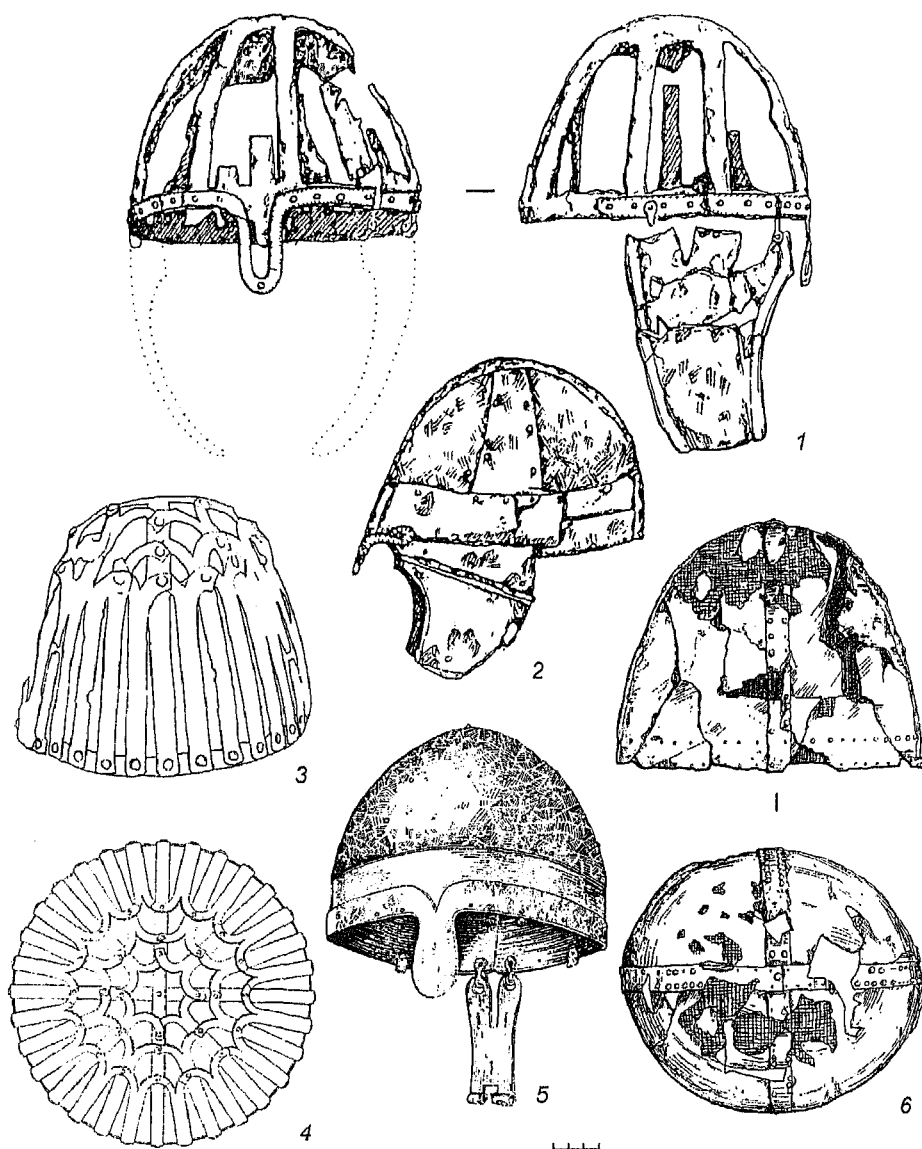


Figure 5. Helmets from the great migrations from Kama cemeteries: 1 – grave 782 of the Tarasovskiy cemetery; 2 – grave 6 of the Tarasovskiy cemetery; 3 – grave 27 of the Suvorovo cemetery (drawing made from a photograph); 4 – reconstruction of the same helmet (according to Ghening); 5 – grave 30 of the Suvorovo cemetery; 6 – grave 1784 of the Tarasovskiy cemetery

The monuments differ from Perm ones in the large number of arms: not only arrow- and spearheads, knives and axes, but also helmets (Figure 5), chain armour, and “sickles”. For example, grave 31 of Suvorovo contained 3 helmets, 2 articles of chain armour (one weighs 13 kg), 4 swords, 9 axes, 3 spearheads, 7 bridles, 17 knives

and daggers, 119 arrowheads and a "sickle". Each male burial place contained 13.5 units of arms on average (excluding knives).

Swords found in Azelinskiy-type graves have some distinct features. Terekhova and Rozanova carried out a metallographic investigation of three swords from unpublished data on the Tyum-Tyum, Ust-Bryskinskiy and Gremyachinsk cemeteries. It showed that the swords not only have a standard form and identical structure, but also the same quality of metal. They were made of hard high-grade steel with a homogeneous structure, cement lattice, and additional cement in the form of needles without any slag. The researchers are convinced that the swords emanate from one centre and were made by highly skilled specialists (Terekhova et al. 1997, p. 138).

Most likely, the Azelinskiy and Suvorovo cemeteries are connected with the migration to the Volga region of the Przeworsk-Cjernjakov population (which left Lbischy-type monuments). The connection between these monuments and the Velbark-Przeworsk region is confirmed by the belt tips with a narrowed middle section. As Bazhan and Vaskul rightly noted, these items could hardly have been brought from the Sarmatians to the Kama region by a southern route, because such tips are unknown there. We should also take notice of an iron ploughshare uncommon in the Kama region. It was found in grave 1 of the Azelinskiy cemetery. Similar ploughshares are well known in the Cjernjakov culture (Sedov 1994, p. 81).

Thus, we have strong evidence that in the late 3rd and early 4th centuries AD an alien population of south-western origin came to the southern part of the Kama region (the Vyatka and Middle Kama). Those groups were probably of a mixed Gothic and Slavonic character; and thus Jordan's statement that the Meri, Mordva and Chud tribes were subdued by the power of the Goths in the middle of the 4th century AD does not seem so incredible after all. It is evident that the Kama region could hardly have been under Gothic power. Nevertheless, this first mention of the Finno-Ugric tribes in written sources was based on a real historical event – the armed incursion of a small group of Gothic Slavs into the Volga and Kama regions.

The second resettlement of alien groups to the south of the Kama region was connected with a later period – the late 4th and 5th centuries. Two barrow cemeteries (Turaevskiy and Kudash) and some graves in a non-barrow necropolis (Tyum-Tyum, Pervomay and Tarasovskiy) are dated to this period.

The Turaevskiy cemetery located on the right bank of the Kama not far from the mouth of the River Izh has been studied thoroughly. Expeditions directed by Ghening excavated 9 mounds with 15 graves and 8 non-barrow burial places. Grave pits were rather deep and had stonework in the covering layer. The graves belonged to warriors; two buried men had no skulls, the skull of the third man lay separate in a small pit nearby. Grave goods undoubtedly indicate their warrior character (Figure 6): among the finds were 8 swords, 11 knives and daggers, 8 spearheads, 2 helmets, 4 articles of chain armour and 5 axes; in three graves there were 10 bits, 7 "sickles", a number of bronze and silver buckles, belt tips, buckle-rings, bridle holders, girth iron clasps, amber beads and other items. Ghening dated the researched mounds to the late 4th–early 5th centuries AD.

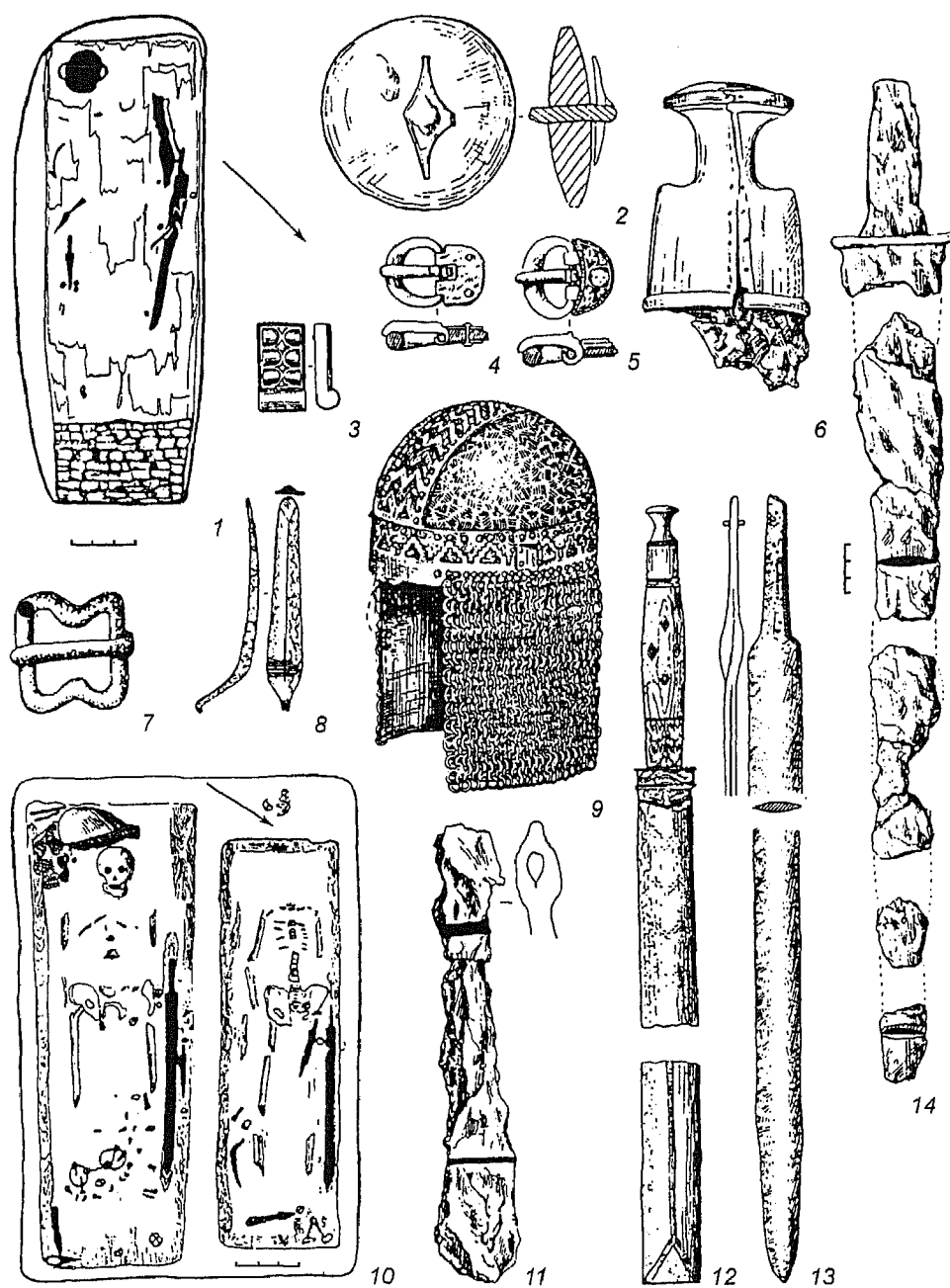


Figure 6. Artefacts from barrow cemeteries of the Kama region from the great migrations:
1, 2, 6, 11, 14 – Kudash cemetery; 3–5, 7–10, 12, 13 – Turaevskiy cemetery

Kudash is a monument close to the Turaevskiy cemetery both by the period and character of the burial places. It contains both barrow (4) and non-barrow (30) graves dated to one period. Most of them are male, warrior; only one is female. There are a number of different armaments: 5 helmets, 3 articles of chain armour, a coat of mail, 8 axes, 7 swords, and 15 "sickles" – in one grave there are five of them, in another six (Kazantseva 1995). Among the other finds were several silver sword handles and a chalcedony disk decorating a handle, a large number of three-part bronze buckles, pendants, threaders, a bronze dart, a polychrome bead, amber pendants and a glass bead breastplate. The mounds, military equipment and its attributes clearly prove the alien character of the population, which left the Kudash cemetery. However, the crockery does not differ much from the ceramics of local Perm tribes – this fact probably indicates the beginning of the assimilation process. The author of the excavation dates the monument to the late 4th–early 5th centuries AD (Kazantseva 1995).

In 1980–1997, 1879 graves were researched during excavations at the Tarasovskiy cemetery (1st–5th centuries AD), located on the right bank of the Kama, opposite the mouth of the Buy River. Among the ordinary graves with local Perm grave goods were several with prestigious defensive equipment. For example, four graves contained helmets, coats of mail, chain armour, swords, spearheads, and "sickles"; two graves had axes (one had 5, the other had 6). Grave 1784 included the following artefacts: a sword in a wooden sheath with a wooden handle and a green glass pommel, an iron knife, a bridle with bronze brackets, two bronze clasps and an iron bit. Nearby lay a bronze buckle and a belt tip. Near the feet were an iron chain armour, six iron axes, a spearhead, an iron "sickle", shoe buckles and shoe tips. Near the head of the body was a helmet, which is hemispheric in shape, welded and covered with thin silver foil on the outside. Along diametrical axes the helmet was decorated with two narrow strips of gold foil which crossed at the top of the helmet at a right angle. Each strip was attached to the helmet by two rows of bronze rivets with rounded heads. The same double row of rivets ran along the lower edge of the helmet; the lower row fastened the edge of a leather helmet lining. The helmet was supplied with a barmitsa of a chain armour type, the diameter of rings is 10–15 mm. The graves with valuable military items are located in the latest part of the cemetery.

Oshibkina excavated a most interesting burial place in the Tyum-Tyum cemetery, where two men were found in grave 94 covered with a soft and probably leather coverlet. Near the feet of the body lay a bast package, which contained a sword, three axes, three spearheads, a drawing-knife, bridle, chalcedony disk and other items. On the top there were two bronze pots. The second assemblage of funeral gifts was in the shape of a rectangle made of 11 long iron fighting axes; inside it a belt with brackets, beads and working tools. A harness and a bronze pot covered them. The third funeral assemblage was located to the left of one of the bodies and consisted of a female head-dress, a horse-pendant, and three broken chalcedony disks. Two more broken disks lay on top of the coverlet. Near each body lay a number of personal weapons (Oshibkina 1979).

Taking into consideration that the graves described contain not only similar kinds of offensive weapons, but also a number of defensive arms with no counter-

parts in the local material (helmets, coats of mail and chain armour), we can suppose that these graves had one and the same area of origin and appeared in the Kama region simultaneously in the late 4th–early 5th centuries.

Most probably, Turaevskiy, Kudash and some other monuments appeared in the Kama region due to the migration of the Cjernjakov-Velbark population to the lower Kama and adjoining Volga regions at the end of the 4th century. This third migration of the Cjernjakov population was caused by the Huns' invasion of Eastern Europe. Placing all the finds of chalcedony disks (used as sword and dagger pommels) on a map, let us distinguish three main areas of their spread: the Crimea, Azov Sea littoral and Kama Basin. Moshkova regards them as an ethnic marker of an independent tribal group of the late Sarmatians. Their presence in the cemeteries of the Kama region could have resulted from the defeat of the Goths by the Huns, after which an isolated group could have arrived.

After arriving in the Volga region, the Imenkovo population occupied a rather vast territory: from the middle Sura River in the west to the mouth of the Vyatka River in the east, and from the Kama in the north to the Samara Luka in the south. Imenkovo monuments were known until the end of the 7th century, when nomadic Bulgars destroyed them.

The Imenkovo population contributed to Finno-Ugric iron-making and bronze-casting techniques. The level of cattle breeding was very high. They bred new strains of cattle of southern origin, as well as camels; sheep breeding was also very popular. Agriculture was especially developed: in addition to ploughshares, scythes, sickles, mattocks and wood-cutting axes are often found in settlements. They cultivated wheat, millet, rye, oats, spelt, barley and peas. It is therefore not by chance that the Imenkovo people were the first to begin breeding the domestic cat to protect the harvests from mice.

However, we should also bear in mind contacts with the southern Perms and Volga Sarmatians. The population of the Mazunino stage of the Cheganda culture probably maintained close contacts with the Sarmatians, for they used Mazunino-type fibulae (Skripkin 1984). In addition, Moshkova believes it was the Mazunino and Bakhmutino populations that produced and supplied the Volga and Ural Sarmatians with some kinds of spring fibulae (featuring a high massive receiver with a curl at the end and a plate-type back of triangle, rhombic or round shape), bow-like fibulae (with an upright rectangular end of a back decorated with a carved ornament) and twisted grivnas.

Another area of the Kama region, which was influenced by certain other phenomena of the great migrations, was the northern part and adjoining districts. Here the alien population did not interfere in the life of local tribes until the end of the 4th century, for this region was rather far from the Volga and Dnieper routes and northern and central Europe, where the great migrations began much earlier. The northern part of the Kama region became connected with this epoch due to the shift of the nomadic Huns from Central Asia through the Siberian and lower Volga steppes to Eastern Europe.

When clashing with the Huns, certain groups from among the steppe and forest-steppe populations escaped to remoter and, as a rule, more northerly regions, which eventually became their new motherland. One such group came to the Kungur forest-steppe at the end of the 4th century. It belonged to the Ugric population of the Sargat culture of the forest-steppe Trans-Ural region. Monuments of the Sargat culture dated to the 4th century BC–4th century AD are concentrated in the forest-steppes of Western Siberia, in basins of the Rivers Irtysh, Ishim and Tobol.

The western variant of the Sargat community is located in the Tobol Basin, not far from the Ural range. The riverheads of the left-bank tributaries of the Tobol – the Iset and Pyshma – are very close to the riverheads of the Chusovaya and Sylva, which cross the Urals in the latitudinal direction and are the easiest route from Siberia to the region west of the Urals. Crossing the Urals under pressure from the Huns, the Sargats left a number of monuments in the Kama region.

It was a forest-steppe cattle-breeding population with a developed horse cult. Bronze horse-pendants were found in graves. Remnants of bridles were excavated in male burial places. Judging by the bones of animals preserved in mounds and trenches, the Brody population reared horses (63.6% of all bones), cattle (27.3%) and small cattle (9.1%). The absence of pig bones indirectly indicates the long journey of the population, because pigs usually do not survive such a nomadic life, though the population of the Kama region was good at breeding pigs as early as the 2nd millennium BC. Interestingly, the Sargat population did not rear pigs.

When arriving in the Kama region, the Sargats had nothing to do but contact the local Perm Glyadenovo population. At first, their relations were far from peaceful; this is borne out by cases of violent death (a common grave of 7 young warriors, several of those buried killed by arrows in the Brody barrows etc.). However, they managed to find other methods in due course. Most probably, their need for wives forced them to co-exist peacefully. The interaction of the alien Sargats and local Perm population resulted in the original Nevolino culture. It is likely that among the migrants there were small groups of the late Sarmatian population inhabiting the upper reaches of the River Belaya in the 3rd–4th centuries, although separate monuments are known to be located on the River Ufa.

Thus, in spite of how remote the Kama region is from the steppe zone, where all the main events of the great migrations took place, the region turned out to be involved in the resettlement of tribes due to its geographical position and due to its connection with one of the basic waterways – the Volga. There are at least three waves of migration to the Kama region: two waves consisted mostly of proto-Slavonic groups (the first in the 3rd, the second in the late 4th century) to the southern districts of the Kama region and to the Vyatka. The third wave, consisting of the Ugric population (the Sargat culture from east of the Urals), also took place at the end of the 4th century and was directed to the northern part of the Kama region. The arrival of the new population there was undoubtedly a powerful new incentive to the progress of the Perm peoples.

In the Middle Ages the scale of trade to the Kama region continued to increase, mostly in the exchange of furs, honey and wax. As before, imported goods include

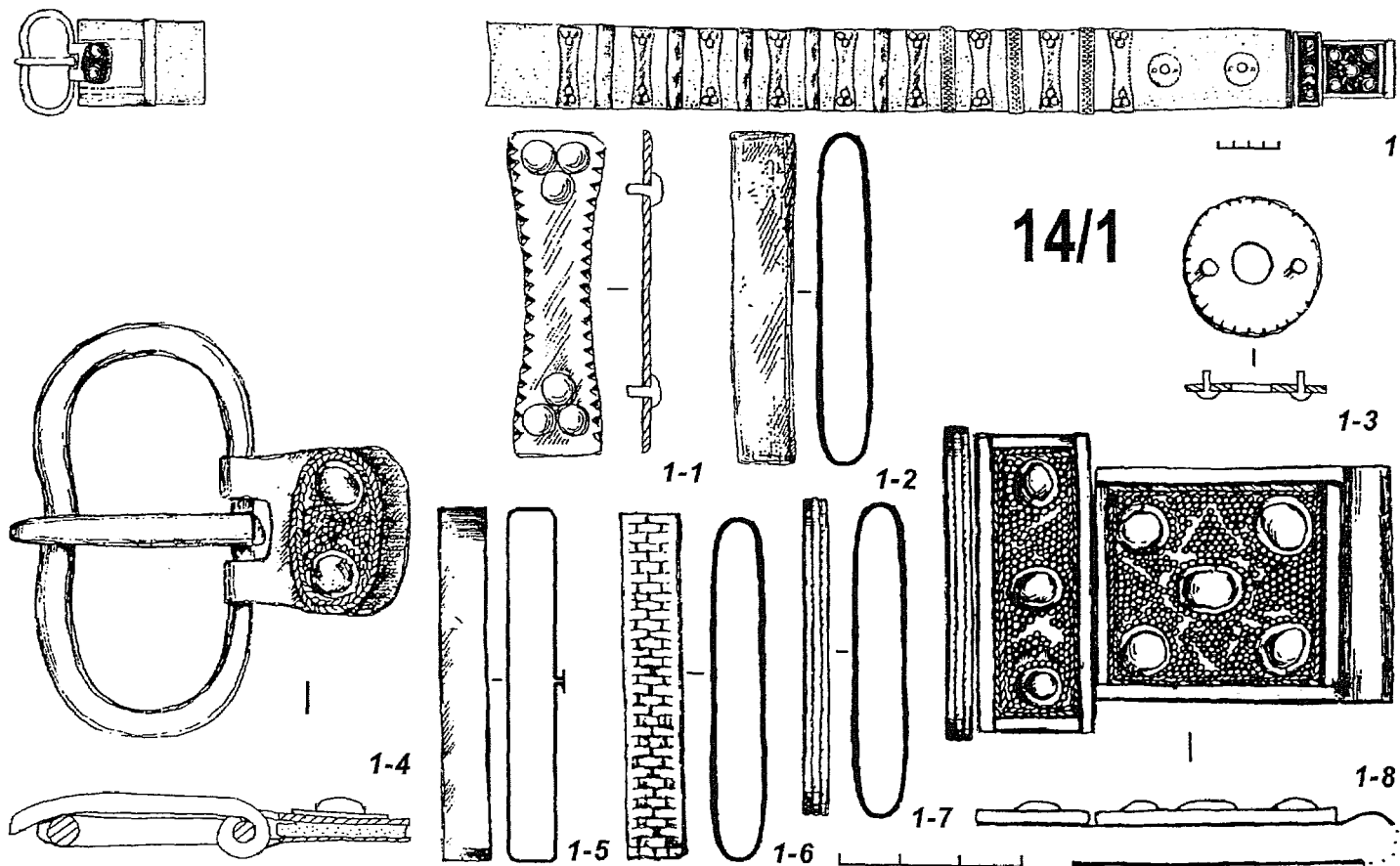


Figure 7. Reconstruction of the belt from grave 1, barrow 14, Verkh-Saya cemetery. Leather, silver, stone.

1-1, 1-2 – silver plates; 1-3, 1-5–1-7 – plates; 1-4 – buckle; 1-8 – belt tip

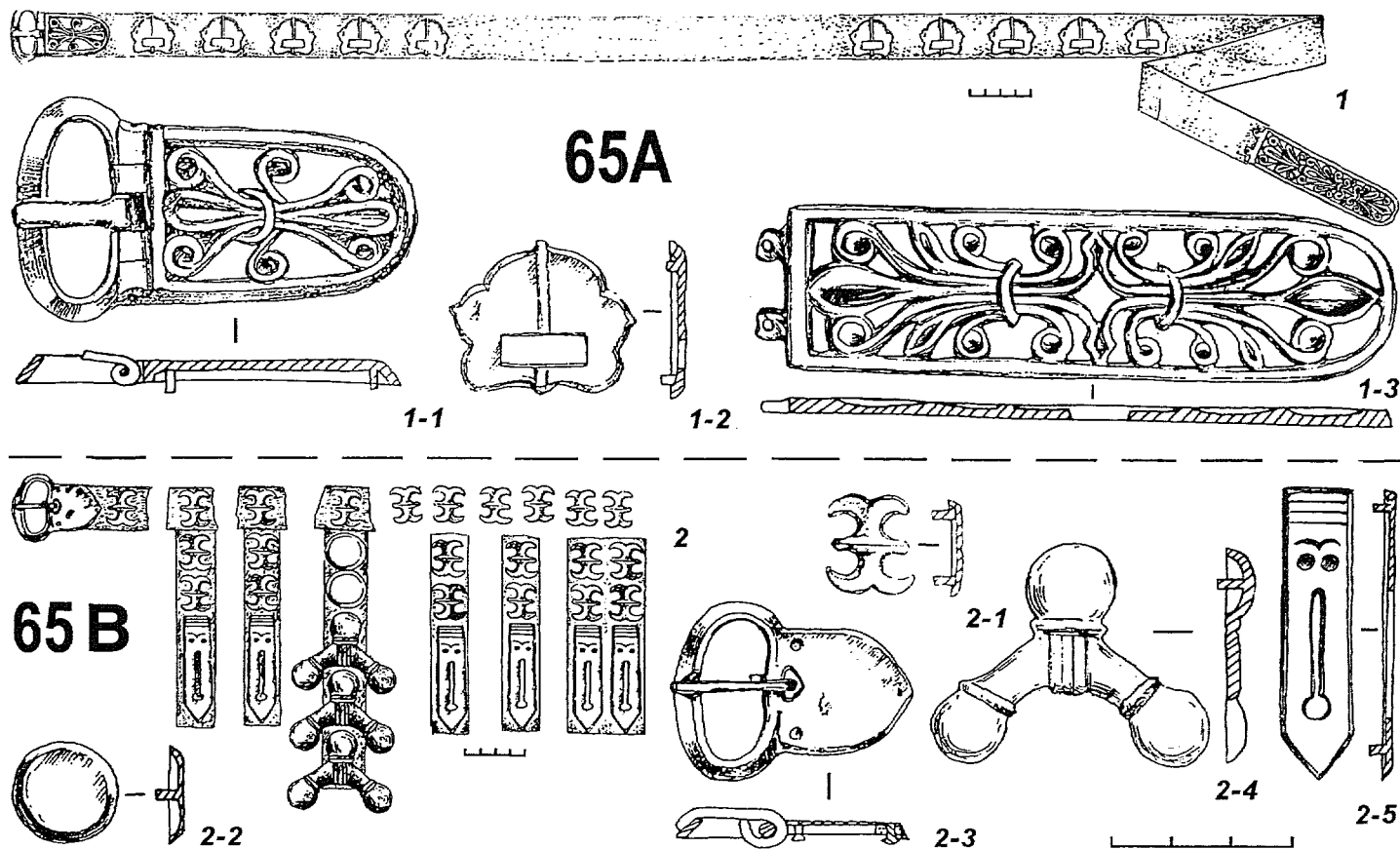


Figure 8. Reconstruction of the belts from graves 65A and 65B, Verkh-Saya cemetery. Leather, bronze.
 1-1 – buckle; 1-2 – figured plate; 1-3 – belt tip; 2-1, 2-2, 2-4, 2-5 – belt plates; 2-3 – bronze buckle

numerous glass and stone beads, belt sets (Figures 7 and 8), parade arms etc. Almost all of them emanate from the southern region (the Black Sea, the Near East, and Central Asia). The amount of parade silver ware and coins is the most impressive of all. At present, 123 monuments that contained 187 silver vessels are registered in the Kama region. They were made in different regions: Byzantium, Iran, Central Asia, Khorezm and other countries. In all likelihood, the lion's share of those vessels has not survived to the present day. Some are still used by local people, others were remelted by ancient masters. Additionally, more than 200 Sasanian drachmas, as well as about 300 Byzantine and 20 Khorezm coins were excavated in the Kama region. Very often these items are intermixed in complexes. Near the Bartym settlement in the Sylva Basin lay 3 Khorezm bowls, a Sasanian bowl and a Sasanian goblet, a "Bactrian" bowl and a Byzantine dish. One of the vessels (a find from 1950) contained 264 silver milliaresii from Iraklii and Iraklii Konstantin (610–641). The same year 8 more coins of the same type were excavated in the probe trench made in the location of that find, and the stem of a silver goblet was ploughed up in 1949. The hoard is primarily unique due to its value (272 coins). Furthermore, the coins are high-quality and are part of an early issue (about 615). 59 coins were made by one and the same pair of stamps. Based on these facts, Kazamanova supposes the hoard was all part of one issue and was not put into circulation. The fall of the hoard was probably connected with the defeat of the Bartym settlement in the late 7th century. Its cemetery was found on the settlement area. Pastushenko believes such a considerable quantity of Byzantine silver appeared in the westernmost part of the Kama region as a payment to the Khazars from the Byzantine government for their participation in the war against Iran.

It is of interest that merchants brought not only expensive and small-sized goods, such as coins, silver ware, and beads, into the territory of the Nevolino culture, but also large-sized articles, such as containers (amphorae and jugs from the Black Sea littoral) with oil and wine. At present, such finds number more than 40 in this region.

In the Kama region, trade was so well-organised that merchants delivered large batches of expensive goods from rather remote regions. This is borne out not only by numerous hoards, but also by the find of a small weight from a Byzantine merchant. It was located in the Verkh-Saya fortified settlement, which was an administrative centre 2 km from the Bartym hoards and settlement. Most probably, relations with Khazaria, which controlled trade routes in the region in the late 7th century, were not limited to trade only. Excavations of the Nevolino settlements register not only tableware, but also dwelling and ritual buildings. Different categories of artefacts (arms, harness, and decorations) indicate the similarity of household structure and beliefs between two regions which were remote from each other. For the present, it is a hypothesis that a common ethnic component of Iranian origin with Ugric and Turkic (late Sarmatian or Hun-Sarmatian) influence participated in the genesis of the Saltovo-Mayatskaya and Nevolino cultures.

Since the 770s or 780s, intensive trade with the Orient influenced the Kama region as it did the rest of Eastern Europe through the nomads. As a result, large col-

lections of Arabic dirkhems were brought there. By the end of the 10th century, due to the exhaustion of silver stocks in Central Asia and a silver crisis in the Eastern Muslim countries, the import of dirkhems to Europe decreased considerably. At the turn of the 10th–11th centuries, it ceased completely. Finds of silver vessels from the East, Arabic dirkhems and numerous Glazov-type grivnas indicate that silver became a trading equivalent in the Kama region for both foreign and domestic commerce. The amount of silver which communities and families managed to save is very impressive. In 1867, near the village of Yagoshur, Balezino district, Udmurtia, a silver jug was ploughed up weighing about 2 kg. It was made in the eastern regions of Central Asia. The jug contained a bar of silver (equal to 18 zolotnik = 76.8 g) and about 1500 silver dirkhems (total weight 10 pounds, or 4 kg). One dirkhem weighs 2.97 g of silver. Judging by the coins, the hoard dates back to the middle of the 9th century. The total weight of the hoard was more than 6 kg of silver. In 1883, near the village of Redikor, Cherdynskiy district, Perm oblast, a hoard of more than 6 kg of silver was also found.

In the Kama region, Glazov-type grivnas are likely to have been used as an independent equivalent concurrently with dirkhems. Ivanov registered 176 grivnas from 51 monuments in the Cheptsya basin, 130 grivnas from 29 monuments on the Upper Kama, and 40 grivnas from 15 locations in the Vyatka–Vetluga interfluvial area. The total number of grivnas in the Kama–Vyatka interfluvial area is 346 pieces. Their weight totalled 55 kg.

Their individual weight was approximately equal and they were very widespread. This is one more piece of evidence of their usage as a trading equivalent. For example, a fragment of such a grivna was found in a hoard consisting of 2200 mostly Arabic coins. The hoard was discovered not far from the mouth of the Oder, on the island of Ryugen in the Baltic Sea. We can assume that Arabic coins were carried to the Kama region and were melted into grivnas and other silver articles (e.g. well-known cult plates – a horseman or a horsewoman on a horse standing on a snake) by local smiths. Those articles as well as the Glazov-type grivnas were most widespread in the 9th–10th centuries, when the stream of Arabic silver to Eastern Europe was truly impressive. As soon as the stream ceased, the Glazov-type grivnas and plates stopped being produced.

The historical literature provides us with the most interesting information on the cost of goods in the Middle Ages. In the 9th–10th centuries in the eastern markets a slave cost 100–500 dirkhems. In the Scandinavian region the price was 200–300 g of silver. According to Kherrman's data, in the 11th century in the Baltic districts a sword or a stirrup cost 125 g of silver, a spear cost 50, spurs 20, a bridle 10, a bridle clasp 5, and a knife 3 g of silver, or 1 dirkhem. One glass bead cost 3 g of silver or one marten pelt.

Ibn Fadlan gives similar prices: in the Rus' one glass green bead cost 1 dirkhem. In all medieval cemeteries in the Kama region, beads are part of mass finds. Archaeologists found 7283 beads in 59 graves of the Polom cemetery (8th–9th centuries), 2176 beads in 64 graves of the Omutnitskiy cemetery (9th–11th centuries), and 5605 beads in 99 graves of the Kuzminskiy cemetery (9th–13th centuries). Female

grave 91 of the latter even contained 697 beads. As all beads were imported, these figures are very significant in understanding the scale of trade among the population in the Kama region in the Middle Ages.

Archaeological materials therefore prove that in the Eastern European forest zone the Kama region was distinct, where due to historical circumstances the population developed trading operations and boasted a large number of precious goods (beads, decorations, arms, silver vessels, and coins) which could be used as articles for trade equally with local products, such as furs, wax, honey and slaves. And in spite of ethnic and political collisions in the nomadic world of the Eurasian steppes, the Kama region probably acted as a mediator between various peoples that inhabited both sides of this steppe corridor.

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