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THE ARKHANGELOSK HOARD¹

Abstract

This article is the first publication of a hoard dating from the late first quarter of the 12th century. It included both coins and other silver objects, whole and fragmentary. The composition of the coin material and the formation and origin of the hoard are discussed.

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In the autumn of 1989 a hoard of coins and silver objects was found in connection with farm work in the vicinity of Arkhangelsk on the western extremity of the Dvina flood-lands (Fig. 1). The hoard was sent to the Arkhangelsk Museum of Regional Studies. The site was examined by archaeologists in the same autumn, and they found some two dozen more coins which were also brought to the museum. According to the finders, the coins and objects lay in a relatively compact area measuring c. 2 x 4.5 metres. Pieces of pine bark were also found, giving the impression of being the remains of some kind of receptacle or covering. This assumption was not, however, confirmed by a radiocarbon date (16th century) obtained at the laboratory of the Institute of the History of Material Culture in St. Petersburg.

There was every reason to believe that the hoard had been buried on the flood-land terrace c. 180 cm above the water-line (as measured in September 1989), on the right bank of a small stream flowing into the Vikhtui river. The latter is a branch of the Toinokurya River, a large tributary of the Northern Dvina (Fig. 2). The place was probably not chosen by chance, for it was situated in the Dvina delta area near waterways near which temporary or permanent camps may have been in existence. The stratigraphy confirms this point: a 5-cm layer of turf overlay about 5 centimetres of sandy loam, followed by loamy soil of the same thickness, and subsoil sand. A considerable number of Neolithic flint flakes and artefacts were discovered in the sandy loam and loamy soil layers. The location fortuitously revealed a new site of this type as well as a hoard of coins and ornaments. The finds are of special value for the delta region of the Northern Dvina, as they shed light on several problems concerning the early history of the East European Polar zone.

As pertinently pointed out by G. F. Korzukhina, a leading expert on Russian hoards, the Russian word for hoard (klad), is relatively late. In the 11th and 12th centuries hoards were called 'silver and gold, hidden in the earth' or simply poklazha, meaning 'load'. (Korzukhina 1954, p. 9).

The Arkhangelsk hoard is a deposit of silver, with a total weight of 1,632.57 g. The weight of the non-numismatic objects – personal ornaments and hacksilber – is 270.67 g. The types of the objects can be compared with those found in other Ancient Russian hoards consisting of women's ornaments, whole and fragmentary, and including very small pieces of old objects. Of special interest is the fact that the material was collected and preserved over a long period.
Several chronological 'strata' can be identified among these objects. The first group includes a fragment of a seven-radial temple ring, a relatively well-preserved temple ring of the so-called Volyn type, and a fragment of a crescent-shaped lunula pendant (Fig. 3:1, 2, 5). The seven-radial ring belongs to a relatively archaic type. It originally had seven small cogs on the inside, each corresponding to a point on the outside. The plaque between is decorated with two rows of rectangular impressions. Five of the outer points were decorated with triangular ray designs (Fig. 3:1). This type can be dated to the late 11th or the turn of the 12th century (Ravdina 1968, p. 138). Ornaments like the seven-radial rings from Radimitsche (E. N. Shinakov’s group 5) have been dated to the 11th and 12th centuries by Shinakov (1980, pp. 117, 121–2, Fig. 2), and Solyeva (1978, pp. 171–8). Prior to the Arkhangelsk find, the Radimitschi radial ring, discovered in a Novgorod layer dating from the late 12th century, had been the most northern temple or temporal ring on record (Shinakov 1980, p. 118, fig. 3; Sedova 1981, pp. 10, 12–13, fig. 2:2).
A fragment of a crescent-shaped pendant (Fig. 3:2) belongs to the large filigree-granulated type mostly found in hoards from the 11th and 12th centuries. Finds of such lunula pendants are few and they usually come from areas close to the Russian urban centres (their decoration is a product of town jewellery) or territories along the main trade routes (Korzukhina 1954, pp. 23, 64–5; Uspenskaya 1967, pp. 99–102).

Also belonging to the first group is a temple ring of the Volyn type (Fig. 3:5; 4). Similar specimens are known from hoards from the middle Dniepr area, dated to the second half of the 10th or the turn of the 11th century (Tolstoi, Kondakov 1897, pp. 64–5, 67–8, figs. 65–67), and from the Kiev necropolis, grave no. 124 dating from the second half of the 10th century (Korzukhina 1954, tabs. VI:9, VII:1, 3; Karger 1958, p. 209, tab. XXVIII. Vol. I). At present, some scholars prefer the term ‘pyriform pendant’ to ‘Volyn type’ on the grounds that such ornaments were mass-produced in Bulgar from the 9th to the 12th centuries, spreading from there to the areas adjacent to the Urals and to the north as far as Yogoria.²

While the silver ornaments reflect Russian artwork of the 11th and 12th centuries, a plaited bracelet with soldered end plaques present a later group of jewellery. The ring is plaited of thick silver wire (Fig. 3:9; 5), and its soldered almond-shaped ends serve as mountings for gemstones (ordinary granite). The sides of the rim are decorated with triangular units of granulation. As shown by its state of preservation, the bracelet must have been used for a long time: it has been repaired in the middle by soldering and parts of the granulation have been rubbed out. According to Korzukhina, twisted bracelets with affixed end plates, often decorated with niello, appeared in the eleventh century and were popular among the military guards of the Russian princes up to the time of the Mongol invasion (Korzukhina 1954, p. 63, tabs. XIII, XIV). There are similar bracelets in the Staraya Ryazan hoard, dating from the second half of the 12th and the first third of the 13th century (Darkevich, Mongait 1978, pp. 8, 11 (nos. 28–9), tab. XX). They have also been found in Novgorod but here they were plaited of pewter wire. They belong to layers dating from the turn of the 11th
century to the late 13th century (Sedova 1981, p. 102). Finds from the Vim cemetery include two kinds of plaited bracelets ending in mounted gemstones, which date back to the 11th and 12th centuries (Savelyeva 1987, p. 129, tab. 32:13). They are not quite analogous to those from Arkhangelsk but they too illuminate the distribution of this type of object in the far north-east of eastern Europe during the first centuries of the second millennium AD.

Another bracelet, also with soldered almond-shaped ends but made of silver sheet and with square mountings at the ends (Fig. 3:10; 6), stands out from the objects discussed above. The sheet bears simple decoration consisting of two longitudinal grooves and three rows of punched dots. All other decoration is centred on the end plates, which are framed with rows of false plaiting and have soldered 'eyes' and triangles of granulation around the square mountings. The mountings contain pieces of glass, probably from broken vessels of eastern origin. The bracelet has been preliminarily associated with Bulgar handicraft. According to information from A. N. Khoroshev a similar bracelet, dating from the late 12th century, was found in Novgorod in 1989. It is natural that such objects reached the White Sea coast. Silver ornaments with similar plaques on round pendants and closed lunula pendants have been discovered in the cemeteries of Vim. They are generally from the 10th - 13th centuries and are of Bulgar origin (Savelyeva 1987, p. 122).

Broken fragments of coiled silver wire (Fig. 3:6; 7) and a piece of what may have been a torque with a clasp (Fig. 3:8; 7) undoubtedly belong to this group as well.

A pair of objects stand somewhat aside from the rest of the material. This is a pair of triangular pendants with three large drop-shaped loops and small scrolls at the clasps. The slightly flattened sides of the loops are decorated with rows of punched 'eyes'. In the northern Arkhangelsk area similar objects have been found at three other sites: a 12th-century cemetery at the mouth of the Varzuga River on the southern coast of the Kola Peninsula (1 specimen; Ovsyannikov 1984, pp. 25-6; Ovsyannikov 1985, tab. 2:1; Ovsyannikov 1984a, p. 102, fig. 4:1; Ovsyannikov, Ryabinin 1989, p. 5:3), the Chud cemetery from the late 11th - first half of the 12th centuries on the Vaga River, a tributary of the Northern Dvina (1 specimen; Nazarenko, Ovsyannikov, Ryabinin 1984, fig. 5:13), and the sacrificial sites on Vaigach Island (3 specimens; the Vaigach excavations were conducted by L. P. Khlo-

bystin). These looped pendants most probably came from eastern Finno-Ugric areas. The Arkhangelsk finds now mark the western border of their geographical distribution (Ovsyannikov, Ryabinin 1989, pp. 208-9).

The second main group of objects in the hoard is of somewhat different origin, being connected with north-western and northern regions. It consists of a cross pendant, fragments of braided chains and their terminal parts, and an axe-shaped pendant.

The cast equal-armed cross pendant with a circle in the centre and three small circles at the ends of the arms (Fig. 3:3; 10) belongs to a type referred to in the literature as 'Scandinavian crosses'. The term was coined at the beginning of the century by A. A. Spitsyn, who thought that the pendants were imported from Scandinavia in the 11th - 12th centuries (Spitsyn 1905, p. 117). M. V. Fekhner showed that they were found at sites dating from the second half of the 10th - 12th century in north-western and north-eastern Russia and in the East Baltic area. By the mid-1960s, they were known from more than thirty sites in the territory of Ancient Russia (cemeteries, towns and settlements). As Fekhner points out, the 'home town' of the pendants is difficult to identify, but quite obviously they are not Scandinavian imports (Fekhner 1968, pp. 210-14, fig. 1:2). V. V. Sedov, who in 1984 published a more complete map of the 'Scandinavian pendants', considered them to be produced somewhere in northern Russia (Sedov 1984, pp. 16, 18, fig. 2). The import of similar cruciform pendants into Latvia from Russian territories has been demonstrated by E. Mugurevics (Mugurevics 1974, pp. 224, 237). According to A.-L. Hirvuluo, the crosses, which are widely spread in Scandinavia, Russia and the East Baltic lands, originated among the Slavs but were made in the 12th - 13th centuries in the territory of Latvia, and possibly in Finland (Hirvuluo 1979, p. 107). A single find of this type, a cross pendant from the sacrificial site on Vaigach Island, is known from the far north-east. A similar cross was found in the Popovo cemetery (11th century) on Lake Lacha in the Onega river basin (Makarov 1990, pp. 97, 198, tabl. XIII:9, 11, 12). The Arkhangelsk cross pendant is attached to a small ring with a distinctive coiled knot. A typical feature is that the pendant is suspended not directly from the chain but has a separate ring in its eye. The chain had funnel-shaped looped end-pieces, which were attached to the ring. The hoard included a set of such end-pieces hanging from a wire ring (Fig. 3:4; 11), as well
as fragments of braided chains (Fig. 3:7; 12).

The pieces of chains made of thin braided silver wire may have been used with various other ornaments than the above-mentioned ones. For example, chains up to one meter long and decorated with horse-head ornaments were included in a 12th-century hoard from the Chernigov Borisoglebsky Cathedral (Rybakov 1949, pp. 58–9, fig. 26). They were also used with the axe-shaped pendants found in Finland and northern Norway (Kivikoski 1970, pp. 90–1, figs. 2, 3). The Arkhangelsk hoard also includes an axe-shaped pendant made of thin silver sheet and furnished with a riveted loop (Fig. 8:3; 13). The front side of the plaque is richly engraved, and the edges of the pendant are contoured with a frieze of parallel ribbed lines with impressed triangles filled with circles ('wolf's tooth' ornament). The frieze separates the top part from the main composition, with a 'horned' design of several lines. The lower part, as well as the top, is decorated with a 'lightning' design. The ornamental elements include impressed lines, and traces of the original marking out of the composition can be distinguished. These are most clearly visible on the reverse of the plaque, where the main composition is schematically repeated, i.e. a line separating the top part and two descending 'horns'. This is an object of North-European origin.

E. Kivikoski has published a map showing finds of pendants of this type, totalling sixteen from eleven sites. Three are from north Norway, one from Sweden, two from Finland, three from Estonia, one from the north-western Novgorod lands, and one from the Vaga river basin (Kivikoski 1970, pp. 88–94, fig. 1). According to Kivikoski the development of the axe-shaped pendants found in Lapland is based on Estonian prototypes.

Fig. 4. The Arkhangelsk hoard. Temple ring of Volyn type. 1:1.

Fig. 5. The Arkhangelsk hoard. Twisted bracelet. 1:1.
Fig. 6. The Arkhangelsk hoard. Lamellar bracelet. 1:1.

Fig. 7. The Arkhangelsk hoard. Coiled silver wire and the fragment of a silver torque with a clasp. 1:1.
The Arkhangelsk area is now added to the find statistics. The pendant differs from the simple forms from the Volga basin. Its decoration resembles that of the objects from Ostrobothnia in where the 'horned' motif is also found (Zachrisson 1984, Fig. 52).

To sum up, the objects in the Arkhangelsk hoard date from the 11th - early 13th centuries. Considering, however, the date of the youngest coins, the deposition of the hoard can be dated to the late first quarter of the 12th century.

During the extensive influx of eastern silver into the North Russian lands and into the East Baltic region in the 8th - 10th centuries, areas to the east and north-east of the Onega remained outside the dirham import. Only one hoard is known from this area, and only one of its coins, dating from 946, has been identified. The hoard was discovered in the mid-nineteenth century in the town of Petrozavodsk, near the place where the Neglinka River flows into Lake Onega (Markov 1910, p. 29, no. 158; Yanin 1956, p. 120, fig. 24; Nosov 1976, p. 101, map; Spiridonov 1984, p. 137, fig. 1). The hoard from Lake Onega does not alter the general picture of the distribution of dirhams in this part of Eastern Europe, even though recently the date of the hoard has been questioned. A. M. Spiridonov has pointed out that, since only one of the sixty coins has been identified, there is no certainty that the rest of the coins should have been Oriental and not West European. Therefore, the hoard could in fact have been from the 11th century (Spiridonov 1989, pp. 148, 151, 154, fig.1).

In the 11th century the situation changed radically. From the 1020s onwards West European coins dominated in the money circulation of Russia (Yanin 1956, p. 153; Potin 1968, p. 45; Darkevich 1985, p. 395). Silver coins began to penetrate widely into the regions to the east of

Fig. 8. The Arkhangelsk hoard. Triangular pendants with three looped bends. Axe-shaped pendant.
Lake Onega, where Oriental silver had been almost unknown (Fig. 14). Their import to Ancient Russia was necessitated by internal economic circumstances (Yanin 1956, p. 153). V. M. Potin has noted that 'every Ancient Russian coin hoard should be considered not only as a material result of foreign relations but of domestic economy as well' (Potin 1968, p. 23). In this connec-

Fig. 9. The Arkhangelsk hoard. Triangular pendants with three looped bends. 4:5.

Fig. 10. The Arkhangelsk hoard. Cruciform pendant. 1:1.
tion, one cannot but point out that the appearance of hoards to the north-east and east of Lake Onega coincides with the arrival of the Russian population and with the distant voyages of the Ladoga and Novgorod people. The silver hoards can be seen as concrete evidence of how the indigenous populations were drawn into relations with Ancient Russia and, primarily, of the inclusion of the remote northern areas into Novgorod's sphere of influence. Silver as a precious metal was delivered to Zavolochye in exchange for furs which played an important role in trade between Ancient Russia and Western Europe (Sverdlov 1974, p. 61; Herrman 1986, pp. 102–3; Spiridonov 1984, p. 140; Spiridonov 1989, pp. 151–2; Makarov 1990, pp. 117–18).

A discussion of the topography of the 11th – 12th-century hoards from the region can be begun with two denarius hoards from the northern side of Lake Onega. The first, dating from
around 1020 and containing 39 whole coins and two fragments, was found near the village of Padmozero in 1889 (Potin 1967, p. 161, no. 261). The second hoard, discovered in 1972 on an island in Lake Sandal, consists of 74 coins, three dirhams, and 71 denarii (Savvateyev 1978, p. 30). The latter is unpublished, but A. M. Spiridonov has dated it to the 1020s on the basis of identifications by A. V. Fomin (Spiridonov 1989, p. 152, n. 20). In 1929 a pot filled with coins was found in Kushtozero, situated between Lakes Onega and Beloye. The five denarii which are known from this find date it to the period after 1068 (Potin 1968, p. 161, no. 262).

Nine hoards with western denarii are known from the areas to the east and north-east of Lake Onega. Seven of them are connected with the basins of the Northern Dvina and the Sukhona Rivers and with the lower reaches of the Vychegda, flowing into the Dvina. The remaining two fall within the basins of the upper Vychegda and the Kama Rivers (Potin 1967, pp. 161–2, 175–6, nos. 264–5, 267, 355–6; Potin 1974, pp. 151–3; Potin 1990, p. 267). Before the discovery of the Arkhangelsk hoard, the most important find was the Nikolsky hoard. It contained 757 11th-century denarii and was found near the village of Nikolskoye on the lower reaches of the Vyled River, the left tributary of the Vychegda, not far from the Vychegda and the Dvina confluence (Potin 1974, p. 153).

The geographical distribution of 11th- and 12th-century hoards outlines the territory where the population was involved in exchanging furs for silver with Novgorod. Such hoards as those from Blagoveschensky, Streletsky and Veliky Ustyug were found in an area rich in archaeological sites from the 10th – 15th centuries on the Sukhona, the Vaga and the upper reaches of the Northern Dvina rivers (Makarov 1986, p. 66, Fig. 2). The Arkhangelsk hoard from the first quarter of the 12th century is one of the richest in this group. The appearance of permanent Russian settlements on the lower reaches of the Northern Dvina, where an original administrative and economic centre formed near Kholmogory by the 12th century can be assumed. Two of the hoards were obviously located in the territories which paid tribute to the Novgorod episcopacy. They were enumerated in the 1137 Charter.
of Svyatoslav Olgovich. First is the Blagoveschensky hoard (deposited c. 1030), found on the Ustyia river in its confluence with the Koksenga, not far from the middle reaches of the Vaga. The nearest point mentioned in Svyatoslav’s Charter is situated ‘near Velye’ on the Vely River, the left tributary of the Vaga. Another place listed in the Charter was situated ‘at the mouth of the Vaga’. Streletskaia Sloboda, where some English coins were found in 1832 and 1833, is situated between the upper reaches of the Vaga and Sukhona Rivers in the vicinity of the point which in the 1137 Charter was said to be ‘near Vekshenze’. Thus, the hoard topography once more testifies how Novgorod’s administrative and fiscal locations of the 12th century were connected with the system of local settlements as well as the areas in the Dvina-Vaga basin which paid tribute to Novgorod (Russian legislation 1984, vol. 1, pp. 224–5).

Large hoards with western coins, such as those from Arkhangelsk and Nikolsky, represented considerable wealth at that time. If we accept the calculations of the Polish researcher A. Gupe, who claims that in the 11th century 530 denarii could buy 4 – 6 horses, 6 – 7 cows, or up to 70 sheep (calculated for the Plotsky hoard; Potin 1968, pp. 27-8), we come to the conclusion that the Arkhangelsk hoard was worth four times more, i.e. sufficient for purchasing 16 – 24 horses, 24 – 28 cows, or up to 280 sheep. Such a hoard could hardly have belonged to an ordinary peasant or hunter. It was most probably buried by a wholesale fur merchant operating in the remote woodlands who was carrying a considerable amount of silver in coins and jewellery (partly in fragments which could be used as change). This is indirectly confirmed by another northern hoard from the early 12th century (after 1110), discovered near the border of Finland and the Tenniöjoki River in Kuolajärvi (Salla), west from Kandalaksha Bay on the White Sea. It was found under a stone, wrapped in birch bark, and included 174 coins, silver ornaments (a braided torque, two bracelets and a brooch) and a balance with twelve weights — the indispensable accessories of an itinerant trader (Potin 1967, p. 161, no. 263; Talvio 1985, pp. 31–35). The owner of the Arkhangelsk hoard undoubtedly came to the lower reaches of the Northern Dvina from the North Russian territories, as most of the silver objects in the hoard were Russian.

It was thought for a long time that the Svir River, connecting Lakes Ladoga and Onega, played a prominent role in international transit trade since the eighth century. Large amounts of eastern silver were supposed to have been conveyed along it from the Volga to the East Baltic region. However, the topography of the Kufic coin hoards has disproved this claim and shown that the main route from the Volga onwards followed the Volkhov River and the rivers of the Ilmen basin (Nosoph 1976, pp. 98–9, 105–9; Spiridonov 1989, p. 151). The importance of the Svir River increased in the 11th century, when it turned into a trade route opening the way from the Volkhov area to Lake Onega and points north.

An extremely high concentration of silver hoards from the 11th – 12th centuries, unparalleled elsewhere in the north-western area, proves the role of the Svir. Three hoards, consisting respectively of 3280, 2871 and 258 coins, mainly denarii, and hidden around the years 1105, 1095 and 1085, have been discovered at Lodeynoye Pole (Potin 1967, pp. 146–52, nos. 218–20). There are two other hoards with 19 and 264 West-European coins, dating from 1015–20 and c. 1040 respectively, from Svirstroy (Potin 1967, p. 152, nos. 221-2). Connected with this hoard cluster is a find from near the village of Ozerki on the Yanega River which flows into the Svir between Lodeynoye Pole and Svirstroy. The hoard was found at the beginning of the past century and is not well-documented, but it is known to have included Kufic coins, a silver bracelet and a silver cross. Korzukhina included it among the hoards deposited in the 11th century and around turn of the 11th and 12th centuries (Markov 1910, p. 29, no. 161; Korzukhina 1954, pp. 24, 102–3, no. 61, map 3).

All five hoards from the banks of the Svir were found along a distance of twenty kilometres. An analysis of the archaeological material carried out by A. M. Spiridonov showed that the sites of the hoards and six groups of burial mounds on the middle reaches of the Svir can almost be seen as a single cluster. They date back to the 10th – 11th centuries. The formation of a cluster at this location can in many respects be explained by the natural and geographical features of the Svir area. The territory with its coniferous forests on sandy and sandy loam soil is most convenient for settlement. The upper reaches of the river are mostly low-lying areas. It can also be mentioned that the most unsafe of the Svir rapids are near the Svir head above the archaeological cluster (Spiridonov 1989, pp. 147–8, 150, fig. 1; Location of points mentioned in the Charter of Svyatoslav Olgovich, p. 17).

Because of the concentration of such notable coin hoards in Lodeynoye Pole, V. M. Potin has...
put forth the idea that it is here that one should look for an ancient settlement which played an economically prominent role (Potin 1968, pp. 31-2). This proposition was supported by Spiridonov, according to whom a group of 'special settlements' controlling traffic along the waterway to the Onega was situated on the 20-kilometre-long section of the Svir. He emphasized an obviously synchronous character of 'the archaeologically presented processes and phenomena' in the Svir and Onega areas in the 10th - 11th centuries. In the 10th century there appear on the Svir mounds with burials of warriors and traders, and at the same time imported metal ornaments, beads and domestic accessories appear in the settlements located in the basin of Lake Onega (Spiridonov 1989, pp. 151, 153).

The accumulation of large coin hoards on the Svir, at the same time when the three hoards from the Onega area (Petrozavodsk, Padmozero, Sandal) included less than a hundred coins each, allowed Spiridonov to put forth an original theory about the organization of trade in the northern regions. According to him, the flow of silver to the north was restricted and blocked on the Svir in the 11th century. The local inhabitants exchanged furs with wholesale traders not for silver but for domestic accessories, ornaments and organic materials, such as cloth. The wholesale traders brought the furs to the Svir, to 'a staging post of the fur and silver trade' or 'a trading station'. Silver and other goods which were much in demand by the hunters came from Russia and the West (Spiridonov 1989, p. 153).

The role of the settlements in the organization of the northern trade, as indicated by clusters of

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Fig. 14. Distribution of 10th to 12th-century hoards with European coins in Northern Russia. 1. = the Arkhangelsk hoard.
archaeological sites along the Svir rapids and defined by Spiridonov, falls into two parts. The first, concerning the controlling function of the settlements situated along the trade routes, cannot be disputed. The Svir was in fact the only place where it was possible to keep watch both over the traders and tribute collectors going to Zavolochye, the Sukhona area and even more distant western and north-western regions, and the export of furs from there to Northern Russia and the Baltic lands. The ways parted already at Lake Onega from the head of the Svir. The first led to the Vedla River and Zavolochye, the second through the Vytega and Kovzha to Lake Beloye, and further on to the Sukhona river. The ways to the north opened from the northern bays of Lake Onega.

An entirely different question is the phenomenon of silver import to Zavolochye and its role in buying furs and exchanging goods not in the north but on the Svir. Both Spiridonov and A. N. Makarov have written about a 'rather strict control of the trade with northern regions'. Many treasures from the Ladoga area,' Makarov notes, 'number hundreds and even thousands of coins, whereas the hoards from Obonezhye and the basins of the Sukhona and Vaga Rivers contain only a few dozen.' The same applies to the distribution of some coins and hoards (Makarov 1990, p. 124). There is no sense in disputing the obvious fact that the number of West-European coins in hoards, cemeteries and settlements is larger on the territories close to the Baltic lands and the central regions of Northern Russia than in the remote wilderness of the Russian North. But the assumption must be wrong that there was no silver import to the North in the 11th century because there was no direct exchange for furs. The discovery of large hoards with West-European coins, such as those from Nikolsky and especially Arkhangelsk, where almost two thousand coins were found together with silver objects, suggests the opposite. Makarov was mistaken in asserting that there are only small hoards of a few dozen coins from the area east of Lake Onega. Firstly, the two above-mentioned hoards include hundreds of coins, and secondly, four of the seven hoards reported from that area are insufficiently known. We have no information on their composition; they might well have been quite substantial. The Arkhangelsk hoard is a major archaeological source on the Middle Ages in the North, and it can be analysed only in the context of the history of the Arctic regions of Northern and Eastern Europe. There is every reason to consider it to be the most northern of the Ancient Russian hoards. All the characteristic features of a treasure of that kind are present: the numismatic material, including both Oriental and West-European coins, and the other objects, including hacksilver. These features were noted by Korzukhina to be typical of Ancient Russian hoards from the Novgorod lands (Korzukhina 1954, pp. 98–9). The main difference between the Ancient Russian and the Lapp hoards – which like the Arkhangelsk find are obviously connected with fur trade in the North – is that the latter never include 'scraps' of precious metals (Zachrisson 1984, pp. 98–106) or objects which had been out of use for a long time.

The objects in the Arkhangelsk hoard, coming from areas distant from each other, do not speak for a Lapp or Bulgar origin for the treasure. This testifies only to the fact that in the broad northern area, bordering on the Arctic Sea and inhabited by peoples connected with the fur trade, a variety of iron objects and bronze ornaments were circulated. They were produced mainly in North-West Russian craft centres. At the same time, hoards, such as the Arkhangelsk one, were accumulating in the hands of wealthy traders.

We must also discuss briefly the region where the hoard was discovered. The northern part of the Lower Dvina area, from the delta of the Northern Dvina up to the region of present-day Kholmogory, played a special role in the development by the Russian population of both the Dvina area, the far north-east lands and the Polar regions of Western Siberia. This was the terminus of the military and trade routes from the Novgorod and Suzdal lands and the starting point of new routes to the Pechora tundra, across the Northern Urals. It is natural to assume that it was in this region of the future Pomor North that the local Russian population first appeared. In our opinion, the find location on the Vikhtui River is quite indicative. In the 1137 list of country centres ('pogosts') of Prince Svyatoslav Olgovich a pogost is mentioned 'near the Vikhtui'. It can be assumed that 'the Ivan pogost' 'on the Rakula', 'on the Spirkov' and 'near the Vikhtui' formed the group of pogosts on the Lower Dvina (Russian legislation 1984, vol. I, pp. 224–5). The administrative and military centre of the Lower Dvina area was in the 12th – 15th centuries situated on the Kholmogory. The settlement structures in the delta of the Northern Dvina were developing in the same time. In 1419, for example, 'the Murmans' came directly to the Dvina delta. They burned down the Nikolo-Korelsky monastery, the Konechny pogost, the
Fig. 15. Coins from the Arkhangelsk hoard.

2. Imitation of a Samanid dirham, Nasr ibn Ahmad, Andarāba 936/7.
7. Norway, second half of the 11th century.
8. Denmark, Sven Estriden (1047–1075), Slagelse.
Yakovlya kurya (stream-settlement), the Ondreyanov shore, the Kig island, the Kyar island, the Mikhailov-Arkhangelsky monastery, Tsyglomen and Khetsynema (the 4th Novgorod Chronicle). The northern part of Khetsynema has since the ninth century persistently been connected with Biarmalands in historical tradition. It is very fitting that it was in the Lower Ovina area of the Mayan shore, the Kig island, the Kyar island, and Khetsynema (the 4th Novgorod Chronicle) that our board was found – the first essential archaeological source on the Northern Pomeroy region.

The Arkhangelsk hoard is the largest coin hoard discovered in the north of the former USSR. It includes about two thousand coins and silver objects. The hoard is remarkable not only because of its size but also on account of its composition and time of deposition. With the exception of three Kufic dirhams (two Samanids and one imitation) all the coins are European denarii, typical of the late 11th and early 12th century coin finds from the East-European plain. The composition of the coins can be listed as follows: England 91, Germany 1797, Bohemia 2, Hungary 1, Denmark 11, Sweden? 1, Norway 3 (Fig. 15). The small number of Scandinavian coins could be increased by the imitations of Anglo-Saxon denarii which above are included among the English coins. Their number is 23; the overwhelming majority of them is certainly of Scandinavian origin.

The German coins which can be identified come mostly from the following areas: the Cologne area (212), Saxony (Westfalen, Niedersachsen, Ostfalen, 316), the Utrecht area (209), Frisia (including Eastern Frisia, 168), and Franconia (291). Among individual mints the most important are: Cologne (186), Speyer (95), Worms (90), Mainz (82), Deventer (65), Utrecht (56), Goslar (42 – not counting 38 Otto-Adelheid pennies and 102 imitations), Groningen (48), Thiell (40), Emden (40), Erfurt (29) and Jever (27). The hoard cannot have been buried before the first quarter of the 12th century. This is indicated by a considerable number of coins of the German Emperor Henry V (1106–25) struck in Goslar (33; Dannenberg 1876–1905, nos. 680a, 682) and a denarius of the same rul of Duke of Bavaria (Dannenberg 1876–1905, no. 799). To the latest coins belongs also a Halberstadt denarius of Bishop Reinhard (1106-25; Dannenberg 1876–1905, nos. 1568, 1570). Two denarii from Würzburg (Dannenberg 1876–1905, no. 2067) have been dated by Dannenberg to the time of Bishop Udalrich (1112–25) and more recently by H. J. Kellner to the early twelfth century (Kellner 1974, pp. 164–5, no. 74). Of special value for the dating is the Cologne denarius of Archbishop Friedrich I (1099–1131; Dannenberg 1876–1905, no. 420; Hävernick 1935, no. 443), belonging to end of his reign (Albrecht 1959, pp. 89–90, tabl. 11).

The oldest coins in the hoard are the Samanid dirham of Nuh ibn Nasr, struck in al-Shash in 945/6 and an imitation of the Samanid dirham of Nasr ibn Ahmad with the mint name Andarab and the date 936/7. The hoard thus includes coins from a period of more than a century and a half.

The latest coins are German. They are followed by the Anglo-Norman pennies of William I (1066–87) and II (1087–1100). The latest type of William I, known as 'PAXS' is the most numerous, followed by the two first types of William II, 'Profile' and 'Cross in Quatrefoil', dated to 1087–90 and 1090–93, respectively. In other words, the English coins do not change the dating indicated by the German coins. The Norwegian coins belong to the second half of the 11th century. One of them is dated by B. Malmer to the years 1055–80 (Malmer 1961, p. 360, pl. 3,3).

Next come the six Danish denarii of Sven Estridsen (1047–75). The later one of the Bohemian coins was struck for Prince Bretislav (1028–55). The Hungarian coin belongs to the reign of Stephen I (1000–38). Although the distribution of monetary silver from West and Central Europe is not unambiguous, the chronology presented above indicates the appearance of English denarii in Germany and Scandinavia and the late influx of German coins to the Lower Northern Dvina along the northern routes.

One of the main features of the Arkhangelsk hoard is its heterogeneous composition: together with coins from the tenth and early eleventh centuries – Kufic dirhams, English coins of Ethelred II and Cnut, and Ottonian coins from Germany – there are coins from the late 11th century and the first quarter of the 12th century. The same is true of the non-numismatic objects: together with more archaic artefacts there are Russian bracelets from the 12th century. All these facts speak of the influence of the Ancient Russian monetary system on the situation in the northern parts of the East European plain. Coins and precious metals were 'mobilized' as a result of reducing the inflow of the latter from the silver-extracting areas of Europe. This point has been discussed by N. P. Bauer and later by N.
The movement of silver was obviously determined by trade and the cultural connections of the northern Finno-Ugric peoples (Lapps, Finns, and Karelians) interacting with Scandinavians and Russians, rather than by any emerging local system of money circulation. This point is borne out by the resemblance of the Arkhangelsk hoard with Finnish and Scandinavian numismatic finds. We specifically mean the above-mentioned Kuolajarvi (Salla) hoard and the coin finds from the Lapp sacrificial sites in Scandinavia. The Kuolajarvi hoard, found in 1839, included 174 coins, silver objects, and a balance with a set of weights. It is dated to the first quarter of the 12th century by almost the same coins as the Arkhangelsk hoard: Goslar and Mainz denarii of Henry V and a Cologne denarius of Archbishop Friedrich I (Salmo 1948, pp. 37-9; Talvio 1985, pp. 31-35). The composition of the Kuolajarvi hoard is very similar to that of the Arkhangelsk find, but it is smaller. Both include English coins of Ethelred II, Danish coins of Sven Estridsen and denarii from the Utrecht-Frisian region. The finds from the Lapp sacrificial sites in Unna-Saiva, Gratrask and Rautasarje (Jammer, Linder-Welin, Malmer and Rasmusson 1956, pp. 183-222) also resemble the Arkhangelsk hoard. Besides numerous analogies in the composition of the western coins, the Gratrask and Unna-Saiva finds also included imitations of the coins of Yaroslav as well as objects of Ancient Russian origin. T. Arne even considered the Gratrask find to be of Russian origin (Potin 1968, pp. 148-9). One of the Norwegian denarii from Arkhangelsk can be compared to a similar coin from Rautasarje (Malmer 1961, p. 360, pl. 3,3). The above makes it possible to outline the ways in which western coins came to the northern regions of the USSR. Until 1989 only a series of finds from the basin of the Northern Dvina was known, but there were no finds from the lower reaches of the river (Potin 1990, pp. 240-54). This gap has now been bridged, and the existence of northern traffic routes for western silver coins has once more been confirmed. The Arkhangelsk hoard is important not only from the point of view of the archaeology, history and anthropology of the North, it also has a numismatic value of its own. It includes a series of rare coins which have not formerly been described in literature. Coins from the Corvey Abbey (Abbot Saracho, 1056-71) and Bohemia (an unpublished denarius of Prince Oldrich, 1012-34) can be mentioned as examples.

NOTES

1 The non-numismatic material is discussed by E. N. Nosov and O. V. Ovsyannikov, numismatic material by V. M. Potin.
2 The authors wish to thank A. M. Belavin for permission to use his manuscript 'Volga Bulgaria and the Perm Urals in the 10th-13th centuries — a study in cultural interaction.'
3 One of the mountings was broken, and a loose piece was analysed in the laboratory (HMMK) of the Russian Academy of Sciences by Dr V. A. Galibin, to whom the authors are deeply grateful. The transparent glass was composed of: SiO2 — a base, Al2O3 — 1.6%; Na2O — 13%; K2O — 4.0%; CaO — 9.0%; MgO — 6.0%; Fe2O3 — 0.5%; TiO2 — 0.08%; MnO — 1.2%; CuO — 0.002%. The chemical type of the glass (Si – Na(u) – Ca, Mg) corresponds to the so-called 'eastern recipe', in which saline land plant ashes dominate over sodium and nearly equal contents of calcium and magnesium are used as the alkaline element. Magnesium was added to decolorize the glass.
4 Taking into account the general dating of the barrows the Osmino cemetery in the Novgorod area, the axe-shaped pendant from Osmino can be dated to the 12th-13th centuries (Spitsyn 1896, no. 20, tabl. XII:22; Malmgren 1893, pp. 6-14; 1894, p. 75).
5 It should be noted, however, that regardless of the amount of identified coins, the pre-revolutionary sources reported the hoard as consisting of 'Kufic coins' (Markov 1910, p. 22, no. 158).
6 To prove his thesis that the exchange of silver for furs took place only on the Svir, A.M. Spiridonov contrasted the Svir hoard with only three small finds from the Omenga area, ignoring hoards of considerable size from Zavolochye, even though information on the Nikolsky find was available. It is methodologically wrong to discuss such a question without taking into account all the hoards known to the east of the Omenga area.
7 The only thing known about the Velikiy Ustyug hoard found in 1827 is that it included English and German coins of the 10th-11th centuries (Potin 1967, p. 176, no. 356); of the 1851 Cherdynskiy hoard the only information is that Anglo-Saxon and German coins from the 10th-11th centuries were found near the town (Potin 1967, pp. 161-2, no. 267). Of the 1890 Vologodskiy hoard of Kufic and English coins there is only the report that it was found (Potin 1967, pp. 175-6, no. 355). In 1969 'plenty of coins' were
found in a wooden box in Krasnoborsk. Of these, 43 have been identified (Potin 1974, pp. 151-2).

8 The Mikhailo-Arkhangelsky monastery, which gave its name to the town of Arkhangelsk, was founded in the late 14th century (Andreev 1988, p. 68).

9 For references to this question, see Jackson 1988, pp. 58-67.

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**ABBREVIATIONS**

АО — Археологические открытия. Москва.

ВИД — Вспомогательные исторические дисциплины

ГИМ — Государственный исторический музей. Москва.

ГЭ — Государственный Эрмитаж. С.-Петербург.

ИИМК — Институт истории материальной культуры. С.-Петербург.

МАР — Материалы по археологии России

МИА — Материалы и исследования по археологии СССР

СА — Советская археология. Москва.