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THE SWORD FROM OTSANLAHTI, KARELIA

Abstract

The article is devoted to the analysis of a find of the upper part of a sword with a disk-shaped pommel and a straight cross-guard, discovered under random circumstances on a private plot of land in the village of Otsanlahti (Kurkijoki, Republic of Karelia, Russia). A complex restoration and investigation were carried out with the item. The important feature of the find is its ornamentation and the character of its application. The overlay decoration made by a thin silver wire on the iron surfaces of the pommel and cross-guard. The traces of an inlaid mark on the sword blade were discovered by X-ray radiography. It's made by tin-lead alloy wire inlay and has a form of a vertical cross crosslet. The find can be placed in the context of a very representative series of weapons decorated in a similar technique. But the found mark on the blade was made in a very unusual technique for this period. The most likely region of their production should be sought in Southwest Finland or on Gotland. The time of manufacture, presumably, can be determined by the second half of the 12th century.

Keywords: Karelia, Middle Ages, weaponry, sword, manufactory techniques, element analysis, in-crustation technique, ornament

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INTRODUCTION

In 2017, the owner of a country plot in the settlement of Otsanlahti (Kurkijoki rural settlement, Lahdenpohja District of the Republic of Karelia; North-Western Ladoga region) found the upper part of a sword (without the lower section of the blade) during clearing out an area for building of a house. The find was for some time kept by

him but after the proposition of a local district police officer living nearby it was submitted to the Kurkijoki Centre of Local History 'Kiryazh' for storage, studying, and subsequent exposition. The finder wished to preserve his anonymity. The Director of the Centre M. I. Petrova and the curator N. A. Bakhmet'yeva received the find and then passed it to the present authors for restoration and studies. It is of note that a



Figure 1. North-Western Ladoga region. The arrow marks the findspot of the sword at the settlement of Otsanlahti. (Drawing by S. V. Belskiy.)

renovation of the archaeological exposition of the Centre is being at present realized. The find under consideration had already taken a key place in its composition.

Now the small settlement of Otsanlahti is located 2 km to the east from the centre of the

settlement of Kurkijoki (Fig. 1). It received its name after the bay which, in turn, is an eastern branch of the large gulf of Laikkalanlahti of Lake Ladoga. Throughout this region, predominantly on the coasts of the bays deeply cut into the coastline, a considerable number of archaeological



Figure 2.1. Sword from Otsanlahti. General view prior to restoration. (Photo: N. S. Kurganov.)

Figure 2.2. Sword from Otsanlahti. Sword's pommel with remains of textile. (Photo: N. S. Kurganov, layout S.V. Belskiy.)

sites of the Iron Age – Middle Ages are known, and a large collection of stray finds has been collected (Kochkurkina 1981: 18–9, 24, 28–9, 66–72, 105, 115; Uino 1997: 243–58; Saksa 1998: 131–50; Belskiy & Shmelev 2020: 142). The highest concentration of archaeological objects including hillforts, cemeteries, and hoards is reported from the villages of Kuuppala (now nonexistent) and Soskua situated near the findspot of the object under publication (Saksa 1998: 131). In different places of Otsanlahti itself, until now, only two chance finds of oval-convex brooches are known. One was revealed in 1895 (Uino 1997: 253); the second was found during the construction of a house in 2018 (submitted to the Kurkijoki Museum Centre of Local History).

The sword was found on a private land plot located near a country road leading to the settlement of Soskua. Now, at the place of the

find, a rock cleared from vegetation is found and the area of the plot is artificially levelled. Unfortunately, no other information is available to the authors on the archaeological context of the find and possible other artefacts nearby.

RESTORATION AND ANALYSES

Visual examination was carried out using a binocular microscope at working magnifications of 10–40 times. Metric measurements were taken with a ruler and caliper.

The elemental analyses were made without any sampling, directly on the surface by the micro X-ray fluorescent analysis. This method is non-destructive and microscopic equipment allows doing the analysis on the micro areas, which are less than 50 microns. For this purpose, the Artax (Bruker) μ XRF spectrometer was used. It

has (Mo) anode, polycarpellary lens. The setup parameters were 50 kV DC tube voltage, 700 μ A tube current, 65 μ m X-ray spot size, no vacuum, no filter. Time of spectrum accumulation were 40 sec. It should be noted that the chemical composition of the alloy at the surface and in the depth of the object may differ on archaeological artifacts that have been buried in the soil for a long time. The article presents results of the tests directly made the surface areas, which are visually clean from corrosion products. The data on the quantitative elemental composition presented in the study is the average value obtained from the three different spots.

X-ray radiography was used to investigate the internal structure of the artifact and to find the inlaid mark. The X-ray imaging examination was made with X-ray generator Eresco 42 MF4 (GE Sensing & Inspection Technologies¹) with wolfram (W) anode and beryllium (Be) filter. It has parameters of 5–200 kV DC tube voltage, 0.5–10 mA tube current, 4.5 mA tube current at 200 kV, 3 mm focal spot size (EN 12543). We used X-ray film Industrex MX125 Film (Carestream). The distance from object to X-ray generator was 100 cm. We made five images with different exposure setups: (1) 40kV, 10 mA, 3 min.; (2) 40kV, 10 mA, 9 min; (3) 60kV, 10 mA, 5 min; (4) 60kV, 10 mA, 7 min; (5) 60kV, 10 mA, 9 min. The best was made with the tube voltage of 60 kV DC, tube current 10 mA, exposition time of 5 minutes.

Common observations

The total length of the object was 318 mm. An examination prior to restoration showed no traces of its disturbance during its extraction from the earth (Fig. 2.1). All deformations and damages were of old origin. On the blade, cross-guard and pommel were deep cracks and surface exfoliation produced by the corrosion. On the pommel there preserved mineralized traces of a textile of linen weaving (Fig. 2.2). It was a plain weave fabric. Thread thickness was 0.2–0.4 mm. It can be assumed that this is woolen fabric.

The surface of the object was covered with brown products of the iron corrosion under which, elements of a goldish colour overlay ornamentation were noticed. Beneath the exfoliated layers, characteristic marks of intense



Figure 3. Sword from Otsanlahti. General view after restoration. (Photo: N. S. Kurganov.)

corrosion were visible. The object was in a poor condition and needed conservation and inhibition of the corrosion processes.

The find was subjected to an entire complex of conservation treatments: the fragile exfoliating surface was strengthened, small broken-off fragments were restored to their place, measures for inhibition of active corrosion processes were taken (Fig. 3). All the restoration procedures were preceded by detailed investigations, the main results of which are presented in this article. Any essential intervention in the surface of the blade: attempts of its mechanical cleaning or its cleaning with chemical reagents would have destroyed the inlaid mark revealed through

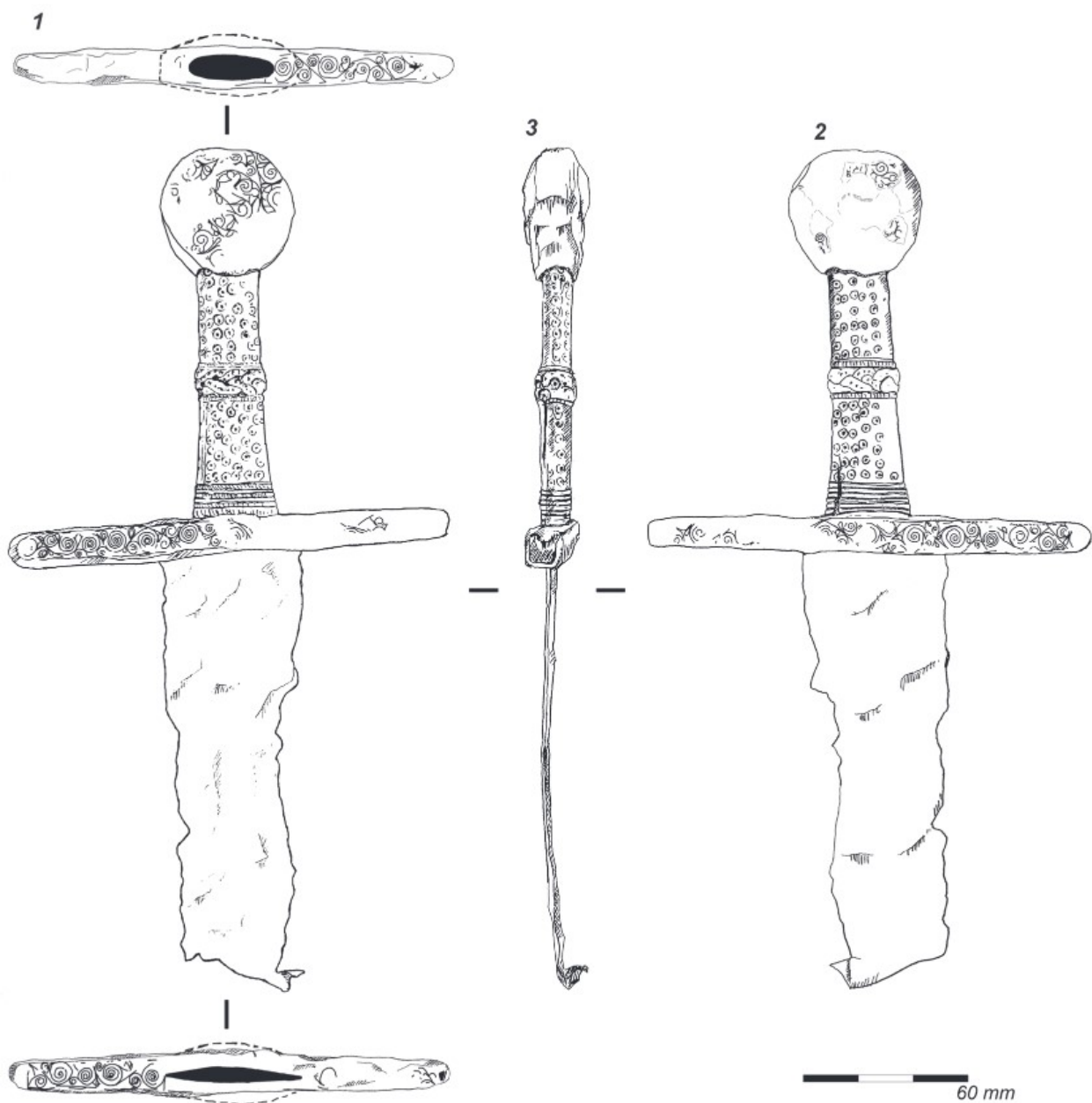


Figure 4. Sword from Otsanlahti. General view. (Drawing: S. V. Belskiy, N. S. Kurganov.)

X-ray photography and invisible by naked eye. The probability that the inlay would have been detected after cleaning even under microscope is extremely small because it is executed with the finest inlay of a tin-lead alloy which is close in colour to the steel blade. The controversial issue was about of preserving the traces of textile on the corrosion products or their removal in order to investigate the surface ornamentation under them. However, on the other side of the pommel overlay decoration has not been preserved, after

discussion it was to remove the traces of the textile and to expose the overlay surface decoration.

The conservation works made it possible to preserve the valuable artifact and reveal its rich overlay ornamentation on the sword's cross-guard and, as well as reveal the inlaid mark, determine the alloy composition of the handle and alloys of ornamentation and stamp inlay.



Figure 5. Sword from Otsanlahti. The view at the cross-guard from the top. Right and left sides. (Photo: N. S. Kurganov.)

Pommel

The pommel of the sword is of nearly discoid form 53 mm broad, 49 mm high, with the width of 18 mm at the edges and 26 mm in the centre, with slightly convex surfaces on which the traces of incrustation are present (Fig. 3, 4). On the lateral sides the overlay is not detected. The pommel is of one piece and without hollows.

Cross-guard

The cross-guard is 170 mm long, 13 mm high, quadrangular in the base, slightly tapering towards the edges and has rounded ends (Fig. 4, 5). In the area adjoining the blade, the latter is 18 mm wide, at the ends 11 mm wide. The decoration covers all its planes. The overlay partly continues to below the blade. Evidently, mounting of the blade and cross-guard was executed after the overlaying. Possibly, both the decorated cross-guard and pommel were manufactured separately from the blade because the width of

the latter is not fitted to the ornamentation. The cross-guard is considerably warped relative to the normal position. It is difficult to say whether this was a manufacturing defect, weak fastening or an indication that somebody attempted to disassemble the sword into parts or to break it.

Overlay decoration

A very important feature of the find under study is in the specifics of its ornamentation and the technique of its application. The decoration is executed using a thin silver wire (Ag – 96.0%; Cu – 2.3%; Pb – 1.3%; Au – traces; Bi – traces) in the technique of notching on the surface of iron elements of the object — the pommel and cross-guard (Fig. 3, 4, 5). The ornamentation has smooth curves. There are no broken lines indicating the preliminary engraving of the grooves. Where the exfoliation of fine particles of the wire had taken place, it is obvious that it has a very small thickness and under the wire there is no deep groove on the iron base. At certain areas of the overlay, irregular depressions are discernible on the surface showing a fine grid of hatches or strokes uniformly rendered under the design across the wire. The latter decorates richly not only the vertical but also the horizontal surfaces of the cross-guard demonstrating a remarkable peculiarity of the object under study. The goldish colour of the overlay is associated with the thin layer of the ferrous compounds formed on the surface of the overlay during the deposition of the object in the soil. Small admixtures of gold (ca 0.6 percent) are of a natural origin and could not considerably affect the colour of the alloy.

The hollow cast tube on the hilt of oval section, 92 mm long, was hafted onto the stem of the blade (Fig. 3, 4). It was made from a copper alloy (Cu – 84.3%; Sn – 12.5%; Pb – 2.9%).

The width near the pommel is 24 mm, that near the cross-guard is 34 mm, the thickness is 12 mm. At one end it has a defect caused by the decreased thickness of the wall during casting. This is an elongated lengthwise hole passing over practically the entire length of the hilt excluding its ornamental zone. On the same side, there is a sizeable rupture — a crack running from the cross-guard towards the middle of the hilt. Possibly, it arose during its hafting onto the stem and, subsequently, it may have increased

due to the inside pressure of the products of the corrosion of the iron.

The preserved part of the blade is 56 mm broad near the cross-guard and 44 mm at the opposite end, with the thickness of 4.2 mm near the hilt and 3.8 mm at the opposite end; 166 mm from the cross-guard, the blade was broken off (Fig. 3, 4). At the place of breakage, the metal shows traces of a rupture and plastic deformation. This fact suggests that the sword was broken still before the metal became fragile in the process of corrosion. Therefore, we have grounds to suppose that the object had been broken before it came into the soil. There are no traces of fuller on the preserved area of the blade.

The inlaid mark was unnoticeable during the visual and microscopic examination of the blade surface. It was revealed through X-ray radiography (Fig. 6).

The inlay was executed by thin lines of notches (0.4 mm) filled with tin-lead alloy wire (Sn – 91.3%; Pb – 8.3%; Cu – 0.4%) hammered in a preliminarily prepared groove on one side of the blade. It was difficult to find the site for the XRF measurement because corrosion products hide the inlaid mark. Measurement area was located according to the X-ray radiography image and the intensity of the signal of Sn emission lines. In all results there was a presence of Fe, but this was excluded from calculations. Final results represent approximate composition of inlaid mark material.

The mark is positioned almost in the centre relative the axis, 88 mm below the cross-guard. It represents a vertical cross with one crossbar and double notches at the edges (Fig. 6.2–3). The lower part is worse preserved so that the form and size can only be presumed while its lower limit is however discernible. The size of the mark is approximately 25×10 mm.

In publications dedicated to study the sword blades with inlays or inscriptions traditionally materials of the inlays are Fe-alloys. This alloy is different in composition from the blade in carbon phosphorus content. The manufacturing technique of such inlays is described as cold hammering or hot welded in grooves (Moilanen 2009: 27). We emphasize, that in our case, the inlay mark is made with a different tin-lead alloy. Probably, the technique was cold hammering of very soft inlaid mark tin-lead alloy in hard

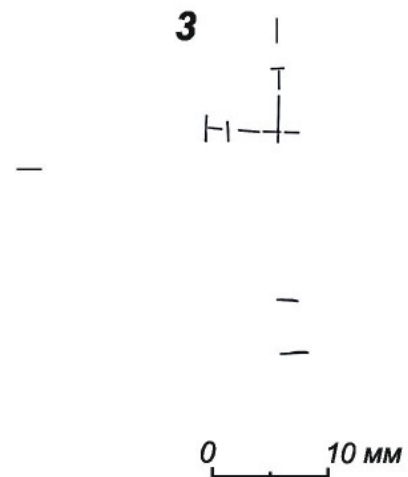
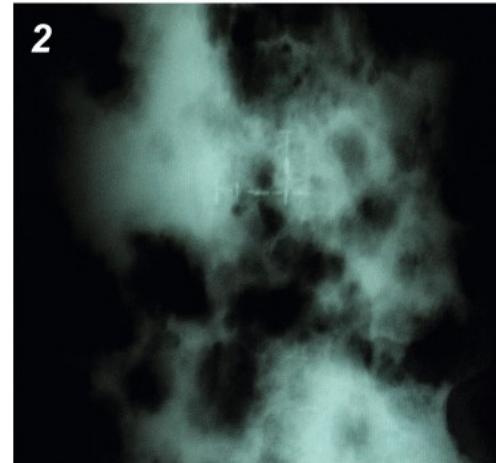


Figure 6.1. Sword from Otsanlahti. Results of X-ray photographing. (X-ray photo: N. S. Kurganov, D. S. Prokuratov.)

Figure 6.2. Sword from Otsanlahti. Results of X-ray photographing. Stamp on the blade. (X-ray photo: N. S. Kurganov, D. S. Prokuratov.)

Figure 6.3. Sword from Otsanlahti. Stamp on the blade. (Drawing: N. S. Kurganov.)

blade Fe-alloy. Or it was made using the brazing (*soldering*) technique at much lower temperature than welding requires.

TYOLOGY AND ANALOGIES

Based on the morphological peculiarities, the pommel of the sword under publication can

be attributed to type G after Oakeshott and the cross-guard to style 1a after Oakeshott (Oakeshott 1964: 95, 96, 113). Swords with pommels of this type are well known in Karelia; they come from the complexes of the burials at Kekomäki 1:3 and 3:1 (Kirpichnikov et al. 2006: 51–3; Moilanen 2015: 271, Fig. 119). At the same time, these objects are united also by their

splendid overlay decoration over the surface of the iron elements.

Analogues. The finding of the sword from Otsanlahti can be considered in the context of a very representative series of objects of weaponry decorated with a similar overlay. They were analyzed in the recently published article devoted to the finding of a cross-guard in the Bolshaya Moskovskaya Str. in Novgorod in 2014 (Kainov & Oleynikov 2020: 169–78). The narrow dating of the archaeological context of the find (early 13th century) is important for the chronology of the use of the swords decorated in this way (Kainov & Oleynikov 2020: 176).

On the sword from Otsanlahti, the ornamentation of the cross-guard is stylistically and technologically similar to the decorations on the analogues mentioned above. However, the composition on the cross-guard is slightly differing in terms of the form where expansions are absent on the cross. The plant pattern is composed of large spirals and small volutes and leaves. The composition resembles the motif of the so-called ‘Greek wave’ with some complications. The decoration is executed with a line of a slightly changing thickness (0.5–1.1 mm). On the cross, the pattern is expanded horizontally like a wavy meander; along the edge there is a traceable straight-line framing. On the pommel, the composition is inscribed into a circular form and is considerably worse readable because of the poor state of its preservation.

S. Yu. Kainov and O. M. Oleynikov note that swords are not the single objects of weaponry ornamented in a similar style. The same series includes finds of several spearheads and axes (Kainov & Oleynikov 2020: 175, Fig. 6).

The best preservation has the sword from Eura, Pappilanmäki found in Western Finland (Leppäaho 1964: 84–6, Taf. 40, 41; Kivikoski 1973: 143, abb. 1166). The pommel is discoid form, belonging to type G according to the typology of E. Oakeshott or type A according to the typology of L. Tomanterä (1980; see also Oakeshott 1964: 95, 96; Moilanen 2015: 270–4). The entire surface of the pommel is decorated in the technique of notching by silver wire forming a floral and geometric ornament. The ornamentation of the central medallion and the discs on the cross-guard, stylistically and technically, coincides with the ornamentation of the central

medallion of the Novgorod cross-guard (Kainov & Oleynikov 2020: 171, 172, Fig. 4). Similar palmettes are also applied to the end surface of the Eura sword’s pommel. The cross-guard is ornamented with a spiral floral ornament.

The sword from the burial 3: 1 of the Kekomäki burial ground is much worse preserved (Leppäaho 1964: 90, 91, Taf. 43). The disc-shaped pommel is decorated with four cruciform palmettes, surrounded by a rim with a spiral ornament. The central medallion and the extensions on the cross-guard are octagonal in shape and are also overlaid with cruciform palmettes. The swords from Kekomäki cemetery and found near the village Melnikovo (Räisälä) are similar to the specimens found in Eura and in burial no. 3: 1 in Kekomäki in terms of the shape of the details of the hilts (Kirpichnikov et al. 2006: 52, Fig. 16, 33). In addition to the complex morphology of the cross-guards, the details of these swords are distinguished by a silver overlay. On the territory of Finland and Karelia, at least two swords with disc-shaped pommels decorated with ornaments made using the notching technique are known (Leppäaho 1964: 88, 89, Taf. 42; Moilanen 2015: 272, 273, Fig. 121). Swords are not the only weapons ornamented in a similar style and technique. M. Moilanen (2015: 273) mentions five spearheads and two axes decorated in a similar way. One more axe was found in the partially destroyed burial 1 of the Gromovo Sakkola) 2 cemetery on Karelian Isthmus, and another one at the village Pozhnyastanok in the Kostroma region (Smirnov 1940: 304, 305, Fig. 1; Belskiy 2018: 187–93, Fig. 59).

There are also known finds of swords decorated in a similar technique in Estonia (Mandel 1991: 122). However, it should be noted that the ornamentation of Estonian cross-guards of swords differs in detail from the ornamentation of weapons from the territory of Finland and Karelia (Kainov & Oleynikov 2020: 176, footnote).

We suppose that the same series possibly comprises also the remarkable belt set from burial no. 8 from the cemetery of Kylälahti Kalmistomäki in the North-Western Ladoga region dated to not earlier than the 14th century (Laakso & Belskiy 2018: 58, Fig. 25). No parallels to the latter still have been found. The belt was discovered in a female burial but laid along

the right side of the dead constituting no part of her funerary costume (Laakso & Belskiy 2018: 56–8). Such an untypical situation suggests that the belt can have been a funerary gift. Hence the limits of its use may be expanded.

The similarity of the technology and style of the ornamentation suggests a single centre of manufacture of the objects under consideration, or even a single workshop during some brief period. So far, there is no common opinion as to where these articles can have been made. There are no grounds to suggest the existence of this centre in Karelia or eastern Finland. The absence of finds of this kind in Eastern Europe also generally allows us to exclude this vast region. In Novgorod, where many articles for Karelian residents were produced, so far, a single find was made in a complex where numerous imported objects are present (Kainov & Oleynikov 2020: 170, 171, 176). Hence the most probable region of their manufacture should be searched for to the west from Karelia. This could have been Varsinais-Suomi (South-Western Finland) or, still farther westwards, Gotland. The view that “Hanseatic German towns, perhaps the island of Gotland” may have served as the place of manufacture of similar swords has already been proposed (Kirpichnikov et al. 2006: 46). Also, the attention has already been paid to the ties of the material culture revealed at Karelian burial grounds, although of a slightly earlier period, exactly with sites of Gotland (Belskiy 2018: 222, 225, 231, 235, 249).

Chronology. Of no less importance is the question of the time of the manufacture of the series of objects under consideration. We will propose a cautious supposition that it may be defined as the second half of the 12th century. This is suggested by the archaeological context of the find of a cross-guard in Novgorod (Kainov & Oleynikov 2020: 176) and some specific features of the Karelian finds.

Concerning the sword from Otsanlahti, of note is such an element as the tube of the hilt from tin bronze which evidently is an alien detail discordant with the style of the design of the entire object. Similar, although differently ornamented tubes are known yet at two examples of swords found in the Karelian Isthmus: the one from a male burial in grave no. 5 of the cemetery of Kekomäki and a stray find from Kiviniemi

(Kirpichnikov et al. 2006: 53, 55, 56, Fig. 29, 31). It is noteworthy that the pattern on these elements repeats the motifs known at other categories of ornaments characteristic of Karelian burial grounds and often found, e.g., on the oval-convex or silver horseshoe brooches. In addition, the authors of the present publication noted that the pommel and the hilt tube of the sword from Kiviniemi differ from each other in the style of their execution and obviously were manufactured in different workshops (Kirpichnikov et al. 2006: 56).

All noted above is completely true as the sword from Otsanlahti is concerned. The surface of the tube is decorated in differing techniques: cast design in the centre in the form of two interlaced cordons; nearer to the cross-guard there is a fine cast design located around the circle of the hilt. All the free planes are covered with numerous strikes of the punch with a circular pattern.

The composition is multilevel (from below upwards): five flattened belts separated by grooves; and two fields of equal size separated through a broad belt. The latter is marked by cordons with toughly adjoining notches (differently directed); the entire field of the belt is covered with a ‘guilloche’ motif constituted by two broad slightly convex cordons decorated with dot depressions.

The basic ornamental fields are filled with a circular design made with a punch. The composition is constituted of thickly positioned circles, 4 mm in diameter, with a dot depression in the centre of each one. The elements of the circular design have no strict order. It seems that this decoration was rendered in order to fill by chaotic strikes as much as possible of the spare plane of the hilt. It is noteworthy that the chased design continues beneath the pommel of the hilt and, correspondingly, it possibly had been executed on the hilt prior to the final assemblage of the sword.

Differences in the ornamental form of elements of swords are found not only on the tubes of the hilt stems but also on the chapes of the scabbards. The authors of the publication about sword from Karelia noted that the designs of the hilt of the abovementioned sword from the burial of Kekomäki 1:3 differ from those on the chape of the scabbard. In their opinion, the scabbard was manufactured for an imported sword in the

style of the Karelian jewellery art (Kirpichnikov et al. 2006: 53).

CONCLUSIONS

It may be thus supposed that the ornamentation of the hilt stems by tubes or the decoration of the chape of a scabbard (so far found as a single example but, in our opinion, illustrating a tendency) at a number of swords was a local innovation and an originally non-envisaged addition arisen according to the local 'tastes' in ornamentation. It must be noted that in order to install the tube on the stem of the blade it was at least necessary to dismantle the pommel and afterwards to fix it again. The local artisans or those who manufactured these objects at orders of mediaeval residents of Karelia added these details to the swords which evidently had been already used for some period in the culture. Possibly this took place during the 13th century because it is exactly to this period that the main mass of Karelian burials containing finds with characteristic designs are dated. In other words, the swords themselves had been manufactured outside Karelia slightly earlier, possibly in the second half of the 12th century. They enter into the archaeological context, similarly to other iron objects decorated in the specific technique of overlaying with thin silver wire over the iron surface, in the 13th, perhaps, second half of the 14th century. The question of the time of occurrence of this decorative tradition remains debatable.

The place of the find can serve as still other important evidence on the general cultural context of the object. M. I. Petrova, after careful interdisciplinary studies of the water portage routes of Kiryaszh (Kurkijoki) Pogost, made a very valuable note which should be cited in full: "The Soskuajoki River falling into Bay Kurkijoki is very sinuous and rich in rapids in its lower reaches. The expeditions for furs and other northern trade goods took place, as a rule, in wintertime. The shallow-water rivers, rather incommodious to navigation, in winter were used as convenient sled roads. Near the rapids, the insecure ice or open water were threatening with danger. During planning the itinerary it was sought to shorten the way as much as possible and to evade such places. It may be supposed that the winter way on the Soskuajoki was

started not from the mouth of the river but from the base of Bay Otsanlahti which was a branch of Bay Kurkijoki. On the shore of Otsanlahti there was a convenient place for trading — Cape Turkulaisniemi with a bay protected by Karvalinvuori where a fort and an observation post were, evidently, located. A small creek with a boggy delta and several spring tributaries fell into Bay Otsanlahti. After having passed round the rapids and found themselves in a mountain gorge, the travellers began to rise via the frozen creek to Lake Ohtjärvi" (Petrova 2018: 568). Further on, from the mentioned lake, the reconstructed route passed as far as the River Iijoki which led to its source, the Lake Iso-Iijärvi. From the latter, through a system of portages, it was possible to get to the Lake Pyhäjärvi. It is exactly this lake connected with Orivesi that is mentioned in the well-known description by Nousia Venäjäläinen of the northern route leading to Kem on the White Sea and Oulu at the Gulf of Bothnia (Vilkuna 1972: 8, 9).

In other words, from Bay Otsanlahti, i.e., the place of find of the sword here published, the trade route began which led to the system of the Saimaa lakes and, farther on, north-westwards to the coast of the Gulf of Bothnia via the lacustrine-riverine system well-known through written and ethnographic sources.

Archaeological investigations of recent years suggest that the burials of the Iron Age, most remarkable in terms of the grave inventory and burial rite in the North-Western Ladoga region, are found on promontories near the mouths of the rivers which are relatively large for this region flowing from the north-west and falling into Ladoga. It is of importance that it is just particular single burials which do not constitute any large burial grounds. It is highly probable that burying of particular representatives of the ancient community exactly near the mouth of a river was a distinct indication of the control of a certain collective over a definite territory with the river constituting its axis as an important transport artery. The finds of hoards of coins and objects not only of the Viking Age but also of general Middle Ages mostly come also from similar places.

In the context of archaeological markers of the ancient waterway from Karelia to the Gulf of Bothnia, it must be remembered that a find of

a complete sword with a discoid pommel typologically similar to the one published now was discovered as early as in 1883. This artefact was discovered by a local miller near the slope of the bank of the River Kokkojoki which constituted an important length of the route from Ladoga to the surroundings of Oulu. Presently this is a territory of the municipality of Valtimo in the Province of North Karelia (Finland). This locality even now is very little populated. The find under consideration is interpreted, according to the miller, as provenient from a “burial of a warrior” since he mentioned also “charred bones” near it (Vilkuna 1972: 21).

Thus, it cannot be ruled out that such a richly decorated and evidently expensive object as the published sword was found not accidentally in Otsanlahti. Very possibly, it comes either from a single burial with a rich grave inventory or from a hoard or represents a sacrificial gift of a kind. In the latter case, it is of note that the objects thus interpreted began frequently being revealed among the archaeological materials from Karelia. Indirectly, the ritual character of the find under consideration is suggested also by the fact of the breaking of the blade of the sword having taken place prior to it getting into the earth. This subject needs a particular study within the context of the archaeology of the Iron Age in mediaeval Karelia.

NOTES

¹ Currently Waygate Technologies.

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