



The craft and jewellery box from Kõue, Harju County

Jaana Ratas

Tartu Ülikooli Viljandi Kultuuriakadeemia (University of Tartu, Viljandi Culture Academy), Posti 1, 71004 Viljandi, Estonia; jaana.ratas@vesilind.ee

Mauri Kiudsoo

Tallinna Ülikool, arheoloogia teaduskogu (Archaeological Research Collection of Tallinn University), Rütli 10, 10130 Tallinn, Estonia

INTRODUCTION

In the years 2013–2016, seven hoards were discovered in Kõue, South Harju County. Their locations mark a late Iron Age road, which may have led to caves in the Kuimetsa karst area, also known as the caverns of Iida, used as a place of refuge in prehistoric times (Kiudsoo 2016a, 179). The most surprising thing about the Kõue hoards is their density and content. Hoards located so close together had previously been found only in Varja, Ida-Viru County (*ibid.*). The dating of the jewellery in the Kõue finds gives us completely new information. It turns out that the work of Estonian silversmiths began at least a hundred years earlier than previously thought, just after the end of the Viking Age, in the third quarter of the 11th century (Tamla & Kiudsoo 2014, 216). During this period, the quantity of silver brought here in the form of coins, which was necessary for making jewellery, was several times greater than in any other period in Estonian history. Although four Kõue silver hoards were collected at different times (*tpq* 1051–1097), they were probably buried, along with two wealth deposits consisting of copper alloy jewellery, and a craft and jewellery box, due to one and the same event. This could have been, for example, a military expedition or a raid that passed through the area around the year 1100 (Kiudsoo 2016a, 179–188).

In June 2016, an assemblage of jewellery was found by metal detector hobbyist Rene Vinkler at Nutu village (prehistoric Kõue settlement) (AI 7654). Historic maps and observations made during the excavation indicate that the location of the Kõue hoard used to be a wetland, which drainage and ploughing had mineralized. The absence of finds characteristic to a settlement site of the prehistoric period in the excavation as well as in the surrounding field suggest that a place farther from dwellings had been selected for the deposition of



Fig. 1. Digging out the block.

Jn 1. Monoliidi väljakaevamine.

Photo / Foto: Mauri Kiudsoo

the find. The nearest settlement site with prehistoric habitation material is at a distance of about 300 m from the find spot (Ratas & Kiudsoo 2017, 1–4).

The whole find was removed from the earth as a block (i.e. together with supportive soil) by archaeologists Mauri Kiudsoo and inspector of archaeological monuments Nele Kangert (Fig. 1). The opening process was carried out in laboratory conditions by Jaana Ratas (Ratas & Kiudsoo 2017).

COMPOSITION AND DATE OF THE BOX

Before opening the box, it was first examined by computer tomography and X-ray. This allowed the general arrangement and location of the objects inside the block to be seen. X-ray and tomography images revealed a dense assemblage of finds with a diameter of approximately 20 cm and a thickness of 5–6 cm, also sparse fragments of spiral tube ornaments (Fig. 2).

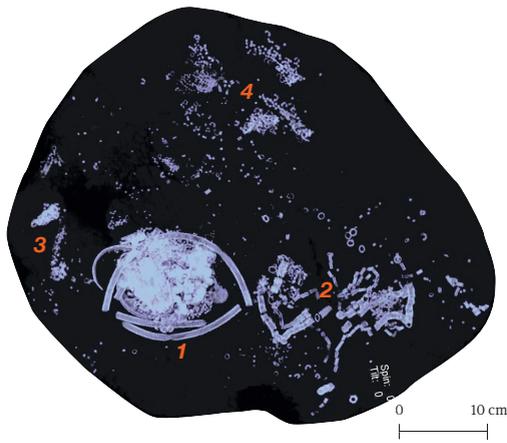


Fig. 2. Top view of the block before opening. Tomography images stacked together. 1 – assemblage of jewellery and craft materials, 2, 3, 4 – remains of spiral tube ornaments.

Jn 2. Monoliidi pealtvaade enne lahtivõtmist (kihiti asetatud tomogrammide). 1 – tihe kogum esemeid ja käsitöömaterjale, 2, 3, 4 – spiraalitorudest kaunistuste jäänused.

Tomograph image / Tomogramm: Estonian Forensic Science Institute / Eesti Kohtuekspertiisi Instituut



Fig. 3. Lump of scrap pewter.

Jn 3. Tinasulami tükk.

(AI 7654: 93.)

Photo / Foto: Jaana Ratas

100 finds, mostly women's jewellery – two bracelets, a ring, six complete and several broken pewter pendants, four ornamental coins, 19 pewter and about 50 glass beads – were extracted from the assemblage. The artefacts were in different states of preservation, some pewter pendants broken to small pieces, a number of glass and pewter beads disintegrated into sand-like powder. Except a few loose items in the upper, disturbed layer, most of the beads and pendants still formed rows, indicating that they had been strung on a yarn or thread. Further examination is needed to ascertain their sequence, to know whether they were ready-made necklace(s) or objects just strung randomly for storing. The Late Iron Age grave finds from Estonia, Latvia and Finland show us that the necklaces are arranged in regular patterns, where beads alternate with pendants. Pendants that appear in pairs are usually placed symmetrically (e.g. Selirand 1974, 136; Lehtosalu-Hilander 2000, plates 31, 37, 41; Zariņa 2006, plates 155, 175, 177, 194, 199). Also, at the very bottom of the assemblage a unique find was recovered – a lump of pewter as scrap material, shaped as a sheet, cast in a thin layer onto a flat surface, and then folded together (Fig. 3).

In addition to the jewellery and the piece of pewter, a stratum of tiny coiled wire tubes was found in the core assemblage (Fig. 2: 1). Spiral tube decorations, made of copper alloy wire, were spread along the eastern shore

of the Baltic over a long period. These decorations were especially abundant in the Late Iron Age, in most cases adorning the edges of women's festive garments (Rammo & Ratas 2015). The spiral tubes in the core area of the hoard were not arranged in a regular pattern. Most of them lay in an oval cluster (Fig. 4). This can be interpreted as a packed supply of raw material for making costume decorations. Some amount of the spiral tubes formed rows, with bits of poorly preserved thread or yarn inside some tubes. Such ways to store spiral tubes strung on thread or wrapped in linen cloth is known in the 13th century jewellery and craft box from Lõhavere hill fort (Laul & Tamla 2014, fig. 33: 3, 4). Similarly, both variants may be possible for Kõue find. Four big spiral tubes surrounding the core assemblage can be considered as uncut raw material. Moreover, digging revealed tiny scraps of birch bark around and under the compact deposit of finds. Bark was also found being stuck on the big spiral tubes. Probably the big spiral tubes were placed curved along the edge of a birch bark box and mark the shape of its bottom. In addition, remains of bark, the arrangement of the jewellery and the oval shape of the spiral tube stratum may refer to a fact that all the items from the compact core area described above had been packed into a smaller birch bark box (Fig. 4: A) inside the big one (Fig. 4: B). A well-preserved example of birch bark box containing smaller boxes with grouped objects (jewellery, craft supplies) is known from the above mentioned Lõhavere find (Laul & Tamla 2014, 17–37).

In addition to the compact artefacts assemblage described above, remains of ornaments made of spiral tubes and ringlets could be seen in the block. Those were located apart of the core assemblage, in different directions, the entire content of the block measuring about 45 × 50 cm (Fig. 2: 2–4). Also loose spiral tubes and ringlets were dispersed all over the block, forming a thin layer. The spiral tube ornaments had been probably disturbed and scattered by later ploughing. There was no textile preserved in Kõue hoard, except some tiny bits of yarn, hence the ornaments consisting only of loose spiral tubes were extremely delicate and needed particular care when digging and documenting.

The spiral tube decorations in the box could be either from separate ornaments ready for usage or from garments onto which they were attached. Numerous wire ringlets with a special kind of deformation indicated that textile items had existed in the box. Such ringlets

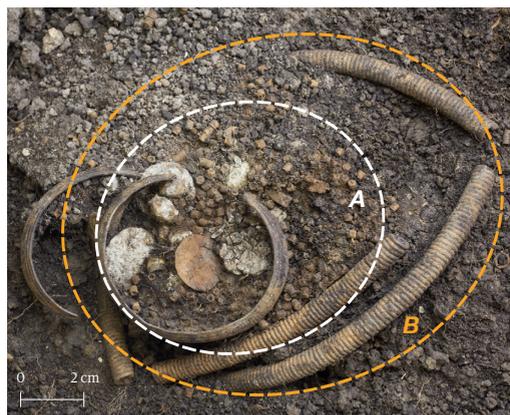


Fig. 4. Dimensions and location of the possible birch bark boxes.

Jn 4. Oletatavate vakkade mõõdud ja paiknemine.
Photo / Foto: Jaana Ratas



Fig. 5. Spiral tube decoration of a garment.

Jn 5. Rõivaeseme jäänused – spiraalorudest kaunistused.
Photo / Foto: Jaana Ratas

were frequently used in the Late Iron Age clothing to attach different details to each other, e.g. spiral tube decorations to the cloth (see Rammo 2006, figs 3, 5). One group among the decorations was almost intact, being composed of different border and corner elements (Figs 2: 2 and 5). All ornament details have been attached to each other, thus forming the outlines of some (rectangular) clothing item. The remains of the decorations need further examination. It is probable that textile items had once been packed in the bigger box.

Beads

Besides the above mentioned spiral tube decorations and fragments of birch bark, there were also several ornaments in the find. The majority of items found were glass beads (Fig. 6). Kõue box contained more than 50 small glass beads, about a half of them metal foiled (Fig. 6: 1, 2). As glass beads were not manufactured in Estonia at that time (Kallis 2010, 153–154), they were apparently imported from Russia and Scandinavia, some bead types probably from more distant regions. Kõue metal foiled beads most probably originate from northwest Russia, as presumed by their appearance – metal foil covered only part of the bead (Shchapova 1972, 85). At the same time, preliminary research indicates that Kõue beads (or part of them) could be covered with ‘false gold foil’¹. From the beginning of the 11th century until the 13th century beads partly covered with silver foil and transparent, slightly yellowish glass top layer were quite common in ancient Russia and also in some parts of Latvia. This kind of production technique made an impression that beads were covered with real gold foil (Kallis 2010, 153–154 and references).



Fig. 6. Glass (1–4) and pewter (5) beads.

Jn 6. Klaas- ja tinasulamist helmet.
(AI 7654: 4, 2, 77, 92, 86, 81, 20, 65.)

Photo / Foto: Jaana Ratas

Besides the above mentioned small beads, the Kõue box includes a single big blue annular glass bead with longitudinal ribs (Fig. 6: 4) and a specimen decorated with ring-and-dots and intersecting lines (Fig. 6: 3). The last-mentioned bead originated from Central Asia, perhaps from western Turkestan. In Scandinavia that type appeared at the end of the 10th century; in Novgorod and elsewhere in present day Russia they have been dated to the 10th and beginning of the 11th century. In Finland too, dark blue glass beads with ring-and-dots and lines are characteristic of the end of the Viking Age (Tvauri 2012, 148 and references). In addition to glass beads, there were about twenty barrel-shaped pewter beads in the handicraft and jewellery box from Kõue (Fig. 6: 5).

Copper alloy ornaments

Two narrow and concavo-convex bracelets made from copper alloy sheet were similar by size and design (Fig. 7: 1, 2). Such kinds of specimens are called Livian type bracelets in archaeological literature (Mägi 2002, 106; Tamla 2005, 105–119). The closest parallel of Kõue bracelets

¹ Preliminary analyses made by Ragnar Saage (TÜ).

was found from the Savastvere wealth deposit which was discovered in North Tartu County, about 7 km west of Lake Peipus, and has been dated to the first half of the Latest Iron Age (1050–1200/1250) (Kiudsoo 2008, 92; 2016a, 185).

There was also a copper alloy finger-ring with volute (Fig. 7: 3) in the Kõue box. Analogous finger-rings were worn in Estonia from the 4th century AD onwards and they were in fashion until the end of the Viking Age or even later (Tvaauri 2012, 165 and references). Rings with double-spiral ends were recorded so far only in two Estonian wealth deposits buried in the 1030ies (Klooga, Varja VII) (Kiudsoo 2016a, figs 75, 101).



Fig. 7. Bracelets and a fingerring.
Jn 7. Käevõrud ja prillspiraalsõrmus.
 (AI 7654: 10, 11, 16.)

Photo / Foto: Jaana Ratas

Pewter pendants

The pewter pendants of the Kõue craft and jewellery box appeared to be unique in Estonian archaeological record. Two of them copy the silver coin – *srebrennik* – of Old Russian sovereign, grand duke of Kiev, Jaroslav Wise. Only eight specimens of the first type of this coin are currently known in the whole world (Gaydukov & Kalinin 2012, 431–432). But coins minted with the stamp (see Sotnikova & Spasskiy 1983, no. 222), which has been the direct model of the Kõue pendants, have been found only in four cases (Leimus 1995, 23). Besides the stray find from the lands of the Raadi manor, an analogous coin occurred also in the Kose hoard, discovered in 1982 (*ibid.*), the findspot of which lies at a distance of only 12 km – as the crow flies – from Kõue.

The front side of the Kõue pendants bears the bust of St. George together with a respective Greek inscription (Fig. 8: 1); on the rear side the Rurik's trident can be seen, also surrounded by unambiguous text, showing that it is Yaroslavl silver. Previously only five specimens of analogous tin or pewter pendants have been found: four from Northern Sweden (Lapps' sacrificial sites) and one from Novgorod (see Serning 1956, 68, 126, 149; Sotnikova & Spasskiy 1983, 202). Although during the last twenty five years about 20 tin pendants resembling Yaroslav's silver coin have been found from Novgorod and its neighbourhood, these have been later progressions. The only new find, identical with the Kõue and North-Swedish specimens, might be the pendant found on the bank of the Volkhov River in mid-1990ies² (see Gaydukov & Kalinin 2012, fig. 22: 3). In Russia, it is considered that the manufacturing of such pendants began at the end of the first quarter of the 11th century, but they were made also later (Gaydukov & Kalinin 2012, 431–432). Since the Kõue specimens come from a so-called closed find, which can be dated by the coin pendants included there, we have the first opportunity to actually date this type of pendants more accurately.

The appearance of the Yaroslav's pendants in the Sami settlement area is probably related to the important trade route that passed along the North Estonian coastline, connecting Scandinavia with Northwest Russia in the 11th century. Those pendants probably arrived to

² P. Gaidukov in an e-mail to Mauri Kiudsoo.



Fig. 8. Pendants.

In 8. Ripatsid.

(AI 7654: 41, 53, 22.)

Photo / Foto: Jaana Ratas

Lapland thanks to trade. For example, two Byzantine folles of Theophilus, which reached Scandinavia in the 10th century, found in a female burial in the Ångermanland County in North Sweden, have been interpreted as connected with fur trade (Kiudsoo 2016b, 12 and references). The significance of the Bothnian coast in Saami Prehistory has been little discussed in Sweden. Recent archaeological finds, dating from the Viking Period, provide new evidence of Saami settlement in northern coastal Sweden. During the period 1000–1100 AD, the Saami artefacts (including Yaroslav's pendants) were mostly of eastern origin, deriving from Finland, Russia and the Baltics. This is also the main period of the Saami metal offer or depositing sites in the hinterland (Broadbent 2010, 11, 38, 146 and references).

It is also possible that the prototype of Yaroslav's pendant reached Kõue by commercial activity. At the same time, we cannot entirely rule out military campaigns of 1054. There are relatively few written accounts from the 11th century about Estonia and its settlement. A possible exception is Keava hill fort in South Harjumaa, situated approximately 20 km southwest from the Kõue findspot, which was mentioned in East Slavonic chronicles as early as in 1054. It describes a military campaign led by Izjaslav, Grand Prince of Kiev, during which they took an Estonian hill fort called *osek Kedipiv*, which translates as 'the Hand of the Sun' (Mäesalu 2012, 196).

The reverses of coins of two different rulers of Anglo-Saxon dynasty have been used as models for at least six of the remaining pewter pendants of the Kõue craft and jewellery box, five of which are identical and well determinable: on one side Aethelred II, the so-called *crux type*, 991–997, on the other Cnut's so-called *quatrefoil type*, 1018–1024 (Fig. 8: 2). Although the number of discovered tin pendants of the 11th century has recently begun to increase (Ratas & Kiudsoo 2017, 13), the Kõue find is still a really exceptional case: it also includes a lump of scrap pewter (42.14 g) (Fig. 3), the composition of which can be compared with the ornaments in the box. Preliminary analyses made by Ragnar Saage suggest that both the pendants and the pewter beads have been cast of an alloy of similar composition, thus indicating the production of a local Kõue craftsman.

Ornamental coins

The latest of the four ornamental coins, which all have a riveted flat loop of copper alloy sheet for hanging, is an anonymous specimen minted in Münster, Germany, in the last quarter of the 11th century (from 1075) (Fig. 8: 3). Since it has no test marks – pecks – scratched on it by

a sharp object, which indicate the circulation frequency and speed of coins, the interval between the date of minting and wearing cannot be long. Although Estonian archaeological material contains evidence that coin pendants were still used as ornaments for a long time after their minting (Kiudsoo 2007, 201), that is unlikely in the case of the Kõue specimen, which looks as if freshly minted. Numismatists base the dating of hoards on the earliest possible time of minting, not the circulation or wearing, of the latest coin in its composition, therefore the *tpq* (Latin *terminus post quem*) of the Kõue box is 1075. Thus, the craft and jewellery box was probably buried due to the same event as other hoards found in Kõue.

CONCLUSION

Kõue VII hoard, turning out to be a jewellery and craft box probably made of birch bark, affirms that hoards recovered may initially have contained more than coins and jewellery. Soft organic materials like textiles or wood decay easily in the soil and leave only minimal traces. Tin and pewter objects may be very delicate and therefore preserve poorly. Often the hoards have been disturbed by ploughing or vandalized by treasure hunters. If the deposit is found intact and dug out as a block, more detailed information can be obtained with further studies in the laboratory, where efficient lighting and tools are available. So, all the tiny details can be detected which may not be noticed in outdoor conditions.

We presently know three hoard finds in Estonia identified as boxes containing craft materials as well. Two of them, one made of birch bark and the other woven of bast, have been dated to the 13th century and have been found in Lõhavere hill fort (Laul & Tamla 2014). The Kivijärve hoard, dating from the 16th century, has also been supposed to be a container of both ready-made pieces and raw materials (spiral tubes) (Rammo & Kangert 2015). Thus, the Kõue hoard number VII is the earliest of the handicraft box finds.

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KÄSITÖÖ- JA EHTEVAKK KÕUEL HARJUMAALT

Jaana Ratas ja Mauri Kiudsoo

Ajavahemikus 2013–2016 avastati Lõuna-Harjumaalt Kõue muinasasulast ja selle lähiümbrusest seitse erinevat peitvara, mis on arvatavasti maapõue jäänud ühe ja sama, 1100. a paiku toimunud sündmuse tagajärjel. Juunis 2016 päevavalgele tulnud ehtekogum õnnestus arheoloogidel üles võtta monoliidina (jn 1).

TLÜ arheoloogia teaduskogu laboris toimunud monoliidi puhastamisel paljandus kompaktna esemekogum (jn 2: 1), millest tuli välja 100 alanumbri jagu leide – käevõrud, sõrmus, tinasulamist ja klaasist erinevat tüüpi helmed, tinasulamist ripatsid, hõbedast ripatsmündid (jn 6–8). Lisaks esemeleidudele olid kogumis ladustatud spiraalitorud rõivakaunistuste valmistamiseks. Kogumi ümbert saadi kasetohutükke, mida leidis ka esemeid ümbritsenud jämedate spiraalitorude all. Toht ja leidude paiknemine võiks viidata kahe tohust vaka olemasolule. Väiksem vakk (jn 4: A), milles olid esemed, võis paikneda suurema (jn 4: B) sees.

Lisaks ehetele sisaldas monoliit ka rõivakaunistusi – spiraalitorudest valmis mustreid, mis olid kündmisele leiukogumist veidi eemale nihkunud (jn 2: 2–4

ja 5). Need pärinesid oletatavalt suuremasse vakka pakitud rõivaesemetelt. Tekstiile ei olnud säilinud. Rõivaesemete olemasolu lubavad oletada mustrite kangale kinnitamiseks kasutatud kokkupressitud rõngakeste esinemine mustrite juures.

Eesti arheoloogilises leiumaterjalis unikaalsed esemed on tinasulamist ripatsid, millest kaks jäljendavad Vana-Vene valitseja, Kiievi suurvürsti Jaroslav Targa hõbemünti – srebrennikut (jn 8: 1). Ehtevaka ülejäänud tinasulamist ripatsite eeskujuna on Kõue meister kasutatud kahe erineva anglo-saksi dünastia valitseja müntide reverseid (jn 8: 2). Leiukogumi põhjast tuli välja tinasulami kamakas, mis oli valatud lamedale pinnale õhukeseks kihiks ja seejärel kokku volditud (jn 3).

Tuginedes Kõue ehtevakast avastatud nelja ripatsmündi dateeringule, on peitvara jäänud maapõue pärast 1075. aastat, sobides seega hästi Harmi-Kõue asustusüksusest päevavalgele tulnud teiste aarete konteksti. Peitvara noorim münt on vermitud Saksa maal, Münsteri rahapajas 11. sajandi lõpul (al 1075) (jn 8: 3).