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## AN EARLY 13<sup>TH</sup> CENTURY CRAFT BOX FROM LÕHAVERE IN ESTONIA AND ITS OWNER

**Abstract:** A birch bark box was unearthed in 1958 in the Lõhavere hillfort (Estonia). The main aim of the paper is to get closer to the initial owner of the box. The relatively well-preserved box contained jewellery, textile remains, and objects related to craft (e.g. textile tools, yarns). Special attention in the article is paid to the finds indicating production of spiral tube decorations, which were used to adorn clothing items. The authors argue that the owner was a more or less professional craftsperson living in the hillfort. Archaeologists tend to divide craft activities according to the raw materials, but the box content shows how in reality various skills, raw materials, and knowledge were needed in combination. It seems that the owner was mainly occupied with making narrow wares and clothing adornments. Possibly the owner was female, which stresses the role of female actors in the sphere of professional craft.

**Keywords:** craft, craft specialisation, textiles, spiral tube decorations, 13<sup>th</sup> century, cross crafting, Estonia, Lõhavere hillfort

### Introduction

A jewellery and craft box was found in a hillfort called Lõhavere. The box is dated to the beginning of the 13<sup>th</sup> century, when Crusades and violent Christianisation took place in the area of present-day Estonia. This event marks the border between prehistory and the medieval period in the Estonian chronology.<sup>1</sup> The Lõhavere hillfort (Fig. 1) was in use already since the 11<sup>th</sup> century, but in the course of the 12<sup>th</sup> century it became one of the mightiest strongholds in South Estonia.<sup>2</sup> On the basis of archaeological and written sources it can be said that the Lõhavere hillfort was one of the centres of local inhabitants in the region during the warfare in the early 13<sup>th</sup> century. The hillfort was burnt down more than once during these events.<sup>3</sup>

The box remained under the earth until the year 1958 when the find assemblage was discovered by archaeologists.<sup>4</sup> The box was found near the remains of the largest house (c. 60 m<sup>2</sup>) in the hillfort.<sup>5</sup> More precisely, the box was

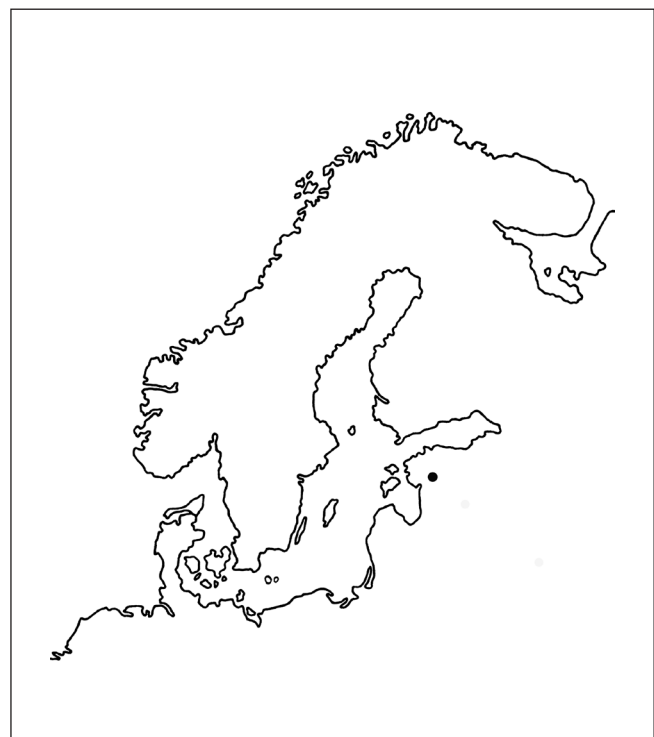


Fig. 1. The location of the Lõhavere hillfort. Drawing R. Rammo.

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<sup>1</sup> Mäesalu and Valk 2006, 127-128.

<sup>2</sup> Tõnisson 2008, 273.

<sup>3</sup> Tõnisson 1965.

<sup>4</sup> Tõnisson 1978.

<sup>5</sup> Moora 1967, 87; Tõnisson 2008, 120.

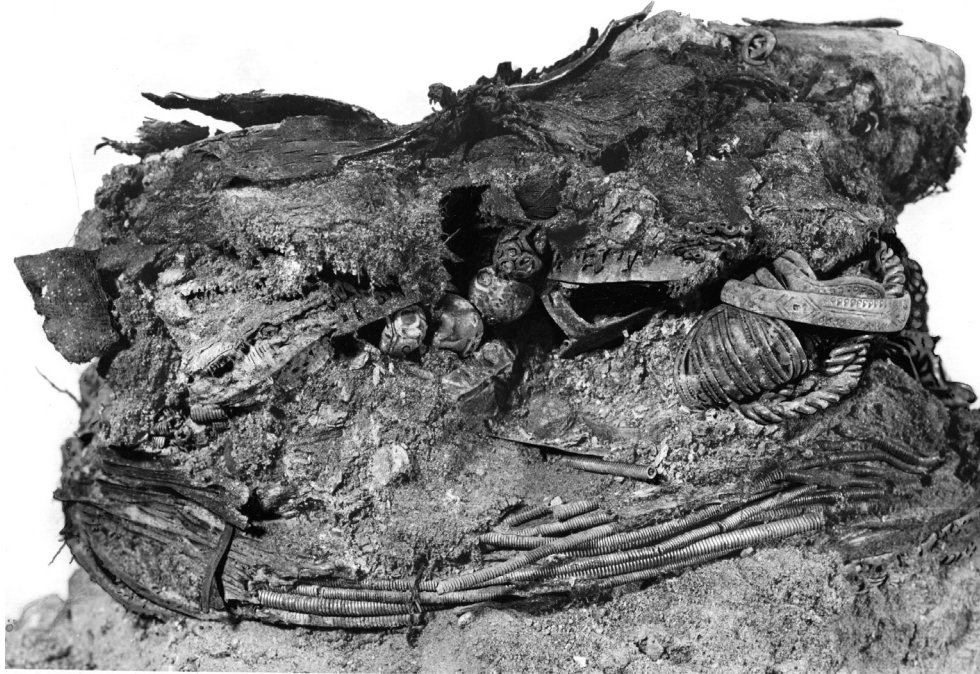


Fig. 2. Lõhavere craft and jewellery box during the cleaning process. Photo Tallinn University Archaeological Research Collection.

placed in a hole dug into the earth outside the eastern corner of the building.<sup>6</sup> Obviously, the birch bark box with a diameter of 30 cm (Fig. 2) was hidden into the ground because of danger, although a possibility that it may have been stored in its ordinary location and accidentally remained under the debris cannot be excluded. Because of the central place of the building and its measurements, it has been suggested that the house belonged to a local nobleman<sup>7</sup> and that the box owner was a wealthy woman of high status.<sup>8</sup> Another interpretation proposes that these building remains designate a location of a tower-like structure that was part of the defence system, because it did not contain an oven.<sup>9</sup>

In the excavations the birch bark box was lifted from the ground as a block.<sup>10</sup> Because of various reasons the cleaning of the finds in the laboratory took several decades with interruptions and the process was finished only in the 1990s.<sup>11</sup> The finds are stored in the Tallinn University archaeological research collection (cat. no. AI 4133: 2274: 1-110). At the moment all the finds have been freshly cleaned and restudied. The find catalogue and an overview about the box were published in 2014 by Ülle Tamla and Silvia Laul. In the present article the stress is put deliberately on analysing finds related to craft, which have not been studied thoroughly so far. The main aim of the study is to get closer to the person, who was engaged in the craft

activities and therefore, answer the question who the owner of the box was.

Evidence for making spiral tube decorations will deserve a special attention (Fig. 3). Adorning clothing with decorations made of tiny spiral tubes was a common practice along the eastern shore of the Baltic Sea in present-day Estonia, Finland, Latvia, Lithuania and north-western Russia.<sup>12</sup> The earliest among the finds are those from 4<sup>th</sup> and 5<sup>th</sup> century AD sites in Lithuania<sup>13</sup> and from 6<sup>th</sup> century sites in Latvia.<sup>14</sup> Occasionally, spiral tubes were still in use within the region during the medieval and modern periods.<sup>15</sup> Spiral tube decorations have predominantly been found in graves, where they were part of the funeral clothing of the deceased. They were mostly used on clothing items worn by women, especially on aprons, head-dresses, leg wrappings, and shawls.

#### Arrangement in the box

The box contained jewellery, textile remains, decorations made of tiny spiral tubes, and artefacts related to craft (e.g. tools, prefabricated products). It seems that all objects were placed into the box carefully and the assemblage gives a rear opportunity to study the arrangement within such a box. Remains of three smaller birch bark boxes were found in the craft box and in addition, bowls of the scales were used as a container for smaller items.<sup>16</sup> Textile remains here

<sup>6</sup>Lõugas 1961, 81.

<sup>7</sup>Moorra 1967, 87; Laul and Tamla 2014, 13.

<sup>8</sup>Jaanits et al. 1982, 392; Laul and Tamla 2014, 13.

<sup>9</sup>Tõnisson 2008, 129.

<sup>10</sup>Laul and Tamla 2014, Fig. 5.

<sup>11</sup>Laul 1992, 1.

<sup>12</sup>Rammo and Ratas 2015, 66 and references; Rammo and Ratas 2016.

<sup>13</sup>Volkaitė-Kulikauskienė 1997, 131.

<sup>14</sup>Zariņa 1999, Fig. 27.

<sup>15</sup>Kaljus 2009.

<sup>16</sup>Laul and Tamla 2014, Figs. 8-10, 25-28.





Fig. 3. Process of making spiral tube decoration (on the basis of AI 4133: 2274: 43). Photos and reconstruction J. Ratas.

and there indicate the usage of cloth bags or wrappings for packaging various items. It is clear that similar objects were placed together – for example, ringlets, spiral tubes or seed beads were stored separately in linen bags or smaller boxes. The raw material may have also been one of the criteria for organising the content; for example, all silver pieces (3 rings and 1 coin pendant) in the box were together in one smaller container and a brocaded band made of gilded silver threads were together with two gilded copper alloy buttons.<sup>17</sup>

The uppermost layer in the box consisted mainly of braids, bands, and yarn balls.<sup>18</sup> Braids were tied into bundles (six were partly preserved) and bands were folded into hanks. In this layer and under it, three smaller containers were found: the scale bowls and one birch bark box containing jewellery and another birch bark box with rolled up spiral tube decorations. The second ‘layer’ under the textile remains and small containers consisted of ready-made and rolled up spiral tube decorations.<sup>19</sup> In addition, all necessary implements (e.g. raw materials, prefabricated products) to make similar decorations (see below) were placed there as well. Although jewellery was found all over the box, it seems that the largest concentration of the ornaments, more precisely pendants and beads, was on the bottom of the large box.<sup>20</sup> In addition, the fourth small container with loose spiral tubes, ringlets, and seed beads was found on the bottom.

#### Textile tools and textiles

Remains of no less than 40 wooden weaving tablets in different bunches stacked together were discovered altogether (Fig. 4). Judging by their different size, the finds

may origin at least from two different sets (c. 50 × 50 mm and 38 × 38 mm). A majority of the tablets were found in the uppermost layer together with ribbons and yarn. Regrettably, because of cleaning and conservation treatment it is not possible anymore to ascertain whether they were implemented at the moment of deposition. Another find is a wooden object that has been identified as a handle of a small weaving sword; the interpretation is based on ethnographic parallels.<sup>21</sup> Remains of approximately 20 yarn balls were discovered together with other textiles in the uppermost layer.<sup>22</sup>

A majority of the textile remains preserved in the box are fragments of various ribbons and bands made from wool. Thread is always plied (ss/Z) and is very similar to the yarns found in the balls. The techniques used are braiding, tablet-weaving, and weaving with heddles (Table 1; Fig. 5). Although all bands are technologically very simply made (e.g. 17 weaving tablets for one band is the maximum, while the usual amount is eight), the yarns are relatively fine and even in comparison with other contemporaneous textile finds in the region.<sup>23</sup> The main combination of the colours by visual inspection is dark bluish, reddish, and light brownish (initially maybe undyed). The yarns of two bands (altogether five samples) were analysed for searching dye stuffs by means of UHPLC-PDA in the Cultural Heritage Agency of the Netherlands.<sup>24</sup> Woad (*Isatis tinctoria* L.) was used for dyeing blue. In one dark coloured yarn woad was combined with madder (*Rubia tinctorum* L.). Both these colourants were not local, thus either the dyes or yarns were imported. Galium species, which might be also of local origin, were used for producing reddish yarns. Considering similar yarns

<sup>17</sup> Laul and Tamla 2014, Figs. 36, 61.

<sup>18</sup> Laul and Tamla 2014, 25, Figs. 34, 40, 41, 43.

<sup>19</sup> Laul and Tamla 2014, 56-57, Figs. 44-50.

<sup>20</sup> E.g. Laul and Tamla 2014, Figs. 54-57.

<sup>21</sup> Laul and Tamla 2014, 41, Fig. 31.

<sup>22</sup> Laul and Tamla 2014, Fig. 34.

<sup>23</sup> E.g. Rammo and Matsin 2014, Figs. 8-11.

<sup>24</sup> Proaño Gaibor 2017.



Fig. 4. Two sets of weaving tablets (AI 4133: 2274: 76). Photo J. Ratas.

|                    | No. of types | No. of fragments | Remarks                |
|--------------------|--------------|------------------|------------------------|
| Tablet-woven bands | 5            | 34               | Made with 8-17 tablets |
| Woven with heddles | 2            | 51               | -                      |
| Braids             | c. 5         | c. 136           | -                      |

Table 1. Remains of the bands and braids.

in the balls and bands as well as the presence of the weaving tablets it is quite obvious that these bands were made by the owner of the box.

Remains of plant fibre textiles are also numerous. Most of these finds are only tiny fragments preserved on the metal items.<sup>25</sup> The largest textile fragment in multiple layers was stuck on the top of the scale bowls.<sup>26</sup> All plant fibre textiles are tabbies woven of single z-spun yarns. Finer and coarser fabrics are present.<sup>27</sup> Almost all tabbies have a repp character; it means that one thread system is remarkably denser than the other system. This type is the most common for plant fibre textiles in Estonia in the 11<sup>th</sup>-16<sup>th</sup> centuries.<sup>28</sup> One exceptional find in the Lõhavere craft box are three tiny fragments of a fine balanced tabby<sup>29</sup> dyed in blue with woad (*Isatis tinctoria* L.).<sup>30</sup> As the plant fibre textiles are not easy to dye and

considering its exceptional and balanced fine structure,<sup>31</sup> the fabric was definitely valuable.

The box also contained other precious textiles: fragments of one simple silk tabby and three brocaded silk bands (Fig. 6).<sup>32</sup> Silk and brocaded bands are extremely rare in Estonia in the period under study.<sup>33</sup> Only during the Middle Ages (c. 1225-1558 AD) the silk and brocaded bands are found more often, usually in urban contexts.<sup>34</sup> All Lõhavere items bear traces of their earlier usage – holes indicating the presence of sewing threads now entirely disintegrated.<sup>35</sup> Two items represent relatively simple tablet woven bands that were widely spread in the neighbouring areas, for example, in Karelia<sup>36</sup> and Latvia.<sup>37</sup> Although it has been suggested that these valuable items were robbed from a priest during warfare,<sup>38</sup> a possibility that they reached Lõhavere via ordinary trading routes should be considered.

### Spiral tube decorations

In the Lõhavere craft box all necessary equipment for making spiral tube decorations and also uniform ready-made adornments were discovered (Figs. 3 and 7). The following description observes the operational sequence of the technique

<sup>31</sup> Rammo 2014, Appendix, 13.

<sup>32</sup> Laul and Tamla 2014, Figs. 36-38.

<sup>33</sup> Peets 1985.

<sup>34</sup> Rammo 2016.

<sup>35</sup> Peets 1985, 96.

<sup>36</sup> E.g. Schwindt 1893, Figs. 343-346; Kochkurkina and Orfinskaya 2014, Figs. 27-30.

<sup>37</sup> Zariņa 1988, Table I: 6, 9.

<sup>38</sup> Peets 1985, 97.

<sup>25</sup> E.g. Laul and Tamla 2014, Fig. 33:3.

<sup>26</sup> Laul and Tamla 2014, Fig. 35.

<sup>27</sup> Rammo 2014, Appendix, 9-20.

<sup>28</sup> Rammo 2014, 106.

<sup>29</sup> Rammo 2014, Fig. 7.

<sup>30</sup> Peets 1992, 92.





Fig. 5. Various bands found in the box. (AI 4133: 2274: 19: 16; 48: 2; 64: 2; 109). Photos J. Ratas.



Fig. 6. Brocaded band (AI 4133: 2274: 51). Photo J. Ratas.

and the related finds in the box. First, for making spiral tubes wire with desired diameter is needed. Secondly, the wire was wound around a stick to make long spiral tubes that were later cut into appropriate short pieces. Along the bottom edge of the craft box a bundle of long spiral tubes was placed. The c. 400 mm long bundle is comprised of tubes from at least two different diameter groups: c. 2.5 and 4 mm. Moreover, relatively flexible wooden sticks were still visible in some of those long tubes.<sup>39</sup>

After cutting long tubes into small pieces the next step followed: the tiny tubes were threaded onto the linen yarn to

design desired patterns on the base, for which birch bark might have been used (Fig. 3). Thereafter, horse hair bundles were threaded into the tubes of designed pattern and the linen thread was removed. The crossing horse hair bundles form a kind of 'lattice' for the pattern. Horse hair gave strength and helped keep the decorations in the correct shape. The placement of the spiral tubes in this 'lattice' creates the pattern, usually geometric consisting of triangles, rhomboids, zigzags, and crosses. Finally, the empty places (i.e. without spiral tubes) of the horse hair 'lattice' were stitched with fine wool threads. The combination of wool yarns and horse hair was common for making similar geometrical patterns in the 11<sup>th</sup>-15<sup>th</sup> centuries. In the Lõhavere box, near the ready-made decorations at least two

<sup>39</sup>Laul and Tamla 2014, Fig. 32:2.

| Cat. no. AI 4133: 2274 | Length (mm) | Width (mm) |
|------------------------|-------------|------------|
| 5:1                    | c. 200      | 23         |
| 5:2                    | c. 200      | 24         |
| 5:3                    | 220         | 25         |
| 38:1                   | 525         | 40         |
| 65                     | 1030        | 29         |

Table 2. Measurements of the full-length preserved ribbons made of spiral tubes.

clusters of the small spiral tubes threaded onto linen yarn,<sup>40</sup> several bundles of suitable wool threads together with tufts of horse hair, and birch bark fragments were found.

Several ready-made end products were found in the craft box. At the moment, 8 ribbons and 7 patches can be recognised, but on the basis of the remains (e.g. loose spiral tubes from the patterns, as suggested by the description of the conservation process) the number of these decorations was initially higher. All the ribbons were rolled up and the patches with similar pattern were placed together: one on the top of other. All decorations are made of similar small spiral tubes (c. 3–4 mm long and c. 2.5 mm diameter). Moreover, the worsted yarns used to make these patterns in the Lõhavere find are fine (c. 0.3 mm), plied (zz/S), and dyed dark blackish blue with the help of woad (*Isatis tinctoria* L.).<sup>41</sup>

The lengths of the ribbons seem to be relatively regular: two longest were 1030 mm (one is not preserved), the second was 525 mm and three shortest ones were c. 200 mm in length (Table 2). The three latter were packed together into one of the small birch bark containers inside the big box. All spiral tube decorations are left unfinished – the ends of the sewing yarns were not cut away and they still hang on the edges (Fig. 7). Among the spiral tube decorations various techniques, designs and professional levels of craft can be distinguished.<sup>42</sup> The owner of this box was making spiral tube decorations on the highest professional level known so far. Remains of similar skilfully made decorations have been found sporadically all over the area where spiral tube adornments were spread.<sup>43</sup>

### Jewellery and scales

In addition to the craft-related finds, the box also contained jewellery (Table 3), which has been thoroughly analysed by Ü. Tamla.<sup>44</sup> The ornaments were mostly made from copper alloys; exceptional are three silver finger rings and a coin pendant and two gilded copper alloy buttons. The most numerous

group consists of neck ornaments: fragments of four neck rings, various pendants and beads in several clusters. Another ornament category contains bracelets and finger rings. The box contained a full set of scales.<sup>45</sup> The scale bowls put together were used as a small container; it seems to be the main function of the scale in the box as the weights were not found. Bowls contained a deliberately broken bracelet and three finger rings, one of the latter also broken.<sup>46</sup> Maybe the items can be regarded as raw material for reuse, for example, making wire for new spiral tubes. Nevertheless, in this case the need for weighting metal might have arisen as well.

| Ornament type       | No. of items |
|---------------------|--------------|
| Trapezoid pendants  | 16           |
| Cruciform pendants  | 9            |
| Zoomorphic pendants | 6            |
| Coin pendants       | 6            |
| Neck rings          | 4            |
| Glass beads         | 89           |
| Copper alloy beads  | 14           |
| Bell                | 1            |
| Bracelets           | 9            |
| Finger rings        | 10           |
| Metal buttons       | 2            |

Table 3. Jewellery found in the Lõhavere box.

Moreover, some ornaments that are clearly used and worn out (for instance trapezoid pendants cut from a thin metal sheet),<sup>47</sup> might have served for reuse as well. On the other hand, there were two pairs of horse-shaped pendants that were new and unfinished; casting marks are still visible on the artefacts.<sup>48</sup> Clearly the assortment of ornaments in the box does not represent an ordinary set worn by one or several persons, but contains a mix of reuse material, new items, and items suitable for various persons.

### The person behind the box?

The Lõhavere craft and jewellery box is an opportunity to see a moment of somebody's life – a structured arrangement of items that were used supposedly by one person in the past. It is quite obvious that one occupation of the box owner was craft, more exactly, making narrow wares and clothing accessories, for example, ribbons, braids, and spiral tube decorations. In addition to the narrow wares and clothing accessories, the owner might have also mediated small ornaments, especially for necklaces and fine clothing adornments (reuse of brocaded textiles). Who was the owner of the box? The varied content

<sup>40</sup> Laul and Tamla 2014, Fig. 33:4.

<sup>41</sup> Peets 1992, Table 28.

<sup>42</sup> Rammo and Ratas 2015, 80.

<sup>43</sup> E.g. Schwindt 1893, Figs. 349–355; Zariņa 1988, Table IV:1, 8; Volkaitė-Kulikauskienė 1997, Fig. 37; Riikonen 2003, 13; Žeiere 2017, Fig. 115.

<sup>44</sup> Laul and Tamla 2014, 65–91, Figs. 51–65.

<sup>45</sup> Laul and Tamla 2014, Fig. 30.

<sup>46</sup> Laul and Tamla 2014, Figs. 63: 2; 65: 8.

<sup>47</sup> Laul and Tamla 2014, Fig. 54.

<sup>48</sup> Laul and Tamla 2014, Fig. 56.

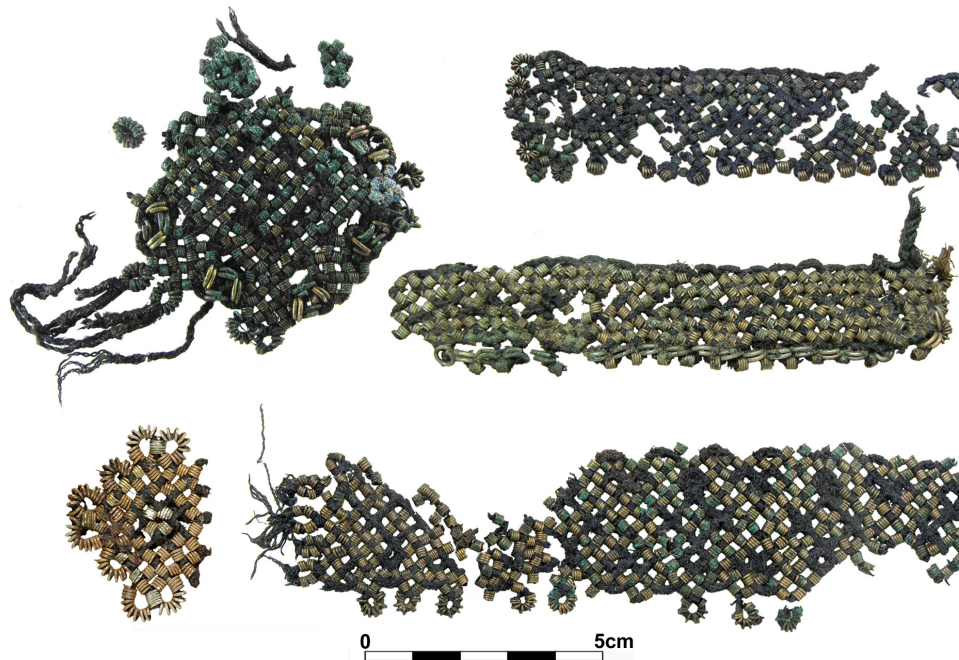


Fig. 7. Spiral tube decorations (AI 4133: 2274: 5: 2; 38: 1; 42; 63: 1; 65). Photo J. Ratas.

of the Lõhavere box allows for multiple interpretations. Considering the valuable finds (e.g. gilded buttons and brocaded bands) and the fact that the box was found near the largest house of the Lõhavere hillfort, it has been suggested that it belonged to a woman of high social status, e.g. ‘the mistress of the hillfort’.<sup>49</sup> Although not expressed explicitly, the notion of the rich lady, supposedly a wife of the hillfort’s chieftain, making fine handicraft, embraces a notion of the home-based craft for the family’s own needs. It has been suggested that the owner of the box put valuable ornaments into the box in a hurry because of danger.<sup>50</sup> However, studying the finds and the content of the box more closely, it seems that the interpretation is not that straightforward. We argue instead for an alternative interpretation suggesting that the owner could have been a more or less professional craftsperson.

#### A professional craftsperson?

As said before, the main focus of the present study is on craft-related finds from the box. Taking this as a starting point the following analysis argues for the owner’s relationship to craft. Foremost, the aspects referring to the hypothetical presence of a professional artisan are deliberately stressed in the discussion. In previous studies numerous interpretative models have been developed to systemise different production modes, for instance, scales having at the one end home production and on the other end professional producers or industry.<sup>51</sup> We admit that the posed question is

problematic on the basis of a single craft box and its content as the research on craft organisation usually embraces analyses of large scale data sets based on debris, tool finds, and manufacturing sites<sup>52</sup> and it is not possible to study the problem in a systematic way as proposed by other researchers. However, the following variables characterising professionalism are addressed: the context of the craft, the aspects of acquiring raw materials and involvement in networks, relative complexity of the technique, distribution of products and possible consumers.

The first variable under study is the context of the undertaken work.<sup>53</sup> Obviously, the owner lived and acted in the hillfort, a local power centre that was permanently inhabited. Moreover, in the hillfort other crafts were also conducted, for instance, clear evidence suggests jewellery and casting of non-ferrous metals<sup>54</sup> indicating the presence of other professional craftspeople as well. The role of hillforts as craft centres, where among other things clothing with spiral tube decorations was produced, has been stressed by previous researchers.<sup>55</sup> The location in the hill fort, which was a power centre and obviously a residence of the highest ranks of the society, may also indicate some degree of elite control over production.<sup>56</sup>

Secondly, an important aspect while studying craft and its degree of specialisation is the question how craft worker acquired necessary raw materials and how the specialist was

<sup>49</sup> Jaanits et al. 1982, 392; Laul and Tamla 2014, 13, 106.

<sup>50</sup> Tamla and Kiudsoo 2009, 50.

<sup>51</sup> E.g. Christophersen 1980, 14-16; Costin 1991, 3-9 and references; Andersson 1999, 10-14.

<sup>52</sup> E.g. Ashby 2015.

<sup>53</sup> E.g. Costin 1991, 25.

<sup>54</sup> Saage and Warmländer 2018, Table 1.

<sup>55</sup> Tvauri 2001, 188.

<sup>56</sup> Costin 1991, 25.



involved into and dependent on social and trade networks.<sup>57</sup> The owner certainly had contacts with metal workers. The raw material for such adornments was wire drawn from various copper alloys. According to estimations, thousands of metres of wire were needed for completing an over 100 cm long open work ribbon. It seems that metal supply was in the form of drawn wire, maybe even already long spiral tubes wound around a stick. Cooperation with metal worker is needed to get the wire or spiral tubes of preferred alloys and in desired measurements. Hence, the owner of the box must have mastered knowledge of various materials and their properties. Moreover, the deliberately broken ornaments in the scale bowls or extremely worn out jewellery can be interpreted as raw material for reuse, for example, as metal for new spiral tubes given to a metal specialist. The need to weight the scrap metal can also explain the presence of the scales.

In addition to the metal parts, finely spun and dyed high quality yarns were needed. For dyeing wool or yarns, for example, woad (*Isatis tinctoria* L.) and madder (*Rubia tinctorum* L.), which was probably imported, was used. Is it possible that the yarn was collected from skilled spinsters acting also in the hillfort or nearby? Regrettably, no archaeological traces can be detected to answer the question as the textile tools are very rare in the hillfort. Imported raw materials also indicate access to traded goods and involvement into the network of tradesmen or mediators.

As one variable, the complexity of the technique for making spiral tube decorations can be pointed out. Not only the complex network for acquiring raw materials and the cooperation of various persons was needed, but as noted above, in comparison with other contemporaneous finds<sup>58</sup> the Lõhavere decorations appear to belong to the most complex and skilled examples. Although complexity of the production process is not always related to the professional craft,<sup>59</sup> it may be an indirect hint. For example, time and daylight resource needed for the execution of the work was substantial.

The fourth variable is the distribution pattern, which helps answer the question about possible consumers. One of the key aspects that has defined a professional in the studies on textile craft is a production aimed for sale, exchange or for an individual customer.<sup>60</sup> Remains of similar decorations to the Lõhavere finds have been found sporadically all over the area where spiral tube adornments were spread,<sup>61</sup> indicating a possibility that these items were traded or given as valuable gifts. It seems that not everybody could afford such fine accessories for one's attire. Therefore, we assume that also these elaborated adornments in the Lõhavere box were meant

for exchange or for certain customers. In this context it is interesting to note that the box contained ready-made and uniform spiral tube decorations that were all unfinished by means of uncut yarn endings indicating that the adornments were freshly made and not used. According to the measurements, the decorations were divided into three groups perhaps derived from the need to adorn special kind of garments known to the customers.

### Social status and gender

On the basis of previous variables we suggest that a professional and skilled craftsperson in the hillfort is one of possible interpretations. Further questions about this person's social and economic status as well as gender are worth highlighting. As the work was probably undertaken in the powerful centre, it might indicate relationships to the highest rank of the society and a kind of attached specialist position meaning production of valuables for elite consumption.<sup>62</sup> Two small copper alloy buttons, which were gilded and precious textiles found in the box, can be regarded definitely as luxury artefacts. Even if these items were meant for mediating to customers and not for personal use, it still indicates access to imported goods. Most likely a relatively high economic and social status of the box owner could be assumed.

Finally, the question of gender of the person whose box was examined is interesting to consider, although not much can be proved. Traditionally, textile work and making spiral tube decorations for clothing have been related to the female domain.<sup>63</sup> At the same time, exchange or mediating jewellery, and scales as symbol of tradesmen rather suggests a male actor. For example, Viking Age grave finds suggest that mostly – but not exclusively – men were familiar with weights and balances as tools of trade.<sup>64</sup> However, using balances for other purposes has been stressed as well, for example, in the context of metal casting to get the right alloy.<sup>65</sup> It is plausible that the scales were also needed by a person who was acquiring wire or spiral tube supplies from a metal worker. Moreover, we could also question this rather traditional (yet modern) gender division; women could also be in charge of trade of their own products (both acquiring raw materials and trading finished goods).

### Conclusions

Archaeologists often tend to study past technologies based on the material categories, e.g. bone, metal, textile, pottery etc. The Lõhavere craft box is good example to show that in the past people did not organise their world according to these separated categories. Instead, producing certain items, such as narrow wares and clothing accessories needed collaboration between different craftspersons

<sup>57</sup> E.g. Mogren 1995, 122; Andersson 1999, 14.

<sup>58</sup> E.g. Rammo and Ratas 2015, 80.

<sup>59</sup> E.g. Costin 1991, 4; Ashby 2015, 16.

<sup>60</sup> Gjøel Hagen 1994, 29; Andersson 1999, 16.

<sup>61</sup> E.g. Schwindt 1893, Figs. 349-355; Zariņa 1988, Table IV: 1, 8; Volkaitė-Kulikaukienė 1997, Fig. 37; Riikonen 2003, 13; Žeiere 2017, Fig. 115.

<sup>62</sup> Brumfield and Earle 1987; Costin 1991, 5.

<sup>63</sup> E.g. Rammo and Ratas 2015, 80.

<sup>64</sup> E.g. Holm 2017, 51.

<sup>65</sup> E.g. Pedersen 2008, 166.



and indicate a need to acknowledge cross craft as a focus of future study.

Professionally made products, a network for acquiring raw materials and distribution, complexity of the production process, and a relatively high social and economic status of a person may indicate that the owner of the described craft box was a more or less professional craftsman. At the same time, it is worth to remember that the craft specialisation is non-dichotomous, but rather multi-dimensional and allows for envisaging various models.<sup>66</sup> The individual we tried to approach in the paper needs not have been a full-time and free craft worker, although occasionally the person spent relatively a lot of time on making spiral tube decorations for exchange or for certain customers. Actually, the notion about the ‘mistress of the hill fort’ as the owner of the box proposed

by previous researchers does not have to contradict with the idea of the specialised craftsman. The woman of a high status living in the hillfort might have also been a professional who produced items for exchange or trade. In the future, it may be possible to acquire more information about the Lõhavere box and its owner by studying more thoroughly other crafts conducted in the hillfort, for example, regarding wire production. Thus, it could help by creating a broader context for the box.

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<sup>66</sup>Costin 1991, 4-5; Ashby 2015, 16.

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## Streszczenie

### Szkatulka na narzędzia z początków XIII wieku z Lõhavere (Estonia) i jej właściciel

Dość dobrze zachowane pudełko z kory brzozonej odkryte zostało w 1958 r. na grodzisku Lõhavere w Estonii. Zawierało ono biżuterię, szczątki tkanin i przedmioty związane z wytwórczością włókienniczą (narzędzia włókiennicze, nitki). Autorki ze szczególną uwagą traktują znaleziska wskazujące na produkcję dekoracji z drucianych spiralek, jakich używano do ozdabiania ubiorów. Właścicielem pudełka był mniej lub bardziej wyspecjalizowany rzemieślnik, mieszkający w Lõhavere. Archeolodzy dość często klasyfikują wytwórczość rzemieślniczą według kryterium surowców. Zawartość tego pudełka dowodzi, że nie zawsze wytwórcy specjalizowali się w wąskiej dziedzinie, a w rzeczywistości konieczne było wykazanie się zdolnością do łączenia różnych umiejętności, a zatem, jak w tym przypadku, również obróbki różnych surowców. Wydaje się, że właściciel pudełka zajmował się wyrobem wąskich pasków i ozdób do ubrań. Możliwe jest, że pudełko należało do kobiety, co podkreślałoby aktywny udział przedstawicielek tej płci w sferze zawodowego rzemiosła.