

## The Eura Costume

The reconstruction of the Viking Period Eura costume was carried out in 1976–1982 and the costume was presented to the public on July 24th, 1982. The scientific research relating to it was carried out by a team consisting of the author, Leena Tomanterä, Seija Sarkki and Eeva Savolainen. The practical arrangements for the work were taken care of by the citizens of Eura, SW Finland, who had formed a committee to raise funds for the work. The costume is on display in the museum of Kauttua, only a few hundred metres from the Luistari cemetery.

The reconstruction is based on the finds from grave 56 in the Luistari cemetery (fig. 1). The grave did not contain any larger pieces of fabric and the basic requirement for a successful reconstruction was that the grave was discovered in excavation and that even its smallest details were recorded from the very beginning. Thus, it could be made certain that the details that differed from earlier assumptions were not caused by the material in the grave having changed place.

The grave contained 169 separate finds from 84 different locations with remains of textiles in about 90 finds. The reconstruction was thus based on the analyses of small pieces of fabric from various parts of the grave (the grave and finds are presented in Lehtosalo-Hilander 1982a, p. 89–94, plates 22–28).

According to analyses carried out by Leena Tomanterä and Seija Sarkki (1978, 1982) there were remains of at least three different garments. The fabric found inside the bracelets was dark blue woollen tabby. Greenish 2/2 -twill was found with the shoulder brooches and chains, and there was similar material of a lighter shade in connection with the spiral ornaments of the apron. A band running twice across the waist of the deceased and over the apron was of a red shade and woven with at least 12 tablets with the surface forming a stitch pattern. Another band was used as the border of the darker twill and was woven with 17 tablets. The band was of three colours, red, blue and possibly a natural light shade, with a meander motif running in the pattern. Many efforts were made to reconstruct the band, but its only preserved part was right at its beginning where the pattern had not yet formed. The band in the reconstruction is a result of compromises from the results of these trials (see Lehtosalo-Hilander 1982, p. 29, fig. 18; Sarkki 1982, p. 37).

There were still other remains of textiles in the graves, but these were not used in the reconstruction. A pair of sewn mittens (see Tomanterä 1978, p. 54–55, fig. 12) can be possibly reconstructed, but this has not been done so far.

Certain finds were especially important for the reconstruction. In addition to the remains of sleeves found inside the bracelets, pieces bordered by the three-coloured tablet-woven band were also crucial to the reconstruction work. One of these was found near the ankles of the corpse, and it can be quite accurately defined as part of the hem of the dress. Another was found some distance above the waist in a position where the fabric continued from the band towards the head. Thus, it could not have been the upper edge of a skirt bundled around the waist. The material was the same as the hem piece, and it was bordered with a similar band. The same fabric was found

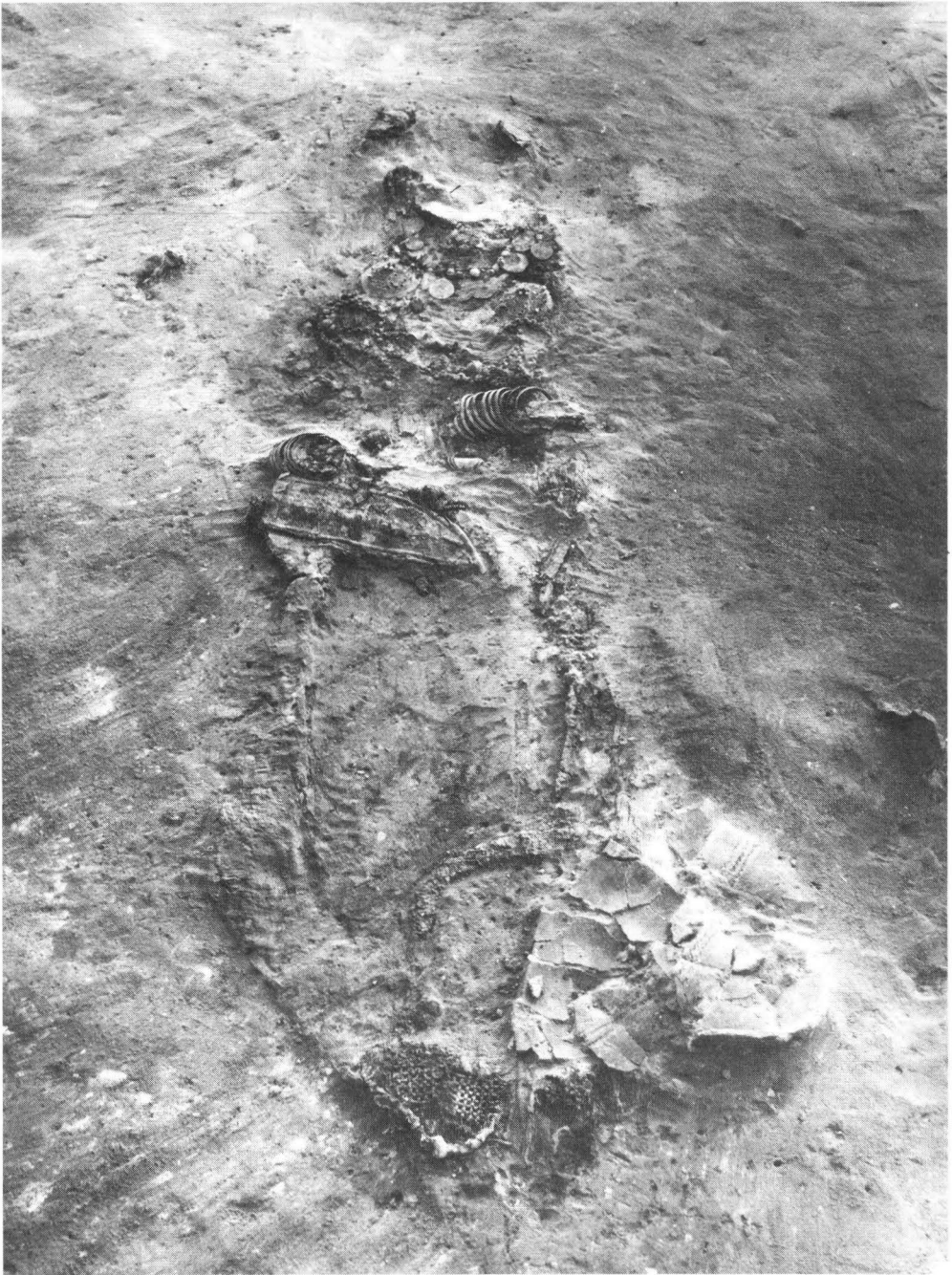


Fig. 1. Grave 56 at Luistari. In the foreground are spiral ornaments from the apron, a broken clay vessel, a sickle and shears. The knife sheath is visible at the waist, in the background the set of ornaments. There are two round buckles at the shoulders and another brooch on the chest, bronze chains, two broad spiral bracelets, four rings and a necklace comprising coloured glass beads, twelve silver coins and two silver pendants. Foto Rauno Hilander.

under the shoulder brooches and folded double under one of the neck pendants. It was also observed that there were on the chest two layers of this cloth in which the upper one was with the reverse side facing outwards. Thus, it seemed probable that the grave had contained a dress with the upper part folded like a peplos. In both of the pieces bordered by tablet-woven bands, there were tube-like selvages, and the dress cloth had apparently been used cross-wise. By measuring the distance from the hem to the shoulder brooches and adding to this the length of the fold, a width of 155 cms was obtained for the cloth. This seems to be a plausible figure for weaving on a warp-weighted loom (cf. Schlabow 1976, p. 47).

The sides of the dress had not been preserved, and therefore it could either have been closed or open. The possibility of a closed dress (Schlabow 1976, fig. 25 or Hald 1962, fig. 10) is suggested by the fact that there was a continuation of the tablet-woven band on the breast (see Lehtosalo-Hilander 1982a, plate 28/56:26). This is not, however, conclusive proof. If longer pieces of band had been woven, for example the bands of the hem and the upper part on the same warp, the band may not have sufficed and it would have had to be continued. Thus, the continuation of the band does not leave out the possibility of an open dress.

The problem was solved by practical experiment. There was no information on the width of the dress, but experiments were made with pieces of fabric measuring c. 155 × 140 cm. The latter measure was obtained from the dress in grave 1 of the Yliskylä cemetery in Perniö, the width of which was estimated at 140 cms by Appelgren-Kivalo (1907, p. 33–34). A closed dress with wide folds was not especially becoming, but an open dress held in place with shoulder brooches and tied at the waist was comfortable to wear, and it did not open even when sitting down. Furthermore, a mantle-dress of this type seems to have been in use in the Baltic region still in the 17th century (see Slava 1966, plate 4:4 or 1978, fig. 1:3), and it is possible that it was also used in Finland in the Viking Period. The use of two shoulder brooches does not alter the basic idea of the costume very much.

The open dress placed certain requirements on the clothing used with it. The fabric found inside the bracelets was not found elsewhere and the sleeves could not have belonged to any upper garment as in that case the same fabric would also have been found on the outer surfaces of the metal artefacts. None of the brooches found in the grave had been used to hold a garment made of this material. The sleeves were thus not from a coat-like garment nor from an upper garment. It is of course possible that the garment covering the body had sleeves made of this differing material or that detachable sleeves were used. It is, however, more probable that the deceased was dressed in an undergarment with long sleeves, which was part of both Byzantine and Western dress in the Romanesque Period. In the 11th century this garment was long and loose extending to the ground and often with long narrow sleeves (Kybalová-Herbenová-Lamarová 1968, p. 102; a garment of this type, although from a later date is shown in fig. 127).

Most probably in the 11th century warp-weighted looms were used in Finland. In these the cloth for each garment was separately woven. The cloths were made short and wide and they were used as economically as possible (cf. Schlabow 1976, p. 43, 79).

Therefore a pattern had to be devised which would permit the cutting of a loose, long-sleeved dress, with sleeves narrow at the wrists and widening upwards, so that the cloth would be wide and that very little material would be lost. Furthermore, the sleeves would have to be cut in a lengthwise direction. After several trials with shirt-like tunics of the Eastern Finnic peoples (see Manninen 1957, p. 107–108), I

found the final pattern in a leather tunic from a Danish bog find assumed to be of Iron Age date (Nørlund 1941, fig. 48, p. 50). The sleeves in this tunic extend to the neck so that there are no seams on the shoulders and the body is formed of front, rear and side pieces. This pattern was applied to the Eura tunic so that it could be cut from a piece of cloth measuring c. 190 × 160 cms without losing a single piece of material. If the cloth was begun and ended with tablet-woven bands, the hems and sleeve-ends would not have to be hemmed. The garment has straight cuttings, eight seams and only the edges of the neck-opening to be hemmed.

It is of course possible that the garment in the grave was not cut according to this pattern. It may well be that none of the patterns that I used in my prototypes correspond to that originally used in the Luistari garment. However, these are not in conflict with the observations of the grave and known features of medieval fashion. It must be remembered, however, that these reconstructed details must be tested with each new grave find.

The largest number of details were preserved in the apron although part of it had been destroyed by a later burial. As it was bordered throughout with bronze spirals it could be observed that it was c. 50 cms wide and somewhat over 90 cms long. It was woven separately so that the starting border was at the hem and the end border at the waist (Sarkki 1982, p. 37). There were tubelike selvedges at the sides. The spiral ornaments were threaded onto separate cords sewn to the borders in between the spirals. One long and three short spirals alternated on the band, and the corner designs of the spirals were made at the ends of the warp of the starting and end borders. Designs made of spirals were affixed to the hem of the apron with a red finger-struck band inside. This had of course accentuated the colour of the designs. Five of these were preserved but there were probably nine originally. In the reconstruction of the apron the designs on the right-hand side were made according to those preserved on the left-hand side.

The problems of reconstruction did not end with finding out the structure and colouring of the material as well as the possible cut of the costume. It has been previously observed that Iron Age textiles were woven of very tightly spun threads. When searching for threads for the reconstruction it was soon found that all available threads were either too thick or too loosely spun.

However, there were two ladies in Eura, over 70 years of age, who had learned to spin thread as little girls and they attempted to make suitable thread. One of them succeeded in spinning such thin and tightly spun thread that it could even be used in weaving the band with 17 tablets. The threads for each garment were hand-spun and with the same ply as in the original shreds of fabric. The threads were dyed with vegetable dyes after many trials. The fact that chemical analyses indicated the use of indigo in dyeing all of the basic garments posed a difficult problem. The deep blue of the undergarment was a known fact, but what were the original colours of the dress and apron? The dress could be estimated to have been green, as I had assumed in my original preliminary sketches even before the results of the analyses, but had the apron also been green? When all other possibilities had been investigated, I searched the vegetable dye samples of the Bureau of Ethnography of the National Board of Antiquities and Historical Monuments for greens in which indigo had been used. Certain matching shades were found as the basis of trials. The final colour of the dress material was obtained by using heather, indigo and birch leaves, the threads for the apron were dyed with nettle and indigo. The yellow-red apron bands were dyed with the roots of *Galium mollugo* and *Galium boreale*.

Model pieces were first woven of undyed thread, later of dyed thread and only

when all the details were right, was the final material woven. A warp-weighted loom was not however built, but a horizontal loom wide enough for a 155 cm dress cloth was used. The dress and apron cloths were ended with tablet-woven bands. A starting border was observed in the apron hem whereby it had been woven from the hem down and an end border had been made at the waist. In a horizontal loom starting borders are not necessary, and in the reconstruction both borders were made at the ends of the ready-made cloth. The model for the end borders of the dress was taken from that of the apron. Although this detail was not preserved in the dress, the tablet-woven band seemed to be the most natural way of bordering the open dress, which was the result of the reconstruction (cf. Vahter 1933 p. 182–183; Sarkki 1979 p. 91, 1982 p. 38).

All of the details of the costume were tried out in practice before the final version. Thus, it is comfortable to wear and a possible festive garment (fig. 2). It must not be thought, however, that the women of ancient Finland went about their chores dressed this way. It is probable that smocks of wool or linen and perhaps with aprons were normal daily wear, to which a mantle-dress and a shoulder cape could be added in cold weather. The best brooches were used only on special occasions.

The Eura costume represents the attire of the early 11th century. The latest coin from grave 56 was dated to post-1018. An idea of the area of use of similar costumes can be obtained by looking for parallels to the convex round brooches found at the shoulders. It is quite obvious that the regions of Eura and Köyliö were in close contact and that there are similar details in many graves, but there are also a couple of burials from the Turku region, in which the brooches and spiral ornaments resemble those of the Luistari find (see Lehtosalo-Hilander 1982b, tables 6 & 11 on pages 97 & 158). If cremation cemeteries are included in finds of the same variant of shoulder brooch and spiral bracelet, both central features of the Eura costume, it can be observed that the fashion may have been similar as far as western Häme. For the time being, however, most of the material is from Lower Satakunta, from the region called Vakka-Suomi as well as from the Turku region (Lehtosalo-Hilander 1982c, map 18).

It has been claimed that the Finnish convex round brooches are rare outside of Finland. This is true only of the older types as up to 12 % of types D, E and F have been found outside of the country. There are also several foreign parallels to the shoulder brooches of type D from grave 56 at Luistari. A couple have been found in Gotland, one in Swedish Lapland, at least one in Zalachtovje as also in Sukromlja in gouvernement of Smolensk (Floderus 1930, fig. 4; Cleve 1934, figs. 2 & 4).

It is possible that these finds indicate that contacts between the Finns and the outside world were at their most active in the first half of the 11th century.

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Fig. 2. The dress reconstructed according to the finds in grave 56 at Luistari. Foto Ulla Finnilä.

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ESA = Eurasia Septentrionalis Antiqua

SMYA = Suomen Muinaismuistoyhdistyksen Aikakauskirja