



## Fröjel Newsletter, Volume 3

### Welcome!

Welcome to the third number of Fröjel Newsletter. This newsletter is a direct continuation of the preceding number, where I started to give an account of part of the results from our investigations of the Viking Age harbour at Fröjel, carried out between 1987 and 1990. As has been demonstrated earlier, we investigated some 290 m<sup>2</sup> during these summers, out of a total area of about 50.000 m<sup>2</sup>. The result from the excavations presented here, will be presented in a new book, which I intend to have published in a month, which means during the month of February. The first version will be in Swedish, but I have the intention to publish it also in English, in due time.

In this number of the newsletter, I have chosen to present some parts of the jewellery found at the site. The number of artefacts are rather huge, and exceed to a very high degree what have been found at Paviken and Bandlundeviken, calculated as the amount of items per m<sup>2</sup>. Paviken and Bandlundeviken are two other Viking Age harbours along the coast of Gotland, investigated during the 1970 and the 1980.

If there is anything you would wonder at, or that you would like to ask me or to discuss, please don't hesitate to contact me. The easiest way to reach me is by email. The address is below.

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## Jewellery and parts of jewellery

Almost 140 pieces of jewellery, or parts of jewellery have been found at the excavation in Fröjel. This is about the same amount of artefacts found at Paviken, and almost three times as many as found in Bandlundeviken. Then, it must be noticed that the total investigated area at Paviken is three times as extensive as in Fröjel, and at Bandlundeviken five times as extensive. This point to a remarkable richness of jewellery and pieces of jewellery at Fröjel.



A look at the material from Fröjel gives a clear notion that the artefacts are mostly from the Iron Age, meaning from around the 7th century well into the 12th century. Having in mind that, many artefacts from the area in question handed over to the museum obviously come from destroyed graves, it seems reasonable to believe that much of the jewellery we have found in connection with our excavations, has come from destroyed graves.



In this issue of the newsletter, I will present the main groups of artefacts found at Fröjel during the excavations in 1987 to 1990. To begin with, I shall deal with the typical Gotlandic female brooches. Then, I will deal with different categories of artefacts, which will illustrate the composition of jewellery found at Fröjel. Finally, I will give some examples of moulds, giving some reflection to the manufacturing at the site.

*The climax of the day is without doubt when you find a gold plated round brooch. All the stones you have carried of all the sudden seem so light. Photo Dan Carlsson.*

## Brooches

The total number of brooches is 22 pieces. To that could be added some 20 pins and parts of pins which obviously belong to different forms of brooches. The jewellery is almost exclusively made of bronze. The female brooch from Gotland is most commonly the animal head brooch, which normally were carried in pairs, and the round brooch. The later brooch was usually worn on the dress between the two animal head brooches.

There are few pieces of jewellery, which characterise the Viking Age tradition on Gotland, as much as these brooches. At Fröjel, we have during the excavations found 3 animal head brooches and 4 round brooches. Two of the animal head brooches can be dated to the 8<sup>th</sup> century (Vendel time, according to our local dating). The last one is from the Viking Age, in this case probably the 10<sup>th</sup> century. From the Vendel period (8<sup>th</sup> century) there is also a round brooch (No. 1580). Of a totally different nature is the oval brooch, registered as number 3808. It is of a type commonly found in Karelia. Whether this brooch belongs to a Gotlandic woman or a woman who came from Karelia and lived on Gotland is of course impossible to say.



*Animal headed brooch from the cultural layer (F3810). The ornamentation indicate that the brooch was manufactured during the 9<sup>th</sup> - 10<sup>th</sup> century. These animal headed brooches are typical of Gotlandic jewellery. Scale 1:1. Drawing Marie Östberg.*



*One of the animal headed brooches from the 8<sup>th</sup> century (Vendel period), from the cultural layer in the settlement area in Fröjel (F1186). The brooch with accompanying chain, probably comes from a destroyed grave. Scale 1:1. Drawing Marie Östberg.*

*An exceptionally piece of jewellery in the Gotlandic soil is oval brooches. These female brooches are typical in all parts of the Viking world outside Gotland. This brooch probably comes from Karelia, and belongs to the late part of the Viking Age, meaning the 11<sup>th</sup> century. That it has been found in Fröjel, underlines very clearly the broad contacts people have had in Fröjel. Photo Raymond Hejdström.*



The oldest dateable artefacts we have found in Fröjel, besides an arrow head from late Stone Age, is a so called bow fibula (to the right); a brooch from the 6<sup>th</sup> century. It is very well preserved, and manufactured in bronze. Scale 1:1.



*Photo Dan Carlsson*

The animal head brooch to the left has traces of a runic inscription in the bottom. We have been able to read the word "Kika", or something like that. What it actually means, we don't know.



*Drawing Marie Östberg*

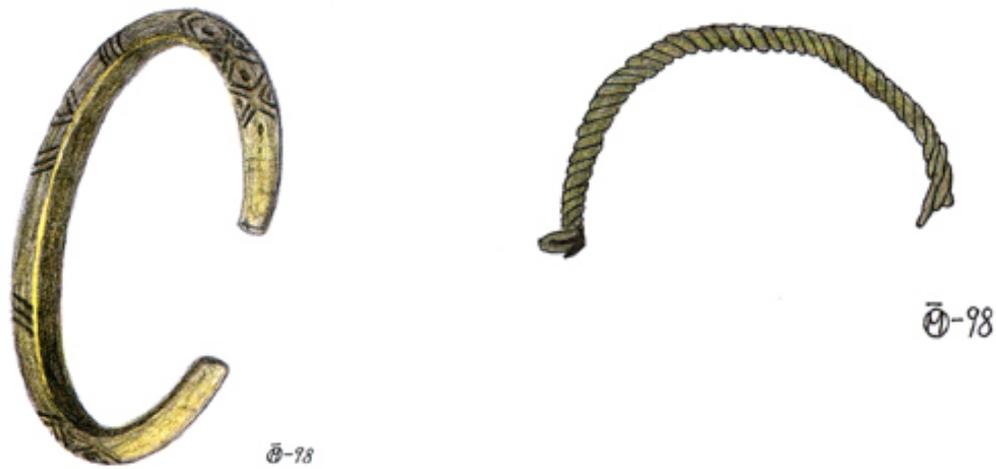
The man's typical (sometimes they are found together with females) jewellery in Viking Age is the pennanular brooch. The function of the pennanular brooch was to hold the cloth together. All together, we have found 14 whole, or parts of pennanular brooches. Only one of the pieces is complete with both the needle and the frame (F3809). This ring needle is also the only one that is completely decorated (see illustration below). The pennanular brooches from Fröjel are mostly from the 10<sup>th</sup> century, judged by the form and ornamentation.



*One of the ring needles we have found in the cultural layer during the excavation (F3809). It is made of bronze, and beautifully decorated with punched ornamentation. It is from the 10<sup>th</sup> century. To the right, is a typical pin to a ring needle, also in bronze and with punched decoration. Scale 1:1. Drawing Marie Östberg.*

## Bracelets and finger rings

All together we have found four complete, or almost complete bracelets. Two of them are worth a closer look. One is a complete bracelet made of bronze (F3821), and the other is a part of what seems to be a bracelet. The first one is complete, and of a construction open in one side. It is decorated, but the pattern is diffuse and difficult to interpret. The way the bracelet is constructed gives at hint to a dating of the older part of the Viking Age, meaning the 9<sup>th</sup> century. The fragment of the other bracelet is also made of bronze and twisted, which gives a probable dating to the 7<sup>th</sup> to 8<sup>th</sup> century (F3826).



The bracelet to the right is of the twisted form made by twinning a number of bronze threads together. The one to the left is decorated with simple lines. Scale 1:1. Drawings Marie Östberg.

All together, we have found 9 finger rings. Three of these were made of silver, five in bronze and one of amber. The last one is displayed to the right. The finger rings of silver are both of the traditional smooth form, but we also have found more elaborated finger rings in silver of a typical Gotlandic form.

A signet ring made of amber. On the inside of the ring, there are small circles incised, and also a cross. A similar ring was found some years ago at Sigtuna. This type of ring is supposed to originate from Novgorod, in Russia, where several examples have been found. It has also been found at Wolin in Poland. Scale 1:1. Drawing Marie Östberg.



## Chains

Chains were used in Viking Age among other things as pieces of jewellery. But chains also had a more practical function and were used both in beam scales and as equipment chains. With an equipment change, I mean chains to which were fastened small things like keys, metal holders for needles, tweezers, and similar small practical everyday objects.

The chains with the different objects were, in their turn fastened with different kinds of small metal objects fastened to the belt or to the dress. normally, these equipment chains were normally used by women, and it is rather common that we found this kind of artefacts in female graves from Viking Age.

The four different chains that have been found at Fröjel are between 21 and 105 mm long, and have a thickness of the links that fluctuate between 0.5 - 4 mm. The finds, number 329 and 3798 have links that are turned spirally, while the number 1423 has S- shaped links. The chains are very well shaped, and present the very high artistic skill the Viking Age smiths and metal workers possessed. Scale 1:1. Drawing Marie Östberg.



## Strap mountings and belt buckles

This is a category of objects that occurs rather frequently the Viking Age material. It consists of small objects, normally only a few centimetres big. They have been mounted in the end of straps and strings, or is the belt buckle, not unlike our day's belts. Belt buckles were common in the Viking Age, and were presence in large numbers in Eastern Europe and down to the southern part of Russia.

Belt buckles is a type of ornamentation that very often are mounted in long rows on belts and straps in Viking Age. The belt buckles from Fröjel, it has been found 16 items, are throughout very small, about 1 - 2 cm big, and furnished with a rivet on the reverse side, used for mounting them on belts or straps. Normally, they are made of bronze, but they occur many times made of silver.

The objects are in many different forms, from the shape of a heart to almost square formed. They are as a role very nicely decorated on the obverse side. They are for the most time from Viking Age. The heart- and shield shaped belt buckles are from the Orient.



*A number of belt buckles and strap mountings have been found at Fröjel. They are as a role rather small and well-made and made in bronze as well as silver. The three objects to the left are belt buckles and strap mountings. They are all made of bronze. The items in the three pictures to the right are small objects that have been mounted on belts and leather straps. They are, as in this case (except one) many times made of silver. Scale about 1:1. Drawings Marie Östberg.*

## Bells

A rather unusual kind of objects are small bells. In Fröjel, we have found all together 5 of this small bells. The exact function of this small bells in Viking Age is not known. Bells of iron are often found as parts of a horse equipment, but bells are also found in human graves. that was the case in the town of Birka, and it has been proposed that the bells were toys for children. They might also have been used as a protection against evil spirits, Bells as part of the dress is a characteristic feature in the Middle Ages.



The bells at Fröjel are all made of bronze. Four are half, and one is complete. Of the four half bells, three are made up of the upper part (F 1955, 3818, 3820) and one of the lower part (F 3819). The only bell that is complete, the one seen to the right, is gilded and have a suspension loop on top (F2620). All the bells have a diameter between 12 and 14 mm, and should probably be dated to the late part of Viking Age, suggested by the fact that they do not have any kind of ornamentation. The bells on the top are in scale 1:1, the one below is in scale 2:1. Drawings Marie Östberg.

## Dress pins and decoration pins

A rather common item of jewellery at Fröjel is dress pins and decorative pins of different types and forms. They have probably come from destroyed graves. All together, we have found 15 needles, five of them being complete and well preserved. Almost all of them are made of bronze. Besides these needles, we have also found many pieces of needles, heads and the needle itself. Almost all of the needles are more or less bent. This damage has probably occurred after that the needle have been discarded, or been accompanied the deceased in the grave. An exception from this is a well preserved needle that has been bent to probably serve as a fishing hook (but without a barb).



The decoration of the needles varies, but most of them have small holes that occur on the head itself. Six of the needles have loops on top of the head. Almost all of the needles are made of bronze. They can be dated from the Vendel Period, meaning 8<sup>th</sup> century (F306) to the 12th century (F1549).

At Fröjel we have found several dress pins and decoration pins made in bronze. The depicted pins above and to the right are from Viking Age, principally from the late Viking Age. But, there is one exception from that dating, and that is the pin furthest to the right above. It is from Vendel period, meaning in this case from the 8<sup>th</sup> century. The pin to the right might even have been used as a fishing hook; this may explain why it is bent. All pins are drawn in about scale 1:1. Drawings Marie Östberg.



## Moulds

Most of the jewellers presented here are more or less completely produced with the help of casting techniques, and a clear sign of local production at Fröjel are three different moulds, found in the cultural layer. Two of them are made in sandstone, the third one in soapstone. One of the moulds in sandstone has been used to produce ornamented pinheads (F 274). The form of the head of the pin, as well as the ornamentation reminds us strongly of some of the pins found at the site. Obviously, the way to produce the pins has been to cast the head in itself, and then put together the head with a round bronze rod, sharpen in one end. The pinhead from the mould can be dated to Viking Age, in this case probably the 11<sup>th</sup> century.

The other mould in sandstone has been used on both sides (F 3797). On one of the sides, the mould has the shape of casting bronze bars, some 6 - 8 cm long. Among the items found at the site, we have several examples of bronze bars of the same size, and almost identical with the form displayed in the mould. On the other side of the mould, small mountings have been cast, probably to be fitted on dresses. What the third mould has been used for is not clear. The figure reminds of the number eight (F 3796).

*Moulds of sandstone to the right. The mould has been used for casting a head of a dress pin in bronze. The bronze has been pored from above. The other part of the mould is missing. The picture is showing the mould in double the actual size. The shape of the head of the pin points to the Viking Age, probably the later part of the period, meaning the 11<sup>th</sup> century. Photo Dan Carlsson.*



*The mould to the right is double sided. On one of the sides, the one to the right, bronze bars have been cast. The other side of the mould (to the left) has been used to cast small mountings that might have been fastened to clothes or belts of different kinds. The moulds, together with huge amount of clipping from bronze plates, clearly shows that bronze handicraft has been carried out at the site. Bronze as raw material was probably imported from the Continent. Scale about 1:1. Drawing Marie Östberg.*

