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Ingunn M. Røstad, Elna Siv Kristoffersen, Håkon Reiersen, Unn  
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# Technologies – Knowledges – Sustainability Crafting societies in the first millennium CE

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Publisher:

Museum of Archaeology, University of Stavanger

N-4036 Stavanger

Norway

Tel.: (+47) 51 83 26 00

E-mail: post-am@uis.no

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The front page: Amber nuggets and semi-finished amber beads and pendants from pit-house 7/91 in Biskupice, Poland.

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The back page: Suspension loop for gold bracteate S12625, from Hå on Jæren, Rogaland. Photo: Annette G. Øvreliid.

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# Crampons – Late Iron-age everyday items and/or artefacts with sacred meaning?

ANNE-SOFIE GRÄSLUND

Anne-Sofie Gräslund 2025. **Crampons – Late Iron-age everyday items and/or artefacts with sacred meaning?**  
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The question is whether crampons, ordinary artefacts in everyday use on icy roads, also may have had a sacred meaning. The notion that they did is supported by Old Norse literature: in Gísl Sursson's saga, it is mentioned twice that it was customary to bind *helskór* to a dead man's feet. After a description of crampons for horses and people, I have selected Valsgärde and Birka, two well-known burial grounds from the second half of the first millennium in the Mälardalen valley in eastern Sweden, to study the frequency of crampons and their distribution according to grave type and the sex of the interred. Crampons are rather common and occur in both men's and women's graves and in both inhumations and cremations. An exception seems to be children's graves: in Birka, there probably are at least 80–100 children's inhumations, and only in one of them a crampoon has been found. Strangely enough, there are several examples where a dead person was provided with a horse crampoon. Philologist Dag Strömbäck has commented upon the mentioning of *helskór* in Gisli's saga. He points out that translators have misunderstood the significance of the custom and strongly rejects their suggestion that the shoes were supposed to fasten the dead person into the grave and prevent him from returning to the world of the living as a ghost. To Strömbäck, it is obvious that the purpose of *helskór* was to help the deceased persons on their long and arduous journey to the Other World. I find Strömbäck's argumentation strong and sound, and I join his opinion.

Anne-Sofie Gräslund, Uppsala University. E-mail: Anne-Sofie.Graslund@arkeologi.uu.se

**Key words:** Crampons for horses and people, *helskór*, Valsgärde, Birka, journey to the Other World, 2<sup>nd</sup> half of the 1<sup>st</sup> millennium

## Introduction

It is a fascinating thought that ordinary artefacts may have a double meaning, both the obvious one in everyday life and a sacred or ideological one. A good example are the grinding stones which have both a practical use and a symbolic meaning (see Lidström Holmberg 1998; Fendin 2006).

Crampons are small iron objects with spikes that were attached to the underside of the shoes of humans or the hooves of horses by means of leather straps or string. Usually, this was done to keep their wearers from slipping and losing their footing on icy ground, but they also have been described in connection with death and funerals. I will come back to this aspect, but let us first have a quick look at crampons and their frequency.

Horse crampons (Figure 1, cf. Figure 5): U-shaped mounts with a broad irregularly shaped or semicircular base plate (width ca. 3.5–4.5cm) from the underside of which projects a single pyramidal spike. The legs are bent



Figure 1. Horse crampoon from Valsgärde, cremation grave 86. Late Viking Age. Photo: Mikael Wallerstedt, Uppsala.



Figure 2. Crampons for shoes/humans, Valsgärde, cremation grave 89. Viking Age. Photo: Mikael Wallerstedt, Uppsala.

when attached to the hooves. A common interpretation is that if the legs (length ca. 5.0–6.5cm) are straight, the crampoon has never been used. After consulting with a colleague with knowledge of horses and their gear, I understand that there may be another explanation: when crampoons were no longer needed – such as when the ice was gone – they were straightened out, in order to remove them. This is how horseshoe nails are handled today after the change of horseshoes, every 6<sup>th</sup> to 8<sup>th</sup> week (e-mail from Anneli Sundkvist PhD 2014-04-09).

Crampons or studs for humans/shoes (Figure 2, cf. Figure 5): these are band-shaped with the legs bent together over the base plate, which has a spike underneath. Usually, they are rather small, just 3–4cm long and 1–2cm wide. They may have been fastened on a wooden stick or a piece of thick leather (Atterman 1935, 153–55). Another method is demonstrated at Tuna in Alsike, Uppland, eastern Sweden, where a woman buried in a boat (grave X) had an iron band, about 10cm long, with three spikes underneath (Arne 1934, tables XV, XXX; Atterman 1935, 154).

In addition, there is also a small number (5 examples) of a triangular type of crampoon probably fastened to the shoe heel with a cord or a leather strap. This type, common in the Middle Ages, will not be touched upon here. To study the frequency of crampoons, I have chosen two

well-known eastern-Swedish cemeteries in the Mälardalen valley: Valsgärde, pre-Viking (Vendel/Merovingian Period) and Viking Age, and Birka, Viking Age. The numbers are approximate, as small fragments may be difficult to identify.

Valsgärde (Vgde): horse crampons occur in connection with horse skeletons in the Vendel-period boat graves 6, 7 and 8, probably also in Vgde 5, as well as in several of the Viking-age boat graves (for example Vgde 1, 2, 4, 13, Figure 3 and 4) and in the Late Viking-age chamber grave 22 (Figure 4). Concerning cremation graves, the burials mostly consist of cremation layers under some form of external structure, such as a stone setting or a cairn. Horse crampons occur in six (49, 52, 57, 75, 85 and 86), human/shoe crampons in three (89, 95 and 96) and both types in one cremation grave (94) (Arvidsson 1942, 1954, 1977; Munktell 2013; Nordahl 2018).

Birka (Bj; see Figure 5): at least 28 horse crampons are known from 18 horses in inhumation graves as well as 28 examples from 21 cremation graves. Band-shaped shoe crampons were found in 109 graves (50.5% cremations, 49.5% inhumations). Number of sex-determined: 29 male, 32 female, 2 double interments of a man and a woman). It is remarkable that only one of the graves is listed as that of a child (Arbman 1943, 321). In a previous paper (Gräslund 1973), I tried to identify the children's graves



Figure 3. Skeletons of two horses with crampons at their hooves. Detail of a drawing of boat grave Valsgärde 13, made by Bengt Schönbäck. Museum Gustavianum, Uppsala. Viking Age.

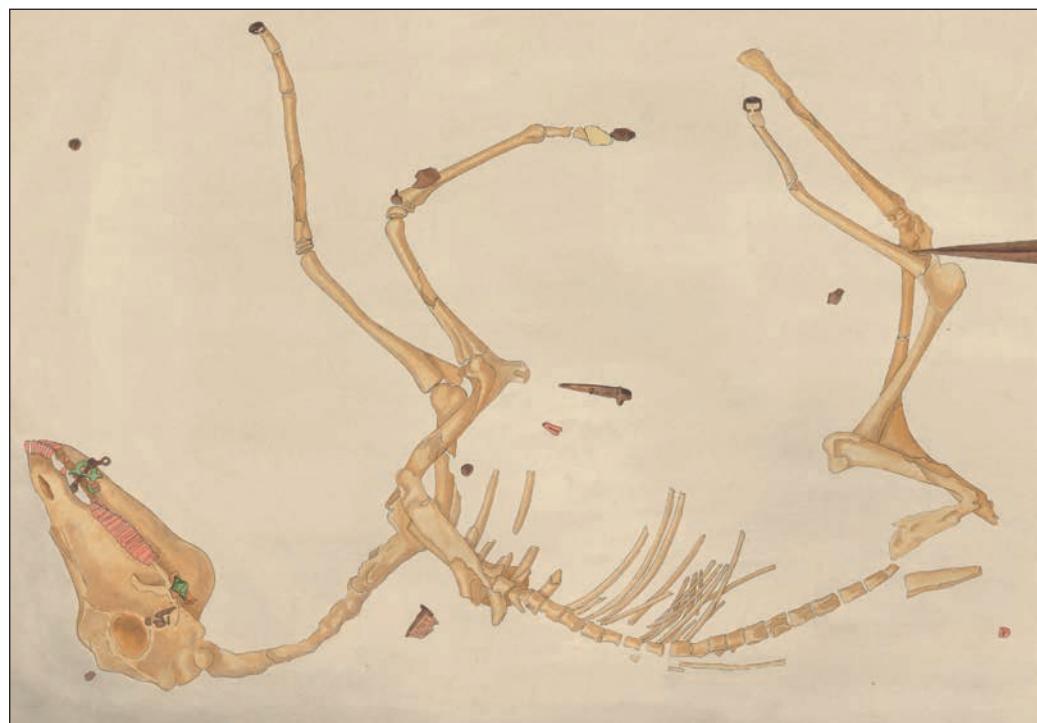


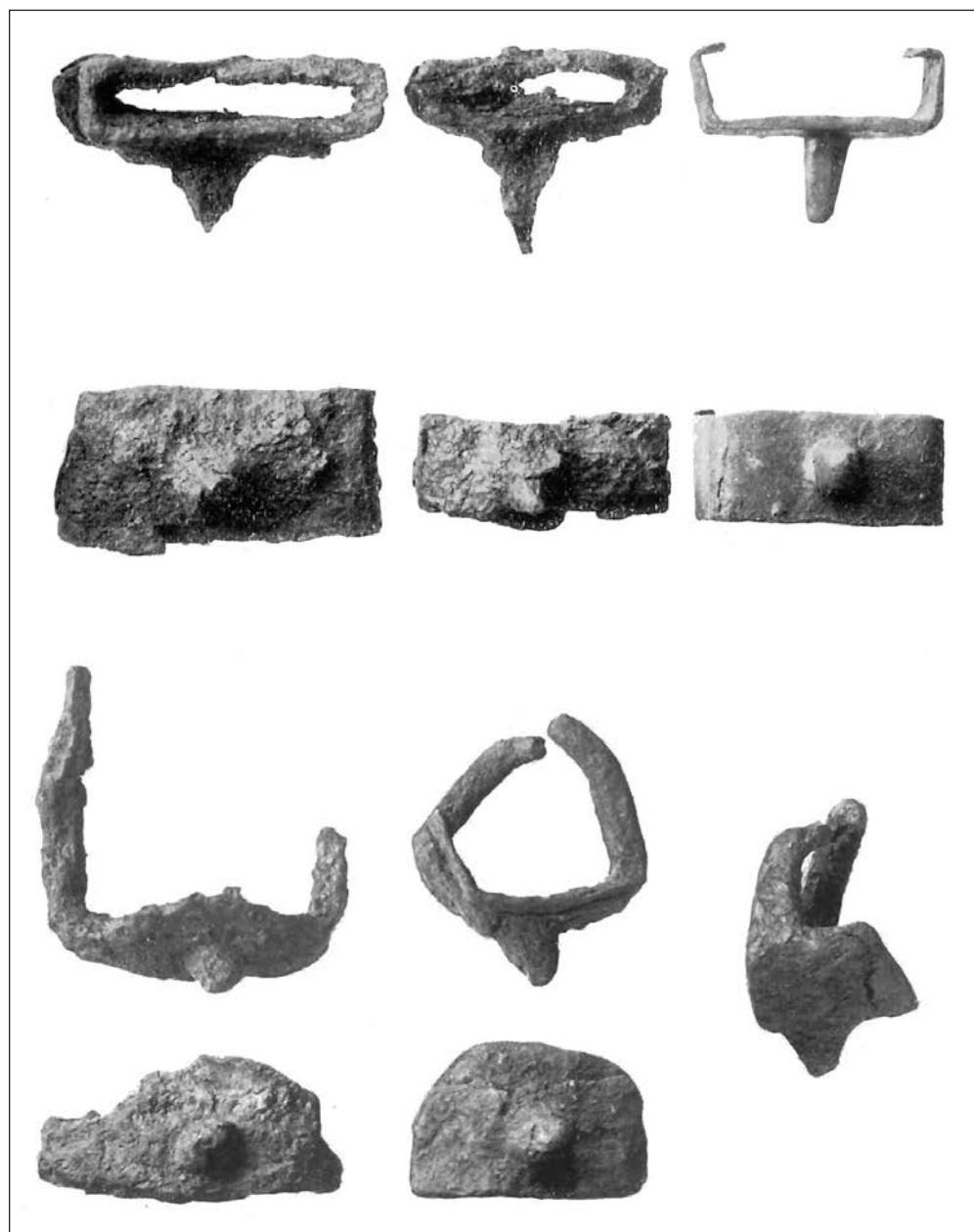
Figure 4. Skeleton of a horse with crampons at three of the hooves. Detail of a drawing of chamber grave Valsgärde 22, made by Bengt Schönbäck. Museum Gustavianum, Uppsala. Late Viking Age.

in Birka's burial grounds, based partly on artefact finds and partly on burial pits shorter than 1.5m. The grave in question, Bj. 846, contains an inhumation, where the deceased child was buried in a nailed coffin about 1.45m long. The deceased was equipped with jewellery consisting of oval brooches, one large and one small round brooch, both gilded, a bronze needle case with needles still in place in textile remains and a bronze-clad iron weight as well as a damaged band-shaped crampon with wooden remains near the place where the child's feet

probably had been. Interesting is the inhumation grave Bj. 887 (Figure 6), where the dead person – presumably a woman, judging from the grave goods consisting of 12 glass beads, two of them with gold foil and 10 with silver foil, a knife and a comb – had been equipped with one horse crampon under the right foot and two shoe crampons under the left foot.

It is worth mentioning that Jan Petersen included crampons in his 1951 book *Vikingetidens redskaper*, but only those for horses. He knew of 118 examples in

Figure 5. Crampons from various Birka graves (after Arbman 1940, slightly modified by John Ljungkvist). Viking Age. Upper row shoe studs, from left: Bj. 1032 (inhumation grave), Bj. 323, Bj. 385 (both cremation graves). Row 2: the same crampons seen from below. Row 3: horse crampons, from left: Bj. 887 (inhumation grave), Bj. 954 (chamber grave). Row 4: the same crampons seen from below, the one from Bj. 954 also in profile.



Norway, where they are strongly concentrated in the Østlandet region. Even while some of them seem to be band-shaped, he argues that they are too big to be shoe crampons. The only example of possible shoe crampons he knows from Norway comes from a 9<sup>th</sup>-century male grave in Akershus (Petersen 1951, 62–66).

### A possible sacred meaning

More or less contemporarily, two eminent Scandinavian philologists, Anne Holtsmark in Oslo (Holtsmark 1951) and Dag Strömbäck in Uppsala (Strömbäck 1952) proposed the idea that crampons were a materialisation of what in Old Norse literature is referred to as *helskór*: shoes that are used when hiking to the other world. Support for the idea is to be found in Gísli Sursson's saga, one

of the Icelandic sagas. Crampons are also mentioned in the *Eyrbyggja saga*, chapter 45, but these obviously are of the triangular type referred to above.

Briefly, the story of Gísli's saga is about the consequences of the secret murder of Véstein Vésteinsson, brother of Gísli's wife Aud, on Gísli's farm, Hóll. The perpetrator is Thorgrím Thorsteinsson, who is married to Gísli's sister and living on the neighbouring farm Sæból. Gísli immediately understands the situation and after some time exacts revenge by secretly killing Thorgrím. The scene in the saga relevant to the question of the meaning of the *helskór* concerns the ceremony accompanying Véstein's interment in a mound (chapter 14): Thorgrím says, "It is the custom to bind *helskór* on dead men on which they are to go to Valhalla, and I will do that with Véstein [...]. Nor

can I bind Hel-shoes if these should loosen" (Gisle Surssons saga 1993). In her thorough analysis of the persons and events described in the saga, Anne Holtsmark (1951, 55), merely mentions the custom of binding *helskór* and adds nothing more about it.

Dag Strömbäck believes that the translators of the passage quoted above misunderstood the meaning and rejects their idea that the *helskór* were meant to fasten the dead person into the grave and to prevent his return to the world of the living as a ghost (Strömbäck 1952, 144). Instead, he proposes, the essential thing was to tie the shoes properly over the ankle, so that the crampons could be useful for the deceased on his long and arduous journey to Valhalla (Strömbäck 1952, 142–44). Strömbäck's argumentation seems sound and strong, and I agree with it.

Some Early-medieval wooden coffins found under Saint Lars' church in Linköping contained long rods or staffs, which are interpreted by medievalist Sune Zachrisson as walking sticks for the long and difficult hike to the Other World. In Lund, several 11<sup>th</sup>- and 12<sup>th</sup>-century graves contain such staffs as well as, in some cases, the remains of shoes, which led Zachrisson to think of the concept of *helskór* (Zachrisson 1958, 198–200). This is supported by the fact that in Germany, well into modern times, the funeral beer was called *Totenschuh*. Finds of shoes, lasts or models in graves may thus be related to this notion (Gezelius 1959; Strömbäck 1961; Zachrisson 1958).

Swedish folklorist Louise Hagberg, who published a comprehensive book on burial customs in Early Modern Times in Sweden, discusses in detail how the dead body was dressed. Socks, she points out, were extremely important and usually were put on before the onset of rigor mortis (Hagberg 1937/2015, 189–93). This may be reminiscent of the old custom of death shoes and by extension even of *helskór*.

Our ideas of the concept that people in Viking-age Scandinavia may have had of the Other World and the journey there are rather obscure, as there is a lot of contradictory information in Old Norse literature, both in the Eddic poems and elsewhere. One of many important questions that arise, for example, is whether women were allowed to enter Valhalla, Óðin's abode of fallen warriors? Or were they excluded from the Other World?

An interesting suggestion regarding the custom that included boat graves has been proposed recently. From the middle of the Bronze Age and throughout the Iron Age, the ship has been a natural means of travel. This makes it reasonable to understand the notion of a ship and a sea voyage as a metaphorical medium for the

deceased's journey to the Other World. The reason for this may well be that on the horizon, the open sea seemingly meets the sky in a way that invites the idea that celestial space will be reached if one will just sail far enough (B. Gräslund 2018, 90–91). Sailing was one way to reach the Other Side, walking there obviously was another. In this context, it is interesting to note that none of the boat graves at Vendel and Valsgärde include crampons for humans, only for horses, although there is the incidence noted above of a crampoon for human shoes in the boat grave at Tuna in Alsike.

## Conclusion

I find it entirely reasonable that crampons sometimes had a double meaning – that of an everyday aid for walking on icy ground and a sacred meaning as *helskór*, a helpful implement on the difficult hike to the Other World. Obviously, however, the latter was not a widespread custom

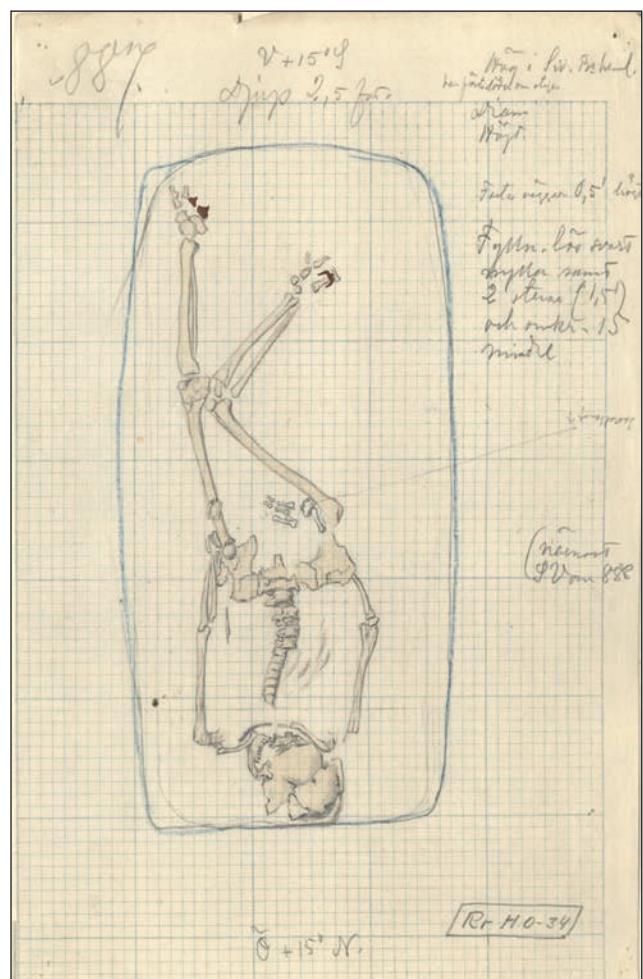


Figure 6. Hjalmar Stolpe's plan of inhumation grave Bj. 887. The deceased person had a horse crampoon under the right foot and two shoe studs under the left foot. The crampoons are indicated by colour. Museum Gustavianum, Uppsala.

or there should be many more examples, especially band-shaped shoe crampons, among the grave finds. In Birka, for example, only 10% of the graves include crampons. Only one was found in the grave of a child (Bj. 846). In the catalogue, we read: “one band-shaped crampon, damaged, with remains of wood”, obviously remains of the shoe sole (Arbman 1943, 321). The suggestion that the child might have been carried to the Other World by an adult is interesting (and in fact found in churchyards from early modern time, where children sometimes are interred in an adult’s grave), but there is no evidence for that here. The grave in question is equipped in an usual way, neither richer nor poorer than other children’s graves.

Note: Much of the Valsgärde material presented here is unpublished. It is kept in the archive of Museum Gustavianum, Uppsala, and is going to be published by the project Viking Phenomenon, led by Neil Price, John Ljungkvist and Charlotte Hedenstierna Jonson. My warmest thanks to John Ljungkvist for helping me with the illustrations.

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