

BOTFUS THE GUTE AND THE PRODUCTION OF VIKING AGE WEAPONS ON GOTLAND

It is difficult to underestimate the importance of weaponry in Scandinavia during the period of active raiding and trading which we usually call the »Viking Age«. Judging from the uneven distribution of weapons in various areas of Scandinavia, we may assume certain differences in social structure, ideology and, as a result, different grades of violence in local societies. The island of Gotland represents a remarkable example of an unusually large amount of weaponry during the whole Iron Age (Nørgård Jørgensen 1999; Androshchuk 2009, 96. 102). However, there is reason to believe that many weapon graves on Gotland do not indicate the existence of a highly stratified society or a specialized warrior class. Most likely we are dealing here with free and socially active members of the society where weapons and violence were a common part of everyday life. It would be reasonable to suggest that the high demand for weapons on Gotland led not only to exports from the Continent but also to local production. Although the local production of weapons was always assumed (Thålin-Bergman 1983, 257-263. 278-280; Mägi-Löugas 1993; WKG III, 658-659), it has never been the subject of a special study. Past scholarship has suggested the export of weapons from Gotland in the Late Viking Age (Ebert 1914, 126. 133-134) but this idea has not been supported by scholars who argue for the existence of a local and independent production of weapons on Gotland (Creutz 2003, 106-107).

In this paper, we present evidence for the local manufacture of weapons on Gotland during the Viking Age (fig. 1)¹.

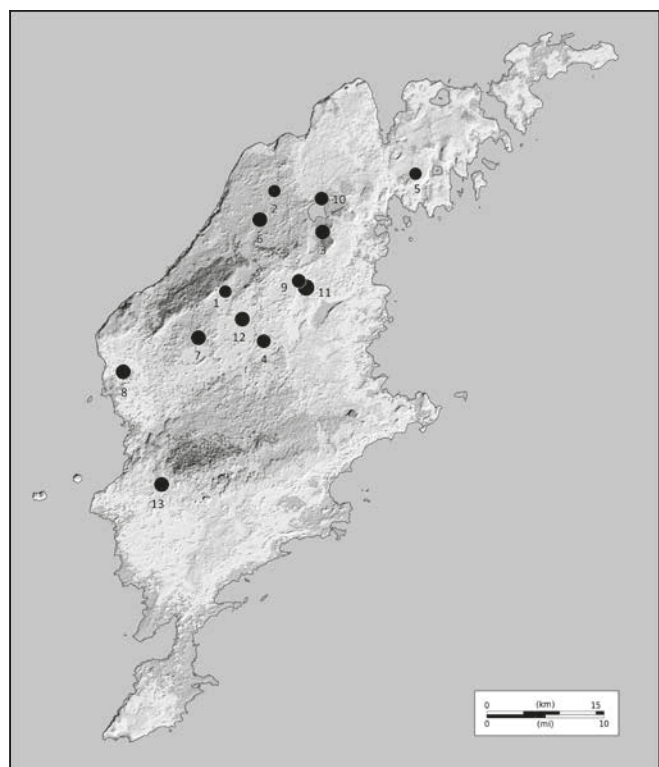


Fig. 1 Places of weapon production on Gotland mentioned in this paper: **1** Svenskens in Endre. – **2** Smiss-Hof in Stenkyrka. – **3** Bjärs in Hejnum. – **4** Broe in Halla. – **5** Ire in Hellvi. – **6** Martebomyr. – **7** Levide in Vall. – **8** Alvena in Mästerby. – **9** Stora Sojdeby in Fole. – **10** Rosarve in Tingstäde. – **11** Gudingsåkrarna in Vallstena. – **12** Lillmyr in Barlingbo. – **13** Möllegårds in Hemse. – (Map F. Androshchuk).

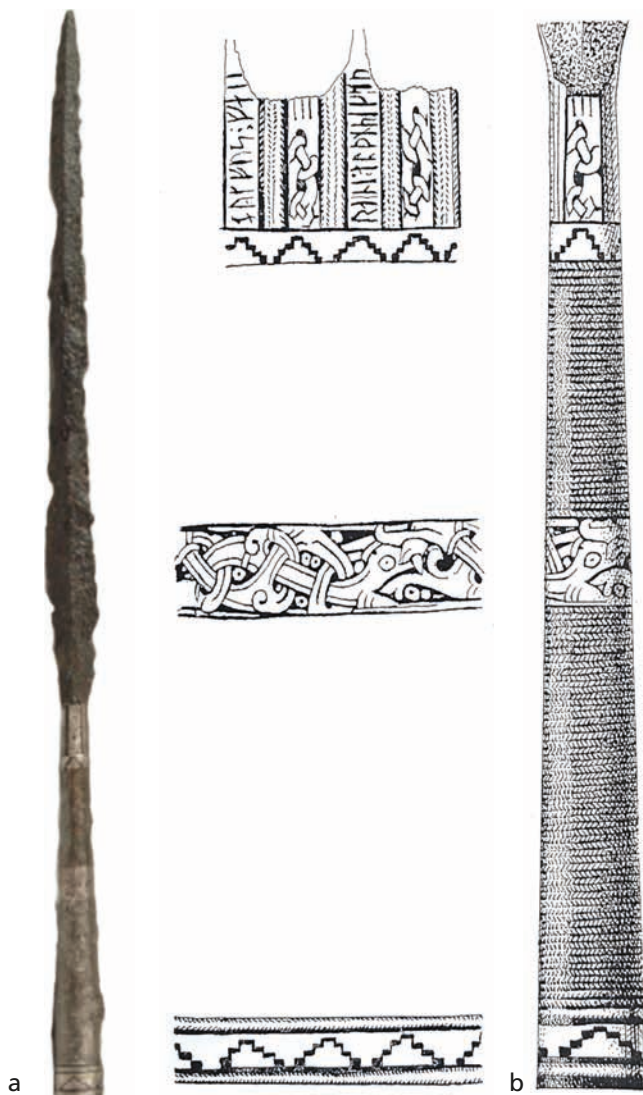


Fig. 2 Photo (a) and drawing (b) of the spearhead from Svenskens in Endre parish on Gotland. – (a photo courtesy Statens Historiska Museet [SHM]; b after Rydh 1952, 29 figs 1-2). – Not to scale.

In doing so we will start by bringing to light a unique spearhead with an incrustated runic inscription that was found by Karl Johan Malt at Svenskens in Endre parish on Gotland in 1917, during the digging of a ditch between Svenskens and Stora Vede in Follingbo (fig. 2).

Both villages can be found stated as the find spot in the literature (see WKG III, 196; GR 3, 8-26: G 225 with previous bibliography). For some strange reason, although the spearhead has been published several times before, it has never been discussed in connection with the issue of the local production of weapons on Gotland. The appearance of a runic inscription on the spearhead makes this find exceptionally important for one more particular reason – the dating of the runes. For these purposes, we are going to discuss the runic inscription in connection with the archaeological dating of the spearhead, paying attention to three different criteria: runic contexts; typology; the chronology and identification of the decorative style of the spearhead.

DESCRIPTION

The total length of the spearhead is 51 cm; the largest width of the lancet-shaped blade is 2.7 cm; the length of the socket is 13.5 cm (fig. 3, a). Between the blade and the socket, there is a 2.1 cm long transition part representing the neck of the spearhead. Both the socket and the neck are decorated with silver incrustation.

The socket edges are marked with decorative belts representing a stepped pattern that has two double flanking wires at the end of the socket. In the upper part of the socket, there is a belt with a motif representing a ribbon-shaped animal (fig. 3, c-d).

Large fields of sockets between the decorative belts are decorated with alternating twisted wires. The neck has vertical fields, two of them with incrustated runes and two with interlace motifs with two knots (fig. 3, b. e-f).

Three narrow fields between the runes and interlaces are ornamented with two alternating double-twisted wires. The observation of enlarged photos shows that the runes were executed sloppily but undoubtedly were made simultaneously with the incrustation of other parts of the spearhead.

The dating of this spearhead has never been seriously discussed. In Hanna Rydh's opinion, the spearhead belongs to the first half of the 11th century (Rydh 1952). Lena Thunmark-Nylén orally supposed a dating around the end of the 10th or the beginning of the 11th century (GR 3, 25). Both datings are groundless and should be discussed here.

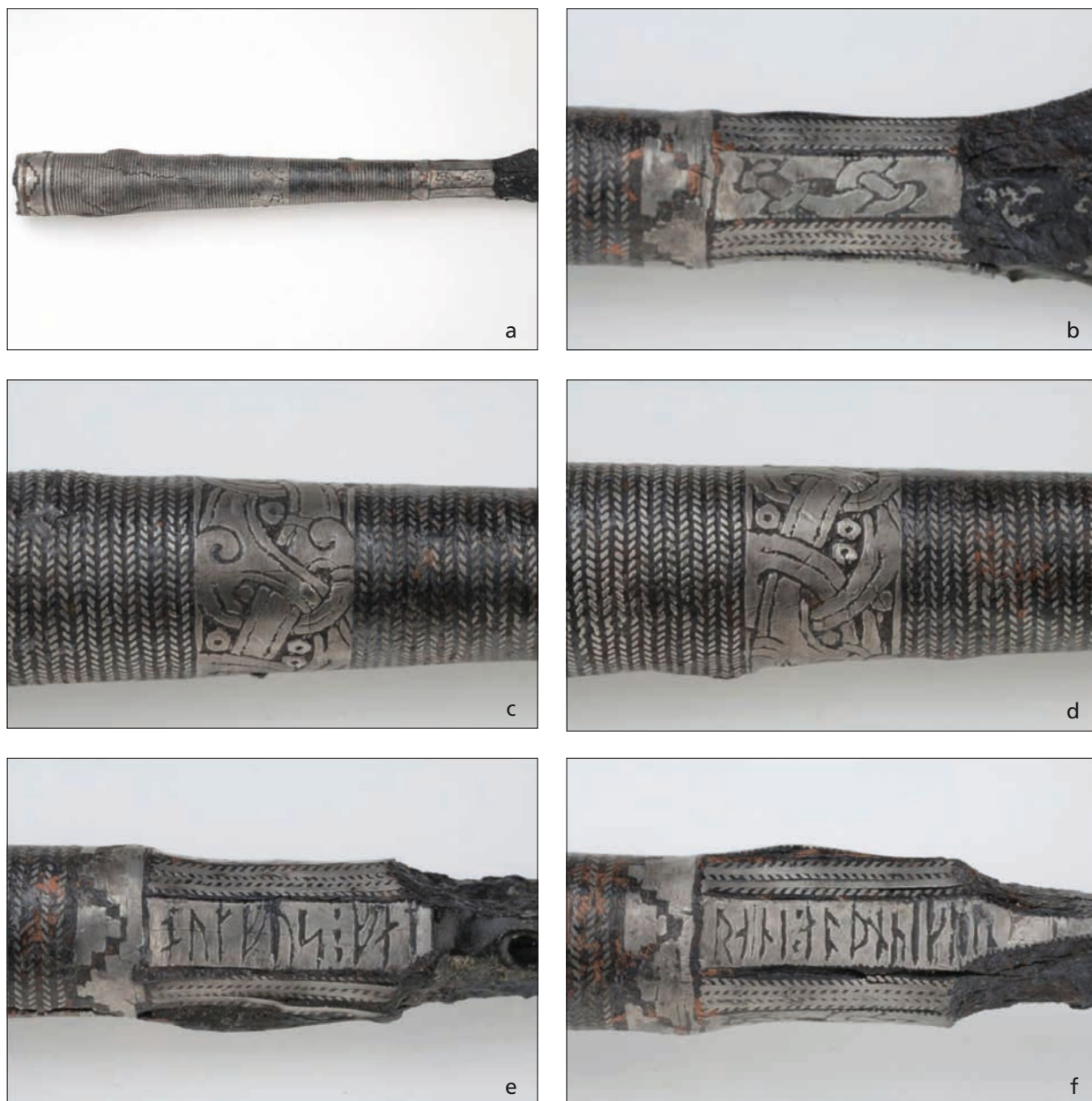


Fig. 3 The spearhead from Svenskens on Gotland: **a** socket of the spearhead with the neck. – **b** knots. – **c-d** representation of a ribbon-shaped animal inlaid in the upper part of the socket. – **e-f** decorated neck of the spearhead with runes. – (Photos courtesy SHM).

TYPE

Several typologies of Viking Age spearheads have been proposed. In the Norwegian material Jan Petersen has singled out two related types – I and K (Petersen 1919, 31-33 figs 20-22). According to him, both types have a long lancet-shaped rigged head and a slightly shorter socket that can be decorated with incrustated silver and copper wires. The only difference is short spikes of bronze (from 11 up to 15) which are arranged along the socket of type I and often are not preserved. Type I was dated to the first half of the 10th century, type K to »the earlier part of the Viking Period« (Petersen 1919, 33).

Jan Petersen's typology has been challenged by Lena Thålin-Bergman, who took the edge welding as a criterion for the division of the material (Thålin-Bergman 1969, 185-196; Fuglesang 1980, 137). According to

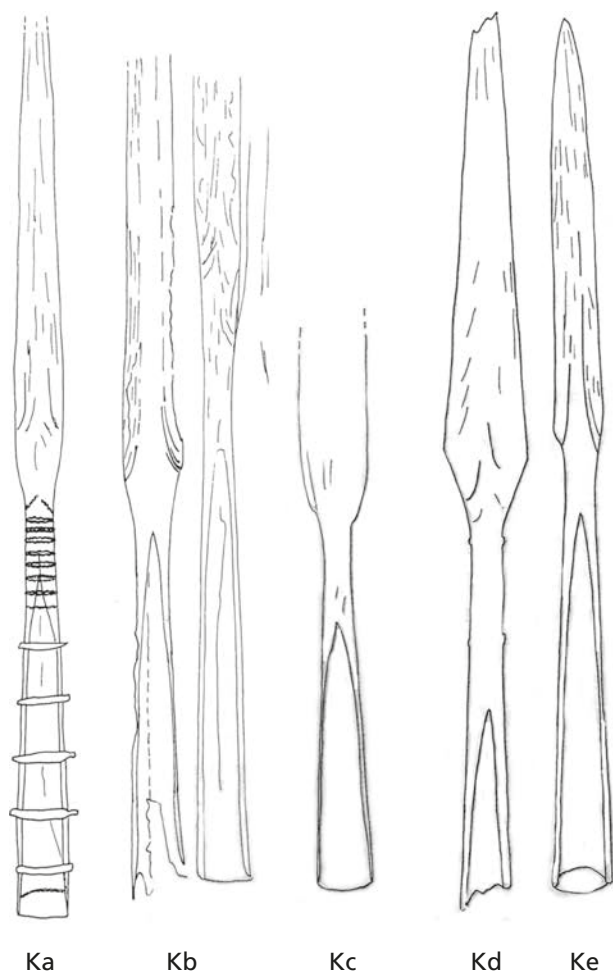


Fig. 4 Lena Thålin's five variants of K-type spearheads. – (After Thålin-Bergman/Arrhenius 2005, 59-60 figs 42-44).

- Ka: spearheads with »short slender blades with straight cutting edges all along the blade«;
- Kb: »long spears with broader blades, all probably with angles and curved cutting edge welds«;
- Kc: »smaller spears with rounded angles, no cutting edge weld visible«;
- Kd: spearheads »with rhomboid blades«;
- Ke: spearheads »with short narrow blade, socket with extremely wide mouth« (Thålin-Bergman/Arrhenius 2005, 59-60 figs 42-44).

These variants of Scandinavian spearheads can be reduced to four because Thålin-Bergman's type Ke is a long thrusting spear of eastern European origin (type V according to Kirpichnikov 1966, pl. IX, 7-13, or type Ia according to Izmailov 1997, 58-59 fig. 31).

Later, Signe Horn Fuglesang drew particular attention to the spearheads of Petersen's types K and M decorated in the Ringerike style. According to her, both types are characterized by such common typological and technical characteristics as the division of the socket into an upper polygonal and a lower circular section decorated with crossing ribbons and a vertical step pattern respectively. Both types have a sharp angle at the shoulder of the blade and correspond to Thålin-Bergman's third group of spearheads. According to Fuglesang, types K and M differ in the shape of their blade. The latter usually has broader blades with higher shoulders than on type K. She applied proportional measurements in distinguishing types, i.e. the ratio between the edge of the socket and the shoulder. According to her, type K corresponds to spearheads with a ratio between 1:3 and 1:3.8 while M-spearheads characteristically have a ratio between 1:1.6 and 1:2.4 (Fuglesang 1980, 31-32). Also, Signe Horn Fuglesang noted the existence of the intermediary type K/M

her, there are three groups of spearheads: the first one includes lancet-shaped heads without a clear transition from the socket to the blade (Petersen's types A-D1 and E), the second one comprises spearheads with low edge shoulders and a short conical socket (Petersen's types D2, G-H) and the third one is represented by the spearheads with a narrow and sometimes shouldered blade with a long, narrow and conical socket (Petersen's types F, K, I and M).

The irradiation of Swedish spearheads undertaken by Lena Thålin-Bergman has confirmed Petersen's observation that bronze spikes are the only feature that distinguishes spearheads of types I and K (Thålin-Bergman 1986, 17-19; Thålin-Bergman/Arrhenius 2005, 58-59). It may be suggested that the spikes were not only decorations but also additional means of fastening a wooden shaft to the socket.

Depending on the general length and the length of the sockets, smaller and lighter as well as larger and heavier spearheads can be distinguished among the spearheads of type K. Lena Thålin-Bergman has subdivided five variants of K-type (fig. 4):

- Ka: spearheads with »short slender blades with straight cutting edges all along the blade«;
- Kb: »long spears with broader blades, all probably with angles and curved cutting edge welds«;
- Kc: »smaller spears with rounded angles, no cutting edge weld visible«;



Fig. 5 Half-finished copies of spearheads representing two differently made groups. – (Photo courtesy D. Khramtsov).

which, like the M-type, usually bears ornamentation in the Ringerike style while the pure type K does not have such a decoration (Fuglesang 1980, 32).

Petersen's vague argumentation was examined by Bergljot Solberg who has subdivided types based on the proportion of the typological elements (material, form, technique and decoration) and X-ray examination (Solberg 1985, 4-11. 79). She has produced twelve groups of spearheads of which groups VII.1B, VII.2A, VII.2B and VII.2C correspond to Petersen's types F-I and K (Solberg 1985, 97. 118). Subtype VII.1B (Petersen's F-I) is represented by 18 spearheads with shouldered blades that are ovate or polygonal in section with a concave or straight outline of the run (i. e. the part between the socket and the widest part of the blade) and sockets decorated with spikes (from 3 up to 11). Twelve specimens are decorated with horizontal circles. Spearheads of subtype VII.2A (Petersen's I) has a blade that is narrow and rhomboid in section and spikes on the socket (from 3 up to 13). Many sockets are decorated with horizontal circles or herringbone pattern and/or horizontal interlacing ribbons or triangles. There are 62 such spearheads recorded in Norway, of which 58 have a pattern-welded blade. Spearheads of subtype VII.2B (Petersen's K) comprise specimens with a long, narrow-shouldered blade and decoration similar to that of previous subtypes except for the presence of spikes. Four variants distinguished by a short blade (var.1), a wider and a short socket (var.2), a wider and thicker blade (var.3) and decoration between socket and blade (var.4) have been recorded. A total of 66 exemplars have been noted, of which 42 have welded blades. Subtype VII.2C (Petersen's K) includes spearheads with a shorter blade without shoulders with a convex run and sockets, sometimes decorated in a similar way as previous subtypes. A total of 66 exemplars have been recorded, of which 38 have welded blades. The majority of these spearheads came from eastern Norway (Solberg 1985, 79-90 figs 12-14).

Kristina Creutz has made a comparative study of a selection of Estonian, Finnish, Latvian, Russian and Swedish spearheads of type M. These spearheads with shorter and wider circular, rhomboid or polygonal section blades with shoulders and a concave run, often decorated in silver in the Ringerike or Urnes styles, are traditionally dated to the Late Viking Age (Petersen 1919, 35 fig. 25; subtypes VII.3A and VII.3C after Solberg 1985, 100-102). Creutz has tried to revise both the typology and the chronology of this type. However, it seems that the only ground for her argument is the presence of facets that she considers as an essential feature distinguishing spearheads of type M. As a result, she referred to this type some specimens which traditionally are considered as type K and are found in the 10th-century graves of Birka (Björkö/S) and Gästrikland (Gävleborgs län/S) (Creutz 2003, 34. 253 fig. 2.7 S-57M, S-58M, S-64M).

To sum up, judging from its form, proportions and ornamentation, the spearhead from Svenskens should be identified as Petersen's type K – a weapon characteristic of the 10th century.

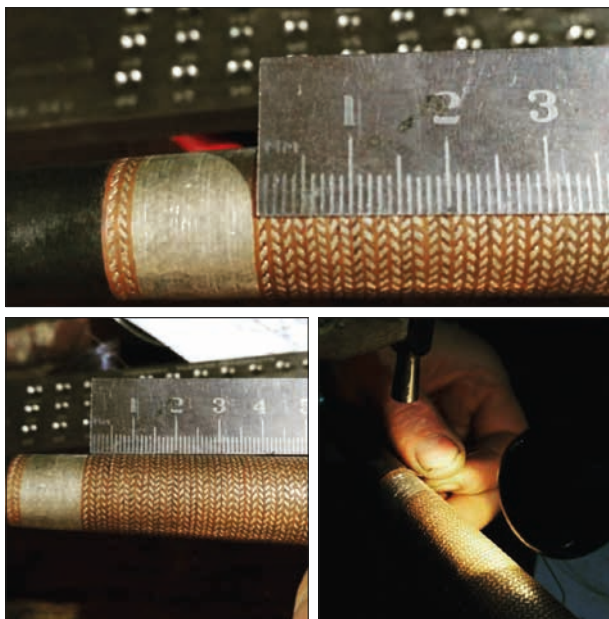


Fig. 6 The process of interlaying of the socket. – (Photos courtesy D. Khramtsov).

MANUFACTURING EXPERIMENTS

Based on the particular method of manufacture, all the spearheads may be subdivided into two main groups: group I that comprises specimens with blades and sockets made of one piece of iron, and group II that includes spearheads with separately made blades and sockets (fig. 5).

An experiment made by the smith Dmitry Khramtsov (Minsk) has shown that separate making of the socket and head of a copy of the spearhead from Svenskens takes approximately four days (one or two extra days would be required in the case of pattern-welding of the blade). Four more days were needed to interlay the socket (fig. 6).

For this purpose, two coloured wires about 80cm long twisted in opposite directions and one untwisted wire were hammered into channels specially cut in the iron body of the socket. In particular sections of the socket, a decorative pattern was engraved by a pointed tool. Then the inlaid pattern was hammered and filled with niello. For the making of the socket, a special Г-shaped tool ending with a cone was used. With the help of hammering and welding, two edges of the socket were joined together on it.

For the most effective and productive work, a team of specialized co-workers was necessary. One of them would be responsible for the buying and preparation of the raw material, one more would be required for the blacksmithing and one silversmith would be needed for the decoration of the socket. If the number of workers was limited, a smith might have devoted some days to working with the preparation of half-finished specimens and then with welding and decoration. It may reasonably be assumed that three to five half-finished pieces were manufactured during a single day. Different ways of manufacturing spearheads might have been applied by the same smith. Simpler spearheads of group I were cheaper to produce while separately made sockets and pattern-welded blades might have been aimed at rich customers. In this experimental copy, all stages including ornamentation were made by the same smith, which is the basis for the suggestion that the spearhead from Svenskens was also made by the same master (fig. 7).

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DATING OF THE TYPE

In her conclusions, Bergljot Solberg follows Petersen's chronology which is chiefly based on Norwegian finds with uncertain find circumstances (Simonsson 2015, 72-75; Androshchuk 2014, 144-146). Instead, we are going to apply well-documented and published Swedish finds.

The only true Swedish spearhead of Petersen's type F has been discovered in grave VI excavated by Alexander Seton. It contained one sword of type H/I, an oval brooch of type 51A1 and a Carolingian coin struck in 814-840 (Androshchuk 2014, 149 tab. VI.2; 166, Up58b) dated to the beginning of the Late Birka Period, i. e. c. 870-900. Spearheads of type I have been recorded in Swedish graves with swords of types E (1x), H/I (5x), V (3x), X (1x), Y (1x) while spearheads of type K were found with swords of types H/I (4x), M (1x), V (1x), X (2x), Y (1x). In two graves with swords of types H/I, and Y spearheads of both types have been



Fig. 7 Copy of a spearhead from Svenskens. – (Photo courtesy D. Khramtsov).

discovered. Thus, all find associations with spearheads of types I and K belong to phase 2 of the Late Birka Period or the Middle Viking Age, i. e. 900-975 (Androshchuk 2014, 148. 171 tab. VI.2-4 fig. 86). Such a dating of I-spearheads might be confirmed by the association of the finds with swords of types H (1×), X or V (1×) and S (1×) in Denmark (Pedersen 2014, 134-135 find list 3:13, 47, 49; cat. nos 118. 315. 350 pls 11, 4; 43, 2; 45, 2), swords of type O in Iceland (Eldjárn/Fridriksson 2000, 89. 151 nos 37. 85 fig. 28), swords of type V on the Isle of Man (Bersu/Wilson 1966, 57 fig. 35), a sword of type W in Russia (Zozulia 2014, figs 2-3) and swords of types T and Z in Ukraine (Kainov/Shchavelev 2005, 84 fig. 1). The Russian find (a spearhead elaborated into a whip handle) has been found in Timerevo's barrow 100 (Yaroslavskaya obl.) along with seven dirhams, the youngest of which was struck around 976 (Ravdina 1988, 116 no. 204) while the Ukrainian spearhead (also elaborated) has been discovered in the Chorna Mogyla barrow (Tschernihiwska obl.) together with a Byzantine silver coin struck between 945 and 959 (Ravdina 1988, 125 no. 222).

The archaeological dating of spearheads of types I and K to the first half of the 10th century was suggested based on graves excavated at the Kaupang cemetery (Vestfold/N; Blindheim/Heyerdahl-Larsen/Ingstad 1999, 95-100). All Danish spearheads of types I and K (3 and 10 finds respectively) derive from graves dated to the 10th century (Pedersen 2014, vol. I, 94 fig. 5.11; vol. II, 134-136 find list 3).

One or two spearheads of type I and 40 of type K have been recorded in Iceland (Eldjárn/Fridriksson 2000, 338-341 figs 182-185). Some of them are rather locally produced but all are dated to the 10th century (Androshchuk/Traustadottir 2004, 6).

Thus, based on Scandinavian find associations, spearheads of types I and K should be dated to the period between around 900 and 975. Three late specimens have been recorded in the above-mentioned graves with swords of types S, W, T and Z which can be dated to the Late Viking Age, i. e. c. 975-1050 (Androshchuk 2014, 172).

DECORATION

As mentioned above, the socket edges are marked with decorative belts representing a stepped pattern which is characteristic of ornamentation of hilts of Petersen's type H/I (Petersen 1919, 91 pl. I, 2). In Swe-

den, the most characteristic example is the sword hilt from Broe in Halla parish on Gotland (WKG I, 132-139; IV, 338-339; Androshchuk 2014, 304 Go 59). A motif of two intertwined ribbon-shaped animals represented in the upper part of the socket was correctly identified by Otto von Friesen as the Jelling style but mistakenly dated to the first half of the 11th century (von Friesen 1942, 33. 39).

It is necessary to remember that in the chamber grave of the north mound at Jelling (Syddanmark/DK), dated to 958/959, several objects were found. One of them is a famous silver cup decorated with two ribbon-shaped animals, which became exemplary for the Jelling style, while three other fragmentary wood-carvings representing scrolls with tendril-like offshoots are identified as the Mammen style (Fuglesang 1991, 95). In the Mammen style, the most popular motifs are plants – double tendril offshoots and scrolls, ribbon-shaped animals, bird, lion, snake and mask filled with pelleting. A central object of the Mammen style is a decorative axe discovered in the Mammen chamber grave (Midtjylland/DK), constructed in 970/971 (Fuglesang 1991, 97-103). In her catalogue of objects decorated in the Mammen style, Signe Horn Fuglesang included four spearheads of type K from Aust-Agder in Norway, from Gotland, Gästrikland in Sweden and London in England. The sockets of all these spearheads are decorated with two pairs of intertwined ribbon-shaped animals and looped tendrils (Fuglesang 1980, 148-150 nos 1-4; 1991, 93 no. 29). The Swedish specimens were later identified by Kristina Creutz as her M2 and M3 types (Creutz 2003, 430-431 S-60M; 440-441 S-79M).

The closest parallels to the intertwined animals and knots in the decoration of the spearhead from Gotland are motifs of sword hilts of Petersen's types R and S. For instance, similar animal heads with open mouth, oval eyes, a lock of hair and ribbon-shaped body can be seen on the hilts of two swords from Busdorf (Kr. Schleswig-Flensburg/D; Müller-Wille 1972, figs 5-8. 12-13. 17-19). Other objects with a similar interlacing motif are the mounts of a pictorial panel of harness-bows from the Mammen hoard, discovered in 1871. Here we can see animals with the same decorative features in addition to transverse hatching which fills the animals' bodies. The decoration has been attributed to the Jelling style and dated before 970 (Näsman 1991, 233-235 fig. 22). Swords of types R and S with decoration in the Jelling style belong to the After-Birka Period but earlier than 1000 when they were replaced by swords of type Z. In the town of Sigtuna (Stockholms län/S) established shortly after the decline of Birka there are only swords of type Z. The earliest of them is a lower guard of antler decorated in the Mammen style (Jansson 1991, 279 fig. 13; Androshchuk 2014, 427 fig. 38a-b Up163). Most later stylized representations of swords of type S can be found in the Old English illustrated *Hexateuch* dated to the second quarter of the 11th century (Dodwell/Clemoes 1974; Androshchuk 2014, 168)². As mentioned before, some swords of type R have similarly decorated knots on the guards (Peirce 2002, 97. 107). The knots filled with dots with animal-shaped pommels are similar to such characteristic features of the Mammen style as »lion-like terminals« (Fuglesang 1991, 93 nos 24. 26-27. 30). This indicates that R-swords with such an ornamentation should be dated later than S-swords with the Jelling style. Thus, based on the stylistic parallels, the animal decoration of the spearhead from Gotland can be dated between around 950 (the appearance of the Jelling style) and the 970s (the emergence of the Mammen style).

THE RUNIC INSCRIPTION

The exemplar from Svenskens is the only Viking Age spearhead that carries a runic inscription, which makes it unique from a runological point of view. The first study of the inscription was made by Otto von Friesen shortly after the runes had been discovered in conjunction with the preservation of the object in 1919. In 1934 he undertook a second examination of the runic inscription before he published his results in an article (von Friesen 1942).

In the manuscript of the third volume of the corpus edition »Gotlands runinskrifter« the inscription (G 225) is described and analysed by Helmer Gustavson, who offers the following reading and interpretation of the text (GR 3 Endre socken, 10):

rani : a ṁpn uikur | butfus ṁ fai[i]

Rani ā þann vigur. Bōtfōss fāði.

»Rane äger detta spjut. Botfus ristade.«

(»Rane owns this spear. Botfus carved.«)

The runes are incised in two silver bands which are incrustated on different faces of the socket. Both inscriptions measure about 22 mm in length and the runes are normally between 4 and 5 mm high. On one of the faces the upper part of the silver band is now missing and of the last rune only the left side of the vertical remains. Otto von Friesen's investigation, as well as early photographs, show that there were never any branches to the right and the rune must, therefore, be interpreted as *i*.

According to H. Gustavson (in: GR 3 Endre socken, 9-10) a closer examination of the cutting grooves shows that the runes were made with the same instrument as the ornamentation on the socket, using the identical carving technique. This indicates that the inscription and ornamentation were completed by a single person on the same occasion. This conclusion is also substantiated by the fact that the lines are filled with the same type of niello.

Since the inscription is divided into two parts the reading order between the two runic sequences is voluntary, but as carver signatures appear normally at the end of a runic text, **butfus ṁ fai[i]** »Botfus carved« is believed to conclude the inscription. Only two word dividers are used in the inscription and they separate in both cases a personal name from the following text.

The suggested interpretation of the inscription presupposes some errors by the carver. The sequence of the runes that follows the name **rani** has been analysed as **aṁ ṁpn uikur** (von Friesen 1942, 36-37; Snædal 2002, 60-61) or **a ṁpn uikur** (H. Gustavson in: GR 3 Endre socken, 10, 13-14), which in both cases implies some kind of mistake. In the first alternative, the verb form *ā* (of *æiga* »own«) is supposed to be expressed with a combination of both **a** and **ṁ**, in which case the second rune is used with erroneous sound value (in the Early Viking Age it normally denotes a nasalized /a/). The second alternative presupposes that a couple of runes in the second word has been transposed (**ṁpn** instead of **ṁpn**). Of the two possibilities, the second explanation seems more likely since transposed runes are not uncommon in runic writing.

The following rune sequence **uikur** must render a designation for »spear«, but the etymology and gender of the word are disputed. A loan word from Old English *wigur* »spear« originally suggested by O. von Friesen (1942, 36) can be dismissed since H. Gustavson (in: GR 3 Endre socken, 14) has shown that the alleged form with *-u-* is probably due to a misspelling. It is more likely that **uikur** renders a word in a Scandinavian language, but the word formation still offers some problems (see Gustavson, op. cit. 15-17).

In the sequence **fai[i]** in the second part of the inscription, the bow of a **ṁ**-rune must have been omitted in the third rune if the form *fāði* is intended. The possibility to interpret this sequence as *fāi ī* »may carve (or: paint) therein« seems unlikely since we do not expect a verb in the present subjunctive tense in a signature. In Old Icelandic, the verb *fá* means »paint, colour«, but also »overlay, decorate« (Norrøn ordbok s.v. *fá*). The second meaning is recorded, for instance, in the phrase *gulli fáðr* »gilded or decorated with gold«. In runic inscriptions, the verb *fá* is often combined with *rūnar* »runes« and normally translated as »write« or »carve«.

H. Gustavson (in: GR 3 Endre socken, 20) discusses the meaning of the verb *fā* in this context and suggests that it might have been used with an extended meaning also including the production of the object, not

only the runes. If this was the case, a verb like *gæra* »make« would probably have been more expected. Another possibility is that the choice of *fā* had something to do with the silver incrustations on the spearhead. The inscription gives us the name of the owner of the spear as well as the name of the man who forged it. The name of the owner is spelled **rani** and is normally construed as a male name *Hrani*. This name is probably represented by the spelling **harani** on a Late Viking Age grave slab from Skänninge in Östergötland (Ög Fv1943;317B), and it is also recorded as **rani** on a grave slab from Rådene churchyard in Västergötland (Vg 93), dated to the 12th century. Old West Norse (OWN) *Hrani* is rather well-attested in the medieval sources in Norway (Lind 1905-1915, 567-568) and it is also found written in runes (**rani**) on a 12th-century bone comb from Bergen (Vestfold/N) (N 290). From Denmark, there are numerous records of Old Danish *Rani* from the medieval period (DGP 1, 1133-1135) and in the 14th and 15th centuries, *Rane* was not an unknown name in Sweden (SMPs). There is even a record of a byname *Rane* on Gotland in the late 15th century (*jacop rane* C 9 fol. 28v, 37r).

In Nordic Rune name lexicon (NRL) the personal name *Hrani* is said to be identical with a noun preserved in Modern Icelandic, namely *hrani* »noisy, troublesome, rough-mannered person«. In the case of **rani** on the spearhead from Svenskens it is also possible to link this name to OWN byname *Rani* recorded in Bohuslän (Västra Götalands län/S). According to E. H. Lind (1920-1921, 286) this name is possibly identical with the OWN *rani* »snout«, but he prefers to identify it with a New Norwegian noun *rane* meaning »pole, stake, tall and slender tree« and suggests that it was used as a designation for a tall person.

Since the name *Hrani* is attested all over Scandinavia, it is impossible to say anything sure about the nationality of the owner (and probably sponsor) of the spearhead, but the find spot indicates that he was probably a native of the area.

The name of the rune carver, *Bōtfōss*, is only attested in one additional source in Scandinavia, namely on a medieval grave slab from Hablingbo church on Gotland (G 60). Since both name elements *Bōt*- and *-fōss* are common in runic inscriptions from Gotland it seems highly likely that *Bōtfōss* was a Gotlander. As H. Gustavson (in: GR 3 Endre socken, 25) has pointed out, this suggests a Gotlandic provenance also for the manufacture of the spearhead.

The rune forms on this object belong mainly to the so-called short-twig runes, which was the prevailing system in Viking Age Sweden before the decades around the year 1000 when they were replaced by the so-called long-branch runes. The latter are believed to have originated in Denmark and were intimately linked to the rune-stone custom that flourished in the Late Viking Age. In earlier accounts, the spearhead from Svenskens was dated to the beginning of the 11th century and the inscription was therefore assumed to represent the latest example of an inscription adopting the short-twig system on Gotland (see e. g. Snædal 2002, 62). From the same period, there are several picture stones in southern Gotland, but they are all written with the long-branch system (see Källström 2012, 120. 128) and in this context, the inscription on the spearhead from Svenskens looks like an anomaly. With the revised archaeological dating of the spearhead suggested above, this inscription is more in line with the other short-twig inscriptions on Gotland.

The rune forms in the short-twig system are not as fixed as the normalized versions in the handbooks might give the impression of. When it comes to the individual inscriptions they can show considerable variation in form, though they are normally recognizable as short-twig runes by other features such as the often low branches in the **u**- and **r**-runes.

When Ingrid Sanness Johnsen (1968) analysed these runes in her dissertation she divided the material into three groups based on the length and position of the branches in a set of four runes (**ā**, **n**, **a** and **b**), which she construed as a typological and chronological sequence (see **fig. 8**). In group A these runes have single-sided branches placed only on the right side of the vertical. This group include the famous Rök stone in Östergötland (Ög 136) and was believed to represent the earliest stage. Then followed group B, which

included inscriptions where the four runes in question have crossing branches. The final stage was represented by group C, where the runes have single-sided branches but where the position on different sides of the vertical is also used as a distinction.

In a review of Johnsen's work, Aslak Liestøl (1969, 176-178) criticized the suggested chronology. By using archaeologically dated inscriptions in Johnsen's material, he was able to show that the dated inscriptions from the early part of the Viking Age consisted largely of mixed inscriptions with group B as the dominating factor. This means that the short-twig inscriptions that adopt crossing branches in runes such as **n** and **a** belong to the earliest stage. The most likely development – if the three groups are still assumed to represent a chronological sequence –

would then be B-A-C, not A-B-C (see the more detailed discussion in Källström 2020, 131-134).

Although there are no clear-cut boundaries between the three groups in Johnsen's system, the features she recognized in her investigation might still be used for a rough division of the material. The problems arise when only a limited number of characters is attested in the inscription and when some of the more diagnostic runes are missing. On the other hand, it looks as – at least in the material from Gotland – the runes with the same kind of elements follow each other in shape in the same inscription. If the **b**-rune has crossing branches, the same kind of branches occurs often in the runes **ǫ**, **n** and **a** and sometimes even in **t**.

From Gotland, about 15 inscriptions with short-twig runes have been registered, which makes up about a third of the inscriptions of this type in Sweden (cf. Källström 2013, 106). Most of these inscriptions belong to Johnsen's group B with crossing branches. There is only one inscription that clearly differs from the others, namely the Tjängvide stone (G 110) from Alskog parish on Gotland. In this inscription the **ǫ**-, **b**-, **n**- and **a**-runes have single-sided branches belonging to Johnsen's group C. From what is recorded of the damaged inscription on the picture stone from Ollaifs (G 109) in the same parish, this stone carried the same set of runes.

The dating of the Gotlandic inscriptions with short-twig runes is very troublesome. The majority of the inscriptions appear on picture stones of the so-called C- and D-types, which are normally dated to a period stretching from the 8th to the 10th century. The individual inscriptions are given rather disparate datings within this time span, mostly based on the language and to some extent rune forms (for an overview see Snædal 2002, 64). The Pilgård stone (G 280) is believed to belong to the second half of the 10th century (see the discussion in GR 3 Boge socken, 65-68). The best-dated inscription is an animal-head brooch from an unknown place on Gotland (G 355), now in the Historical Museum in Lund. The brooch is dated typologically to the 9th century and the rune forms belong to group B.

The combination of characters adopted on the spearhead from Svenskens differs in some respect from the set of runes used in the short-twig runic inscriptions on Gotland. Most of the characters belong to group B, such as the runes **b**, **n** and **a** with crossing branches, but the last two runes also occur with single-sided branches of the type characteristic of group C. The **t**-rune has the single-sided branch on the right side, a rather uncommon type normally associated with group A. Finally, there is a tripartite **s**-rune belonging to the long-branch system. Also, the **ǫ**-rune with single-sided branches, of which one is descending from the top of the vertical, has more in common with early long-branch inscriptions than with the short-twig runes.

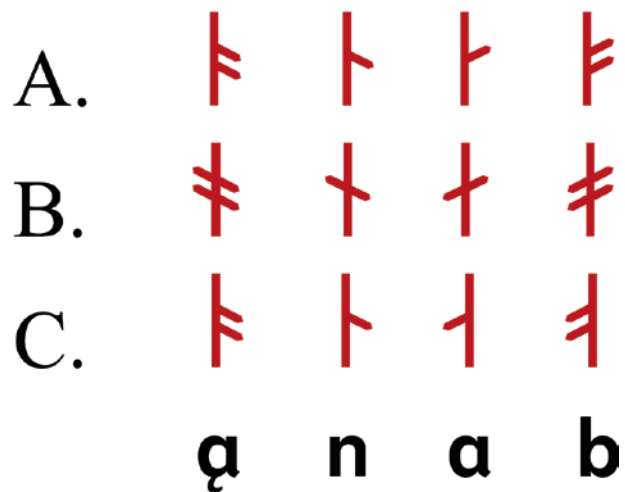


Fig. 8 The typology for the short-twig runes suggested by S. Johnsen (1968). – (After Källström 2020, 132).



Fig. 9 Late Vendel Period sword from Broe in Halla parish on Gotland. – (Photo courtesy SHM).

Some of the unexpected rune forms might be due to the rather faulty execution of the inscription, and it is even suggested that the runes were incised by an illiterate person following a draft made by someone else (H. Gustavson in: GR 3 Endre socken, 13). The traces of guidelines for the verticals cut with a light hand might support this suggestion. This might explain the form of the **t**-rune (cf. Gustavson, *op. cit.* 26) and possibly also the single-sided **a**- and **n**-runes in the name **rani**.

It is possible, however, to put this inscription in another context. Most of the Gotlandic inscriptions belong to Johnsen's group B and some of them are probably rather early, from the 9th century onwards.

Only two inscriptions (G 109, G 110), both on picture stones, belong to Johnsen's group C and must, therefore, be rather late. The Tjängvide stone (G 110), for instance, has been dated to the late 10th century or around the year 1000 (Snædal 2002, 64). The spearhead from Svenskens seems to fill a slot between these two groups, and maybe it is not so unexpected to find traits of both groups and even a glimpse of the middle group – Johnsen's group A – which is otherwise invisible in the Gotlandic material.

MANUFACTURING AND SALES OF WEAPONS ON GOTLAND: OTHER EVIDENCE

In 1914 Max Ebert launched the idea that the Late Viking Age spearheads with sockets decorated with silver-incrusted animal motifs most probably were produced on Gotland. The main arguments were the distribution of finds as well as the animal Urnes style similar to the decoration of some Gotlandic picture stones (Ebert 1924, 126. 133-134; cf. Lindqvist 1941-1942, Ardre III and IV figs 153-154. 157-158. 169-170). Thus, the connection with Gotland was based only on the decoration and no other archaeological support has been found (Creutz 2003, 106).

It has been noted that during the Viking Age Gotland had very limited resources of iron and was dependent on imports of raw material from the Swedish mainland. Iron production has been considered as an important indicator of social and economic changes. In medieval Sweden, the increasing demand for the production of iron and the manufacture of weapons has been explained by the growing horsemanship (Lindkvist 2015, 42-45). At the same time, there is clear evidence of considerable iron production on the island during the Viking Age and Early Middle Ages (Thålin-Bergman 1983, 257-263; WKG III, 658-659). Lena Thunmark-Nylén has mentioned such sites with clear evidence of iron working as Burs near Bandlunde (where grindstone was also recorded) and Smiss-Hof in Stenkyrka. Among other arguments for local production, she mentions a spearhead of Petersen's type E with a socket decorated with a silver inlay with niello of similar character to what is seen on local female mitre-shaped pendants (WKG II, 237:5, 162-163) as well as some types of the Viking Age swords (WKG III, 658-659). In a recently published work, one of the authors noted some examples of local production of swords on Gotland (Androshchuk 2014, 32-33. 37-38. 70. 77 Go 38, 47, 68, 89, 76, 115, 133, 138, 171, 175, 177). Below we summarize this material in the following way.

To the very beginning of the Viking Age (c. 700s) belong four hollow-cast parts of sword hilts in bronze richly decorated in animal style III. These resplendent swords reflect the previous Vendel tradition of sword

making and ornamentation and undoubtedly were made for local big farmers (*storbonde*). One such hilt came to light at Broe in Halla (**fig. 9**), one more at Bjärs in Hejnum, and two at Ire in Hellvi parish. There are remains of nine swords and two helmets, five swords and 32 swords respectively from the Vendel Period in each of these places (Hyenstrand 1989, 78 tab. 10). These sites have been associated with large farms and residences of local chieftains (Hyenstrand 1989, 81-82. 124-125; Carlsson 1983, 31-37; 2015, 238-239). Judging from the chronology of the Ire cemetery, the majority of the weapons (swords, spears and arrowheads) are dated to the Vendel and Early Viking Periods (WKG I, figs 13-15).

The irradiation of the Danish sword blades from the Vendel Period has shown that there are no indications that they were manufactured on the Continent and then imported to Denmark but rather local smiths were responsible for the copying of the Saxon weapons (Nørgård Jørgensen 1999, 200). Undoubtedly a similar practice was followed on Gotland in a later period. Below we will have a look at such examples. We will start with a sword of Special type 1B found in Martebomyr on Gotland (**fig. 10**).

The total length of the sword is about 92 cm³. Its pommel and both guards are decorated with copper incrustation. The edges and middle part of the lower guard are decorated with six small plates with the imitation of the gripping beast style; on the fragmentary blade, there are incrustated geometrical signs (WKG II, 218. 223). A possible prototype might have been a sword similar to that from Steinsvik in Norway (see a comparison in Androshchuk 2014, 37-38). The hilt of the sword from Gotland has smaller proportions while the decorative plaques bear a very simplified gripping beast ornament of the same style as on the sword from Steinsvik. The imitative origin of the gripping beast style and symbols on the blade imitating letters are the main arguments for the local production of the sword from Martebomyr. A similar imitative character is seen in the gripping beast ornamentation on the silver hilts of swords of Special type 1A from Kalundborg/Holbæk (Sjælland/DK) and Rostock-Dierkow (D). Both might have been considered as half-finished or unsuccessfully made pieces.

The hilt from Rostock-Dierkow was discovered in a well dated to 817 (Geibig 1993; Westphal 1992/1993). Brooches decorated in the gripping beast style are found in Ribe in depositions dated to c. 780/790 (Feville/Jensen 2000, fig. 6, 10c. e) while the coexistence of objects decorated in the gripping beast style and Salin style III is referred to the period c. 780/790-850 (Androshchuk 2014, 36-37. 130). Typologically similar is a copper-alloy sword hilt from Ristimäki in Finland (Salmo 1938, figs 28-30; Kivikoski 1973, 75 fig. 518). It consists of a triangular pommel, a straight upper and a lower guard, and a grip. The pommel fastened with two rivets and the grip are decorated in the Late Vendel Period Salin style III. Thus, the sword from Martebomyr should be dated to the same period.

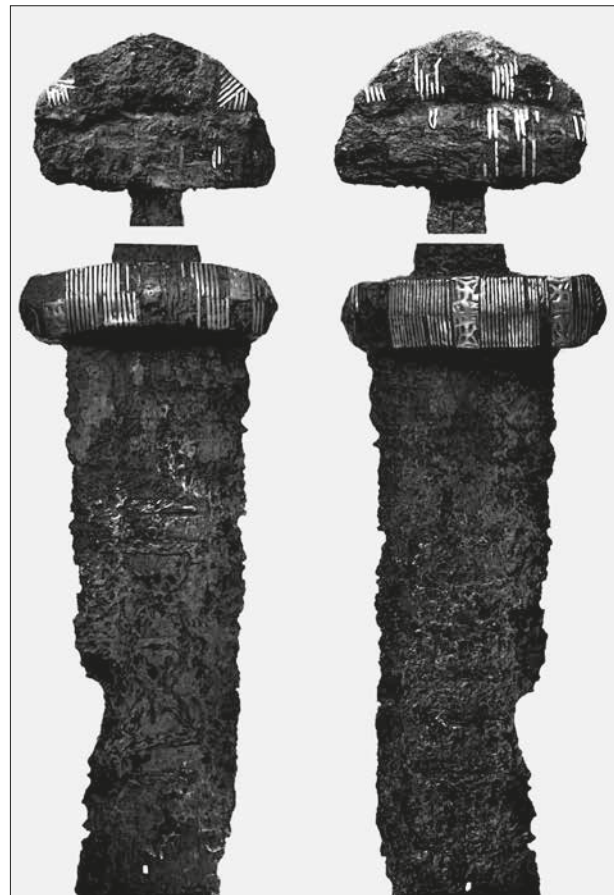


Fig. 10 Sword hilt of Special type 1B found in Martebomyr on Gotland. – (After WKG II, pl. 223).

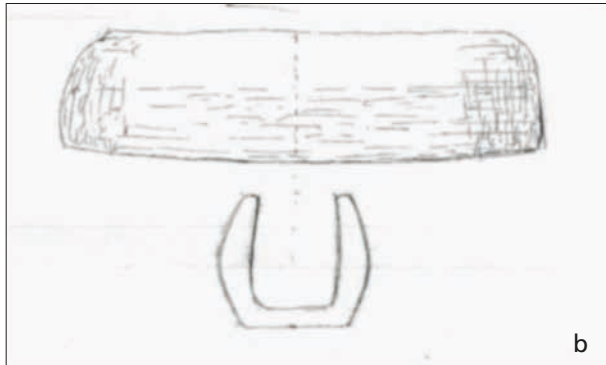


Fig. 11 Unfinished pieces of sword hilts made on Gotland in the 10th century: **a** Go 139. – **b** Go 138. – **c** Go 38. – (Photos courtesy SHM / NKHM; after Androshchuk 2014, pls 129b; 133b-c). – a scale 1:2; c scale 1:1.

To the Early Viking Age belong a pommel and a lower guard of type B made of antler found at an unknown place on Gotland (Androshchuk 2014, 87 fig. 36 Go 179). Iron hilts of these swords have a separately made pommel and upper guard fastened together with the tang. This feature was a reason for identifying antler pieces as belonging to type C (WKG III, 289). However, swords of type C have a very massive five-sided pommel with two horizontal ridges on the broadsides, while the three-sided shape of the pommel, the size and proportions of the lower guard from Gotland are typical of type B. Most possibly we are dealing here with an imitation of iron swords of type B, rather a toy imitating a sword similar to those wooden toys discovered at Staraya Ladoga (Leningradskaya obl./RUS) (WKG II, 231:1b; III, 229; GR 353; Ryabinin 1999, 189 fig. 4).

A whole series of locally made swords is dated to the 10th century. These are hilts or their parts made of iron or cast of copper alloy (fig. 11).

Two examples are represented by an unfinished pommel of a sword of type N (WKG IV, 763; Androshchuk 2014, 320 Go 139; fig. 11, a) and an upper guard of a sword of type T that came to light at Levide in Vall parish (WKG II, 231:4; IV, 761; Androshchuk 2014, 320 Go 138; fig. 11, b).

The first type N has been often confused with another, the X-type. Both have a rounded pommel on a straight upper and a straight lower guard. The difference is that the N-type has a hollow pommel that was fastened to the upper guard with two rivets or a loop while the pommel of an X-sword is made of

one piece. The N-swords have been recorded in Germany, France, the Netherlands, former Prussia, Latvia, Slovakia and former Rus territory (Peirce 2002, 118; Ypey 1962-1963, 172 fig. 29; Kazakevičius 1996, 70 fig. 80; Ruttkay 1975, 135 fig. 8, 1; Kirpichnikov 1966, pl. VII, 2). In Sweden, there are eight swords of this type. Two finds were made in Gästrikland and Uppland and six on Gotland (Androshchuk 2014, 69-71. 81-83. 256). Two swords from Gotland have pattern-welded blades (Go 6-7). The loop which was necessary for the fastening was not yet made inside the exemplar from Levide, which indicates the unfinished character of the pommel.

Swords of type T have a tripartite pommel and straight or slightly curved guards and are known in two variants. The first one with heavier guards decorated with circular pits and/or interlacing motifs has been noted in a very limited number in Norway (Petersen 1919, figs 119-121). Judging from the style of the decoration, they were locally manufactured (Martens 2002). The second variant is represented by swords with lighter guards ornamented in geometrical figures and lozenges. The type is very rare in Europe. One specimen (T-2) has been discovered in Slovakia (Ruttkay 1976, 271-272 fig. 24, 4). Both variants are found in Ukraine,

in one case in a mound dated to the end of the 10th century (Kirpichnikov 1966, 2 no. 41 fig. 4). Swords of type T have hollow upper guards of the same character as the exemplar from Levide. The latter lacks the hole for the tang which displays the unfinished character of the object (WKG III, 295; Androshchuk 2014, 76-77 Go 138 pl. 133c).

The next group of hilts is cast of bronze and includes eight specimens. Five tripartite pommels with lateral parts shaped like beast snouts decorated with an interlacing motif were found along with 14 unfinished fish-head pendants in a ploughed-out hoard at Alvena in Mästerby parish. The hoard is connected with a settlement dated to the Late Iron Age and Middle Ages with traces of advanced metalworking (Gustafsson 2011, figs 1-2). The half of such a pommel with an interlacing ornament has been discovered at Stora Sojdeby in Fole parish (fig. 11, c). The find was made in a hoard within the area of a handicraft settlement specialized in bronze casting (WKG IV, 190; II, 231:5; Androshchuk 2014, Go 38 pl. 133b). Both the shape of the beast snouts and pelleted interlacing are characteristic features of the Mammen

style and correspond to Petersen's type R. The closest parallels are already mentioned by other scholars (Gustafsson 2011, 244). One of them is a pommel from Gråsand in Ginding in Denmark. Signe Horn Fuglesang has observed that its interlacing pattern is the same as on a decorated finger ring of silver from Fröjel on Gotland (Fuglesang 1980, 157 nos 25-26 pl. 15, A-C; WKG II, 32; IV, 204). One pommel came to light at Păcuil lui Soare in Romania (Popa 1984) and one more in the Taman Peninsula in Russia (Androshchuk 2016, fig. VI, 1).

Two other specimens are slightly curved lower guards decorated in the Borre style (fig. 12, a-b). One of these was a stray find at Rosarve in Tingstäde parish and one more is known without provenance (Androshchuk 2014, Go 133, 177 pl. 138c). The shape of the guards is characteristic of swords of type Z. It is a heterogeneous type embracing three variants as well as a related Danish-British group of swords. Particularly the later one might have been considered as comparable to the Gotland specimens. Their hilts are cast of silver or bronze or made of antler and decorated in the Mammen or Ringerike styles (Androshchuk 2014, 84-88. 91-95). Swords of this type are depicted on famous Sigurd rune carvings in Uppland and Södermanland decorated in the Urnes style. The Gotland guards are decorated with characteristic Borre knots and an animal head which are performed in a very negligent manner. One more specimen is a stray find from Fløan Østre in the lower Stjørdalen in the Norwegian Trøndelag (T1509; fig. 12, c)⁴. The comparison of all three guards shows small distinctions in ornamentation. The exemplar from Rosarve has a clear performed relief and a fully recognizable beast head in the lower edge of the middle part. Scrolls in the lateral parts



Fig. 12 Hilts of swords made on Gotland in the 10th century: **a** Rosarve in Tingstäde parish, Gotland. – **b** Gotland without provenance. – **c** Fløan Østre, Trøndelag. – (Photos courtesy a-b SHM; c F. Androshchuk). – a-b scale 1:2; c without scale.

are similar to those characteristics of the Mammen style. These details on the other guards from Gotland and Norway are sloppy and somewhat degenerate, which indicates their secondary character in comparison with the Rosarve specimen. All three guards should be considered as Gotland production dated to the very end of the 10th century.

Gudingsåkrarna in Vallstena parish on Gotland is of considerable importance for our discussion. It is situated in the north-eastern part of the island, 8 km from the sea. Here within a marsh area bordered by four farms – Stora Gudings, Lilla Gudings, Stora Bjärke and Allekvia – as well as the Vallstena-Bäl and Vallstena-Källunge roads, many deposited objects of iron have been found on several occasions (Engström 1972; WKG IV, 777-786). According to the calculation, the deposition includes 225 spearheads, seven swords, six axes, six knives and other objects of iron and bronze. The majority of the spearheads correspond to Petersen's type E, while other types are A-C (5 examples), G-H (2 examples), K-M (3 examples), F (1 example). Among the swords, one specimen was identified as type X and one as a sax. Four axes belong to Petersen's type C and three to type M (WKG III, 460). Birger Nerman has suggested that the local place name »Gudingsåkrarna« can be explained as the fields for the offering of eiders (Swedish »ejderhansblotarnas offerplats«, see Nerman 1942). However, this interpretation was challenged by Mårten Stenberger, who points out to the relatively modern origin of the place name that can be traced in the form Gudings only since the 17th century (Stenberger 1943, 181). Today it is clear that the interpretation of Gudingsåkrarna as offering place should be reconsidered. Recently conducted excavations within the area revealed remains of a workshop specializing in the manufacture of metal objects including weapons (Carlsson 2011, 61-62). We can support this interpretation with other accounts explaining the deposition of iron objects in soil. Diodorus Siculus (1st century BC) says the following about the Celtiberians (Book V, 187): »And a peculiar practice is followed by them in the fashioning of their defensive weapons; for they bury plates of iron in the ground and leave them there until in the course of time the rust has eaten out what is weak in the iron and what is left is only the most unyielding, and of this they then fashion excellent swords and such other objects as pertain to war. The weapon which has been fashioned in the manner described cuts through anything which gets in its way, for no shield or helmet or bone can withstand a blow from it, because of the exceptional quality of the iron« (transl. by Ch. H. Oldfather).

A very similar method was used in the 19th century by the Circassians (Adyghe) inhabited the North Caucasus. It is said that they kept buried in the ground pieces of iron or old blades. After 10, 15 or more years they dig up the deposition and use it for the forging of new blades that could cut quite thick iron (Saleman 1834, 153 note 2).

One more deposition of weapons has been found in the Lillmyr marshland in Barlingbo parish, consisting of 15 bent swords, about 30 shield bosses and eight arrowheads (WKG III, 460; IV, 55-57). Two swords were of type H/I, one of Special type 2, two of type N (Androshchuk 2014, Go 3-7) which indicates the 10th century as the most possible dating for the deposition.

Finally, a deposition of 34 spearheads found in a slope down to the marsh at Møllegårds in Hemse parish should be mentioned, seven of which were deposited close together. The deposition included ten spearheads of eastern Baltic origin similar to one discovered in Gudingsåkrarna, while the remaining are local types A-C and E (WKG II, 308; III, 303. 460).

Thus, depositing old iron objects was necessary for reforging, and Gotland, which did not have natural deposits of iron ore, could use this method extensively.

To sum up, the earliest evidence for the local production of weapons, for instance swords, on Gotland is dated to the Vendel Period. These are few and exceptional pieces of weaponry made for distinguished members of local communities. Judging from the depositions of weapons in the course of the Viking Age, a number of them were manufactured by local smiths who made imitations of certain types of Carolingian

swords and spearheads. In the second half of the 10th century, we can see clear evidence of specialization in the manufacture of weapons on Gotland. The Svenskens spearhead, with its origins confirmed epigraphically, was manufactured precisely at this time. Local silversmiths made richly decorated parts of sword hilts of Petersen's types D, R and Z. Some smiths like these at Gudingsåkrarna were specializing in the production of spearheads. Reforging of old weapons at this time explains the decrease of weapons in Gotlandic graves, and most probably the rising demand for iron on the island. The presence of half-finished types of swords and jewellery characteristic of the Swedish mainland and other parts of Scandinavia indicates its local production for export. This activity brought to Gotland silver and bronze deposited in numerous hoards on the island.

Notes

- 1) This research has been supported by the Helge Ax:son Johnsons stiftelse.
- 2) www.bl.uk/manuscripts/FullDisplay.aspx?ref=Cotton_MS_Claudius_B_IV (11.8.2020).
- 3) Only the upper part of the sword is recorded in the published catalogue (Androshchuk 2014, 316 Go 115).
- 4) <https://collections.vm.ntnu.no/artefacts/1624-T1509> (11.8.2020).

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Zusammenfassung / Summary / Résumé

Botfus der Gote und die Herstellung wikingerzeitlicher Waffen auf Gotland

Der Artikel untersucht Beweise für die lokale Produktion von Waffen auf Gotland während der Wikingerzeit. Besondere Aufmerksamkeit gilt halbfertigen Stücken von Schwertgriffen sowie einer singulären Speerspitze mit Runeninschrift, die in Svenskens auf Gotland entdeckt wurde. Die Speerspitze wird unter typologischen, chronologischen, dekorativen und epigraphischen Gesichtspunkten diskutiert. Auf der Grundlage der Analyse wird eine neue Datierung für die Inschrift in Kurzweigrunen vorgeschlagen. Die Ergebnisse unterstreichen die Bedeutung Gotlands für die Produktion und den Export von Waffen in der Wikingerzeit.

Botfus the Gute and the Production of Viking Age Weapons on Gotland

The paper scrutinizes evidence for the local production of weapons on Gotland during the Viking Age. Attention is paid to semi-finished pieces of sword hilts as well as a unique spearhead with a runic inscription discovered at Svenskens on Gotland. The spearhead is discussed from typological, chronological, decorative and epigraphical points of view. On the basis of the analysis a new dating is suggested for the inscription in short-twig runes. The results underline the importance of Gotland in the production and export of weaponry during the Viking Age.

Botfus le Goth et la production d'armes vikings au Gotland

Cet article examine les témoins de production locale d'armes au Gotland durant l'époque viking. Il attire l'attention sur des poignées d'épée semi-finies, ainsi que sur une pointe de lance unique portant une inscription runique et découverte à Svenskens au Gotland. La pointe de lance est examinée sous différents angles: typologique, chronologique, ornemental et épigraphique. L'analyse permet de proposer une nouvelle datation de cette inscription en runes à branches courtes. Les résultats soulignent l'importance du Gotland dans la production et l'exportation d'armes à l'époque viking.

Traduction: Y. Gautier

Schlüsselwörter / Keywords / Mots clés

Gotland / Wikingerzeit / Produktion von Waffen / Epigraphie / Kurzzweigrunen

Gotland / Viking Age / production of weapons / epigraphy / short-twig runes

Gotland / époque viking / production d'armes / épigraphie / runes à branches courtes

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