## The Kainuu Culture

The inhabitants of Kainuu (Fi. kainulaiset, kveenit) and the word »Kainu(u)» itself have been the subject of numerous publications. So far, there has been no broader consensus on the origin or history of the term or the people referred to. A general view, however, is that it refers to one of the lost peoples of the North<sup>1</sup>.

#### The etymology

Kustaa Vilkuna searched for the etymology of the term on the basis of artefacts<sup>2</sup>. Jouko Vahtola<sup>3</sup> with reference to Jorma Koivulehto<sup>4</sup> held that the word »kainu» is a Germanic loan; the original had been hwein meaning »low-lying damp gruond, bog». The word whainoo was derived from this and in turn it rendered kainuu. According to Vahtola, Ostrobothnia was Kainu because of the low-lying terrain<sup>5</sup>, as also suggested by Virrankoski somewhat earlier; he saw »kainuu» as signifying the »lost» Viking Period population of Southern Ostrobothnia<sup>6</sup>.

The above etymologies can be accepted with slight modification: Kainu =»land risen from the water, alluvium». This assumed meaning gives a direct description of the Ostrobothnian coast and its land upheaval. »Kainasto», »low-lying, watery meadow» is thus related directly to the basic meaning. This Germanic loan must be older than a younger loan based on the same root,  $vainio^7$ , and if the first loan is older than the Gothic contacts, the word »kainu» may have referred to pastoralists inhabiting the shore meadows of the Gulf of Bothnia or the coastal area in general. Apparently the numerous Bronze or Early Iron Age cairns (kuströsen) on both shores of the Gulf of Bothnia<sup>8</sup> are related to pastoralism in particular. In consequence, the word »kainu» need not have originally referred to a certain ethnic group.

Distribution maps usually give occurrences of the word »kainu» without reference to the chronological differences of occurrence<sup>9</sup>. The earlierst occurrences of the word may be the Kainu -prefix originally in *Kalanti* and *Kalix* <sup>10</sup>.

#### The written sources

The earliest written reference to the kainus seem to be found in Jordanes  $^{11}$ . An Irish manuscript of Jordanes gives the name uinoloth < < (c)aino-thioth  $^{12}$ . This people is mentioned in the logically right connection with the north and together with the Finns (i.e. the Lapps). The next known reference is in the addition to Alfred the Great's translation of Orosius' world history (c. 900 AD) $^{13}$ . He mentions with reference to Ottar the North Scandinavian terms Cwen-sea, Cwena-land and Cwenas. According to Ottar the »kvens» (Fi. Kveenit, kainut) taxed the Lapps. He also lists the trade goods of the north, based on hunting. Thus it would not be

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surprising if the »kainus» or »kvens» had been known already a few centuries earlier. In the 11th century Adam of Bremen¹⁴ places the kvens in the »Land of Women» mixing the words kvenir anand kvaenir but following the tradition of the geographers of antiquity who knew of a legendary land of women¹⁵. Also in later sources Kainuu is referred to as the Land of Women. Adam of Bremen called the inhabitants of Norrland skridfinns and he gave the word kven some kind of ready translation, whereby there had been an umlaut in the word kainu and in consequence it was phonetically connected to the word kvaen, »woman». In another connection he is more precise and gives Hälsingland as the land of the skridfinns. As a geographical term Hälsingland meant the whole of Northern Sweden in Medieval times, and at was the Swedish rendition of the word kainu, whereby the Gulf of Bothnia, Ottar's Cwen-sea was Helsingabotten in Swedish¹⁶.

On Adam's information it would thus seem that the name *skridfinn* refers to the Kainu population of Northern Sweden. Adam also states that the skridfinns had had their own apostle, the historically known Stenfi (the Staffan of legend?)<sup>17</sup>. It may be possible then that Christianity was adopted in the region at about the same time as in the Åland Islands, i.e. during the 9th century? For example, the youngest grave finds from Lake Hotingjärvi, albeit from the beginning of the 12th century, are nearly completely without artefacts and display an east-north-east orientation; thereby possibly Christian<sup>18</sup>. The Lapp hoards of Northern Sweden contain numerous cross pendants. Thus material culture gives certain indications of possible Christianity in the area, which may have had more of an eastern orientation than a western one. However, if the Lapps are meant by the skridfinns then the work of Staffan the apostle of Hälsingland may not have been so important<sup>19</sup>.

The Kvens are also mentioned in many Icelandic sources, e.g. in Torulf's voyage over the fells<sup>20</sup>. The information contained in the sagas and in geographical references has generally been regarded as reliable. In the sagas the Kvens were non-Scandinavians, shamans with knowledge of spells and magic. According to Laurosela a slightly later Christian cartographical source mentions »both Kainuu-lands»<sup>21</sup>. Would this mean placing Kainuu on both shores of the Gulf of Bothnia? Also Russian sources refer to the Gulf of Bothnia as the Sea of the Kajans (Fi. Kajaanien meri)<sup>22</sup>.

There are numerous place-names beginning with kven in Northern Norway and the archaeological finds of the area show contacts with areas of Finnish settlement. Thereby there has been a Finnish original population both in Northern Norway and Sweden, which were called Kainus or Kvens. They converted relatively early to Christianity. As stated before, at some stage in history Hälsing was the Swedish term for the Kainus<sup>23</sup>. This population left behind the Finnish place-names of Northern Sweden and Norway<sup>24</sup> as well as genetical features.<sup>25</sup>

## The trade connections

The earliest written references to the Kainuu area and people are from the 6th century, part of the most illustrious period in the history of the peoples around the Gulf of Bothnia. In the 5th-7th centuries active trade contacts developed with many areas and directions. After this period trade took an other course as the economic rise of Central Asia created a new trading route on the Kama river. It, is possible, though, that the eastern artefacts reached this part of Finland through the trade route of Northern Lithaunia. The rich material from the 7th and 8th centuries found in the

Kyröjoki river region (including Scandinavian, North Norwegian, eastern and Baltic artefacts) gives reason to assume that in the Migration Period, and possibly later, this area formed the second or »lower» trading route acting as an intermediary and a gate to the east as well as being a part of Kainuu.<sup>27</sup> It is known that the material from north Norway contains artefacts of eastern or Permian origin from the 7th century onward, too, and the northern region can be seen as economically independent, acting as procurer of furs in the same manner as the Kama river area. At a later stage this position is underlined by the intermediary activity of the so-called Bjarmian trade.<sup>28</sup>

The position of Southern Ostrobothnia as a centre of trade is also reflected in the coin finds of the area, two of which have been published.<sup>29</sup> A few coin finds from the mid- or late 10th century are known from Northern Sweden, whereas several have been found in North Norway.<sup>30</sup> Although it is generally held that Southern Ostrobothnia became depopulated at the beginning of the Viking Period,<sup>31</sup> this theory need not be accepted in the light of artefact finds and especially coins.<sup>32</sup>

#### Northern Sweden

The ealriest Iron Age finds from Northern Sweden are of Estonian or Baltic origin, <sup>33</sup> displaying contacts with Finnish areas. The earlier place-names of Northern Sweden as well as those of Southern Ostrobothnia are of Finnish origin; there are Finnish elements in the gene pool and Finnish settlement is also suggested by Finnish loan words in the Swedish Lapp tongue, including the term »kainulainen». <sup>34</sup> If both the late Bronze Age and Iron Age population (with Finnish origins as argued above) had practiced similar forms of livelihood – and thus chosen similar sites for settlement – it could have been termed »kainu» for the very same reasons, no matter on which side of the Gulf of Bothnia the settlers practised their livelihood.

## The Archeological remains

The late Iron Age artefacts of Northern Sweden are similar in character to those of Northern Finland.<sup>35</sup> There are no large cemeteries, only a few burial grounds. Accordingly there was no village-type settlement. The Viking Period, as also in Finland, is reflected by single finds of penannular and tortoise-shaped brooches. Finnish-type penannular brooch finds are 10 in number in Norrland – with 70 from Lapp hoards. Also axes are another important artefact group.<sup>36</sup> Of these late Iron Age find, mainly Crusade Period, a considerable part are so-called Permian or Karelian.<sup>37</sup> The North Norwegian finds of the 9th–11th centuries reflect the same traits; they include eastern, Finnish, »Bjarmian» and »Karelian» artefacts.<sup>38</sup>

## The Teuva grave

An interesting parallel to the North Scandinavian material is provided by a Crusade Period grave from Teuva in Southern Ostrobothnia. The material in question includes among other things the find of a coat with bell-buttons having parallel in the near region, viz. the Fjäderägg grave in Sävar near Umeå.<sup>40</sup> The Teuva grave contained a pendant that seems to be of Vepsian type. Pendants with web foot-like



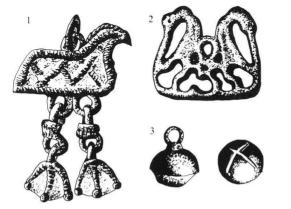


TEUVAN LAUTAMÄEN naishaudan esineistöä: toinen soikeista liljakoristeisista kupurasoljista, kannatin sekä alkuperältään vepsäläiset riipukset sekä riipuksena käytetty vaillinainen kehäsolki.

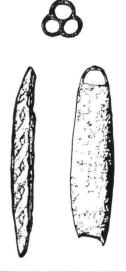
(KM 14498; Mikko Paloniemi, Ristiretkiajan hautalöytö Teuvalta, SM 1960, s. 22–37)

# NORRLANTILAISIA VASTINEITA LAUTAMÄEN ESINEILLE:

- 1 Vepsäläinen linturiipus. Lyksele, Valttjärn (SERNING, Övre Norrlands järnålder, pl. 23: 3; p. 135)
- 2 Vepsäläinen hevosriipus, Yli-Luulaja, Bodforsen (SERNING, Övre Norrlands järnålder, pl. 29: 13, p. 161)
- 3 Kulkusnappitakin kulkusia, Sävar, Brotjärn (SERNING, Övre Norrlands järnålder, pl. 29: 12, p. 150)



NORRMAN, Gravarna vid A Abelvattnet, fig. 7, s. 223. Abelvattnetin (Tärna, Vapsten) toisen haudan esineistöä: kudontavälineet sekä kannatin.



SM.

appendants, though not originating in the Kama river area, have been found in both Northern Sweden and Norway. A horse-shaped pendant was also found -possibly of Vepsian origin. A slightly later Vepsian horse pendant has been found in Over Luleå. These pendants are part of the so-called Karelian female costume. Vepsian origin can also be suggested for a circular pendant found in the female burial in Teuva. The pendant was without appending parts and was thus incomplete. There are parallels to it i.a. in Lapp hoard finds. Vepsian features are also present in a tubular bead pendant. An eastern artefact type is also a pair of oval tortoise brooches, with decorative features (lily motifs) indicating originally a Livonian type. A three-ringed bearer found in the grave is paralleled by a find from the Abelvatten Lapp (?) grave from Norrland (no dating possible). The bearer was apparently used for hanging tools necessary in weaving. The richness of the Teuva graves is indicated by the many textiles with penannular brooches and a so-called Hansa dish. The male grave seems to be poorer in artefacts (bell-button coat, scythe and an axe(?)).

#### The Kainuu culture

This grave contained all the elements that I regard the basis of the definition of the Late Iron Age archaeological culture of North Scandinavia, Northern Finland and Southern Ostrobothnia. This culture will be tentatively termed the Kainuu culture although it seems to extend to Late Iron Age Häme. The culture is based on isolated habitation and its distinctive features are:

- imported bronze artefacts i.e. no indigenous production technology. The Lapp hoards in part reflect artefacts used in the Northern area.
- the material contains a considerable amount of »Vepsian» and so-called »Bjarmian» artefacts, that are so numerous that they may indicate a possible dependence on Vepsian centres.
- graves and thereby sites are located singly and usually along rivers; the choice of sites may indicate that salmon fishing was the basis of the culture. The culture did not locate its sites of habitation at locations suitable for intensive agriculture but concentrated on single isolated settlements.

Salmon fishing was apparently made possibly by a form of agriculture suitable to it as well as the form of dwelling. The dwelling may have been of log framework type and agricultural activities of slash-and-burn type.

#### The Kainuu culture - a culture of newsettlers

These criteria can be seen to apply also to East Finland and the Late Iron Age of Häme and the distribution of the culture is indicated in part by finds of oval tortoise brooches. The economic feasability of salmon fishing was apparently influenced by the fact that by the 11th century Christianity had taken firm root in Novgorod and thus the great demand for fish during fasting periods made it a better article of trade than furs. This caused a shift to fishing waters that had not been utilized before both in the north and elsewhere. It is possible that the main stress of economic activities shifted from West Finland to the north. Slash-and-burn farming permitted settling in areas that previously, due to crude agricultural methods, could not have been used. In part, also the log framework cabin, used as both dwelling and cattle-shed as well

as barn and sauna, made it possible to inhabit the northern areas. It is also possible that part of the original Finnish population of Northern Sweden, known as Kvens, settled along the rivers of Northern and Central Ostrobothnia. There is a considerable cluster of Kainuu-names in Central Ostrobothnia. The names may indicate the border as defined in the Treaty of Pähkinäsaari. According to Laurosela the border in question exteds in Northern Sweden to the Skellefte river thus forming the southern boundary of the Kainu area. In Northern Finland the coastal areas were less favoured by settlement than the rivers. It can be assumed that when the Kainu population in charge of the Lapp trade and taxation of Northern Sweden moved to Finland drawn by a new means of livelihood, new traders, the "pirkkalaiset", moved in to fill the gap. This course of events is of course very theoretical and is supported only by the indirect indications of linguistic material.

The term Kainu can be seen as a Germanic name for the Finnish population of the alluvial shore meadows of Finland and Northern Sweden at the end of the Bronze Age and the beginning of the Iron Age (be they originally local in origin or from Estonia). The opposite to this term would thereby have been the häme|saame term, suggesting Finns practicing hunting and fishing. The terms reflect the contrast of two cultures of a different character – farming-pastoralist and hunting. Later the term came to means solely the Finns of Northern Scandinavia with the term finn meaning Lapp as its opposite.

The Viking age demand for furs gave the final impulses to the economic independance of the North, and later, when the trade route shifted from Courland (Kuurinmaa) to Carelia at the beginning of the 10th century, the North developped its own culture. The artefacts, however, were produced from the Vepsians, the intermediaries of the trade of the Baltic Finns.

N.B. The artefacts are termed »Vepsian» on the basis of their technology. Bronze artefacts with reflections of the filigree technique, and forming a special group of their own, are found mainly in the area that lays between Lake Ladoga and White Lake, i.e. in the area that was inhabited by the medieaval Vepsians (c.f. note 28).

#### NOTES

<sup>&</sup>lt;sup>1</sup> Ebert M: Reallexikon der Vorgeschichte, III, 373 § 11, Berlin 1924-; Kulturhistoriskt lexikon för nordisk medeltid, IX, p. 599-602, Malmö 1956-. Jouko Vahtola has dealt with the Kainu(u) question extensively in his work »Tornionjoki- ja Kemijokilaakson asutuksen synty» (Studia historica spetentrionalia), Rovaniemi 1980. The most important studies on the problem are: Wiklund, K. B.: Om kvänerna och deras nationalitet. Arkiv för nordisk filologi 12, Lund 1896; Grotenfelt, Kustavi: Über die alten Kvänen und Kyänland. Suomalaisen Tiedeakatemian toim. B I. Helsinki 1909; Laurosela, Jussi: Kveen-Kainulais-kysymys. Historiallinen arkisto XII, Helsinki 1911; Schybergson, C. M: Frågan om kvänerna. Historisk Tidskrift för Finland 1918; Tunkelo, E. A: Sanoista Kainu ja kaino. Virittäjä 1918; Ojansuu, Heikki: Kainulaisten kansallisuus etupäässä paikannimitutkimuksen valossa. Valvoja 1919; Jaakkola, Jalmari: Suomen varhaishistoria, s. 332-366, Porvoo 1935; Luukko, Armas: Etelä-Pohjanmaan historia II. Helsinki 1950; Vilkuna, Kustaa: Muinaisrunojen Kainuu ja Suomi. Turun historiallinen arkisto XI, Turku 1951, same: Kainuu-Kvänland, mikä ja missä. Helsinki 1957; same: Kainuu-Kvänland, ett finsk-norsk-svenskt problem. Acta Academiae Regiae Gustavi Adolphi XLVI. Uppsala 1969; Fjällström, Phebe: Lapskt silver. Studier över en föremålsgrupp och dess ställning inom lapskt kulturliv. 1. Textdel. Skrifter utgivna genom Landsmåls och folkminnesarkivet i Uppsala. Ser. C: 3. Uppsala 1962; Steckzén, Birger: Birkarlar och lappar. En studie i birkarleväsendets, lappbefolkningens och skinnhandels historia. Kungliga Vitterhets Historie och Antikvitets Akademiens Handlingar. Historiska serien 9. Lund 1964; Virrankoski, Pentti: Kainuu - Pohjanmaan rautakautinen kansa? Faravid 2: 78. Rovaniemi 1978.

<sup>&</sup>lt;sup>2</sup> Vilkuna 1957, p. 98-101, 111-112.

<sup>&</sup>lt;sup>3</sup> Vahtola, 1980, p. 478.

- <sup>4</sup> Koivulehto, Jorma: Lainoja ja kerrostumia, Virittäjä 4, 1979.
- <sup>5</sup> Vahtola, 1980, p. 466-467; 476-479.
- <sup>6</sup> Virrankoski, 1978.
- <sup>7</sup> Sköld, Tryggve: Har svenskans (h)ven f. »sank mark, sidlänt ort» lånats i Finskan och estniskan? Svenska landsmål och svenskt folkliv 90, Häfte 1–4, 1968, p. 1–10.
- On questions relating to the origin of the population of the Swedish coast of the Gulf of Bothnia: Westerlund, Ernst: Okänt folk eller lappar? Kungl. Skytteanska samfundets handl. 6, Nordsvensk forntid, Uppsala 1967, p. 237-241.
  - <sup>9</sup> E.g. Vilkuna 1969, p. 22; Vahtola 1980, p. 470-476.
  - <sup>10</sup> Vilkuna 1951, p. 22; Naert, Pierre: Kalanti-Kalix. Virittäjä, 1968, p. 159-162.
- <sup>11</sup> Jordanes: Romana et Getica. Ed. Th. Mommsen (Monumenta Germaniae Historica, auctore antiquissimi, VI), Hannover 1882. On Scandinavian names: J. Svennung: Jordanes und Scandia, Kritsich-exegetische Studien. Skrifter utgivna av K. humanistiska Vetenskapssamfundet i Uppsala, 44: 2A, Uppsala 1967. According to Grienberg to German translation of the passage in question is: »... die sehr kleinen Finnen, die kleiner sind als all Bewohner der Scandia, sowie auch ihre gewohnten Genossen die Vinovilot bekannt in diesem Stamme als die übrigen an leibsesgrösse übertragend . . .» (Grienberger, Th. von: Die nordischen Völker bei Jordanes. Zeitsschrift für deutsches Altertum u dt. Litteratur 46, Berlin 1902, p. 137–239.
  - <sup>12</sup> Svennung 1967, p. 93-96.
- <sup>13</sup> King Alfred's Orosius. Ed. H. Sweet, London 1883; Ekblom R: King Alfred the Great as Geographer. Studia neophilologica, 14, 1941–42, Uppsala 1942.
- Lönborg, Sven: Adam af Bremen och hans skildring af Nordeuropas länder och folk. Diss., Leipzig 1908, p. 129; Adam, manuscript. IV, col. 24, 25, skol 94.
- 15 He is apparently only following the practice of his day; after this the Land of Women was located to the east or north of Scandinavia.
- Wahlberg, Erik: Namn på folkslag och folkstammar i Nordkalotten. Norlandica 5, Uppsala 1961, p. 280.
- 17 cf. Serning, Inga: Några reflektioner kring lapska offerplatsfynd och lapsk förkristen religion. Norrbotten 1957, p. 29.
- <sup>18</sup> Hvarfner, Harald: En vikingatidsbygd i skogslandskapet. Från Norrlandsälvar och fjällsjöar, Stockholm 1960, p. 47–49.
  - <sup>19</sup> Serning 1957, p. 29.
- Anthoni, E: Egils sagas berättelse om Torolf Kveldufssons färder over fjällen. Historisk tidskrift för Finland, 1948. On references to Kainu in the sagas: Holmberg, Maj-Lis: Om Finland och övriga finnländer i den isländska fornlitteraturen. Arkiv för nordisk filologi 91, 1976, p. 173–175.
- <sup>21</sup> Laurosela, 1911, p. 15. He is however of the opinion that the reference to »two Kainulands» in the manuscript is mistaken.
  - <sup>22</sup> The border on the Finnish side was known as the »Kainuu border»; Vilkuna 1969, p. 16.
- <sup>23</sup> The word Hälsing is often used in connection with Kainu. E.g. at the border of Hälsingby in Mustasaari and Vähäkyrö there is a Helsinge stone (Helsingin kivi) as a border marker (Vilkuna 1969, p. 38–40); on the other hand a Kainusaari island was also known from the border of the parishes (Vahtola 1980, p. 471).
- <sup>24</sup> On the place-names of Finnish origin in Northern Sweden: Vilkuna 1969, p. 90; Collinder B: Birkarlar och lappar, Namn och Bygd, 53, 1965: 1, Lund 1966, p. 2, footnote 1. There are numerous place-names ending in »järvi» and »lahti» (»laksi») in Norrland that are of ancient date. There are also place-names beginning with kvän in Northern Norway (eg. Vilkuna 1969, p. 34–36; Vahtola 1980, p. 465).
- There are several layers of Finnish genetic traits in the population of Northern Sweden: Beckman, Lars: Samisk och finsk inslag i Nordskandinavien. Acta Universitatis Umensis. Norskandinaviens historia i tvärvetenskaplig belysning. Umeå, p. 47–52.
- <sup>26</sup> Coins. D. E. Haritonov: Nahodka vostotsnyh monet V-VIII vv. v Prikame. Na Zapadnom Urale, Perm 1964, p. 170-177. In addition to Pre-Islamic finds of coins the area is known for its silver and gold finds
- <sup>27</sup> Thus there were two distinct economic centres in Northern Scandinavia: North Norway and to the south the estuary of the Kyröjoki river. In Torolf's journey over the fells the »upper» route to Karelia is mentioned.
- <sup>28</sup> On the archaeological material of »Bjarmia»: Tallgren, A. M: Biarmia. ESA VI, Helsinki 1931, p. 100–120. The material contains direct parallels to finds from Norrland. On the Bjarmi problem: Haavio, Martti: Bjarmien vallan kukoistus ja tuho. Helsinki 1965. He gives the word »bjarmi» the etymology »light» alba, which is found in cartographic sources among others. This meaning is clearly related to Lake Belozero and the White Sea: Golubeva, L. A: Ves i slavjane na Belom Ozere. Moskva; same: Arheologitšeskie pamjatniki vesi na Belom Ozere, Sov. Arh. 1962: 3, p. 53–57; same: K probleme

etnogeneza Vesi, MIA 76, p. 142–146, Moskva 1970; V. V. Pimenov: Etnistšeskaja prinadležnosti kurganov jugo-vostotšnogo Priladožja. Sov. Arh. 1964: 1, p. 88–98.

- <sup>29</sup> An Anglo-Saxon coin destroyed in the fire of Old Vaasa has been puslished by C. A. Nordman: Anglo-Saxon Coins found in Finland, Helsinki 1921, p. 18; type Hildebrand 2424. On the Vähäkyrö find: C. F. Meinander B. Granberg: Myntfyndet i Lillkyrö. Corolla Archaeologica C. A. Nordman, 1952.
- <sup>30</sup> Laisälven, Arjeplog. Erixon: Skattefynd. Norrbotten 1936. Serning, Inga: Övre Norrlands järnålder. Umeå 1960, p. 49–50.
  - <sup>31</sup> E.g. Meinander, C. F: Etelä-Pohjanmaan historia I. Esihistoria, 1950, p. 151–152.
- 32 In this case it must be assumed that after the beginning of the 9th century, having remained for some time in the same location, settlement moves along with the shoreline, and for this reason no settlement of village type had formed in the area. For this reason it must be assumed that the Viking Period finds in the area are sporadic and nearer to the sea than in the 8th century.
- 33 E.g. the brooch from Järvi in Hortlax (Serning, 1960, p. 24); the Storkåge hoard (ibid. p. 21–24); or a bronze shepherd's crook pin found in Nämfors (Hvarfner, op.cit. fig. 45).
- <sup>34</sup> The word »gai' dno(las)» is found only in the Tornio and Swedish dialects of Lappish meaning »non-Lapp freeholder»; Itkonen, E: Zwei Andenken an die Zeit von Karelien Haalogaland im Lappischen. Sust 145. Helsinki 1968, p. 46.
  - <sup>35</sup> Serning 1960, p. 38, -42.
  - <sup>36</sup> Ibid. p. 36-38.
  - The origin of the artefacts has not been the subject of broader study.
- <sup>38</sup> On Norwegian-Finnish-Baltic relations: Gjessing, G: Finsk-ugriske vikingetidssmycker i Norge. Universitetets Oldsaksamlings årbok 1927, p. 23 f; Gjessing, G: Noen nordnorske handelsproblemer i jernalder. Viking 3, 1939, p. 44–47. On Norwegian artefacts in Finland: Kivikoski, Ella: SMYA 43, 1939, p. 84. Äyräpää, A: Katsaus Pohjois-Pohjanmaan esihistoriaan, 1914, p. 25; Tallgren, Biarmia, 1931, p. 119.
  - <sup>39</sup> Paloniemi, Mikko: Ristiretkiajan hautalöytö Teuvalta. SM 1960, XLVII, Helsinki 1960, p. 22–37.
  - 40 Serning, 1960, p. 44-45; 150 f.
- <sup>41</sup> The bird pendant from Valltjärn; Serning 1960, p. 45, plate 23: 3. Other parallels Tallgren: Biarmia, p. 114, fig. 6; V. V. Pimenov 1964, p. 94, fig. 3.
- <sup>42</sup> Serning, Inga: Lappska offerplatsfynd från järnålder och medeltid. Uppsala 1956 (AL 11). A parallel from the Vepsian area: Golubeva 1962, p. 68 & 70; fig. 11.
- <sup>43</sup> Another tortoise-shaped brooch has also been found in the area, although of earlier date, viz. the large oval brooch with crayfish ornament from Jurva (Pohjanmaan Museo).
- <sup>44</sup> Norrman, Jan: Gravarna vid Abelvattnet. Kung. Skytteanska samfundets handl. 6, Nordsvenskt forntid, p. 211–235.
- Many of the oval tortoise-shaped brooches are single finds, cf. Olof af Hällström: Lisiä suomalaisten soikeiden kupurasolkien syntyhistoriaan, SM 1947–48, p. 45–50. The brooches may in part indicate the route of single-household settlement. The 10th century Ruskeenkärki grave find in Tenhola may indicate an early Häme or Tavastian slash-and-burn farming/fishing site. Of the find: Keskitalo, Oiva: Viikinkiajan ruumishautaröykkiö Tenholasta, SM LXX, 1963, p. 34–41.
- <sup>46</sup> The Vepsians among other peoples came to know the log-frame technique in the Viking Period; Pimenov, 1964, p. 90–92.
  - <sup>47</sup> Laurosela, 1911, p. 15-16.
  - <sup>48</sup> Vahtola, 1980, p. 289.