## Kainuu from the Stone Age to the Bronze age. Finds and Cultural Connections

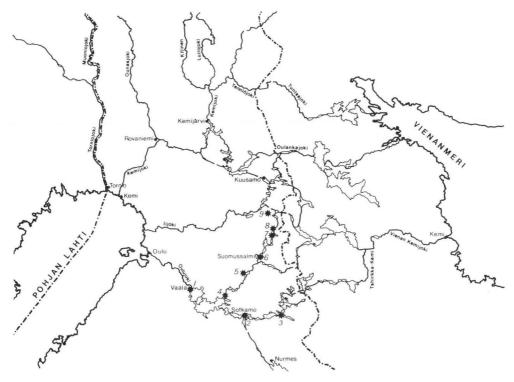
The presently known region of Kainuu was formed around Lake Oulujärvi and the Sotkamo and Hyrynsalmi (Emäjoki) waterways that flow into it. The region comprises Hyrynsalmi, Kajaani, Kuhmo, Paltamo, Puolanka, Ristijärvi, Sotkamo, Suomussalmi, Vaala and Vuolijoki. The rivers and lakes of the area have always been of importance to settlement and as they are navigable up to their headwaters and in many places separated only by narrow isthmuses they have provided routes for communication passing through the area (Luukko 1954, 20–30).

In historical times the Oulujärvi water system has been an important water route between east and west. The watershed, which separates the waters flowing into the Gulf of Bothnia and the White Sea, is near the present border and can be easily traversed in many places. Proceeding from the Oulujärvi water system the watershed can be crossed to reach the headwaters of the Kemijoki river in Viena. The most commonly used waterways were the Sotkamo route, leading through Lentua in Kuhmo to the headwaters of Tširkka-Kemi, and on the Emäjoki river route the direction of Vuokkijärvi from Suomussalmi and Sarvitaipale on the border of Suomussalmi and Kuusamo, which lead to the Kuittijärvi water system. At Sarvitaipale there are still remains of a portage passage of logs along which the boats were drawn over the watershed.

Lake Kuittijärvi also connected with Kuusamo and from there to the Iijoki river headwaters or via Posio to the Kemijoki river, both of which led to the Gulf of Bothnia. Kuusamo also had connections with Kantalahti (Kandalakša), which could be reached from the Kemijoki river via the Tenniö- and Tuntsanjoki rivers. There were thus several routes to choose from, but the shortest route between the Gulf of Bothnia and the White Sea passed in case through Kainuu.

The water routes also permitted north-south communications. From the 16th century there is information on the so-called Nousia Venäläinen route, used by the Karelians in traffic from Lake Ladoga to the Gulf of Bothnia. It led through the Saimaa lake system to Lake Pielisjärvi and from there over a narrow isthmus to the Sotkamo route. From Suomussalmi there was access to the north, via Kuusamo to the Kemijoki river, from the headwaters of which the waterways flowing into the Arctic Ocean could be reached. Thus East Finland could be traversed by boat from Lake Ladoga to the shores of the Arctic Ocean with only few portages in between. In Kainuu and Kuusamo this route crossed the most important east-west routes of the area.

These routes have no doubt been of great importance already to the prehistoric settlers of Kainuu. At the moment about 400 prehistoric sites are known from the area, about half of which are in Suomussalmi and for the most part these sites are located along the main routes of communication. It must be remembered that research has mainly been concentrated along these routes. The construction of power facilities on the Emäjoki river and especially the effects of water control and



Map 1. Historical routes of communication between the Gulf of Bothnia and the White Sea and prehistoric dwelling sites mentioned in the text.

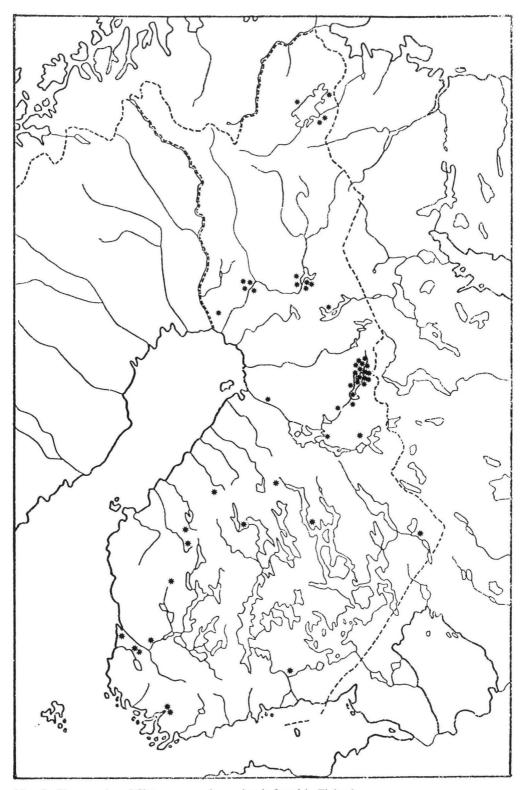
1. Vaala (Säräisniemi) Nimisjärvi, 2. Sotkamo Kiikarusniemi, 3. Kuhmo Sylväjänniemi and Koposensaari, 4. Paltamo Kaarre and Kitusenmutka, 5. Hyrynsalmi sites, 6. Suomussalmi Ämmänsaari and Kukkosaari, 7. Suomussalmi Juntusranta Kalmosärkkä, 8. Suomussalmi Tormua, 9. Suomussalmi Värikallio.

damming on the prehistoric shore zones in Suomussalmi have directed archaeological interest to these areas. However, the concentration of the known sites cannot be explained solely on these grounds.

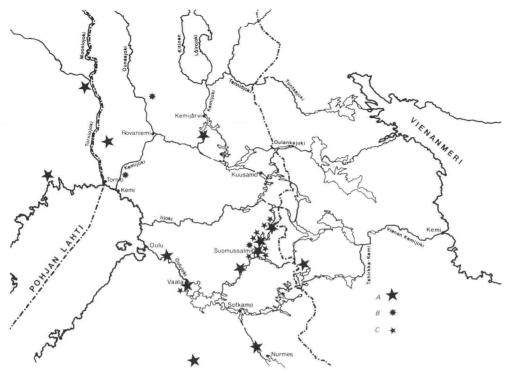
In Kainuu only about thirty sites have been excavated, ten of which are in Suomussalmi. Many of the sites are of large extent. The best-known of these is the Nimisjärvi site in Säräisniemi (present-day Vaala) to the west of Lake Oulujärvi near the fall of the Oulujöki river. The dwelling site area is nearly uniform and covers nearly completely the shores of Lake Nimisjärvi (c.  $1 \times 2$  kms) as well as the shores of the Nimisjöki river flowing into Lake Oulujärvi. In the 1880s the first recorded sherds of Stone Age ceramics were found here and an excavation carried out in 1895 was one of the first excavations of a Stone Age site in Finland (Ailio 1909, 185–211; Heikel 1896).

Other extensive sites are Kalmosärkkä in Juntusranta, Suomussalmi, extending c. one kilometre (Huurre 1959), Ämmänsaari in Suomussalmi, with c. 6 kilometres of a uniform dwelling site zone at the head of the Emäjoki river on the shore of Lake Kiantajärvi and the Vonkka-Koppeloniemi-Saha site area of c. 2,5 kms at Hyrynsalmi on the shore of Lake Hyrynjärvi.

The sites are usually of long duration. The water level of the lakes in Kainuu seems to have remained more or less the same throughout the prehistoric period and even



Map 2. The even-based flint arrow- and spearheads found in Finland.



Map 3. Casting forms for Bronze Age tools found in Finland. A. Casting form for an Ananino celt, B. Casting form for a Mälar axe, C. Casting forms for chisels and other artefacts.

later on, whereby there would not have been any need to change sites. At Nimisjärvi there are finds from the Preceramic Period to the Iron Age and the Kalmosärkkä finds provide a cross-section of the whole history of the area from the Stone Age to modern times. Also the other above-mentioned sites were of long duration and of other studied sites, at least Tormua and Kukkosaari in Suomussalmi (Huurre 1982), Nahkaniva in Hyrynsalmi, Kiikarusniemi in Sotkamo as well as Sylväjänniemi and Koposensaari in Kuhmo. In addition to these, there are isolated finds from unexcavated sites from both the Stone Age and the Metal Periods. Unfortunately the culture layer at these sites is usually strongly mixed and no stratigraphy can be established.

The oldest dated sites in Kainuu are in Paltamo, Kaarre and Kitusenmutka on the Emäjoki river, dated to the time of the Ancylus Lake, c. 6500 BC, according to Ari Siiriäinen (Siiriäinen 1978). A  $C_{14}$  date from the Koppeloniemi site in Hyrynsalmi, c. 6310 BC (Hel 1425 = 8260  $\pm$  120 BP) falls in the same range. The oldest finds from the area show contacts with the Suomusjärvi culture of Southern Finland (Äyräpää 1950a; Luho 1967). The Suomussalmi material includes primitive axes, mace-heads and leaf-formed slate points.

The first ceramics in the area belongs to the Early Comb Ceramic (Sperrings) or Äyräpää's styles I: 1 and 2 (Europaeus-Äyräpää 1930, 171–178) found at Nimisjärvi as well as Hyrynsalmi and Suomussalmi. The northern variant of this style, Säräisniemi 1 (Sär I) ceramics, is more richly represented by finds from 13–14 sites. Distinct Typical Comb Ceramic pottery, Äyräpää's style II (Europaeus-Äyräpää 1930, p. 179–183), is rarer, represented by finds from only six sites. Furthermore,

there is material that Äyräpää's stylistic definitions do not apply to in all respects. The Late Comb Ceramic, style III: I (Europaeus-Äyräpää 1930, 183–189), is possibly represented by a few sherds from Nimisjärvi and Suomussalmi. Eastern Pitted Ware (Europaeus-Äyräpää 1930, p. 189–190) has not been found in Kainuu.

As elsewhere in East Finland the Typical Comb Ceramic is succeeded by asbestos-tempered ceramics. Pottery of the Pöljä group (Meinander 1954a, 162–167; Edgren 1964) has been found on about 10 sites and a few finds can also be classified as belonging to the Kierikki group (Siiriäinen 1967).

A parallel to asbestos-tempered ware is a type of pottery found on a few sites in the area. In this material organic temper has been used instead of asbestos. As the temper has disappeared, its impressions have been left in the material leaving it porous, light and usually quite fragile. Along with obvious plant material also mollusc and egg shells were used and feather temper has been observed especially at the Kalmosärkkä and Koppeloniemi sites.

The most common decorations are comb stamps relatively long and running in narrow horizontal rows. The stamps were impressed diagonally with either the same orientation in all rows or with alternating orientation from row to row. There are also perpendicular stamps. In some vessels there are sparsely stamped short comb stamps. Rarer features are round shallow pits, ring-formed stamps, etc. (Huurre 1959). In some cases there are also traces of red colouring.

There is a distinct thickening of the rim towards the inside and also the top of the rim is decorated with stamped impressions. There are often drilled holes in the sherds, which have been used to fix carcked vessels by »sewing». There are often traces of black sealing material around these holes.

The decoration and general impression of this group resembles Pyheensilta ceramics as well as the asbestos-tempered Kierikki and Pöljä groups. Torsten Edgren has suggested that this group is in fact Pöljä-type pottery without asbestos tempering (Edgren 1964, 26). Organic temper is not completely rare in the Comb Ceramic styles, especially in last phase and on certain sites, e.g. Pitkämäki, Lapua and Kolpene, Rovaniemi, it has been found in large amounts already in material of the typical phase.

Although some flakes of flint have been found at the Kaarre site in Paltamo, the actual use of the material seems to have begun in Kainuu, as elsewhere in Finland, during the Typical Comb Ceramic continuing up to the Early Metal Period. Because of the lack of stratigraphy, there are no indications of the extent of this during different periods, but in any case the Suomussalmi-Hyrynsalmi area seems to have been among the richest in Finland (Vuorinen 1982, map 11). Flint may have been imported to Southern Finland mainly from the Valdai region (Vuorinen 1982, 76–78), but visual inspection of the Kainuu material indicates differences from the former. The origin of the material has not been investigated, but on the basis of routes of communication it is possible that flint was imported from the White Sea area already in the Comb Ceramic Period, by the Early Metal Period this was definitely the case.

The long and narrow Pyheensilta -type arrowheads (Meinander 1939; Äyräpää 1950b, 22–23, 37–39), common in SW Finland at the end of the Comb Ceramic are also found in the asbestos-ceramic area, including Kainuu. Five amber pendants found at Kalmosärkkä are probably also from the same period (Huurre 1959). These are originally from the Baltic area and had apparently come from the direction of the Gulf of Bothnia. The influence of the SW Finnish Battle-axe Culture was not extensive in the inland regions, but despite this a fragment of a battle-axe of this



Fig. 1. Feather-tempered ceramics from Kalmosärkkä in Suomussalmi (KM 14504: 135, 98, 99, 103). – Museovirasto/Esa Suominen.

culture has been found in Hyrynsalmi. A battle-axe of Swedish type has been found in Kuusamo and there are fragments of red slate artefacts from three sites in Hyrynsalmi as indications of Scandinavian contacts. Scandinavian or at least northern contacts are indicated by a curved slate knife and a hook shaft found in Suomussalmi.

According to J-P Taavitsainen different influences are also reflected in the Värikallio rock painting in Hossa, Suomussalmi on the border to Kuusamo (Taavitsainen 1979). This rock painting is dated to c. 2500–1500 BC and displays many features differing from other known rock paintings in Finland. According to Taavitsainen it resembles the Nämforsen petroglyphs as well as the East Karelian petroglyphs, especially the latter.

The Early Metal Period settlement of Kainuu and especially Suomussalmi seems to have been more intense than in other parts of Finland. Sites with pottery from this period or corresponding datable finds are 22 in number in Suomussalmi; generally there is older material from the same locations.

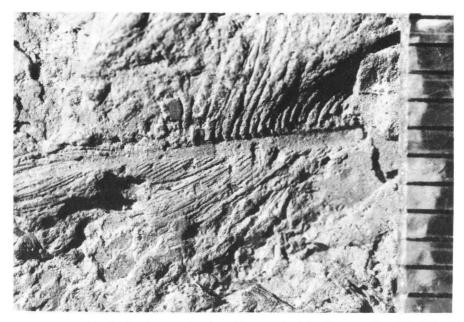


Fig. 2. Impression of a feather in ceramics from Koppeloniemi in Hyrynsalmi (KM 20634: 160). – Museovirasto/Esa Suominen.

During the Bronze age textile-impressed ceramics spread to Kainuu (so-called Sarsa-Tomitsa ceramics), without doubt from the south-east, mainly from the direction of Lake Ladoga (Meinander 1954b, 182–195; Carpelan 1979). North of the Lake Oulujärvi water system this material is known only from Kemijärvi (Kehusmaa 1972). As it is not found along the lower reaches of the Kemijoki river, it is obvious that it came to Kemijärvi from Kainuu via Kuusamo–Posio. In mixing with the local asbestos-tempered ceramics, textile-impressed ceramics led to the formation of the leading Early Metal Period ceramic group of Northern Fennoscandia, the Säräisniemi 2 or Sär 2 group (Carpelan 1979).

Although textile-impressed ceramics also brought with it knowledge of metals to the north, the most important connections with the eastern bronze cultures was via the White Sea. It is in this connection that the oldest metal tool found in Finland, a gouged adze of copper found at the Kukkosaari island site in Lake Kiantajärvi in Suomussalmi, can be placed. Its dating, c. 2000 BC, is however only an estimate and there are no definite parallels for it elsewhere (Huurre 1982). In any case, the influences of the Seima and subsequent Ananino cultures were felt as far as Scandinavia.

Metal artefacts of those cultures are rare throughout Finland and there are none from Kainuu. However, the Kainuu region and especially Suomussalmi has revealed relatively numerous finds relating to bronze casting, including casting forms of steatite as well as their fragments and unfinished pieces. These include casting forms for an eastern Mälar axe and several Ananino celts (Huurre 1982). Taking into account the available routes of communication the bronze that was obtained via the White Sea to northern Fennoscandia came in substantial amounts through Kainuu and it was there that steatite was available for forms that part of it was apparently cast into artefacts.

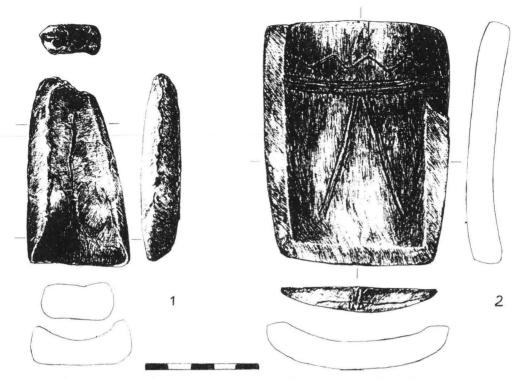


Fig. 3. The gouged adze of copper found in Kukkosaari in Suomussalmi (KM 20850) and the casting form for an Ananino celt from Maikonsärkkä in Suomussalmi (KM 20442: 1). – Museovirasto/Anne-Maarit Huikuri.

It was by the same route that a new arrowhead type, the even-based flint arrowhead (Carpelan 1962) came to Fennoscandia. It was adopted here and arrowheads were also made of local materials: the 145 arrowheads known from Finland are divided fairly evenly between flint, quartz and quartzite as material. The latter was especially popular in Lapland and Swedish Norrland. The spatial division is uneven: three quarters of the Finnish finds are from Northern Finland viz. the areas of the Oulu and Lapland provinces. The Kainuu material accounts for 25 % of all of the Finnish finds but nearly 40 % of all imported flint arrowheads, which seems to indicate the main route of import.

No artefacts of the western bronze culture are known from Kainuu. There are so-called »Lapp cairns» (Fi. lapinraunio) in places, which may be burial cairns based on prototypes from the coastal culture, but as there are no studies of these nothing certain can be said of these at this stage.

From the Stone Age onward Kainuu has received influences from many directions: west, south-west, south-east and east. Their distribution reflects more or less clearly depending on the case the water routes, that were later known as routes of communication in historical times and the use of which seems to have become standard at already an early stage. During the Iron Age these become more distinct. It can be noted that extensive sites of long duration are usually located at the crossings of routes. Without doubt these achieved central importance as sites where foreign travellers stopped regularly and through which new influences spread among the local population (Meinander 1979).

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