

Räisälä Pitkäjärvi revisited – new interpretations of the dwelling remains

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Räisälä Pitkäjärvi –dwelling site is one of the classic sites in the history of Finnish Stone Age research. Sakari Pälsi excavated the site in 1915 and used one of the dwelling remains observed at the excavation to reconstruct the so-called *Pitkjärven kota* (Pitkäjärvi hut). This Sámi tent-like reconstruction became the type-dwelling of Finnish Stone Age for decades to come.

Even though Pälsi's interpretation has become legendary in Finnish archaeology, later research has sometimes questioned it. However, these doubts have been largely based on good academic guesses (*cf.* Halinen 2002; Lavento *et.al.* 2001) and nobody has tried to examine the presented hypotheses with the actual excavated find material or Pälsi's own field notes. A need to re-examine Pälsi's interpretations in the light of fresh discoveries rose recently during an analysis of the Pitkäjärvi -find material.

The re-examination was done with the help of the carefully documented find distribution, excavation plans and section drawings, as well as Pälsi's personal notebooks. To get still more information of the dwelling remains a visit to the site was made in May 2004. During this visit the excavation area was approximately located and several trial soundings were made around the excavated area.

In this article the site and its find material are briefly presented in general. The results

from the examination of Pälsi's excavation notes and the spatial analyses of material connected to the dwelling remains, as well as the new observations made at the site in 2004 are presented in more detail.

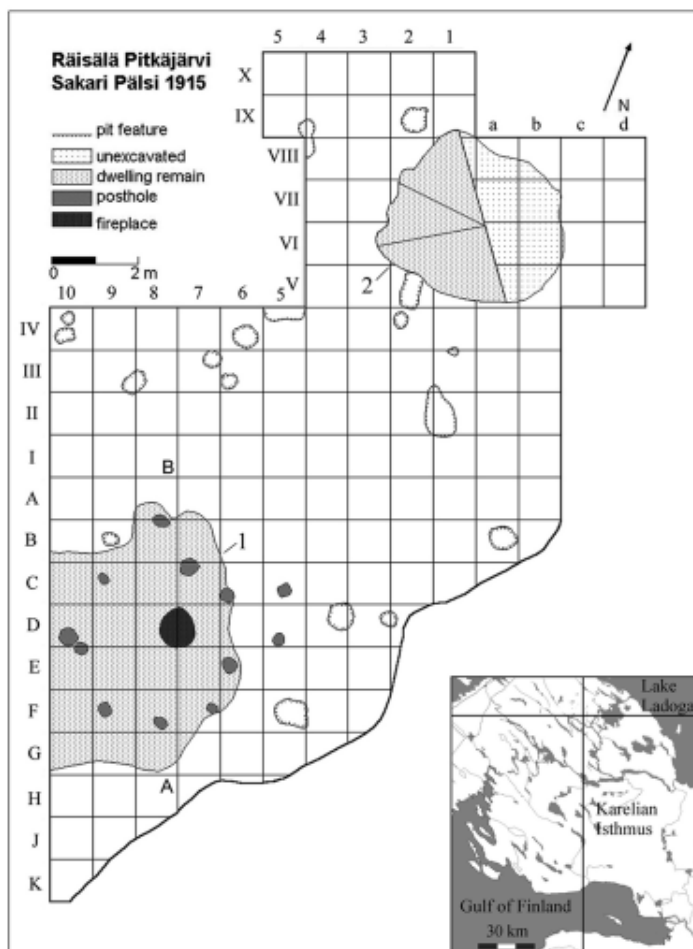
Pitkäjärvi site

Räisälä Pitkäjärvi site is situated about 21 km NW from the church of Räisälä on the Karelian Isthmus, on the so-called "Antti Huppunen's shore-field" along the shore of nowadays almost completely dry Lake Yli-Pitkäjärvi (Fig. 1). It lies on a terrace in the end of an ancient bay of Lake Ladoga at about 21-24 m asl.

Site was originally found by the tailor Simo Iivonen from the Riukjärvi village situated in the neighbouring Kaukola parish. He had got interested in ancient remains after seeing Pälsi's and Julius Ailio's excavations in the Kaukola Riukjärvi and Piiskunsalmi area. In 1911 he sent some ground stone tools and ceramics from the Antti Huppunen's field to Pälsi. Next year Pälsi inspected the find place and found by test pitting a large and rich Stone Age dwelling site. (Pälsi 1918: 3.)

Pälsi visited the site again in 1915 and found out that lot of finds had been recently revealed in the nearby sandpit. The sandpit was under heavy use, and so Pälsi decided to

Figure 1. The location of Pitkäjärvi on Karelian Isthmus and the excavated area. 1-2 are the dwelling remains observed by Pälsi. Line A-B marks the section through dwelling 1 shown in the figure 4. (Drawn after Pälsi's notes by O. Seitsonen.)



excavate the area threatened by the sand-taking. (Pälsi 1918: 3, 26.)

1915 excavation

Pälsi excavated the site later in the same year. He opened on the side of the sandpit an excavation area of ca 161,5 m² (Fig. 1). Excavations revealed an exceptionally rich multiperiod Stone Age dwelling site with ca 20-70 cm thick cultural layer. The site seems to have been first inhabited already in the preceramic period, which is attested by a couple of large slate points. According to the ceramic finds the site has been used through the Subneolithic period in the Early Comb Ware (CW1), Typical Comb Ware (CW2)

and Pöljä Asbestos Ware periods. Excavation area was situated on an area containing mostly CW2 finds. CW1 finds came from the north-eastern part of the excavation area and Pöljä finds were confined almost exclusively to the south-western corner. Find material includes vast numbers of ceramics, ground stone tools, *e.g.* an imitated battle-axe, amber pendants, quartz, flint and stone implements, and burned bone fragments (NM 6939). (Pälsi 1918.) The faunal remains from Pitkäjärvi have recently been analyzed and the results of this analysis will be published in the nearby future (Puttonen 2003, *in press*).

Pälsi developed and tested new field methods in the course of the excavation, and the used excavation methodology was highly

developed for his time. Plough layer was excavated as one context and the finds from it documented in 2 x 2 m units. From the top of cultural layer the site was excavated in *ca* 10 cm arbitrary spits with shovels, using the so-called “slashing technique”. However at places the excavated spits seem to have been somewhat thicker than the reported 10 cm. Special attention was paid to the documentation: maps and photographs are of a high quality and have stood well the test of time. Pälsi mentions that he *e.g.* experimented with using the transparent tracing paper, which permitted having all the plans on top of each other, and this way gained more accurate control over drawing. As is well known he was also a very experienced photographer. At Pitkäjärvi site he tried *e.g.* various kinds of filters to get the stained cultural soil visible in the black and white photographs. (Pälsi 1918: 27.)

Most of the finds from cultural layer were documented in 1 x 1 m squares, and many measured to their exact find place. Almost all of the finds were also documented according to the spit from which they originated (in Pälsi’s terminology “found above/ below a specific documentation layer”). There is generally a higher number of small finds in the Pitkäjärvi assemblage than from the other sites excavated at the early 20th century. This is probably due to the high standard of excavation methodology; for example the smallest flint flake in the assemblage measures 7,4 x 7,0 mm, and there is a high number of small burned bone fragments (*cf.* Puttonen 2003). Pälsi also collected some charcoal and soil samples for analyses that might be developed in the future.

Pälsi made a combined artefact distribution map of the whole excavation area, showing the exact find spots of a large number of artefacts. He experimented with this kind of documentation together with Julius Ailio already during their work in the Riukjärvi and Piiskunsalmi area (*cf.* Pälsi 1920). This distribution map proved to be

very helpful in the re-analyses of artefact distribution. In general it can be stated that Pälsi’s documentation seems more accurate at Pitkäjärvi in 1915 than in the excavations which he conducted before or after this. The sophisticated documentation methodology allowed conducting further analyses on the material excavated 90 years ago.

Dwelling remains

Perhaps the most significant relics found in the course of excavation were remains of two Stone Age dwellings. The other remain (number 2 in the Fig. 1) received only little attention from Pälsi and was excavated only partially since there had been later disturbance: a pig had been recently buried right on the top of this dwelling remain. The southwest half of the dwelling pit was excavated in sectors, and finds within the feature were CW2 sherds, flint and quartz implements, and burned bone fragments. (Pälsi 1915.)

Pälsi used the southernmost dwelling remain (number 1 in the Fig. 2) to reconstruct the conical Sámi tent-like “*Pitkäjärven kota [Pitkäjärvi hut]*”, which became the archetypical dwelling of the Finnish Stone Age for decades to come. The dwelling remain was marked by dark charcoal stained sand. There was a stoneless pit-fireplace close to the eastern end of the feature. Finds within the dwelling were Pöljä asbestos ware, some CW2 sherds - mostly in the upper spits -, flint and quartz implements, *e.g.* basal fragment of a Volosovo-type flint point from the floor layer of the dwelling, ground stone tools, for instance some fragments of Pyheensilta-type arrowpoints, amber pendants and burned bone (Fig. 2). (Pälsi 1915.)

Pälsi was fond of using ethnographic parallels to get some “meat on the bones” that the archaeological observations offered (*e.g.* Pälsi 1916); also in this sense he was decades ahead of his time. When

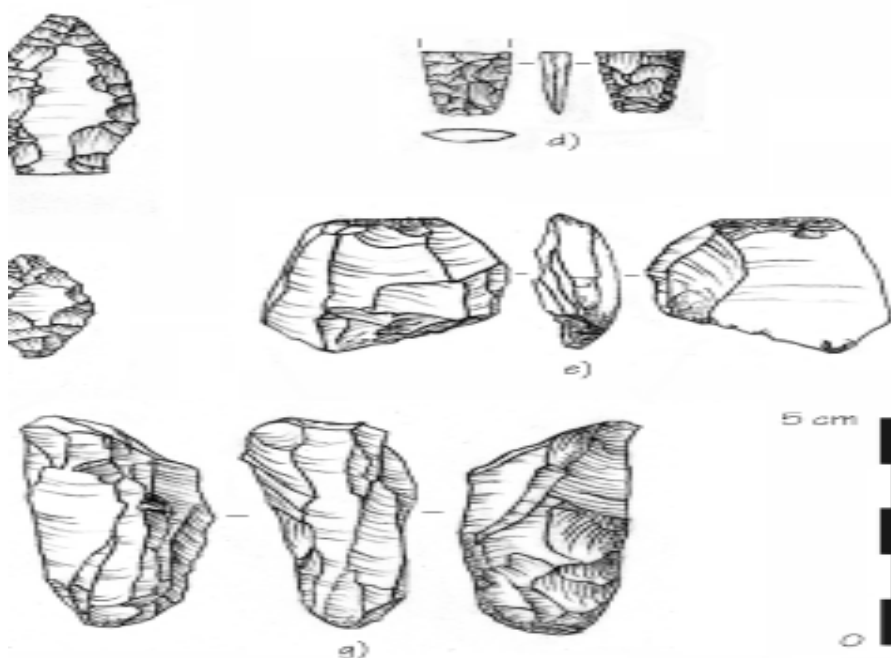


Figure 2. Flint artefacts from Pitkäjärvi: a) bifacial point perform, NM 6939:1; b-c) bifacial points b) NM 6939:276, c) observed at the site in 2002; d) bifacial point fragment (Volosovo-type), NM 6939:193; e) bipolar core, NM 6939:93; f-g) anvil platform cores, f) NM 6939:276, g) NM 6939:122. (Drawn by O. Seitsonen.)

reconstructing the Pitkäjärvi hut he utilized an ethnographic example reported by U.T. Sirelius amongst the Gilyak (Nivkh) – people of Siberia (Sirelius 1907: fig. 71). Päläsi based his interpretations about the structure largely on the existence of assumed postholes shown in the figure 1. However, Päläsi's interpretations seem to reflect more the general evolutionary views of “primitive housing” of his own time than the factual observable archaeological remains. Later research has from time to time questioned Päläsi's “postholes”, which might actually have been something else reminiscent of postholes (e.g. Korhonen 1984; Meinander 1976: 28-29; Muurimäki 1995; Lavento *et al.* 2001). As a matter of fact some of the sections through Päläsi's “postholes” suggest that they really are something else, e.g. animal burrows (Päläsi's field notes; Päläsi 1918: Fig. 3).

The re-examination of Päläsi's dwelling remains

Nowadays most of the Stone Age dwelling remains known from Finland and Karelian Isthmus are semi-subterranean dwelling depressions. As was already noted above, Päläsi mentions that the dwelling remain 1 is connected to the Pöljä ceramics (Päläsi 1918: 33). This was tested by examining the spatial distribution of ceramics (Fig. 3). In addition to the ceramic distribution, the basal fragment of a Volosovo type flint point supports the Late Neolithic dating.

In Finland the known dwellings connected to the Pöljä culture are mostly semi-subterranean, roughly rectangular, and have sometimes signs of timber structures. As suggested earlier by some authors (e.g. Halinen 2002) also the Pitkäjärvi dwelling remain might be a rectangular semi-

subterranean dwelling depression, eastern part of which was left outside the excavation area. In my study this hypothesis was examined through the vertical distribution of finds, as well as Päläsi's personal notes, excavation plans and section drawings, which are stored in the topographic archive and the library of the Department of Archaeology, National Board of Antiquities.

Päläsi's well-drawn excavation plans are clearly reminiscent of the features observable at the recent dwelling pit excavations. Outside the dwelling remain 1 clean sand was revealed generally already at the bottom of second spit, while inside the dwelling the darkly stained cultural soil continued deeper, at places to the bottom of fifth spit and even deeper. The dwelling remain 1 is presented in the figure 1 a little different from what Päläsi published in 1918.

Päläsi's published representation was based exclusively on the bottommost mapping. In the figure 1 the stained sand from the upper, third documentation layer is connected to the features observed in the bottommost mapping. The plans suggest that the floor of dwelling was somewhat hollowed in the middle. Same remark has been made at various dwelling pit excavations in Finland (e.g. Halinen *et.al.* 2002). The vertical distribution of finds and the hollowed top of the cultural layer evidence the same: in general the finds are deposited deeper within the dwelling than outside it (Fig. 4).

Often the long axes of the dwelling depressions observed in Finland are situated parallel to the ancient shoreline. This would have been the case also at Pitkäljärvi, if the dwelling would have continued outside the excavation area. All the above presented

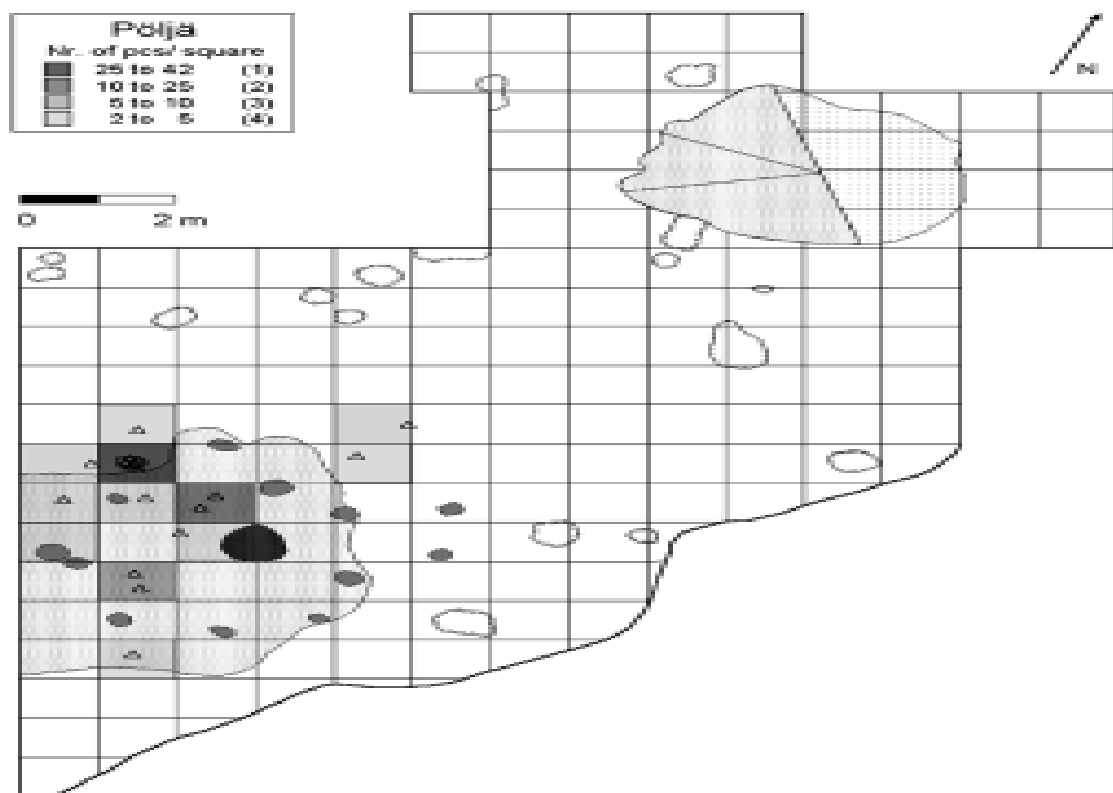


Figure 3. Distribution of CW2 (left) and Pöljä (right) sherds in the excavation area.

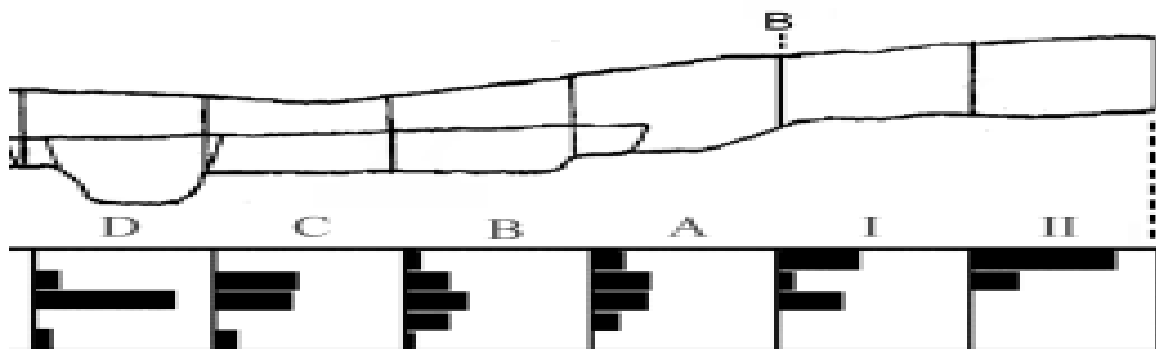


Figure 4. Top: section across the excavation area and the dwelling remain 1 (drawn after Pälä's field notes). Bottom: percentile frequency of finds by excavated c. 10 cm spits in the adjacent 1x1 m squares (Squares x: K-II / y: 6-10).

evidence suggests that the dwelling remain 1 might have been a semi-rectangular dwelling depression which was only partly excavated. Yet this can not be stated with certainty without re-excavations at the site.

There are also several less well-documented sites where dwelling depressions might have been excavated on Karelian Isthmus in start of 1900s. These contain mostly relatively vague remarks of pit dwellings, and owing to the rough excavation and documentation methods used at these sites it is almost impossible to re-evaluate the results anymore. Yet, at some cases the existence of a dwelling depression can be established indirectly, even when the original excavators have not realized this.¹ This kind of situation is *e.g.* at the Kaukola Pekka Iivosen rantapelto (shore-field) site excavated by Julius Ailio assisted by Pälä in 1908. Pälä published in his doctoral thesis an excavation plan from this site showing the extent of a Stone Age dwelling remain, which he interpreted as a semi-circular hut floor. However even he admits that there must have been some kind of rectangular wooden structure limiting the spread of stained soil from inside the dwelling, and mentions that the cultural layer continued much deeper within the structure than outside it. (Pälä 1920: 45.) Visits to the site have shown that

also this possible dwelling depression would have been situated its long axis parallel to the shoreline of the Riukjärvi Lake.

If the remain 1 at Pitkäljärvi would be a remnant of semi-rectangular dwelling pit, then again the dwelling remain 2 could actually be resulting from a conical tent-like structure, which has been partly dug into the ground. It is most likely connected to the CW2 period. Studies by *e.g.* Martio (Halinen *et.al.* 2002; Martio 2000), Pesonen (1995) and Sohlström (1992) suggest that circular/oval hut floor areas are still a relevant interpretation at places. The size of dwelling remain 2 is closely reminiscent of the hut floor areas observed at other known dwelling sites (*cf.* Martio 2000: 83; Pesonen 1995: 145). The Stone Age inhabitants no doubt needed also some kind of temporary lightweight shelter besides the structures of a more sedentary nature (*cf.* Pesonen 2002: 11).

2004 visit to Pitkäljärvi

In May 2004 a group consisting of Finnish, Russian and Estonian archaeologists visited the Pitkäljärvi site.² With the help of Pälä's general map, which is tied to a large still existing rock on the lower field, the old

excavation area was roughly located. Several trial soundings were made along the eastern edge of the excavation area in order to get an idea of the present state of the cultural layer.

The plough layer proved to be fairly thin, varying from 3 to 14 cm, and suggesting that there has been no mechanized agriculture at the site; therefore it can be assumed that the site has been relatively well preserved since Päläsi's times. The trial soundings showed that in large part of the site the cultural layer has been preserved almost completely intact, while approximately at the place of the excavation area it had been mixed deeply with the plough layer. These mixed soundings might be connected to Päläsi's refilled excavation area.

Most interesting were the observations about the colour and consistency of the cultural layer. Thickness of the cultural layer varied at places, ranging from about 20 cm to past the length of auger, beyond the depth of 40 cm. There were a lot of tiny bone fragments observed all through the cultural layer, as Päläsi mentions (1915); these can also be seen in the soil samples he collected in 1915. Cultural layer in general is fairly light and homogenous, not reaching beyond 25 cm in most soundings. However, at the area next to where Päläsi excavated the dwelling remain 1, the soil had a fairly dark charcoaly colouring and the cultural layer's thickness exceeded the auger. This could be a further suggestion of the presence of a dwelling depression which continues outside the excavation area. Nevertheless a clear answer to this hypothesis can only be achieved by re-excavations at the site to reveal the other boundary of the dwelling structure.

Conclusion

The re-analysis of dwelling remains from Sakari Päläsi's Pitkäläjärvi excavation suggests that the dwelling, which Päläsi originally used as a basis for his famous hut reconstruction, might actually have been a partly studied

dwelling depression. This view is supported by the excavation plans, section drawings, vertical distribution of the finds and the general topographic setting of the dwelling remain. Also the recently made trial soundings at the site support this possibility. However certainty of this hypothesis can only be achieved through re-excavations at the site. On the other hand, according to the Päläsi's notes the other dwelling remain observed at the site could in fact be a remnant of a circular tent-like construction.

There are also several less well-documented cases where dwelling depressions might have been excavated at a number of sites on Karelian Isthmus, e.g. at the Pekka Iivosen rantapelto site in Kaukola. However, owing to the rough excavation and documentation methodology used at these sites it is well nigh impossible to re-evaluate the results almost hundred years after the excavations. It is the sophisticated methodology used by Päläsi at Pitkäläjärvi which allowed conducting further analyses on the material excavated 90 years ago. This could work as an advisory remark also for the contemporary archaeologists: since we have the opportunity to document our observations accurately with the modern technology, it might be worth doing it. The future generations of archaeologists might be more than thankful about it.

Notes

¹ However, Kaukola Ville Pessin Lavamäenpelto site cannot be included into these sites, although opposite statement has been erroneously published (Mökkönen *et.al.* in press); this statement was based on a misunderstood personal communication (*pers. comm.* Kerkko Nordqvist 30.5.2005).

² Visit was done on 21st of May 2004. Group included the present author, MA Dmitriy Gerasimov, Lic.Phil Petri Halinen, PhD Aivar Kriiska and Cand.Hum. Sanna Puttonen.

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FA - Fennoscandia Archaeologica

SM - Suomen Museo

SMYA - Suomen Muinaismuistoyhdistyksen Aikakauskirja