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## CORDED WARE CERAMICS IN FINLAND AND SWEDEN

### Abstract

The aim of this paper is to illustrate the types of transbaltic prehistoric contacts between Jäkärälä culture and Swedish and Finnish Battle Axe cultures.

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### Introduction

The term *ethnic group* is, in archaeological literature, almost completely interrelated with the term *archaeological culture*, although the later term can comprise even *an assemblage* or a set of *ideas*, or can be used as a *chronological instrument* (Funnel Beaker period, Battle Axe period, Comb Ware period style 1:2, etc.).

In Kontaktstencil (Bågenholm 1992, 153) I pointed out that there is a risk when researchers connect the term *ethnic groups* to archaeological pottery styles. My criticism was directed at the tendency to associate asbestos pottery (Sär II) to the Sami ethnos and the attempt to find a Finnish ethnos in the coastbound Morby Ware culture. The model anticipates that Finland's Swedish speaking population lacks settlement continuity prior to the Crusade period. If, instead, the present coastal population does have a settlement continuity reaching back to the Morby Ware culture and the asbestos pottery belong to the Sami ethnos — then where are the ancestors of Finland's Finnish speaking population to be found? It is, in my view, unreasonable to interpret prehistoric pottery styles as ethnic indicators.

The Finnish Corded Ware pottery is often understood as being an Indo-European pottery style originating in the Baltic region. My hypothesis is that the cord decorated pottery is not limited to the Battle Axe period during which it is supposed that an Indo-European migration to Finland took

place. Prehistoric ethnicity was most probably expressed in a more complicated way than by differences expressed solely in the ceramic decor.

Corded Ware pottery is the Finnish Battle Axe culture's most common leading artefact. Finnish Battle Axe pottery has repeatedly been found on settlement sites together with finds from the Mesolithic period, the Comb Ware pottery styles I:1, I:2, II:1, II:2, III:1, Jäkärälä-, Uskela-, Bronze Age, Asbestos tempered and MorbyWare pottery. There are also settlement sites which consist exclusively (Nos. according to Edgren 1970 321, 607, 713) and even mainly (Nos. 307, 352, 401) of Battle Axe artefacts. Of the 106 Finnish Battle Axe settlement sites, noted by Edgren, the majority are classified, based only on the presence of very few potsherds (less than 6) in an otherwise heterogeneous find material (e.g. sites Nos. 301, 302, 332 [11 cord decorated potsherds of 2670], 343, 402, 406, 509, 704, 710, 801. Edgren 1970, 63–100). The settlement site (329) Hannusbacken in Lapinjärvi sn. Nyland records a stratigraphy where Battle Axe pottery is found below Late Comb Ware pottery, style I:2 (Cleve 1931; Edgren 1970, 71).

In Estonia Battle Axe pottery is mixed with Comb and Pitted Ware pottery:

"Most of the evidence consists of burials, isolated finds, and of rare sherds of Corded Ware pottery together with late comb and pit ornamented pottery styles; there is only one pure Corded Ware site" (Rimantiene 1992, 135).

## “The phosphate hypothesis”

Assuming that the Finnish Corded Ware pottery is later than the Early Comb Ware pottery, it would mean that the contaminated settlement sites have had two entirely separate activities at widely separated periods of time. Taking the changing land levels into account, this implies that only the earliest settlement could have been shorebound.

Sakari Päläsi proposed that the high phosphate levels on original settlement sites prevented forest regrowth, the glades being primarily responsible for the occurrence of varying pottery styles in exactly the same area. I would call this “the phosphate hypothesis” and this hypothesis is supported in the Finnish literature (for example, Edgren 1984, 75; Edgren 1993, 87; Purhonen & Ruona-vaara 1994).

The Pitted Ware culture is found in the regions of Skagerak and Kattegatt, on Bornholm, in southern Scandinavia up to Åland and on the Swedish mainland in Dalarna (Vindförberget Ore sn, Oresand Leksand sn, Korsnåset Grangårde sn. Löfstrand 1969; Ericson 1980, 3f). The Pitted Ware culture is considered to have halted east of the Åland archipelago, despite the fact that the Finnish Comb Ware pottery is usually pit decorated.

Oskar Almgren interpreted the Megalithic culture as an invading culture and the Pitted Ware people as a remnant of the Ertebölle culture (Almgren 1912, 12, 61f). Mats P. Malmer's interpretation is that the Pitted Ware culture developed from earlier foraging cultures (Ertebölle, Trindyx, Nöstved and Fosna) (Malmer 1969, 100f). Today it is suggested that the Pitted Ware culture is pos-

sibly a specialised variation of the Funnel Beaker culture (Indrelid 1972, 10; Carlie 1986, 156ff), or alternatively, a regional variation inside the Funnel Beaker culture (Browall 1991).

The early Pitted Ware settlement sites are almost always contaminated with Funnel Beaker artefacts and later on with Battle Axe artefacts. <sup>14</sup>C dated constructions which are dominated by Pitted Ware artefacts in Sweden cover the period 2700–1700 BC (Algotsson 1992, 13, uncalibrated value). The Pitted Ware culture's time axis stretches from the Funnel Beaker phase to the transition period of the Late Neolithic, and overlaps the Battle Axe culture in the sequence 2290–1770 BC (Algotsson 1992, 13, uncalibrated value).

The profiled vessel shape is an attribute which the Pitted Ware pottery has in common with the Finnish pottery finds from Pyheensilta, Lyttikänharju, Hiittenharju and Ristinpelto (Vikkula 1988, 61). The pit and comb decorations are the other attributes which the Finnish Comb Ware pottery shares with the East Swedish Pitted Ware pottery (Säter IV/Fagervik IV). A potsherd from Hiittenharju in Finland resembles the East Swedish Pitted Ware pottery (Vikkula 1988, 62).

The East Swedish Pitted Ware pottery (Browall 1991, 120), the Early Comb Ware pottery (Fast 1993, 67ff), and the Jäkärälä pottery (Edgren 1966, 84) are all mineral- and chalk tempered.

The Comb Ware vessels appear to be larger in terms of volume capacity than the Pitted Ware vessels which seldom keep more than 10 to 15 litres (information received from Christian Lindqvist). The Comb Ware vessels contain between 9 litres (NM 17238) and 45 litres (NM 14697) (Edgren 1982, 24, table 1. A unique vessel hold-

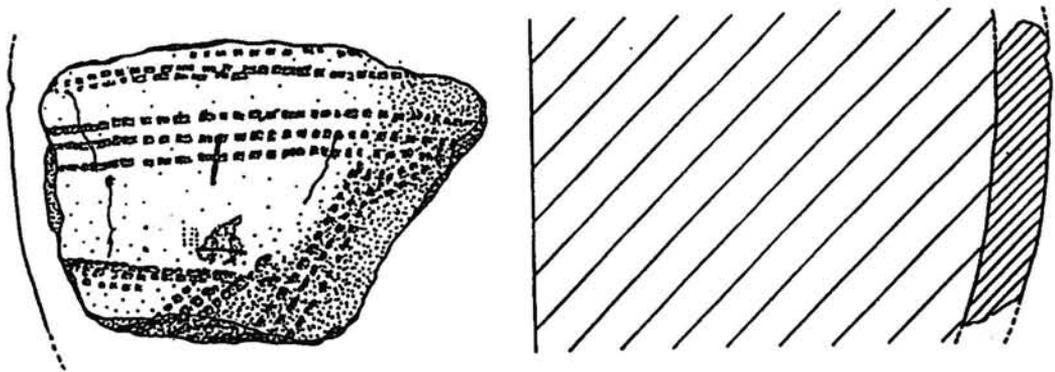


Fig. 1. Comb decorated pottery from the settlement site at Karleby, 148, Västergötland. (F 119). Drawing: Lisbet Bengtsson. (Unpublished).

ing 72 liters from Lieto Kukkaroski I is recorded (ibid, 29 fig 16). According to Fast the Comb Ware vessels became reduced in volume between the styles I:1 and I:2 (Fast 1993, 75).

In the Balticum (Nida, Southwest Lithuania) cord decorated vessels have been found capable of holding around 100 litres (EM 2243:6201, 2243:6202, Rimantiene 1990, fig 29). The variation in vessel size most likely reflects functional requirements rather than ethnical differences.

### Comb Ware pottery, Funnel Beaker pottery and Vrå Ware pottery.

Aarne Äyräpää considered that the Comb Ware pottery in Finland has several decorative attributes comparable to the South Scandinavian Funnel Beaker pottery (Beaker period C). He mentions dotted lines, twisted cords, alternating horizontal and vertical lines, garlands, comb stamps, pitted designs and oval or half moon-shaped impressions (Äyräpää 1956, 41f). The Comb Ware pottery however lacks the Funnel Beaker pottery's leading design elements: the vertical lines on the belly of the vessel, the angled lines and the cord impressions (*vertikala fårar, linjeknippen, de enkla snörintrycken, vinkellinjerna* are the terms used by Äyräpää, ibid 42).

In 1935 an Early Neolithic farming site was discovered in Eastern Vrå, Stora Malms sn. Södermanland containing Funnel Beaker pottery. Vrå Ware culture's relative dating is based on comparison with South Scandinavian material (Olsson & Hultén 1985, 27). Pottery which resembles the East Swedish Vrå Ware was found in southern Scandinavia and the earliest dating given was approx. 3000 BC. The Vrå Ware pottery is decorated with cord, line, comb, and nail impressions (Florin 1958, pl. I-XV).

The Vrå Ware has an assemblage comparable with the Jäkärälä pottery and the Finnish Battle Axe pottery. However, both these Finnish groups are regarded as later. The Vrå Ware has attributes known from the Early Comb Ware pottery. The similarities are the profile, the pointed bottom and the decoration motifs: pits, twisted cords, Furchenstich (dotted lines) and small oval indentations (Äyräpää 1956, 46). The Vrå Ware bottom could belong to the Pitted Ware (after approx. 2600 BC), but it does seem somewhat unlikely. No other Pitted Ware pottery has been located at Vrå Ware settlement sites, which are not shorebound settlements (Persson 1987, 59).

Birgitta Hultén has pointed out the similarities to be found in the clay used, the mineral inclusion

and the building techniques in the production of cord decorated Vrå Ware pottery and cord decorated Battle Axe pottery in Sweden.

"If the datings of the South Scandinavian finds mentioned above (Corded Ware, Vrå Ware and Battle Axe) were not so well established, whilst at the same time so incompatible, then it would make it easier to ascertain whether or not the finds complement each other and in that case possibly are contemporary" (Olsson & Hultén 1985, 30, my parenthesis, translation Fiona Campbell).

It is strange that no Funnel Beaker pottery has been registered in Finland and no Finnish Battle Axe pottery has been registered in Sweden, especially when we know that cord decorated pottery, comb decorated pottery and Pitted Ware have been located on both sides of the Gulf of Bothnia.

### Some implications in the fieldarchaeological method

Per Persson notes that in 4 of the 16 known Battle Axe settlement sites found on the Swedish west coast there is doubt as to whether the cord decorated pottery should be attributed to the Funnel Beaker or the Battle Axe pottery (Grimeton in Halland, Lyse 13C in Bohuslän, Skogome and Ångås in Göteborg municipality. Persson 1986, 270f). Nine of the 16 known settlement sites, i.e. 56%, are contaminated with Pitted Ware pottery. Unless aided by stratigraphy or absolute dating it ought to be practically impossible to differentiate a settlement site belonging to either the Funnel Beaker or the Battle Axe culture when the only distinguishing design element in the pottery is cord decoration.

The vertical stratigraphy is not of overbearing importance for the dating of Finnish pottery. The dating of pottery in Finland is based on shore displacement, decoration styles and a hypothesis about decor evolution.

"Questions relating to the decoration of the (Comb Ware) style I:2 and its stylistic chronological relationship to other pottery groups... have played an important part in the publications... many researchers appear to be in agreement with the fact that the development of the style I:2 has progressed in time from simple to more diversified and "elaborate" decoration of the vessel walls" (Fast 1993, 2, my parenthesis; translation Fiona Campbell).

Analogous to what has been previously remarked upon, I believe it is plausible that the cord decorated pottery found in Finland is earlier, contemporary, and later than that which has been la-

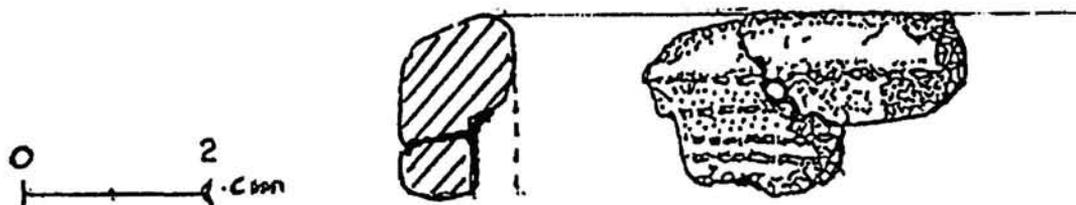


Fig. 2. Comb decorated pottery. A fragment from the vessel from the passage-grave at Gökhem, 71, Västergötland. (F 73). Drawing: Gösta Bågenholm (Bågenholm et al. 1993).

belled the Battle Axe culture. With support from the recorded stratigraphy (Cleve 1931) where the Battle Axe pottery is located in layers below those of the earlier Comb Ware pottery (style I:2), it is not unlikely that the corded motif in Finland is also part of the Comb Ware pottery tradition, usually tempered differently.

To my knowledge Jukka Luoto is the only Finnish archaeologist who is willing to interpret the Finnish Battle Axe culture as a local development of the earlier Finnish cultures (Luoto 1986). I would like to add that I think it might be possible that the corded motif in Finland is also a part of the Comb Ware pottery tradition.

The facts that speak in favour of a continuity between the Finnish Comb Ware and Battle Axe pottery are according to my view:

- 1)  $^{14}\text{C}$  dating
- 2) Seal hunting
- 3) The absence of wool fibres in the Fenno-scandian Stone Age

#### $^{14}\text{C}$ dating

The Battle Axe settlement site at Jönsas (settlement 302) in Vanda outside Helsinki (Hel-1006,  $2570 \pm 130$  BC) has an age close to a German settlement site (Döläurer-Heeide in Germany — H253/208,  $2570 \pm 110$  BC). These are today the two earliest  $^{14}\text{C}$  dated Battle Axe settlement sites in the world. There are of course objections to the dating of the Finnish settlement site. The case rests on a single dating and the material in question is charcoal assumed to have some connection with a Battle Axe grave (Purhonen 1986, 133). On the other hand if one is to review  $^{14}\text{C}$  datings of the Battle Axe culture, the second through the seventh earliest datings come from Holland or Germany (Bengtsson 1988, 33ff), whilst the first and the eighth earliest datings are from Finland (Hel-831,

$2370 \pm 170$  BC. Bengtsson 1988, 38; Torvinen 1979, 80).

It would appear as if the Battle Axe culture within a very short time span had managed to cover a very large area. This emphasizes in my opinion what Mats P Malmer maintains, namely that the Battle Axe culture is a sign of cultural change in early cultures, which mainly manifests a change in burial custom (Malmer 1962; 1975).

#### Seal hunters

According to Markus Hiekkänen there is no change in the osteological material found at the settlement site before, during or after the Finnish Battle Axe culture. Seal hunting appears to have been stable and seal bones make up the majority of recuperated osteological remains (Hiekkänen 1990). If these recent observations are correct, this should more probably suggest a continuity between the Finnish Battle Axe culture and the Comb Ware culture than an immigration of an Indo-European people from the Balticum.

#### Cord impressions

As far as I know, no one has yet examined the Corded Ware pottery's cord impressions. In the Nordic countries the only textile fabrics known from this period are made from lime and willow raffia. On the Continent both wool and flax have been identified (Bender Jørgensen 1992, 114ff). This may suggest a continuity between the Funnel Beaker pottery of Sweden, the Comb Ware pottery of Finland and the Battle Axe pottery in Sweden and Finland, based on the production techniques used for making the decoration tools (cords of willow or lime raffia). The hypothesis for a migrating Corded Ware culture requires a break in

the continuity, pertaining to textile fabrics. One must otherwise ask why the Indo-European pastoral culture (Gimbutas 1991, 385 fig 10:32) refrained from working with wool fibres (which were known on the Continent) as soon as they arrived in Scandinavia and in Finland.

## Acknowledgements

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