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## Essay on Bronze Age and Early Iron Age pottery in Finland with an excursus into the history of fabric impressed ceramics

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## **Abstract**

The essay examines Bronze Age and Early Iron Age Pottery in Finland with a special interest in Fabric Impressed Ceramics (also called Textile Ware) – origin and chronology. It turned out that Fabric Impressed Ceramics originated in Central Europe – Bohemia and North Hungary – soon after 3500 BC. From there the custom to apply fabric impression spread to Russia, the Baltic countries and Finland.

Keywords: fabric impressed ceramics, Textile Ware, Bronze Age, Iron Age.

Dear Mika, 40 years ago we met you participating in a field course on archaeological excavation run by us in Salo as part of the instruction program given by the Dept. of Archaeology, University of Helsinki. From then on you participated in regular excavations there and Christian took you to his Saami excavations by Nukkumajoki near Inari, Lapland. Later you and Pirjo studied pottery from Ceded Karelia in the National Museum in Helsinki, with the aim of finding Epineolithic pottery among the Stone Age pottery — and it was really found. You also followed the footsteps of Sakari Pälsi on the Karelian Isthmus and had there collaboration in field work, excavations and surveys. — The first sentences of the story below were written some time before 1975. The story got lost and was forgotten but found again and given more words — in the beginning of this century when you published your dissertation on Textile Ware. Finally, with this essay, we wish you many happy returns of your memorable Day!

In prehistoric times, the territory of modern Finland was longitudinally divided into a Western and an Eastern Cultural Zone. Moreover, the Western Cultural Zone was divided culturally into a coastal strip and an inland district. The Eastern Cultural Zone which also comprised territories of the Karelian Republic and Murmansk Oblast of the Russian Federation, was divided culturally into a southern and a northern district. This means that a review of Bronze Age and Early Iron Age pottery in Finland is more or less a review of the Bronze Age and Early Iron Age pottery of eastern and northern Fennoscandia. Connections with Estonia are obvious as well.

The Late Neolithic to Bronze Age transition in the coastal strip of the Western Cultural Zone took place when targeted by a Scandinavian wave of influence in the end of the Nordic Bronze Age Period I, ca. 1500 BC. This introduced Nordic cultural traits and practices along the coast among the successors of the local Late Neolithic population. However, the production of pottery drew on local Late Neolithic tradition when developing the Bronze Age *Paimio Ware* which remained in use through Periods II–V. *Morby Ware* replaced Paimio Ware ca. 650 BC early in Period VI, before the beginning of the Pre-Roman Iron Age. Morby disappeared in the Younger Roman Iron Age in the fourth century AD. In Paimio Ware, the surface treatment includes two methods, hatching and fabric impression, while Morby Ware only has hatching.

The Bronze Age and Early Iron Age pottery in the inland district of the Western Cultural Zone is inadequately studied. However, it appears that a technical tradition of the Neolithic Corded Ware persisted and that it is possible to distinguish influence from the eastern cultural zone. It has not been possible to recognise any local Early Iron Age ceramics in the inland district of the Western Cultural Zone but occasional finds of Morby Ware indicate influence from the coastal strip during this period.

The Late Neolithic to Bronze Age transition in the southern district of the Eastern Cultural Zone took place when the region experienced a wave of influence from Central Russia which introduced the Sarsa-Tomitsa Ware ca. 1800 BC. The Sarsa-Tomitsa Ware is a branch of a widespread Bronze Age ceramic complex known as Textile Ware. Fabric impressions on the surface of vessels are common in this complex. This wave of influence almost extinguished the local ceramic tradition which was technically based on the use of crushed asbestos for temper. An exception was provided by the Palajguba 2 Ware mainly found in Karelian Republic. At the Bronze Age to Iron Age transition by ca. 650 BC the Sarsa-Tomitsa Ware was replaced by new types of asbestos tempered ceramics, namely the Luukonsaari Ware and the Sirnihta Ware. Both disappeared in the Younger Roman Iron Age in the fourth century AD.

Even though there are find spots of Sarsa-Tomitsa, Luukonsaari and Sirnihta as far north as the Polar Circle, there are other types of pottery that give the northern district of the Eastern Cultural Zone its character. The local Bronze Age began ca. 1900 BC with the appearance of *Lovozero Ware* and ca. 1600 BC the *Imitated Textile Ware* appeared, both made of clay mixed with asbestos fibres and often also with hair.

In the southern part of the northern district of the Eastern Cultural Zone, the territory of Kainuu stands out as a region where crushed soapstone and talc was substituted for crushed asbestos in the clay paste as early as the Neolithic. Soon after the coming of Sarsa-Tomitsa to the region vessels with identical shape and ornamentation but with smooth surface (no fabric impressions) were made of clay richly mixed with crushed and powdered soapstone, talc or mica. Such ceramics is called *Kainuu Ware*. On the other hand, there is all over the southern district of the Eastern Cultural Zone similar ceramics the clay of which is mixed with a minor amount of crushed asbestos, soapstone, talc or mica in addition to crushed stone, and *with* fabric impressed surface. Because of the fabric impression this variety is classified as Sarsa-Tomitsa. Furthermore, *Anttila Ware* was probably developed on the basis of the Kainuu ware in the Kainuu region.

At the Bronze Age to Iron Age transition by ca. 650 BC all Bronze Age wares in the North were replaced by the *Kjelmøy Ware* which disappeared in the fourth century AD. Kjelmøy Ware could be described as a variant of Sirnihta Ware – or the other way round.

The dating of the Bronze Age and Early Iron Age pottery in Finland relies on AMS dates made on charred crust sticking to the inner sides of potsherds. The results indicate that the transition from Bronze Age to Early Iron Age ceramics took place between ca. 2550 and 2500 radiocarbon years BP or around the seventh century BC.

As said before, very often the outer surface of the vessels representing the Sarsa-Tomitsa Ware of the Eastern Cultural Zone is covered with fabric impressions. However, it is the style of shaping and ornamentation that reveals that Sarsa-Tomitsa forms a branch of a widespread typological ceramic complex which obviously originated in Central Russia, the Volga–Oka interfluve.

In Finland, however, fabric impressions are also found on vessels representing the Paimio Ware and even more often on the Late Neolithic *Kiukainen Ware* of the Western Cultural Zone. In each case the existence of fabric impressions has been connected with Sarsa-Tomitsa and the Central Russian Bronze Age ceramic complex. However, these ceramic entities have no real typological connection with this complex. C. F. Meinander speculated about an earlier eastern wave of influence which would have transmitted the practice of applying fabric impression on ceramics to the early Kiukainen Culture and a later wave which spread the Sarsa-Tomitsa Ware. However, there is no argument in favour of Meinander's earlier wave.

Obviously, there are two different complexes of fabric impressed ceramics represented in Finland. One is the Sarsa-Tomitsa Ware of the Eastern Cultural Zone as a branch of the Central Russian Bronze Age Textile Ware complex. But the question remains to what complex the Late Neolithic Kiukainen and Bronze Age Paimio Wares of the Western Cultural Zone are connected.

The Corded Ware Culture first appeared in Finland by 2900 BC and soon covered the whole Western Cultural Zone of the time. As early as the 1920s Aarne Europaeus reported on a find of fabric impressed potsherds connected to this culture and additional finds have been made later. He also referred to reports on fabric impressions occasionally seen on Corded Ware in Poland and so he tentatively suggested that the origin of the practice of applying fabric impression on ceramics in Central Russia perhaps was to be found in Central Europe. However, none of these authors developed any real interest in the significance of these peculiar occurrences.

In the early 1970s Ville Luho said that he had seen "lots" of 'Textile' Ware in collections from Early Bronze Age sites in northern Hungary and this gave a strong feeling that it was necessary to try to follow the practice of applying fabric impression on ceramics and find the place and date of its origin. (later, 2003, we saw fabric impressed ceramics on display in the Budapest Museum).

A plan to produce a larger work on the theme never materialised but this is a short summary based on notes from before 1975. This is important because on the one hand no one seems to have devoted any comprehensive interest in the topic and on the other recent materials appear to support this old scenario which has remained unpublished.

As a result of a search in literature from Germany, Poland, Czech, Slovakia and Hungary for fabric impressed ceramics a number of hits proved that fabric impression really occurred in Rivnac, Jevišovice B and Nýirség Ware on the one hand and in Globular Amphora, Corded and Zlota Ware on the other although, compared to smooth surface, fabric impressions along with hatching was not very common. Jozef Vladár stated that fabric impression (along with hatching) on ceramics was an important Late Eneolithic horizon marker in a zone reaching from western Ukraine to Bohemia. The find of a battle axe of type A (representing the early phase of the Corded Ware/Battle Axe culture) in horizon B of Jevišovice, was an important indicator of the relatively early chronological level at which fabric impressed ceramics occurred.

Summing up, the usage of applying fabric impressions on the outer surface of clay vessels probably first appeared among the Rivnac Culture of Bohemia soon after 3500 BC. This usage rapidly spread to Slovakia, northeast Hungary and as far as western Ukraine on the one hand and to eastern Germany and Poland on the other.

From Poland, the spread of the usage of applying fabric impressions on clay vessels continued northwards. Such ceramics is found in what is now the Kaliningrad oblast where Carl Engel first linked it with the Corded ware. In Lithuania fabric impressed ceramics was reported from at least

four Neolithic sites and from several sites also in Latvia. At Sarnate, for instance, fabric impressed ceramics occurred together with Corded Ware in the upper part of the cultural layer of two dwellings, in addition to local Sarnate Ware. Furthermore, an early Battle Axe (same as at Jevišovice B) was discovered.

In Estonia, it was the work of Lembit Jaanits' on "Neolithic and Early Metal Age settlement sites at the mouth of the River Emajõgi" that provided, among other things, evidence of the existence of Neolithic fabric impressed ceramics in Estonia. And finally, as stated earlier, the usage of applying fabric impressions on the outer surface of clay vessels spread to Finland together with the Corded Ware 2900–2200 BC.

Clearly, it was the wave of influence represented by the Corded Ware that brought the usage of applying fabric impressions on clay vessels from Poland northwards through the Baltic countries as far as the western Cultural Zone in Finland. There this usage was continued during the Late Neolithic (Kiukainen Ware) and the Bronze Age (Paimio Ware). Finally, the tradition of applying fabric impressions ended with the Bronze Age. Also in Estonia and Latvia the tradition of applying fabric impressions on clay vessels continued through the Bronze Age and it appears to have been productive as late as the initial phase of the Iron Age. South of the Baltic Sea the fabric impressions appear to have disappeared by 2000 BC.

Follows the question of the origin of applying fabric impressions on clay vessels in Russia. Is it autochthonous in the Volga–Oka interfluve or is it adopted from somewhere else? As early as 1915 Sakari Pälsi demonstrated that ceramic products showing fabric impression and dating from various periods had been found in Siberia, China, Japan and North America, in addition to Finland and (European) Russia. However, it is clear that there is no archaeologically visible wave of influence that could have transmitted this usage from the East to Central Russia.

Remains the question of a possible western origin. In the 1970s, searching for material which would shed light on the problem it turned out that in the literature at hand nothing of interest was published concerning the region between the Baltic states and the Volga–Oka interfluve, with one exception. According to Harri Moora fabric impressed ceramics occurred in northernmost Belarus but, unfortunately, he gave no information about the sites and contexts. However, conditionally these finds could indicate the direction of a possible corridor of spread leading from Belarus, Lithuania and Latvia to the Volga–Oka interfluve.

By 1975 it was clear that the origin of the Fat'yanovo culture of the Volga–Oka interfluve is found in the Corded Ware complex, possibly on the one hand in the Middle Dnieper Culture of the Dnieper–Desna region and certainly on the other hand in the Corded Ware Culture of Latvia and Lithuania. While the ceramics connected to the former never shows fabric impressions the ceramics connected to the latter does, as we have seen. On the basis of this, the idea of an indigenous Central Russian origin of the usage of applying fabric impressions on clay vessels appeared highly unlikely and instead postulated that this usage was transmitted to the Volga–Oka interfluve in connection with the spread from Latvia and Lithuania of the Corded Ware influence which participated in the formation of the Fat'yanovo Culture.

In due course, ca. 1900 BC, the Fat'yanovo Culture as well as the Volosovo Culture were replaced by what is called the Bronze Age Textile Ware Culture in the Volga—Oka interfluve. The shaping and ornamentation of the ceramics of this culture reveals a multiple cultural background, namely that of Abashevo, Fat'yanovo, Pozdnyakovo and Volosovo (in alphabetical order). The fabric impression was adopted as surface treatment by the whole complex (in addition to hatching and smoothing). The expansion of the culture towards northwest and north began immediately and simultaneously with the distribution of Seima-Turbino bronzes. As indicated before, this Bronze Age ceramic complex is in Finland known as Sarsa-Tomitsa Ware.

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As a concluding remark it is necessary to point out that the history of the usage of the fabric impression reveals that talking of 'Textile Ware' is to talk of a certain kind of surface treatment, a technical trait, and not to talk of one ceramic typological entity with a cultural relevance. 'Hatched Ware', 'Asbestos Ware' etc. are analogical technical termini which do not refer to typological entities. On the other hand, termini like 'Sarsa-Tomitsa Ware' which refers to ceramics defined by shape and ornamentation names a typological entity which has a genuine cultural meaning. As we have seen, termini like 'Bronze Age Textile Ware' are misleading at least in Finland where at the same time two parallel traditions of fabric impression were present.

Well. Today this story tells about history of research and so does Mika's dissertation. Is there now any fresh opinion concerning the origin of textile ware in Europe – when and where?