Vasa and Vepsküla: Late Stone Age and Early Metal Age settlement sites in the lower course of the Narva River

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INTRODUCTION

The area between the Narva and Luga Rivers, located in the Estonian–Russian border zone, has been an object of interest for archaeologists since the 1930s (for a review of studies, see Kriiska 1996). For more than a decade, an interdisciplinary team of international researchers have conducted studies annually on both banks of the Narva River (Kriiska *et al.* 2016). To date, slightly less than a hundred Stone Age settlement sites have been discovered, and archaeological excavations have been carried out at several of them.

In 2018, an extraordinary opportunity appeared to conduct archaeological survey on a three-kilometre-long stretch along the Narva River. In connection to the initial construction of a pedestrian and bicycle pathway between the towns of Narva and Narva-Jõesuu, a layer of topsoil was mechanically removed from a five-metre-wide area along the planned pathway. During the first survey in June (Johanson & Jonuks 2018), fragments of prehistoric pottery were discovered in the area of the previous Vepsküla village and the Vasa farmstead (both

now located within the borders of Narva town). Corded Ware pottery fragments of the Late Stone Age and potsherds dating most likely from the Early Metal Age were found in Vasa, and pottery of the Early Metal Age in Vepsküla.

In July of the same year, further research took place in both locations. While more than 20 settlement sites with Corded Ware pottery have been found in Narva-Luga area (Kriiska *et al.* 2015) and repeatedly studied (e.g. Jaanits 1966; Kriiska 2000; Kriiska & Nordqvist 2007), just a few finds dating from the Early Metal Age have been identified in the same region, Narva Joaorg being the only substantial settlement site of this era (Nikitjuk 1998; Kriiska & Lavento 2006). This article presents the results of the survey and small-scale rescue excavations conducted in 2018.

VASA SETTLEMENT SITE

Vasa settlement site is located on a low, weakly discernible elongated landscape formation on the western bank of the Narva River, next to the World War II monument 'Tank'. This formation is the highest (and driest) location in the area and is mainly situated at 7 m a.s.l., albeit the highest part of the feature, located slightly west of the settlement site, reaches an altitude of 7.5–8 m a.s.l. (Fig. 1). The settlement site is currently placed west of the



Fig. 1. General map of archaeological fieldwork carried out at the Vasa settlement site. 1 – test trench on the pathway line (trench number marked next to it), 2 – test pit with finds, 3 – test pit without finds, 4 – pathway line, 5 – road, 6 – monument 'Tank', 7 – electric line. Red dots indicate surface finds made on the track of the pathway.

Jn 1. Uuringuala üldplaan Vasa asulakohal. 1 – proovikaevand kergliiklustee alal (koos proovikaevandi numbriga selle kõrval), 2 – leidudega prooviauk, 3 – leidudeta prooviauk, 4 – kergliiklustee trass, 5 – olemasolevad teed, 6 – monument "Tank", 7 – elektriliin. Punaste täppidega on markeeritud pinnaleiud. Man / Plaan: Karkko Nordavist.

Map / Plaan: Kerkko Nordqvist

Narva – Narva-Jõesuu road, on the edge of an open area – a field that was in use until the early 1990s. The plough layer is 15–20 cm thick and differs clearly from layers beneath it, indicating long-term ploughing. In places, a layer of mixed and most likely also ploughed soil was situated on top of the actual plough layer. Thus, the undisturbed cultural layer was in some places covered with up to 50 cm of mixed layers rich in humus. The area is also edaphically different from its surroundings: the soils in the settlement site and its vicinity are podzolic but further away consist of waterlogged gleyed podzols (Estonian Soil Map).

During the road construction works, a layer rich in humus mixed by ploughing was removed, sporadically also part of the underlying sand. In other words, mechanical topsoil stripping removed not only the cultural layer mixed by ploughing, but in places also affected the *in situ* cultural layer (Fig. 2). During archaeological fieldwork, items were collected from

heaps of surface soil set along the pathway, and large soil samples were sieved from the heaps with higher concentration of finds. To document the origins of these finds, the area was divided into 16 sections, each 10 m long. In accordance with the requirements of the National Heritage Board, all surface finds discovered on the opened pathway were 3D-documented using total station, and altogether 16 test trenches 1×1 m in size were dug at 10 m intervals. All excavated soil was sieved using hand sieves with a mesh size of 3 mm. The borders of the settlement site were determined by extensive test pitting: a total of 72 test pits with a diameter slightly smaller than 50 cm were dug (Davõdov 2019).



Fig. 2. Digging test pits and sieving the soil removed from the route of the pathway at the Vasa settlement site.
Jn 2. Proovikaevandite kaevamine ja trassi alalt teisaldatud pinnase sõelumine Vasa asulakohal.
Photo / Foto: Kerkko Nordqvist

After the completion of archaeological fieldwork, the cultural layer was covered with geotextile and sand, macadam and asphalt. This was by no means the best solution, since the cultural layer was severely disturbed already during the initial construction works and could be studied only to a limited extent during the fieldwork in 2018.

Altogether 13 test trenches (Nos 2, 4–7, 9–16) on the pathway and only six test pits outside it contained any finds. The scarcity of finds, especially outside the area cleared for road construction, gives the impression that the settlement site was situated almost entirely along the route of the pathway. The distribution of finds in the excavated areas, on the surface of the pathway, and in the soil heaps next to it indicates that the settlement site is ca. 150 m long and up to 10 m wide, running parallel to the Narva River, about 60–70 m from the river bank. The Early Metal Age settlement extended to the entire area, while Corded Ware finds were confined to the south-eastern half of it. In total, the Late Stone Age finds were distributed over an area of 800 m².

The cultural layer of the Corded Ware settlement was clearly visible as a layer of beige or grey dirty sand in the south-eastern part of the site. Here, the thickness of the untouched cultural layer was up to 35 cm, in test trench no 12 even up to 60 cm. The highest concentration of Corded Ware finds was located in an area 50 m long between test trenches no 10 and 15 (Fig. 1).

Fig. 3. A pit related to the Early Metal Age phase of occupation, found in test trench No 5. 1 – brown layer rich in humus (plough layer), 2 – greyish-yellow sand, 3 – brown layer rich in humus (cultural layer mixed by ploughing), 4 – black cultural layer, 5 – pit fill, 6 – natural sand.

Jn 3. Varase metalliaja asustusetapiga seonduv lohk proovikaevandis nr 5.1 – pruun huumuserikas kiht (künnikiht), 2 – hallikaskollane liiv, 3 – pruun huumuserikas kiht (künniga segatud kultuurkiht), 4 – must kultuurkiht, 5 – lohu täitekihid, 6 – looduslik liiv.

Photo / Foto: Aivar Kriiska

The thickness of the unmixed Early Metal Age cultural layer also varied in different areas between 15 and 35 cm. In the north-western and middle parts of the settlement site, where the Early Metal Age cultural layer was preserved or only partially damaged, the unmixed part was visible as darker, in places, even black soil (see Fig. 3, layer 4). A pit dug to a depth of 35 cm in a layer of natural clean sand was found in test trench No 5 (Figs 1 and 3). The filling of the pit consisted of multi-coloured (from yellow to black) soil and contained pieces of charcoal. A few fragments of pottery were found in the pit. Evidence of cross-ploughing was found in both natural layer and cultural layers in the north-western part of the site. Pieces of burnt stones were recorded in the cultural layer throughout the entire settlement site.

A total of 575 finds¹ were collected from the site, including fragments of animal bones (most of them burned) and burnt hazelnut shells. Most of the items (402 fragments) are sherds of Corded Ware pottery (Fig. 4: 1-8). The majority of these fragments are body sherds; 11 rim and only three bottom fragments were found. The vessel wall thickness is up to 12.3 mm, regularly less than 10 mm, and rim thickness from 4.2 to 12.8 mm. The rims are mostly turned outwards (Fig. 4: 4),

sometimes as thick as the walls (Fig. 4: 2, 7, 8), but often thinner (Fig. 4: 5). The majority of sherds derives from large, thick-walled and flat-bottomed household pots, and at least 16 sherds (4%) come from beakers. The vessels are made of clay mixed with either fibrous organic admixtures and chamotte (207 fragments, 51.5% of fragments), organic admixtures (170 fragments), chamotte (15 fragments), organic admixtures, rock debris and chamotte (7 fragments), or organic admixtures and rock debris (3 fragments). Chamotte is often visible as small red grains (Fig. 5), the diameter of the largest grains is more than 3 mm. The proportion of sherds with chamotte is most likely imprecise, because the determination of temper material was based on visual observation of the surface of the sherds, and therefore fine-grained chamotte can be present in more numerous fragments. The organic admixture has consisted of some sort of fibrous (crushed plant) material, which has often left thin marks on the surfaces of the receptacles (Fig. 4: 1–8; 5; 6). The fibre impressions are visible on 34% of sherds (137 fragments). No clear differences were found in the composition of the moulding material of household vessels and beakers.



¹ TÜ 2720 and TÜ 2728.



Fig. 4. Fragments of Corded Ware pottery (1–8), a sherd from an Early Metal Age pot (9), and a fragment of a whetstone (10) found at the Vasa settlement site.

Jn 4. Nöörkeraamika killud (1–8), varase metalliaja savinõukild (9) ja lihvimiskivi katke (10) Vasa asulakohalt. (TÜ 2728: 155, 291, 42, 255, 287, 155, 287, 289, 288.)

Photo / Foto: Irina Khrustaleva

The moulding technique could be determined for four fragments, all of which were made of strips with N-type conjunctions (TÜ 2728: 91, 112, 195, 238). The surfaces of the vessels were either smoothed or striated. Of the 143 fragments with both sides preserved, the majority (124 fragments, 86.7%) had a smoothed inner and outer surface, four sherds (2.8%) were striated on both surfaces, ten fragments (7.0%) were smoothed on the outer and striated on the inner surface, and three sherds (2.1%) were striated on the outer and smoothed on the inner surface. One Corded Ware fragment had textile-like impressions on the outer surface (TÜ 2728: 294).

Only 15 Corded Ware sherds (3.7% of all Corded Ware fragments) were ornamented. The decoration is always located on the upper part of the pots, sometimes also on the rim, and only on the outer surface. Four types of ornaments were present: cord impressions (six fragments, 40% of ornaments; Fig. 4: 6–8), notches (four fragments), pits (three fragments; Fig. 4: 4–6), and grooves (two fragments). Cord impressions are pressed in horizontal lines on the sides (necks) of the vessels, from two to seven lines are visible on the fragments. Of the two rim sherds ornamented on the edge, the first has two



Fig. 5. A Corded Ware sherd and chamotte grains visible in the ceramic matrix.

Jn 5. Nöörkeraamika kild ja selle keraamilises massis nähtavad šamotitükid.

(TÜ 2728: 55.)

Photo / Foto: Aivar Kriiska, Riina Rammo



Fig. 6. Fibrous marks on the outer surface of a Corded Ware fragment.

Jn 6. Kiudjad jäljed nöörkeraamika killu välispinnal. (TÜ 2728: 283.) Photo / Foto: Aivar Kriiska. Riina Rammo horizontal lines of cord impressions, and the second diagonal cord impressions. Other types of ornamentation are also arranged in horizontal lines.

Based on the composition of the ceramic mass, rim shape, surface treatment and ornamentation, most of the Corded Ware fragments found at the Vasa settlement site can be classified as Estonian Corded Ware. This type of pottery was used in the 3rd millennium calBC in Estonia, southern Finland, northern Latvia, and Pechory region, Ingria and the Karelian Isthmus in Russia (Kriiska *et al.* 2017). It is not possible to date the settlement site more accurately based on the find assemblage alone.

Three quartz flakes, a fragment of a polished stone adze, and a fragment of a whetstone of sandstone (Fig. 4: 13), found at the Vasa settlement site, can also be dated to the Stone Age. One of the quartz fragments has been created by bipolar flaking (TÜ 2728: 295).

In addition to Corded Ware, 74 fragments of handmade pottery, including two rim fragments, were collected. One of the rim sherds turns slightly outwards, and the other widens both in and out. The wall thickness of the pots is from 3.6 to 13 mm, mostly 5–9 mm, the rim thickness is from 6.2 to 10.3 mm. The majority of the fragments are most likely pot sherds, but some of the thinner fragments may come from bowls.

The vessels were made of clay mixed with rock debris, rarely with rock debris and organic material (one fragment), or rock debris and chamotte (one fragment). Of the 37 fragments with both sides preserved, 25 (67.6%) are smoothed on both surfaces, seven are striated on the outer and smoothed on the inner surface (Fig. 3: 9), and two are smoothed on the outer and striated on the inner surface. Two sherds have textile-like impressions on the outer surface, one of them is striated on the inner surface (TÜ 2728: 4, 275), and one smoothed on the inner surface (TÜ 2720: 1). Only three fragments are ornamented: they all have lines of pits, which in two cases are located on the outer surface and in one case on the edge of the rim. Based on the textile impression-like surface treatment and striations on the fragments, the second group of pottery and, therefore, the entire second phase of occupation at the Vasa settlement site dates from the Early Metal Age.

More recent finds were also collected from the settlement site: fragments of wheel-thrown pottery (including a sherd of Russian whiteware), fragments of redware, fragments of white clay pipes, a fragment of a stove tile, pieces of bricks, as well as metal debris and pieces of ammunition. These finds date from the 18th–20th centuries.

VEPSKÜLA SETTLEMENT SITE

During fieldwork in June, one fragment of handmade pottery (TÜ 2721: 1) was found from the opened surface of the pathway in the area of the former Vepsküla village. The find place is located on flat land, approximately 300 m from the Narva River, at 6.5–7 m a.s.l. (Fig. 7). Like at the Vasa site, the top soil rich in humus mixed by ploughing had been mechanically stripped, but at Vepsküla also the underlying layer of sand was removed to a deeper level. This, apparently, had destroyed much of the archaeological remains along the pathway.

Later in July, two other sherds of handmade pottery were found there. 11 test pits measuring 30×30 cm were dug in the area where the fragments of pottery had been found, and 2 m profile at the edge of pathway line was cleaned and documented. The excavated soil was sieved using hand sieves with 3 mm mesh, but no additional finds or cultural layer was found in any of the test pits.

The few fragments of handmade pottery found in Vepsküla, one with textile-like impressions on the outer surface, can be dated preliminarily to the Early Metal Age. The investigated area may have been the outskirts of a settlement site, and most likely destroyed during the clearing of the pathway. Any further knowledge on the site requires additional research in the future.





Map / Plaan: Kerkko Nordqvist

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VASA JA VEPSKÜLA HILISKIVIAJA JA VARASE METALLIAJA ASULAKOHT NARVA JÕE ALAMJOOKSUL

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2018. aastal avanes võimalus arheoloogiliseks luureks ehk leireks Narva linnas u 3 km pikkusel lõigul piki Narva jõe kallast. Kergliiklustee ehituseks kooriti seal u 5 m laiuselt ribalt ära huumuserikas kiht. Juunis toimunud leirel avastati kahes kohas praegu Narva linna piiridesse jäävatel endise Vepsküla küla ja Vasa talu maadel esiajaloolist keraamikat: Vasast kiviaja lõpule iseloomulikku nöörkeraamikat ja savinõukilde, mis tõenäoliselt pärinevad varasest metalliajast, ning Vepskülast varase metalliaja keraamikat. Sama aasta juulis korraldati mõlemas kohas arheoloogilised uuringuid.

Vasa asulakoht paikneb silmaga vaevu eristataval madalal (7–8 m ü.m.p) künnisel (jn 1). See on lähema ümbruskonna kõrgem ja kuivem koht. Asulakoht jäi kergliiklusteele ette pea terves ulatuses. Sealt kooriti ära künniga segatud ja kohati ka selle alust *in situ* paiknevat kultuurkihti. Trassi kõrvale tõstetud mullal tehti pinnakorje, trassikaeves dokumenteeriti kõik pinnaleiud ja kaevati 10 m vahedega kuusteist 1 × 1 m suurust proovikaevandit (jn 1, 2). Asulakoha piire selgitati ulatusliku prooviaugustamisega.

Arheoloogilistel välitöödel tehti kindlaks, et asulakoha kultuurkiht lasub Vasas u 150 m pikkusel ja kuni 10 m laiusel alal paralleelselt Narva jõega, kaldast 60–70 m kaugusel. Leidude jaotus nii proovikaevandites, kergliiklustee kaevise pinnal kui ka mullahunnikutes osutab, et varase metalliaja asulakoht on paiknenud seal kogu leidudega alal, samas nöörkeraamika asulakoht on olnud pea poole väiksem, leidude leviala on umbes 800 m². Proovikaevandist nr 5 (jn 1 ja 3) kaevati välja ka üks kuni 35 cm jagu looduslikku liivapinda süvendatud varase metalliaja keraamikat sisaldanud lohk.

Enamik kogutud leidudest on nöörkeraamika killud (jn 4: 1–8), mis kuuluvad III aastatuhandel eKr Eestis, Lõuna-Soomes, Läti põhjapoolses osas ning Venemaal Petseri- ja Ingerimaal ning Karjala maakitsusel valmistatud Eesti tüüpi nöörkeraamika hulka. Valdav osa kilde pärineb suurematest majapidamisnõudest, osa ka peekritest. Savinõud on tehtud orgaanilise lisandi ja šamotiga, orgaanilise lisandiga, ainult šamotiga, orgaanika, kivipurru ja šamotiga või orgaanika ja kivipurruga segatud savist. Šamott on sageli nähtav väikeste punakate teradena (jn 5). Orgaaniliseks lisandiks on olnud mingi kiudjas materjal, millest on sageli jäänud nõude pindadele jäljed (jn 4: 1–8; 5; 6). Kiviaega võiksid kuuluda veel kolm Vasa asulakohalt leitud kvartsikildu, lihvitud kivist talva katke ja liivakivist lihvimiskivi tükk (jn 4: 13).

Omaette rühma moodustavad 74 käsitsikeraamika kildu, mis pärinevad enamasti kivipurruga segatud savist valmistatud silutud või riibitud pinnaga nõudest. Kolme killu välispinnal on tekstiilijäljendit meenutav vajutus. Tekstiilivajutust meenutava pinnatöötluse ja riibete järgi savinõukildude pinnal võib selle keraamika ja seeläbi kogu teise asustusetapi Vasa asulakohal dateerida varasesse metalliaega.

Asulakohalt koguti ka üksikuid nooremaid leide, nagu kedrakeraamika ja punaste savinõude killud, valgete savipiipude tükid, kahli katke ja tellise tükid. Need leiud pärinevad 18.–20. sajandist.

Vepsküla asulakoht paikneb tasasel alal u 300 m kaugusel Narva jõest kõrgusel 6,5–7 m ü.m.p. (jn 7). Nagu Vasas oli sealgi kooritud ära huumuserikas enamasti künniga segatud pinnas, kuid kaevatud oli märksa sügavamale liivapinda. Vepskülast leiti kergliiklustee trassi ülevaatusel ühe käsitsi vormitud savinõu kild ja seejärel tehti leiukohale üksteist prooviauku. Kõikides prooviaukudes oli tegemist loodusliku liivaga, kultuurkihti ei avastatud. Pinnakorjega saadi siiski veel üksikuid käsitsikeraamika kilde, neist üks tekstiilijäljendit meenutava pinnatöötlusega. Esialgselt võib keraamika dateerida varasesse metalliaega. Tõenäoliselt on seal tegemist asulakoha servaalaga, mis lõhuti kergliiklustee alal täielikult ära. Koht vajab tulevikus põhjalikumaid uuringuid.