



The Iron Age habitation phase of the Vasa settlement site in north-eastern Estonia

Aivar Kriiska

Tartu Ülikool, ajaloo ja arheoloogia instituut, arheoloogia osakond (University of Tartu, Institute of History and Archaeology, Department of Archaeology), Jakobi 2, 51005 Tartu, Estonia; aivar.kriiska@ut.ee

Irina Khrestaleva

Tartu Ülikool, ajaloo ja arheoloogia instituut, arheoloogia osakond (University of Tartu, Institute of History and Archaeology, Department of Archaeology), Jakobi 2, 51005 Tartu, Estonia
Riiklik Ermitaaž (State Hermitage Museum), Dvortsovaya Naberezhnaya 34, 191181 St Petersburg, Russia

Kerkko Nordqvist

Helsingi Ülikool, Kunstide teaduskond (University of Helsinki, Faculty of Arts), Fabianinkatu 24, 00014 University of Helsinki, Finland

INTRODUCTION

The Narva River, much like its easterly neighbour Luga, has been the object of almost continuous archaeological research in its lower reaches over the past few decades. So far, nearly a hundred archaeological sites have been discovered in the territory between the two rivers (e.g. Kriiska *et al.* 2016; Gerasimov *et al.* 2019). The majority of them are from the Stone Age, and only a few date from a later period. Therefore, every bit of knowledge from younger prehistoric periods is a welcome addition to the history of the region, and likewise adds to the history of the areas around the Baltic Sea as a whole.

Excavations of the Vasa site on the left bank of the Narva River in 2018, necessitated by the construction of a pedestrian and cycle pathway, revealed three phases of habitation (Kriiska *et al.* 2019). The oldest period is associated with the Corded Ware culture (typo-chronological dating 2800–2000 calBC), and the youngest dates from the 18th–19th centuries. The third period of habitation, as evidenced by some fragments of handmade pottery, lies between these datings. As typo-chronological dating proved difficult, the finds were first placed in a wider temporal period named as the Early Metal Age (Kriiska *et al.* 2019, 44).

At present, the charcoal samples collected from the cultural layer have been analysed using radiocarbon dating. Since the samples refer to a period with relatively few dates, and since there is scarce knowledge of such open settlements of the Early Iron Age in Estonia, it is justified to immediately add the results to the scientific knowledge base.

AMS DATINGS FROM THE VASA SETTLEMENT

The Iron Age cultural layer at the Vasa settlement site, up to 35 cm thick, is a narrow strip ca. 10 m wide and 150 m long, running parallel to the Narva River at a distance of 60–70 m from it (Fig. 1). There are 74 pieces of pottery associated with this period, collected from test

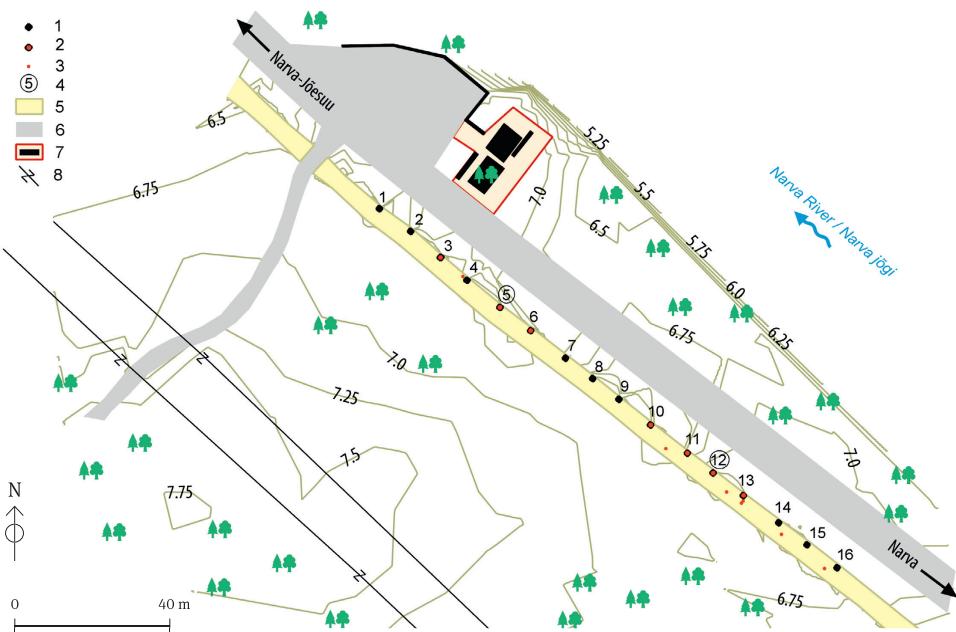


Fig. 1. General map of the Vasa settlement site. 1 – test square on the pathway line without Iron Age pottery, 2 – test square on the pathway line with Iron Age pottery, 3 – Iron Age surface find, 4 – test square with dated pieces of charcoal, 5 – pedestrian and cycle pathway, 6 – road, 7 – monument ‘Tank’, 8 – electric line.

Jn 1. Vasa asulakoha üldplaan. 1 – proovikaevand kergliiklustee alal, kust ei saadud rauaaegsed leide, 2 – proovikaevand kergliiklustee alal, kust saadi rauaaegseid leide, 3 – rauaaegne pinnaleid, 4 – proovikaevand dateeritud sõetükiga, 5 – kergliiklustee, 6 – tee, 7 – mälestusmärk „Tank“, 8 – elektri liin.

Map / Plaan: Kerkko Nordqvist & Irina Khrustaleva



Fig. 2. Pre-Roman Iron Age potsherds from the Vasa settlement site.

Jn 2. Eelromaaja rauaaja savinõukillud Vasa asulakohalt.

(TÜ 2728: 285, 279, 6, 294, 289, 49, 288, 275, 3, 284.)

Photos / Fotod: Jaana Ratas

squares (1×1 m in size) and as surface finds. The potsherds are tempered with rock debris and their surfaces are smoothed, striated or have textile-like impressions on them (Fig. 2). Most are fragments from various pots, but some come from bowls (for further detail see Kriiska *et al.* 2019, 44).

Three pieces of charcoal were analysed in the 14CHORNO Centre at Queen's University Belfast. The obtained dates were calibrated using OxCal 4.4.2 programme (Bronk Ramsey 2020) with IntCal 20 atmospheric curve (Reimer *et al.* 2020). The dated charcoal fragments come from two test squares. Two samples were collected from square no 5 in the north-western part of the settlement site. Both originate from the lower part of the cultural layer, where a sharply contoured depression (pit) was visible in the clean soil (Fig. 3). The fill of the depression consisted of sands of different colour and contained some pieces of pottery. No Corded Ware was recorded in this test square. The radiocarbon ages are 2113 ± 27 BP (UBA-42720) and 1985 ± 27 BP (UBA-42721), which, with a 95.4% probability, correspond to 337–49 calBC and from 43 calBC to 117 calAD, respectively. The dates, albeit various, are consistent with stratigraphy – the cultural layer represents two phases of settlement: 1) the depression and 2) the overlaying layer. The third dated piece of charcoal originates from the beige sandy fill of another depression (pit) which was found in test square no 12 (Fig. 4). Corded Ware as well as Metal Age pottery were discovered there, however, as stratigraphic units, these phases did not differ within the cultural layer. The age of third piece of charcoal is 2356 ± 35 BP (UBA-42722) and agrees with 543–378 calBC with a 94.4% probability. All three dates belong to the Pre-Roman Iron Age of prehistoric Estonia (Lang & Kriiska 2001), but their temporal differences indicate the interruption and re-use of the site rather than continuous occupation.

DISCUSSION

The Vasa site is situated on the coastal plain of a large river, but not within its active coastal zone. The repeated use of the settlement site demonstrates its suitability for both the



Fig. 3. Test square no 5. A – North-eastern profile. The dotted line marks the level from which the dated pieces of charcoal originate. B – The level from which the dated pieces of charcoal originate. In the north-eastern part of the test square, the top of the dug-down depression (pit) is visible.

Jn 3. Proovikaevand 5. A – Kirdeprofil. Punktiirjoon markerib tasapinda, kust pärinevad dateeritud söetükid. B – Tasapind, kust pärinevad dateeritud söetükid. Proovikaevandi kirdepoolses osas on näha maapinda süvendatud lohu ülaosa.

Photo / Foto: Aivar Kriiska & Irina Khrustaleva



Fig. 4. Test square no 12. A – North-eastern profile. The dotted line marks the level from which the dated pieces of charcoal originate. B – The level from which the dated pieces of charcoal originate. In the north-eastern part of the test square, the top of the dug-down depression (pit) can be seen.

Jn 4. Proovikaevand 12. A – Kirdeprofil. Punktuurjoon markeerib tasapinda, kust pärinevad dateeritud söetükid. B – Tasapind, kust pärinevad dateeritud söetükid. Proovikaevandi kirdepoolses osas on näha maapinda süvendatud lohu ülaosa.

Photo / Foto: Aivar Kriiska & Irina Khrustaleva

porary signs of human presence are found in Narva Joaorg (ca. 7 km from Vasa), where an enclosed settlement site was situated around that time (Nikityuk 1997). The 2018 fieldwork season added to the list the site of Vepsküla, where the pottery fragments are similar to those of Vasa, just 1.5 km away (Kriiska *et al.* 2019, 44). Within a 35-kilometre radius there are also Bronze and/or Early Iron Age settlement sites in Toila and Pimestiku, as well as stone graves in Toila, Türsamäe, Udria, Vaivara, etc. (Shmidekhel'm 1955, 194; Lang 2007, fig. 15, 82, 116). The Poanse-type *tarand*-grave in Toila definitely dates from the Pre-Roman Iron Age (Lang 2007, 189). Still, the Vasa site significantly increases knowledge about this prehistoric stage. The model that was observed elsewhere in Estonia holds true also on the left bank of the lower course of the Narva River – the settlements are small and contain few finds. It is probable

Corded Ware culture and Pre-Roman Iron Age populations. This correlates with a well-documented phenomenon in Estonia (Akali, Ilumäe II and IV, Kloostriasaar, Lemmetsa I, Siimusaare and Soodevahe sites), where the choice of habitation place was found to be similar for the Corded Ware and Iron Age cultures, likely due to comparable decision criteria (Jaanits *et al.* 1982, 174; Lang & Konsa 1998; Kriiska & Saluääär 2000, 15; Johanson *et al.* 2014, 36; Paavel *et al.* 2016).

The majority of Pre-Roman Iron Age studies in Estonia have been conducted on stone graves, and some on enclosed and hilltop settlements (Lang 2006). Open settlement sites have been mostly used only for background information. The problem is that not many settlements have been discovered as of yet, and just a few have been archaeologically excavated. The finds also lack variety and are often exclusively pottery. Since the Pre-Roman Iron Age pottery appears similar to the ceramic vessels of the Late Bronze Age (rim shape, temper, surface treatment, ornaments, moulding technique), it is nigh impossible to differentiate small fragments of pottery from these periods without radiocarbon dating. However, Pre-Roman Iron Age radiocarbon dates have so far been published from only four open settlement sites (Lehmja, Siimusaare, Tallinn Liivalaia St. and Tonja II; Lang 2007, 52).

There was no reason to question the habitation of north-eastern Estonia during the Pre-Roman Iron Age, even before the discovery of the Vasa settlement. Nearly contem-

that the dwellings belonged to single households (farms) (Lang 2007, 225) and were used continuously for only some decades. Vasa, however, indicates clearly that the same sites were repeatedly used for human habitation.

Vasa and Vepsküla also add to the broader context of the settlement pattern. While the stone graves indicate active use of the klint escarpments (Lang 2007, 85), the newly found settlement sites on the lower course of the Narva River suggest that human settlement in the northern part of Estonia extended further into the coastal plain. This confirms the settlement pattern observed some years ago on the coastal klint escarpment at the mouth of the Jägala River. A Pre-Roman Iron Age enclosed settlement was situated here, and several smaller Bronze and Iron Age open settlement sites were found nearby, along with extensive remains of fossilised farmlands buried under sand dunes (Kriiska *et al.* 2009). Based on these two settlement areas, it can be assumed that other similar settlements existed on the North Estonian coastal plain, and the search for these Pre-Roman Iron Age (or, thinking wider, also Bronze and Iron Age) sites should begin on the coastal escarpment. Consequently, the almost complete burial of the Vasa settlement site under a pedestrian and cycle pathway is particularly regrettable, especially since preliminary research provided relatively quickly that the pathway could have been redirected without significant additional costs.

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REFERENCES

- Bronk Ramsey, C. 2020. OxCal 4.4 manual. <https://c14.arch.ox.ac.uk/oxcal/OxCal.html>. Date accessed: 19 August 2020.
- Gerasimov, D. V., Lisitsyn, S. N., Kriiska, A. & Nordqvist, K. 2019 = Герасимов Д.В., Лисицын С.Н., Крийска А., Нордквист К. История исследований каменного века Нарвско-Лужского междуречья. – Памятники каменного века российской части Нарвско-Лужского междуречья. Ed. by D. V. Gerasimov. Санкт-Петербург, 19–26.
- Jaanits, L., Laul, S., Lõugas, V. & Tõnisson, E. 1982. Eesti esiajalugu. Tallinn.
- Johanson, K., Kadakas, U., Tõrv, M. & Vindi, A. 2014. Excavations on the island of Kloostrisaar. Some reflections on the Stone Age settlement pattern in South Estonia. – AVE, 2013, 33–44.
- Kriiska, A., Gerasimov, D. V., Nordqvist, K., Lisitsyn, S. N., Sandel, S. & Kholkina, M. A. 2016. Stone Age Research in the Narva–Luga Klint Bay Area in 2005–2014. – New sites, new methods. Proceedings of the Finnish-Russian Archaeological Symposium, Helsinki, 19–21 November, 2014. Ed. by P. Uino & K. Nordqvist. *Iskos*, 11. Helsinki, 101–115.
- Kriiska, A., Nordqvist, K., Khrustaleva, I., Davydov, I., Johanson, K. & Jonuks, T. 2019. Vasa and Vepsküla: Late Stone Age and Early Metal Age settlement sites in the lower course of the Narva River. – AVE, 2018, 39–46.
- Kriiska, A., Rappu, M., Tasuja, K., Plado, J. & Šafranovski, J. 2009. Archaeological research in Jägala. – AVE, 2008, 36–52.
- Kriiska, A. & Saluääär, U. 2000. Lemmetsa ja Malda neoliitilised asulakohad Audru jõe alamjooksl. – Artiklite kogumik, 2. Ed. by A. Vunk. *Pärnumaa ajalugu*, 3. Pärnu, 8–38, 134–136.
- Lang, V. 2006. Research into the Bronze and Early Iron Ages. – Archaeological Research in Estonia 1865–2005. Ed. by V. Lang & M. Laneman. *Estonian Archaeology*, 1. Tartu, 77–104.
- Lang, V. 2007. The Bronze and Early Iron Ages in Estonia. *Estonian Archaeology*, 3. Tartu.
- Lang, V. & Konsa, M. 1998. Two Late Neolithic to early Iron Age settlement sites at Ilumäe, north Estonia. – AVE, 1997, 67–77.
- Lang, V. & Kriiska, A. 2001. Eesti esiajaloo periodiseering ja kronoloogia. – EJA, 5: 2, 83–109.

- Nikityuk, A. 1997** = Никитюк, А. Предварительные результаты раскопок городища Нарва-Йоаопр. – АВЕ, 1996, 68–78.
- Paavel, K., Kimber, A., Rannamäe, E. & Kriiska, A. 2016.** Investigations at Sõjamäe and Soodevahe cup-marked boulders and Late Neolithic / Iron Age settlement site at the southeastern border of Tallinn. – АВЕ, 2015, 47–58.
- Reimer, P., Austin, W., Bard, E., Bayliss, A., Blackwell, P., Bronk Ramsey, C., Butzin, M., Cheng, H., Edwards, R., Friedrich, M., Grootes, P., Guilderson, T., Hajdas, I., Heaton, T., Hogg, A., Hughen, K., Kromer, B., Manning, S., Muscheler, R., Palmer, J., Pearson, C., van der Plicht, J., Reimer, R., Richards, D., Scott, E., Southon, J., Turney, C., Wacker, L., Adolphi, F., Büntgen, U., Capoano, M., Fahrni, S., Fogtmann-Schulz, A., Friedrich, R., Köhler, P., Kudsk, S., Miyake, F., Olsen, J., Reinig, F., Sakamoto, M., Sookdeo, A. & Talamo, S. 2020.** The IntCal20 Northern Hemisphere radiocarbon age calibration curve (0–55 cal kBP). – Radiocarbon, 62: 4, 725–757.
- Shmidekhel'm, M. 1955** = Шмидехельм М.Х. Археологические памятники периода разложения родового строя на северо-востоке Эстонии (V в. до н.э. – V в. н.э.). Таллин.

RAUAAJA ASUSTUSETAPP VASA ASULAKOHAL KIRDE-EESTIS

Aivar Kriiska, Irina Hrustaljova ja Kerkko Nordqvist

2018. a toimusid väljakaaevamised Vasa asulakohal Narva jõe vasakkaldal (jn 1). Uuringud näitasid kolme asustusetapi olemasolu. Vanim asustusjärk seondub nöörkeraamika kultuuriga (u 2800–2000 aastat eKr) ja noorim kuulub 18.–19. sajandisse. Nende vahele mahub asustusjärk, millest päritineb 74 kivipurruga segatud ning silutud, riibitud või tekstilijäljendit meenutava pinnatöötusega savinõukildu (jn 2). Kuna tüpokronoloogiliselt oli neid raske täpselt dateerida, paigutasime leiud esialgselt üldistavalt varasesse metalliaega. Nüüdseks on käes asulakoha kultuurkihist kogutud söetükkestest tehtud radiosüsiniku analüüsides.

Dateeriti kolm söetükki kahest proovikaevandist. Kaks söetükki päritnevad proovikaevand 5 kultuurikihi osast, kus ilmusid nähtavale maapinda süvendatud lohu kontuurid (jn 3). Üks neist andis vanuseks 95,4% tõenäosusega 337–49 kalibreeritud aastat eKr ja teine 43 kalibreeritud aastat eKr kuni 117 kalibreeritud aastat AD. Dateeringud on erinevad, kuid kooskõlas stratigraafiaga – kultuurkihis on näha kaks asustusetappi: 1) lohk ja 2) ja sellel lasuv kultuurkiht. Proovikaevandist 12 kaevati samuti välja omaegsesse maapinda süvendatud lohk (jn 4). Kolmas dateeritud söetükk päritneb lohku tätnud beežikast liivasest kultuurkihist. See andis vanuseks 94,4% tõenäosusega 543–378 kalibreeritud aastat eKr. Kõik kolm dateeringut kuuluvad Eesti esialjalo periodiseeringus eelrooma rauaaega.

Vasa asulakoha korduvkasutus osutab, et see paik oli sobilik nii nöörkeraamika kultuuri kui ka eelrooma rauaaaja inimestele. See korreleerub ka mitmel pool mujal Eestis dokumenteeritud nähtusega, et real juhtudel on nöörkeraamika kultuuri ja rauaaaja inimeste elupaiga valik olnud sarnane. Eelrooma rauaaegse asustuse olemasolus Eesti kirdeservas ei olnud põhjust kahelda ka enne Vasa asulakoha leidmist. Samaaegsed asustusjäljed on avastatud Narva Joaorust, kus sellel ajal paiknes kindlustud asulakoht. Lähim teadaolev eelrooma rauaaaja kivikalmistu paikneb Toilas. Vasa asulakohat lisab aga siiski uusi teadmisi selle perioodi kohta. Narva jõe alamjooksul kordub ühelt poolt muster, mida me oleme näinud mujalgi Eestis – asulakohad on väikesed ja leiuvaesed. Küllap on põhjust pidada neid kuuluvaks väikestele asustusüksustele ning oletada, et need olid järjepidevas kasutuses vaid kümnendite jagu. Vasa dateeringud näitavad aga selgelt, et samu kohti on pruugitud elupaigana korduvalt. Kui kivikalmed osutavad aktiivselle klindipealse kasutamise Eesti põhjarrannikul, siis uued asulakohad Narva jõe alamjooksul ei jäta kahtlust, et toona elati ka laiematel rannikumadaliku aladel. See on analoogne asustusmustrile, mis sai mõne aasta eest nähtavaks klindiesise rannikumadaliku uurimisel Jägala jõe suudmealal. Nende kahe asustuspiirkonna põhjal võib prognoosida, et rannikumadaliku asustusüksusi oli ilmselt teisigi.