

# Archaeological excavations on the hill fort of Värtemägi, Karula Parish

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#### INTRODUCTION

In the spring of 2016 a new hill fort was discovered in Karula parish, Valgamaa County, south-eastern Estonia by Pikne Kama and Pille Tomson when checking a site, designated on the basic map of Estonia with the toponym *Liinamägi* (Est. 'hill of stronghold') in the northern part of present-day Ähijärve village (Fig. 1). There, from the bottom of a test pit made on the hill with the intriguing name, traces of an occupation layer were found in the depth of *ca*. 50 cm.<sup>1</sup>

The hill (Fig. 2) is located 300 m northeast of Värtemäe farmstead<sup>2</sup>, *ca*. 200 m east of Antsla–Koemetsa road, 300 m west of Lake Sibula, 500 m west of Ala-Sibula and 600 m south-west of the Mäe-Sibula farmstead. According to local lore, a stronghold 'in ancient times, maybe in the time of Swedish War', bordered by hills, swamps and lakes had stood on the land of the Hauka farmsteads.<sup>3</sup> For the locals the toponym *Liinamägi* 

<sup>2</sup> According to data from Mati Urbanik, the owner of Värtemäe (hist. Väretemäe) farmstead, the name Värtemäe ('hill of gates') originates from the gates which designated the border of Sweden and Poland. Antsla-Koemetsa road passed the hill with the gates 500 m south to his household. The border had not stood there for a long time – just for some years. The lore comes from his grandfather who heard it in the early 20th century from old local men. The tradition refers, evidently, to some time span during the war between Sweden and Poland in the early 17th century (1600–1625), indicating also the medieval presence of the road. The card file tells also about stone gates which had stood on Värtemägi (Toponym cards of the Institute of Estonian Language, Karula parish).



Fig. 1. Site plan of the Värtemägi hill fort (Liinamägi). Jn 1. Värtemäe linnamäe asendiplaan. Map / Kaart: Estonian Land Board / Maa-amet



Fig. 2. View of Värtemäe Liinamägi hill fort from the south-west.

**Jn 2.** Vaade Värtemäe linnamäele edelast. Photo / Foto: Heiki Valk

<sup>1</sup> Finds: TÜ 2592.

<sup>&</sup>lt;sup>3</sup> Toponym cards of the Institute of Estonian Language, Karula parish. The 'Swedish War' is a popular name for the Great Northern War (1700–1721).



- Fig. 3. Värtemägi hill fort: the sloping plateau and the trenches.
- Jn 3. Värtemäe linnamägi: kaldus mäeplatoo koos kaevanditega.
- Map / Kaart: Estonian Land Board / Maa-amet, Ragnar Saage



Fig. 4. Trench no. 1 with a post hole against the background of virgin soil.

Jn 4. Kaevand 1 postiauguga loodusliku maapinna taustal.

Photo / Foto: Heiki Valk

has presently a somewhat fuzzy meaning – it designates, in addition to the hill fort, also a lower grassland hillock immediately west of the stronghold site – a place without any traces of an occupation layer. The oblong hill *ca*. 200 m north-east of the hill fort, designated on the basic map as *Sibula Liinamägi*, was known as *Liinamäe alune* ('area below the hill fort') among the locals.<sup>4</sup>

The relative height of Liinamägi hill is 15–17 metres, being the biggest on the northeastern side of the hill. The plateau of somewhat triangular shape (estimated size ca. 1200-1300 m<sup>2</sup>) is strongly slanting towards the west. Its length on the longest, north-eastern side is ca. 70–75 m. In the northern tip of the plateau there is an almost horizontal area with the diameter of 10-15 m - asuitable place to build cross-beam buildings. However, no occupation traces were found from test pits made there, likewise from any part of the sloping plateau in the upper part of which intact virgin loam appeared in the depth of *ca*. 15 cm already. In the central part of the western, lower edge of the plateau a slight rim, formed as a result of long-term ploughing, separated the former stronghold area from the hill slope. Evidently, long-term ploughing had also fully destroyed the occupation layer from the slanting plateau of the hill fort. No visible traces of fortifications could be observed at the edge of the plateau.

To get information about the chronology of the hill fort, two small trenches were made on the hill by the expedition of the University of Tartu in the summer of 2016 (Fig. 3).<sup>5</sup> All the soil was sieved on meshes with 5 mm eye diameter.

# TRENCH 1

Trench no. 1 ( $6 \times 1$  m; Fig. 4) was located in the middle of the western edge of the plateau, close to the middle part of the field border rim whereby the lowest metre remained below the rim. The exact location of the

<sup>&</sup>lt;sup>4</sup> Data from Mati Urbanik.

<sup>&</sup>lt;sup>5</sup> Finds: TÜ 2616: 1–301.

trench was determined by the test pit where an occupation layer was discovered in spring when the stronghold was found.

The ground under the thin layer of brown forest soil consisted of disturbed sandy loam which had been washed down the slope as a result of erosion caused by ploughing. From the two lowest metres of the trench, partly below the 'ploughing rim', i.e. outside the former field area, an irregular cluster of stones (diameter 10–17 cm, mostly 12–15 cm) was unearthed in the depth of 30-40 cm. The stones lay in light brown disturbed soil which covered the virgin mineral soil. As the stones were not burnt, they seemed to have been removed from the field during land cultivation. Being buried under 30 cm thick erosion layer, they originate, evidently, from the earliest stage of cultivation.

The soil contained predominantly tiny occasional fragments of hand-made pottery which occurred from the top until the bottom, i.e. intact natural clayish loam. These finds show the former presence of occupaSIBULA 1. KARVAND BSO? 2016

Fig. 5. Post hole from the defence wall on Värtemägi hill fort.
Jn 5. Värtemäe linnamäe kaitsetara postiauk.
Photo / Foto: Heiki Valk

tion layer which has fully been destroyed by ploughing, being mixed with mineral ground. The disturbed loam stretched until the depth of 35–40 cm in the upper part and until *ca*. 45–50 cm in the lower end of the trench. The bottom of the trench contained also some pieces of iron slag.

Against the background of virgin loam there appeared a circular patch of disturbed soil, *ca*. 0.7 m in diametre (Fig. 4), with its lower edge located in the distance of *ca*. 1.6 m from the rim which marked the border of the field area. When excavating deeper, it turned out to be a post hole (Fig. 5) – evidently, from the timber wall which protected the stronghold from the direction of easiest access. The single-standing post hole at the edge of the plateau is the only trace of a defense wall of horizontal logs between vertical posts – other remains of it had been destroyed by ploughing and erosion. In a similar way, a post hole was discovered close to the edge of the plateau also on the adjacent Karula Rebäse hill fort (Valk et al. 2011, 58, figs 8, 12). The depth of the hole from the present-day ground surface was 1.25 m, it stretched for 0.85 m into intact mineral ground. In the bottom part the diameter of the pit was *ca*. 30 cm, referring to a post of such diameter. The post hole was filled with a mixture of disturbed mineral ground and a dark occupation layer. The hole contained also several fire-cracked stones (diam. 8–12/15 cm), evidently coming from fireplaces. Soil in the upper part of the hole was predominantly dark and in the uppermost 10-15 cm it contained also some charcoal pieces and pottery fragments. Evidently, the location in a pit had preserved the occupation layer from disturbances and erosion. A radiocarbon date from the top fill of the pit gave the result 1310±90, calibrated date: 563–900 (93.6%) or 922–949 AD (1.8%) (95.4% probability).6

<sup>&</sup>lt;sup>6</sup> Ta-3124; calibrated with OxCal 4.3.2 programme (Bronk Ramsey 2009) and IntCal13 calibration curve (Reimer et al. 2013).

## TRENCH 2

Trench no. 2 was made in the southern corner of the triangular plateau. Also in this area a rim designating a former field border could clearly be observed in the length of *ca*. 6–7 metres. In the corner of the hill fort a rather flat area continued also below the rim, i.e. outside the former field border. Trial drilling indicated there, differently from trench 1, an intensive dark occupation layer with the thickness of *ca*. 40–50 cm. Since the area had not been used as a field, occupation layers had not been destroyed there due to land cultivation.

The trench of an irregular size (Figs 6–7; 8 m<sup>2</sup>) was located in the area with the darkest occupation layer. Until the depth of 15 cm the dark grey soil was of even colour and consistence and contained several small fragments of hand-made pottery. Evidently, the soil had been washed down the hill fort plateau as a result of erosion. Since the depth of 15 cm the character of soil changed: until the virgin loam which appeared in the depth of 45/50 cm occupation layers had preserved. In spite of the small size of the trench, the character of soil in its different parts distinctly varied.

In the upper part of the trench the soil was dark, in the depth of 30-40 cm almost black, containing also some tiny brand fragments. A sample taken from the depth of 30-40 cm gave the result of  $1610\pm90$  BP (calibrated 241–630 AD)<sup>7</sup>, a sample from the bottom of the trench (depth of 40-45 cm) was dated  $1560\pm70$  (cal. 350-368 (1.6%) or 379-640 (93.8%) (both 95.4%)).<sup>8</sup>

The soil yielded large quantities of small fragments of burnt red clay of irregular shape: their total amount from the area of 8 m<sup>2</sup> was 19.1 kg. When excluding a peripheral square



Fig. 6. Trench no. 2 on Värtemägi hill fort, -30 cm from the ground level.

Jn 6. Värtemäe linnamäe kaevand 2 maapinnast 30 cm sügavusel.

Photo / Foto: Heiki Valk



Fig. 7. Trench no. 2 on Värtemägi hill fort, -40 cm from the ground level, with a stone cluster on the foreground.
Jn 7. Värtemäe linnamäe kaevand 2 maapinnast 40 cm sügavusel, esiplaanil kivistik.
Photo / Foto: Heiki Valk

7 Ta-3123.

<sup>8</sup> Ta-3125.

metre with almost no fragments, their average quantity was 2.73 kg per m<sup>2</sup>. The number of burnt clay fragments was small in the eroded top soil (10–15 cm); most of them came from the depth of 15–35 cm. Probably just because of the disintegration of these fragments or dissolving of unburnt clay the soil in the lower part of the trench was red in colour. Evidently, the uneven occurrence of these finds which were almost missing in trench 1, indicates the existence of a building.

In the upper end of the trench (Fig. 6) in the depth of 15–25/30 cm a layer of brown sand was unearthed. From this soil a big fragment of light brown fine vessel with a smoothed surface decorated with circular and oval pits (Fig. 9: 18) was found. The brown sand was followed by darker soil within which there was an irregular cluster of fire-cracked stones (diam. 10–12 cm), evidently, on the original ground surface (Fig. 8). The soil contained numerous daubs. From the rest of the trench no fragments of burnt stone were found.

## THE FINDS

The finds included almost exclusively fragments of hand-made pottery, mainly tiny fragments picked from the sieve (590 in total) and were similar in both trenches. Pottery was mostly of greyish or brownish (Fig. 9: 4, 6, 9, 11, 15), sometimes of pinkish beige (Fig. 9: 2, 3, 5, 10, 12, 17), rarely of black colour. From the bottom of trench 1 a big sherd of dark grey, almost black colour with textile imprints on the surface and with a round pit at the edge (Fig. 9: 16) was found. This find, as much as known presently, is unique in Estonia, since ware with textile impressions typical for the Roman Iron Age in southern Estonia is usually of reddish or pinkish colour. The fragment with the dark surface probably represents the meeting of different pottery traditions: on the one hand, the use of textile for processing surfaces of clay vessels, a feature coming from the Roman times,



Fig. 8. Värtemägi hill fort, trench no. 2. Photogrammetric ortophoto in the depth of 40 cm.

**Jn 8.** Värtemäe linnamäe kaevand 2. Fotogrammeetriline ortofoto 40 cm sügavusel maapinnast.

Graphics / Graafika: Ragnar Saage



- Fig. 9. Pottery from Värtemägi hill fort. 1–8, 18 with dot ornamentation, 9–13 – with (semi)penetrating holes at the edge, 14, 15 – striated, 16 – with textile impressions and dots at the edge, 17 – unornamented, with coarse addition.
- Jn 9. Savinõukilde Värtemäe linnamäelt. 1–8, 18 lohkornamendiga killud, 9–13 – servaaukudega killud, 14, 15 – riibitud keraamika, 16 – servalohuga tekstiilkeraamika, 17 – ornamendita jämedapurruline kild.

Photo / Foto: Heiki Valk

<sup>(</sup>TÜ 2616: 66, 78, 102, 124, 52, 161, 145, 211, 88, 236, 22, 123, 82, 103, 114, 109, 271, 210.)

but, on the other hand, also a different burning technology which gives vessels a darker surface. Striated pottery was represented with two fragments (Fig. 9: 14, 15).

17 sherds had (semi-)penetrating holes at the edge of the vessel (Fig. 9: 9–13), one of them was profiled (Fig. 9: 13). Such pottery is widespread in the western part of south-eastern Estonia in the second half of the 1st millennium AD; the tiny holes are considered a characteristic feature of the so-called Rõuge type pottery (Aun 1992, 43, 45, 47). 8 sherds with mostly smoothed surface were decorated with dot ornamentation (Fig. 9: 1–8). This type of ornamentation is also common in south-eastern Estonia during the period noted above (Aun 1992, 49, 50). A unique find is a tiny disk of burnt clay (diam. 15–16 mm) (Fig. 9: 1), a possible gaming piece. Also seven tiny flint fragments, including pieces of imported light grey (TÜ 2616: 8), grey (TÜ 2616: 119) and black flint (TÜ 2616: 77), probably indicating Stone Age human activities on the hill, were found.<sup>9</sup>

#### CONCLUSIONS

The homogeneous character of pottery in both trenches and in different depths refers to a rather short-time use of the Värtemägi hill fort. The almost total lack of pottery with textile impressions, characteristic for the Roman Iron Age (50–450 AD), and scantiness of pinkish sherds enables to determine the lower time limit with the final stage of that period. Striated pottery was in use in south-eastern Estonia up to the 6th century (Laul 2001, 174). The overlapping part of the three samples is 563–630 AD which fits well with the general character of pottery. Thus, the site can be dated to the second half of the 6th century and the first third of the 7th century. It must be noted that the inland hill fort and adjacent Lake Sibula, belonging to the Gauja River basin, are not connected to any network of waterways.

Excavations on Värtemägi added a new dot on the map of hill forts of south-eastern Estonia whereby the finding of a post hole originating from a defence wall is worth special noting. The modest size of the plateau, as well as the lack of earthen fortifications, refer to its local meaning, but the presence of a stronghold cannot be questioned – a settlement unit on a hill with steep slopes with a toponym referring to a fortified site and with a post hole at the edge of the plateau can in no way be regarded as an ordinary open settlement. The discovery of a new hill fort is more noteworthy because the closest strongholds – those of Karula Rebäse (Valk *et al.* 2011, 54–59) and Madsa (Valk & Kama 2016) lie in a very small distance – 5.6 km WNW and 7.6 km NW, respectively. All three forts originate from the middle or second half of the 1st millennium AD whereby the strongholds of Madsa (6th–early 7th century) and Värtemägi seem to have been of short-time use and come from the same period. Such concentration of small strongholds refers, in case of simultaneous use, to the limited hinterlands of strongholds, in case of temporal sequences – to the instability of local power centres.

Finds from Värtemäe *Liinamägi* show that on slanting hill tops occupation layers may have fully been destroyed as a result of long-term ploughing, being preserved only in pits or depressions or outside the land cultivation area. Excavation results from Värtemägi hill fort, likewise those from Madsa in 2015, demand closer attention to sites known in toponymic evidence as hill forts, but considered to be 'fake' during earlier field inventories when occupation layers were looked for from the tops of potential hill forts only.

<sup>9</sup> The flint was reviewed by Kristiina Johanson (TÜ).

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## ARHEOLOOGILISED KAEVAMISED VÄRTEMÄE LINNAMÄEL KARULA KIHELKONNAS Heiki Valk

2016. aasta kevadel avastati Karula kihelkonnas, Ähijärvest 3 km kirdes Värtemäe talust 300 m kirdes *Liinamäe* toponüümi kontrollimisel uus linnamägi (jn 1, 2). Kohanimi on mõneti hajunud, sest sama nime all tuntakse ka madalamat naaberküngast. 15–17 m kõrguse künka kõrgemas osas olev linnuse kolmnurkne, veidi poolkuu kujuline õueala (1200–1300 m<sup>2</sup>) langeb tugevasti lääne suunas (jn 3). Kultuurkihti esineb kohati vaid tugevalt kaldus mäeplatoo alumises servas, mujal linnuse õuealal on see künni ja erosiooni tulemusel hävinud – nõlvale kandunud ja loodusliku mineraalpinnasega segunenud.

Tartu Ülikooli 2016. aasta suvistel välitöödel tehti mäele kaks kaevandit. I kaevand ( $6 \times 1 \text{ m}$ ; jn 4) rajati linnuse õueala lääneserva keskkohta, kunagist põlluala markeeriva künnirandi piirkonda – kohta, kus kevadisel šurfimisel oli leitud erosioonipinnase alla mattunud kultuurkihti. Kaevandis, mille alumine ruutmeeter jäi künnirandist madalamale, koosnes pinnas 35–45 cm paksusest erodeerunud ja kündmisega segatud saviliivast, mis sisaldas ka väikseid käsitsikeraamika kilde. Kahe alumise meetri ulatuses leidus alumises korrises 10–12 cm läbimõõduga põlemata, ilmselt põllult koristatud ja põlluserva visatud kive. Kaevandi põhjast leiti mõned väikesed šlakitükid.

Puutumata liivsavi foonil joonistus künnirandist u 2 meetrit kõrgemal välja tumedam pruun 70 cm läbimõõduga laik, mis kaevamisel osutus ilmselt kaitsetarast pärinevaks postiauguks (jn 5). Auk, mille alaosa läbimõõt oli veidi enam kui 30 cm, ulatus maapinnast 1,25 m, loodusliku liivsavi ülaservast 85 cm sügavusele. Postiaugu ülaosa oli täidetud tumeda künnist ja erosioonist puutumata kultuurkihiga, mis ülemise 10–15 cm ulatuses sisaldas ka kultuurkihist pärit söetükikesi ja savinõukilde, alaosa oli aga segatud mineraalpinnasega. Söeproov postiaugu ülaosa täitnud, sellesse ilmselt erosiooni toimel valgunud tumedast kultuurkihist andis kalibreeritud tulemuseks vahemiku 563–949 pKr.

Teine, ebakorrapärase kujuga kaevand  $(3 \times 2 \text{ m ala}$ ning kaks selle ühes otsas külgnevat ruutu; jn 6–8) tehti linnuseala edelanurka – mäeplatoo servas selgesti jälgitavast, kuni 60–70 cm kõrgusest, kunagise põlluala piiri markeerivast künnirandist madalamale. Seal oli mullapuur näidanud 40–50 cm paksust tumedat kultuurkihti. 10-15 cm paksusele pealmisele ühtlaselt läbisegatud, nähtavasti erodeerunud mullale järgnes kivideta kultuurkiht, mis kaevandi mäepoolses osas koosnes tumedast, üksikuid väiksemaid tukke ja söetükke sisaldavast mullast. Eriti tume oli algset looduslikku alusmulda kattev 10 cm paksune alumine pinnasekiht. IV korrises olnud tukist võetud süsinikuproov andis kalibreeritud tulemuseks 241-630, V korrises olnud tukist võetu aga 350–640 pKr. Kultuurkiht sisaldas kokku 19,1 kg väikseid punaseid põlenud savitükke, mida leidus kõige enam 15-35 cm sügavusel. Kas selliste tihendite lagunemisest või samasse konstruktsiooni kuulunud savist on kaevandi nõlvapoolses osas pinnas punaseks värvunud (jn 7). Kaevandi mäepoolseimas ruudus oli pinnas helepruun ja liivane, siit leiti silutud pinnaga pruun lohkornamendiga nõu servatükk (jn 9: 18). Samas piirkonnas, maapinnast 30-40 cm sügavusel paljandus omaaegsele alusmullale toetunud 10-12/15 cm läbimõõduga põlenud kivide lasu - nähtavasti pärinevad need tuleasemest (jn 8). Maapinnast 45-50 cm sügavusel algas puutumata looduslik mineraalpinnas - valkjas liivsavi. Ka II kaevandist leiti eranditult käsitsikeraamikat, samuti mõned tulekivikillud.

Leiumaterjal oli kaevandites ühetaoline ja koosnes peamiselt keraamikast. Kokku leiti sõelumisel 590 valdavalt väikest käsitsi tehtud keraamika katket. Enamasti on tegemist hallikaspruuni, harvemini roosakasbeežide (jn 9: 2, 3, 5, 10, 12, 17) kildudega. Ainus tekstiilkeraamikakild oli musta värvi ja servalohuga (jn 9: 16). Leiti ka 2 riibitud pinnaga (jn 9: 14, 15) ja 8 enamasti silutud pinna ja lohkornamendiga kildu (jn 9: 1–8) ning 17 nõuservas oleva (pool)läbiva augukesega kildu (jn 9: 9–13). Vasteteta leid on savist põletatud kettake, mis võis olla mängunupp (jn 9: 1). Leiti ka 7 tulekivikildu, neist neli kohalikust ja kolm importtulekivist (viimastest üks helehalli, teine halli ja kolmas mustjat värvi).

Kolme süsinikuproovi ühisosa – ajavahemik 563–630 pKr – sobib linnamäelt leitud keraamika iseloomuga ja viitab linnuse kasutamisele 6. sajandi teisel poolel – 7. sajandi esimesel kolmandikul, seega eelviikingiajal. Värtemäe linnamägi asub silmapaistvalt lähedal Madsa linnamäele ja Karula Rebäse linnamäele. Need jäävad temast vastavalt 5,6 km lääneloodesse ja 7,6 km loodesse, kusjuures kaks esimest linnust on olnud võrdlemisi lühiajalised. Asjaolu, et muististe dateeringud ajas üksteisele järgnevad / või on vaid osaliselt kattuvad, viitab kohalike võimukeskuste ebapüsivusele.