

# Valjala hill fort in Saaremaa

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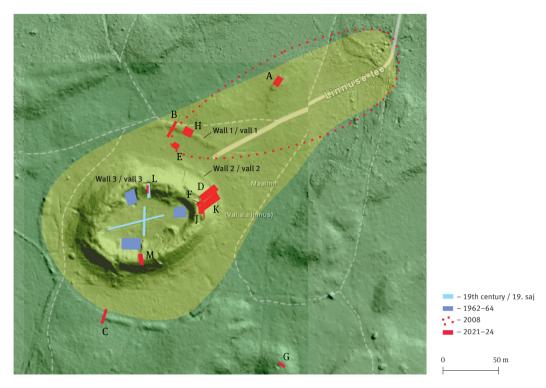
## INTRODUCTION

Valjala hill fort in southern Saaremaa is one of the best-investigated late prehistoric and early medieval (800–1300) fortifications in Estonia. The siege of Valjala has been described in the Chronicle of Henry of Livonia in the 13th century, where the site was called the strongest among others in Saaremaa (HCL XXX: 5). The hill fort is a monumental fortification, partly of stone, that in the time of use was surrounded by additional walls and a settlement, called *urbs* in the chronicle.

By now, approximately 580 m<sup>2</sup> have been excavated at and around Valjala hill fort (Holzmayer 1868, 46–48; Trudy, 27; Kustin 1963; 1966; Mägi 2024a; 2024b; 2024c; 2024d; Mägi *et al.* 2023). Since 2021, Foundation Osiliana and Tallinn University have carried out archaeological excavations around and on the rampart of the hill fort, complimented with GPR investigations (Mägi *et al.* 2023). The excavations were divided into twelve trenches. The article here focuses on the trenches that embraced the rampart of the big hill fort itself (Fig. 1).

Trenches D and F were opened in 2022. F was widened in 2023, the new area was called trench J. Trench K was opened next to D in 2023, but reached deeper inside the rampart, and also covered about twice as big an area as D, which was made possible by the use of tracked excavator-loaders. The total area of the excavations was about 145 m<sup>2</sup>. They embraced the outer slope of the big rampart and part of its flat top. The trenches were not fully excavated, but stopped at certain stages of uncovered structures, e.g. when the dry-laid stone wall was cleaned out. On the top of the rampart, the excavations were stopped at the depths of 70–80 cm from the ground level, where the same layer of loose stones seemed to continue deeper towards the inside of the rampart (Fig. 2).

The construction phases of the great rampart of the hill fort are numbered in the order in which they were excavated, i.e. phase A is the latest, phase B the one before, etc. Some of the phases, which were not stratigraphically related, may have been contemporaneous (Fig. 3).



- Fig. 1. Archaeological excavations and surface survey at Valjala hillfort and surroundings. The area with cultural layer, detected in 2008, is marked in yellow.
- Jn 1. Arheoloogilised uuringud ja eeluuringud Valjala maalinnal ja ümbruses. Kollasega 2008. aastal tuvastatud kultuurkihiga ala.
- Relief map / Reljeefkaart: Estonian Land Board / Maa-amet, drawing / joonis: Marika Mägi



Fig. 2. Valjala hill fort in 2023. Aerial view to trenches D, F and J. Jn 2. Valjala maalinn 2023. Õhuvaade D, F ja J kaevandile. Photo / Foto: Marika Mägi

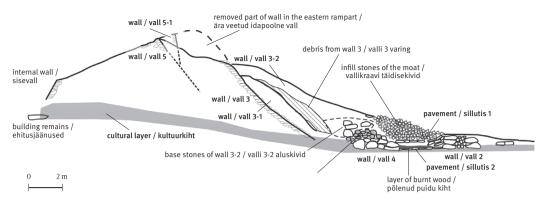


Fig. 3. Schematic plan of different fortification structures at Valjala hill fort. Jn 3. Valjala maalinna kindlustuse struktuuride skemaatiline plaan. Drawing / Joonis: Marika Mägi

**CONSTRUCTION PHASE A: WALL 2, WALL 3-2, DEPRESSION AT ITS FOOT, AND PAVEMENT 1** Immediately beyond the foot of the main hill fort, an additional wall, wall 2, was exposed in excavations K and D (Mägi 2024b; 2024d). The wall was also visible on Lidar maps and GPR slab images. It had been a stone rampart, about 2 m wide, probably with a wooden fence on top (Mägi *et al.* 2023).

Between the big rampart of the hill fort and wall 2 there was a depression, probable dry moat, that was filled with loose stones 10–20 cm in diameter (Fig. 4). The stones had apparently fallen from the higher part of the rampart and were visible on the surface before the excavations. Further excavations clearly showed that any activity on the top of the rampart easily ended with smaller stones rolling down the slope. The belt of loose stones, still visible in many places today, is particularly evident in early 20th-century photographs of Valjala hill fort. Among the loose stones filling the depression were also slabs that originated from wall 2, as well as areas with no stones that probably marked the places where wooden parts of wall 2 had collapsed.

The 1.3-m-high wall of the depression that was closest to the big rampart was built of small limestone slabs, laid at an angle of about 45° in a horizontal but irregular position (Fig. 5). At the higher end of the slope, there was a horizontal area about 1–1.5 m wide, covered by limestone slabs. The zone of the slabs ended where the clayey soil forming wall 3-2 started.



Fig. 4. Depression or moat in the southern profile of trench D.
Jn 4. Süvend või vallikraav kaevandi D lõunaprofiilis. Photo / Foto: Marika Mägi



Fig. 5. Slope of the depression, built of small limestone slabs. Construction phase A, trench D.
Jn 5. Süvendi väikestest paeplaatidest kallak. Ehitusjärk A, kaevand D.
Photo / Foto: Marika Mägi

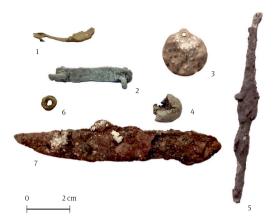


Fig. 6. Finds from the infill of wall 3-2 (1–5) and from the lowermost cultural layer (6–7).

Jn 6. Leide valli 3-2 täidisest (1–5) ja alumisest kultuurkihist (6–7).

(SM 10890: 199, 211, 206, 201, 209, 230, 229.) Photo / Foto: Marika Mägi The base of wall 3-2 consisted of large boulders, mainly limestone, up to 70–80 cm in diameter. There were large gaps between them. It is likely that these stones had been placed there to stabilise wall 3-2 otherwise made of clayey soil. The boulders had been deposited in a layer of about one metre in thickness and had covered the earlier constructions (see below).

Wall 3-2 was built of a cultural layer – the almost stoneless embankment consisted of a dark, clayey soil with numerous charcoal pieces and some finds (Fig. 6: 1–5). As similar cultural layer was found all around the hill fort, it can be assumed that the soil was excavated from the same area around the fortification. As shown by the excavations between walls 1 and 2 (Mägi *et al.* 2023), the cultural layer was quite thin in places and

the soil had become silty – this may have been the area where material for the construction of wall 3-2 was collected.

The bottom of the depression or moat had been paved with fairly well-preserved limestone slabs (pavement 1). These were 15 to 20 cm above the lower surface of the foundation stones of walls 2 and 4, indicating that pavement 1 was later than the walls that flanked it. Beneath the paving stones there were smaller stones and a 6 cm thick clay layer, probably for stabilisation purposes.

Thus, in the last construction phase of the fortification, there was a stone rampart at the top of the main fort, and below it a wide earthen rampart. At the foot of the rampart there was a horizontal zone about 1 m wide, paved with slabs, and then a moat up to 2.8 m wide and at least 1 m deep, which ended in wall 2.

# CONSTRUCTION PHASE B: WALLS 2 AND 4, PAVEMENT 2

Wall 4 consisted of larger stones, laid with the outer edge regularly straight in places, but irregular in others, especially towards the interior of the fortress. The zone of stones forming wall 4 was about 2.5 m wide and was covered by a dense layer of heavily burnt granite stones, about 15–20 cm in diameter (Fig. 7). There were numerous pieces of charcoal between the stones, evidence of the burning of wooden parts of the structure. The burnt stone layer did not cover all of wall 4 and was absent above the regularly laid curbstones. The layer of burnt stones was directly covered by large boulders from construction phase A, which formed the base of wall 3-2.

Wall 4 was cleaned out in excavations D and K (Mägi 2024b; 2024d). In trench K, an 80–90 cm wide zone devoid of stones was found, forming a probable entrance through wall 4 (Fig. 8). Next to the entrance there was a circular gap of about 50 cm in diameter between the stones, possibly indicating where a wooden post used to stand.

A well-preserved pavement 2 was exposed on the outside of wall 4 in trench D, 30 cm deeper than pavement 1 (Fig. 9). It consisted of limestone slabs densely packed with light greyish yellow clay. On top of the pavement was an intense burnt layer, up to 20 cm thick, with large

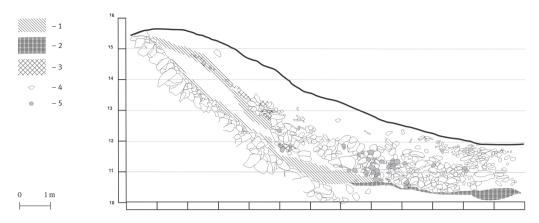
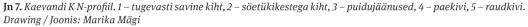


Fig. 7. Northern profile of trench K. 1 – clayey layer, 2 – layer with pieces of charcoal, 3 – wooden remains, 4 – limestone, 5 – granite stone.



pieces of charcoal and some unburnt pieces of wood. It is possible that pavement 2 had once been covered by some kind of a timber structure. The stones of pavement 2 were in the same plane as the lower stones of walls 2 and 4, indicating the contemporaneity of these structures.

A partially preserved pavement next to wall 4 towards the inner side of the fort in trench K probably belonged to the same phase of construction, and there were also slabs covering the floor of the entrance through wall 4. A cultural layer was recorded in the entrance area and beside wall 4, indicated by small charcoal fragments and some finds (Fig. 6: 6–7).

Also seeming to be part of the same construction phase was a line of larger slabs about 1 m from the foot of stone wall 3, which was revealed in excavation K (Fig. 8). Stratigraphically, the probable building remains unearthed outside wall 2 in trench D in 2022, as well as wall 1 and most of the cultural layer outside the hill fort (Mägi *et al.* 2023), may have been constructed simultaneously. According to Aita Kustin, the remains of the buildings in the inner yard of the fort were found at a depth of about 1 m below the base of the stone rampart (Kustin 1963). It can be assumed that at least some

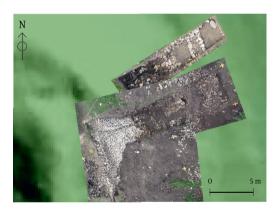


Fig. 8. The lowest layers in trenches D, F, K and J. Georeferenced drone photos.
Jn 8. Kaevandite D, F, K ja J alumised kihid. Georefereeritud droonifotod.
Relief map / Reljeefkaart: Estonian Land Board / Maaamet, drawing / joonis: Marika Mägi



Fig. 9. Wall 4 and pavement 2 in trench D. Jn 9. Vall 4 ja sillutis 2 kaevandis D. Photo / Foto: Marika Mägi

of the buildings discovered in the courtyard area of the fort in the 1960s were built during construction phase B, too, since the stratigraphic relationship between the lowest stones of wall 3 and those of construction phase B in excavations K and D was approximately the same as that recorded by Kustin.

## **CONSTRUCTION PHASE C: WALL 3-1**

The embankment of Valjala fortress was piled in two stages, separated by a clear layer of debris (Fig. 10). The debris layer was not uniform everywhere, but consisted of clusters formed by stones bound together by clay, usually accompanied by remains of unburnt wood, mainly pinewood.<sup>1</sup> The wood debris was also visible in some profiles and consisted mainly of 3-4 cm thick planks, which in one case had been attached to a  $10 \times 10$  cm squared log. The stones and wooden remains probably came from the upper part of the large rampart (wall 3) of the hill fort, which had begun to collapse by the time of construction phase A. The layer of collapse partly extended over the top of wall 4, and was therefore later than the construction phase B.

The earliest earthwork, wall 3-1, covered the outer face of stone wall 3 from the lowest point of the regular stones to about 6 m up the rampart. It was at most 1 m thick and, as shown in excavation K, consisted almost entirely of clayey soil. As far as is known so far, there is no evidence of a cultural layer (charcoal, finds) in the infill of wall 3-1, as was characteristic of wall 3-2. Wall 3-1 was covered with a thin layer of clay (Fig. 7).

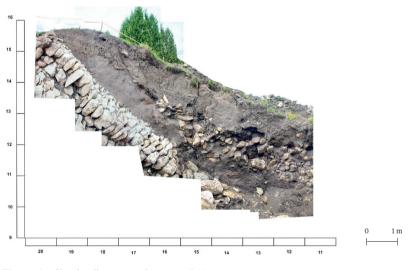


Fig. 10. Profile of walls 3, 3-1 and 3-2, trench K. Jn 10. Vallide 3, 3-1 ja 3-2 profiil, kaevand K. Photos and drawing / Fotod ja joonis: Marika Mägi

# **CONSTRUCTION PHASE D: STONE WALL 3**

In trenches F, J and K, a stone rampart (wall 3), preserved along the slope for 7–8 m, was cleaned out in 2022–2023 (Mägi 2024a; 2024b; 2024c; 2024d). Most of the rampart had been later covered by earthen walls 3-1 and 3-2 or removed (see below). Drawing parallels with the height of the survived rampart in those parts of Valjala hill fort from which no stones were taken (including excavation M), the stone wall 3 must originally have been about 2 m higher

<sup>1</sup> Analysed by Alar Läänelaid (TÜ).

than it is today, and measured approximately 9–10 m from the ground level to the top along the slope. In the lower surviving half of wall 3 the slope was about 40–45°, in the highest surviving part 50–60° (Fig. 3). A layer of clay had covered the stone wall 3, being thicker on the lower part of it due to erosion. Clay was also packed between the stones to hold them together, and making the wall smooth and difficult to climb.

In the masonry, a regularly protruding part of the stone wall was revealed, which extended from the top to the foot of the rampart. A second, but much smaller protruding part stuck out along the southern side of the wall, about 2 m from the first one. In the lower part, the latter was clearly visible as a crack in the masonry of the rampart – here, the lower part of the stone wall, up to the height 3.2 m, had been originally laid separately, i.e. the stones were not bound. Starting from the height of 3.2 m, the masonry was regular, all stones bound with each other. One can presume that these features indicated a built-in gateway (Fig. 11). It is likely that the original

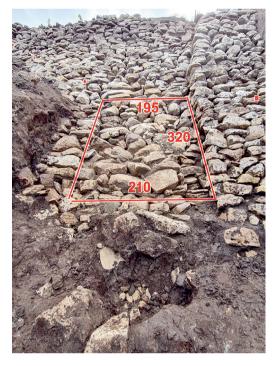


Fig. 11. Presumable built-in gateway in wall 3. Jn 11. Arvatav kinniehitatud väravakoht vallis 3. Photo and drawing / Foto ja joonis: Marika Mägi

rampart had been lower, extending vertically only to the height of the gateway. At some point the gateway was blocked up and the rampart was built higher all round. It seems that the northern wall of the gateway had originally extended further outwards, forming the protruding part of the wall, which continued higher up the rampart. Another possibility is that the rampart was originally built full height, and the gateway, which was about 3.2 m high and 2.1 m wide at the bottom, was supported by beams and led through the stone rampart.

Below the presumed gateway, wall 3 continued for about 1 m with irregularly laid and also slightly smaller stones. It can be assumed that this section was piled directly on top of an elevated natural ground.

In trenches F and J, the survived upper part of stone wall 3 was uncovered. Before the excavations, the uppermost part of the rampart had regular, some tens of centimetres deep depressions measuring  $1.2-2 \times 1.2-2$  m, some of which were drawn on the 1842 plan of the hill fort (Kruse 1842, Tab. 62). Regular depressions and higher ridges between them were clearly visible in the excavations as well, but the stones were loose, with gaps in between, i.e. the depressions must have been created in the course of later activities (Fig. 8). No charcoal or other finds came to light. The stones were probably those that had once been inside the rampart – only the edges had been laid in a neat way, while the inside of the rampart had been filled in irregularly.

Valjala rampart had probably been a place where stones were regularly quarried, for example for building works. As the depressions were still visible, this activity could not have taken place very long ago, although it must have happened before the mid-19th century. <sup>14</sup>C analysis from animal bones found between the stones 20–25 cm below the surface gave the most likely date to around 1700 AD, or the first half of the 19th century.<sup>2</sup> Most of the upper part of the rampart was probably removed in the modern period.

In the southern part of the hill fort rampart, where excavation M was opened in 2024, the picture was slightly different. Where in the excavations on the eastern side of the hill fort had been the stone wall, here, at least in the upper part of the rampart, there had been

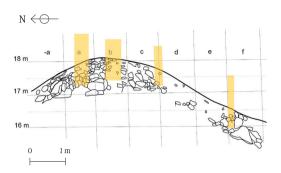


Fig. 12. Eastern profile in trench M, with post places marked on the drawing.

Jn 12. Kaevandi M idaprofiil, joonisele märgitud postikohad.

Drawing / Joonis: Marika Mägi



Fig. 13. Walls 5 and 5-1 in trench M. Jn 13. Vallid 5 ja 5-1 kaevandis M. Photo / Foto: Marika Mägi

an earthwork with single stones and some large postholes (Fig. 12). The construction phase D in the upper part of the rampart in trench M had consisted of massive wooden posts and boxes made of horizontal beams, the inside of which had been filled with soil and a few stones. Since a collection of stones was uncovered in the lower part of trench M, it can be assumed that the somewhat lower stone wall 3 was also present in the southern side of the hill fort, although this is not confirmed. In any case, the soil rampart 3-2 that consisted of cultural layer seems to have existed here, too, as indicated by some metal finds.

## **CONSTRUCTION PHASE E: STONE WALL 5**

Trenches F and J in the eastern part of the fortress did not open up the higher inner part of the rampart, which seemed to have been made up of smaller stones discarded during the quarrying process. Trench M of 2024 on the southern side of the fortress was opened at the point where the rampart ridge was about 2 m higher than in previous trenches and appeared to be undisturbed. This revealed that at least two other construction phases had preceded stone wall 3 (Fig. 3). It is possible that these phases were also present on the inner side of the rampart next to the trenches J and F, but had remained unnoticed in 2022–2023.

Excavation M uncovered wall 5, built of regular limestones (Fig. 13). It resembled wall 3, but was located about 3 m closer to the inner courtyard. The slope of the part of

wall 5 exposed in the excavation was 45°. Immediately behind the regular stone wall, on the side of the courtyard, a layer of loose stones of 10–15 cm in diameter began. It covered the entire inner side of the rampart down to the inner limestone wall excavated by Kustin in 1962.

<sup>&</sup>lt;sup>2</sup> Poz-156084, 90±30 BP, 1.6%N, 6.4%C, 4%coll, 1687AD (26.0%) 1731AD, 1806AD (69.5%) 1926AD (95.4% probability).

In fact, the inside of the stone rampart had been laid as a drystone wall only to the height of about 1.5 m (Kustin 1963, 3–4; 1966), immediately followed by a layer of loose smaller stones, sloping 20° towards the top of the rampart. The upper stones of wall 5 were 20–30 cm above the layer of smaller stones and had partly slid down the inner slope. A wall with such a construction could not have had an additional wooden palisade.

At some point in time, wall 5 was supplemented by an outer stone wall, wall 5-1. The stones of this wall were also laid with the straight edge on the outside. However, between 5-1 and 5 there was a 20–40 cm wide zone of smaller stones or no stones at all. The wall 5-1 was almost vertical and therefore had to meet the wall 5 at a depth of about 1.5 m. At one end of the trench the wall 5-1 extended up to the present surface, while at the other end it was about 30 cm lower. Between the two walls there may have been a timber structure with stone parts of different heights (a crenellated palisade?), possibly connected with construction phase D.

#### CONSTRUCTION PHASE F: THE LOWERMOST CULTURAL LAYER

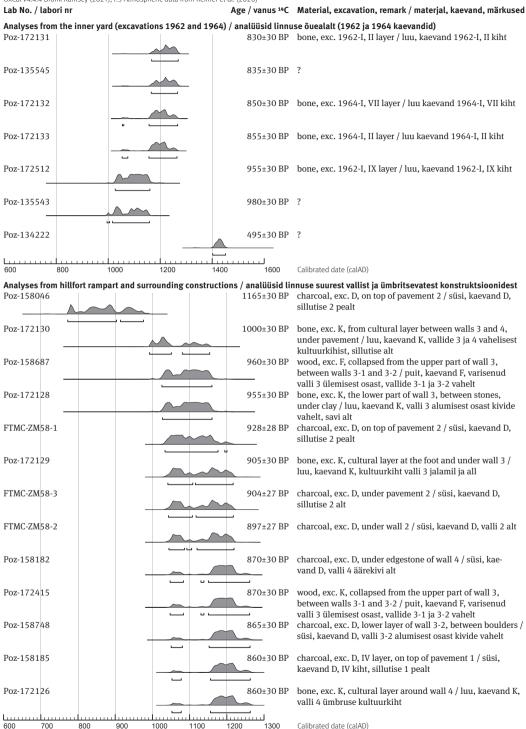
In trenches D and K, beneath walls 2 and 4 and the surrounding limestone pavement, a sooty cultural layer was identified. This layer is probably the first phase of settlement before the construction of the fortifications. Some finds were also recovered from this layer (Fig. 6: 6–7).

### DISCUSSION

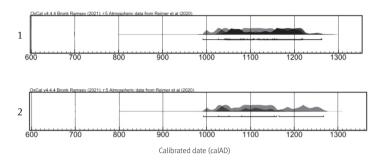
In addition to radiocarbon analyses from the area surrounding the central hill fort of Valjala (published in Mägi *et al.* 2023, fig. 3), 21 <sup>14</sup>C analyses have been made from bone or charcoal samples taken from the trenches at the main rampart or in the inner yard of Valjala hill fort. With the exception of some clearly earlier and later results, the majority of the results fell into the period from the mid-11th century to the third quarter of the 13th century (Fig. 14). However, mainly the stratigraphy must be relied on in order to define the construction phases.

At the foot of stone wall 3 and around and under walls 4 and 2, and under the pavement at the foot of wall 3, the earliest construction phase F could be identified. Somewhat surprisingly, the analyses of charcoal samples Poz-158046 and FTMC-ZM58-1 from above pavement 2, especially the former, gave earlier results than the analyses of the charcoal from under pavement 2. It can be assumed that old wood, such as cut in the 10th century, was used for erecting the wooden structure between or on top of the walls 2 and 4. Placing the results of the analyses taken from construction phase F in a stackplot in OxCal (Fig. 15: 1), it can be seen that although some results point more to the end of the 12th century, there is also the possibility that all samples date to the mid- or late 11th century. This is indirectly supported by the stackplot of calibrated <sup>14</sup>C data from samples under wall 1 outside the main hill fort (Fig. 15: 2; dates see Mägi *et al.* 2023, fig. 3). However, although wall 1 is structurally similar to wall 2, it is not stratigraphically contiguous with it. Given the structures and samples taken elsewhere, the second half of the 11th century would be the most likely date for the cultural layer beneath the earliest fortifications of the hill fort.

Animal bones found between the stones in the lower part of stone wall 3, which must have been placed there during the construction of the rampart, dated to the second half of the 11th century or the first half of the 12th century (Poz-172128; Fig. 14). Construction phase D can, therefore, be dated to the same period. It is not known whether phase B was contemporaneous with phase D, since walls 4 and 3 did not stratigraphically overlap. However, the probable entrance found in wall 4, and the presumed former gateway directly opposite it in the lower part of stone wall 3, point to the possibility of contemporaneity. It is most probable



**Fig. 14.** <sup>14</sup>C dates from the inner yard, rampart and surrounding constructions of Valjala hill fort. **Jn 14.** <sup>14</sup>C dateeringud Valjala maalinna õuealalt, vallist ja ümbritsevatest konstruktsioonidest.



**Fig. 15.** Stackplot of calibrated <sup>14</sup>C dates from construction phases D and F at Valjala hill fort. 1 – from construction phase F, 2 – from underneath wall 1.

**Jn 15.** Valjala linnuse ehitusjärkudest D ja F saadud kalibreeritud <sup>14</sup>C analüüside koondgraafik. 1 – ehitusjärgust F, 2 – valli 1 alt.

that wall 3 was built not earlier than in the first half of the 12th century, especially as it was preceded by wall 5, uncovered in 2024.

Samples for luminescence analyses were taken from soil walls 3-1 and 3-2 and analysed in the Department of Physics at Technical University of Denmark. The sample from wall 3-1 gave OSL age 990±50 BP (984–1084 AD), the one from wall 3-2 830±40 (1154–1234 AD). Unfortunately, the laboratory could not confirm from the feldspar IR50 and pIRIR ages that the quartz OSL signal was well-bleached at deposition, meaning that the results may also be some hundred years younger.<sup>3</sup> Considering the stratigraphic features and results of <sup>14</sup>C samples, the given OSL ages really seem to be too early, so the question of when the soil ramparts were erected remains open.

Wall 3-1, or construction phase C, is clearly later than phase D, but can stratigraphically be contemporary with phase B. Stone wall 3 was elaborately laid and covered with a layer of clay, which clearly indicates that the wall was originally meant to be visible. However, in time, the lower part of the impressive stone wall was hidden behind a soil rampart, the wall 3-1. It may be connected with the introduction of new sieging technology – catapults, devices used for launching boulders against the sieged fortifications. According to medieval chronicles, it was the reality in Livonia around 1200 AD, but hardly earlier.

The possible construction sequence of Valjala hillfort is that the earliest fortifications were walls 4 and 2, presumably also wall 1, that were erected on top of the earlier cultural layer. Some time later (the 12th century?), the first wall 5 was built. It seems to have been fully built of stone, without additional timber constructions on top. Soon after that the wall was re-built anew, creating a much broader rampart that partly, near the 'town' and the higher terrain around the hillfort, was fully built in stone, but in some places the uppermost part of it was of timber. At around 1200 AD, the lower part of the impressive stone fortification was hidden by a soil rampart, which was also covered with a layer of clay. In this time walls 2 and 1, and perhaps wall 4 as well, were probably still there, forming additional fortifications for the hillfort.

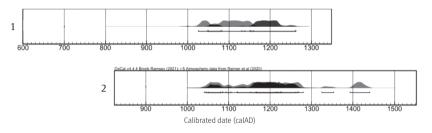
The most intriguing is to date the latest construction phase A, when wall 3-2 was erected, with a depression or dry moat at the foot of it. Stones and wood debris, fallen from the upper part of the rampart indicate that the earlier stone fortification had started to collapse, before the final building phase started. There were no signs of fire, and the wooden parts mainly consisted of planks, presumably a sort of covering roof over the palisade of the rampart. The

<sup>&</sup>lt;sup>3</sup> E-mail from Dr. Jan-Pieter Buylaert, who made the analyses, 10.07.2024.

time span when the hill fort and the surrounding 'town' was abandoned, and the time when wall 3-2 was erected, must have been at least some decades.

<sup>14</sup>C samples made from charcoal found from the infill material of wall 3-2, as well as some finds, date the cultural layer forming the wall predominantly to the second half of the 12th and the first half of the 13th century (Fig. 16: 1). Considering that the cultural layer used for erecting wall 3-2 was gathered from the surroundings of Valjala hill fort, <sup>14</sup>C results from the area outside the main hill fort can also be taken into account (Mägi *et al.* 2023, fig. 3). Calibrated data put in a stackplot created in OxCal program highlighted the mid-11th century and the period from mid-12th century until the 1270s as the most likely occupation periods, although one sample indicated even later time (Fig. 16: 2). It is in a good correlation with artefacts found during different excavations in and outside Valjala hill fort (see https://osilia-na.eu/en/valjala-hillfort/), as well as the infill material that was used for re-fortifying wall 1 (the second building phase; Mägi *et al.* 2023). However, occupation around the hill fort had probably stopped some time before the soil was gathered for erecting wall 3-2 and re-fortifying wall 1. The possibility that it happened in the very end of the 13th century, in the middle of the 14th century, or in the early 15th century, as indicated by one <sup>14</sup>C sample (Poz-156085; Mägi *et al.* 2023, fig. 3) cannot, therefore, be excluded.

Analyses made from animal bones found during the 1960s' excavations in the inner yard of Valjala hill fort pointed to two occupation periods that overlap only minimally (Fig. 14): the second half of the 11th and the first half of the 12th century, and the second half of the 12th and the first three quarters of the 13th century. It is in good correlation with the result from the fortifications and the area around the big hill fort. One sample dated to the first decades of the 15th century (Poz-134222) may indicate late medieval occupation of the hill fort, or may also point to occasional activity in the remains of the one-time fortification.



**Fig. 16.** Stackplot of calibrated <sup>14</sup>C dates from construction phase A at Valjala hill fort. 1 – from the infill of wall 3-2, 2 – from cultural layer between walls 1 and 2 and outside wall 1.

Jn 16. Valjala linnuse ehitusjärgust A saadud kalibreeritud 14C analüüside koondgraafik. 1 – valli 3-2 täidisest, 2 – vallide 1 ja 2 vahelt ning vallist 1 väljastpoolt.

#### CONCLUSIONS

Although Valjala can probably be considered as one of the most thoroughly studied hill forts in Estonia, there are still a lot of doubts in the interpretation of its period of use and construction. In a relatively short period of time, the hill fort and the surrounding fortifications were rebuilt several times, and the possibility that the fortress was still in use in some form in the Late Middle Ages cannot be ruled out. Although some of the finds and analyses from the area around the hill fort indicated activity as early as the 5th to 7th centuries, no firm evidence of the hill fort's existence at such an early date was found. It is possible that the area of later fortifications was in use for some other purpose.

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## REFERENCES

- HCL = Henriku Liivimaa kroonika / Heinrici Chronicon Livoniae. Trans. by R. Kleis, ed. by E. Tarvel. Tallinn, 1982.
- Holzmayer, J. B. 1868. Osiliana I. Das Kriegswesen der alten Oeseler. Arensburg.
- Kruse, F. 1842. Necrolivonica oder Alterthümer Liv-, Esth- und Curlands bis zur Einführung der Christlichen Religion in den Kaiserlich Russischen Ostsee-Gouvernements, zusammengestellt und historisch erläutert in einem Unterthänigsten Generalberichte über seine auf Allerhöchsten Befehl im Jahre 1839 ausgeführte archaeologische Untersuchungsreise nebst mehreren wissenschaftlichen Excursen und vielen Lithographien von Alterthümern, Plänen und Charten. Dorpat, Leipzig.
- Kustin, A. 1963. Aruanne Valjala maalinna arheoloogilistest kaevamistest 1962. aastal. Tallinn. (Manuscript in TLÜ AT.)
- Kustin, A. 1966. Aruanne Valjala maalinna arheoloogilistest kaevamistest 1964. aastal. Tallinn. (Manuscript in TLÜ AT.)

## VALJALA MAALINN SAAREMAAL

Marika Mägi

SA Osiliana ja Tallinna ülikool on alates 2021. aastast viinud läbi kaevamisi Valjala maalinnal, mida 13. sajandi kroonikates nimetati Saaremaa kõige tugevamaks linnaks. Uuringud toimusid 12 kaevandis (jn 1). Siinne ülevaade keskendub kaevanditele D, F, J, K ja M aastatest 2022–2024, kus kokku kaevati läbi u 145 m<sup>2</sup> (jn 2).

Kaevandites paljandunud keerulised ja kohati raskesti tõlgendatavad struktuurid on jagatud kuude ehitusjärku, mis on tähistatud tähtedega selles järjekorras, kuidas need kaevamistel ilmnesid. Osad järgud, mis polnud stratigraafiliselt omavahel seotud, võisid olla üheaegsed.

Ehitusjärk A oli kõige hilisem. Suure valli jalamist vahetult väljapool paljandus kaevandites K ja D 2 m laiune kivivall, vall 2, mis oli jälgitav ka Lidari kaartidel ning GPR horisontaallõigetel (jn 3). Vallist 2 suure linnuse poole oli hiliseimas ehitusjärgus 2,8 m laiune ja u 1 m sügavune süvend, tõenäoliselt kuiv vallikraav. Süvendi põhi oli sillutatud paeplaatidega (sillutis 1). Hiljem täitus süvend valli harjalt varisenud kividega (jn 4, 5). Mägi, M. 2024a. Aruanne Valjala maalinna arheoloogilistest kaevamistest. Kaevand J. 2023. Kopenhaagen. *(Manuscript in MA.)* 

Mägi, M. 2024b. Aruanne Valjala maalinna arheoloogilistest kaevamistest. Kaevand K. 2023. Kopenhaagen. (Manuscript in MA.)

- Mägi, M. 2024c. Aruanne Valjala maalinna arheoloogilistest kaevamistest. Kaevandid F, J ja K. 2022/2023. Kopenhaagen. (*Manuscript in MA.*)
- Mägi, M. 2024d. Aruanne Valjala maalinna ja ümbruse arheoloogilistest kaevamistest. Kaevand D. 29.07.– 24.08.2022. Kopenhaagen. (Manuscript in MA.)
- Mägi, M., Tõnisson, H. & Harjo, O. 2023. Archaeological and ground penetrating radar investigations around three Saaremaa hill-forts – Valjala, Pöide and Kaarma. – AVE, 2022, 73–90.
- Trudy = Труды Московского Предварительного Комитета X археологического съезда в г. Риге. Выпуск 11. Москва, 1896.

Muldvalli 3-2 alus koosnes kuni 70–80 cm läbimõõduga paekividest ning nendest kõrgemal peamiselt savisegusest mullast, milles leidus üsna rohkesti inimtegevuse jälgi (jn 6: 1-5). Ilmselt oli valli 3-2 kuhjamiseks võetud pinnast samast linnuse kõrvalt, varasema intensiivse kultuurkihiga alalt. Samasugust pinnast kasutati linnust kaugemalt ümbritsenud valli 1 tugevdamiseks, mis võis leida aset ehitusjärguga A üheaegselt.

Ehitusjärk B hõlmas valle 2 ja 4 ning nende vahelist sillutist 2. Vall 4, mis jäi maalinna hilisema suure valli serva alla, oli kaevandites K ja D u 2,5 m laiune. Valli väline serv oli hoitud sirge ja koosnes mitmes kihis suurtest paekividest (jn 9). Alumise kivikihi peal oli ilmselt olnud kividega täidetud kastidest puitkonstruktsioon, millest oli säilinud söene, põlenud raudkivide kiht. Kaevandis K tuli välja 80–90 cm laiune tühimik, võimalik sissepääs läbi valli 4, mille kõrval oli arvatav postikoht. Vall 4 paiknes valliga 2 samal tasapinnal, nende vaheline ala oli olnud sillutatud paeplaatidega (sillutis 2). Tõenäoliselt on need struktuurid üheaegsed. Paeplaate leidus ka mujal valli 4 kõrval. Sillutist 2 kattis paks põlengukiht puidujäänustega.

Ehitusjärguks C loeti muldvall 3-1. Valjala linnuse mullast valliosas eristus selgelt kaks kihti (jn 7, 8, 10). Neid eristas nii savine vöönd, mis kunagi oli katnud muldvalli 3-1, kui ka linnuse kõrgemast osast piki muldvalli 3-1 alla varisenud ehitusjäänused. Need olid põhiliselt saviga seotud kivide kogumid koos põlemata puidujäänuste, peamiselt plankudega. Ehitusjäänuste all olev muldvall 3-1 kattis varasema kivivalli alumist osa u 6 m ulatuses jalamilt lugedes. Kultuurkihi jäänuseid valli 3-1 täidises ei tuvastatud, vall koosnes peaaegu ilma kivideta savisegusest mullast.

Ehitusjärk D hõlmas kivivalli 3. Vall oli säilinud piki kallet 7–8 m ulatuses, kuid oli algselt ilmselt u 2 m kõrgem. Suur osa kivivallist oli hiljem kaetud muldvallidega või ära veetud. Alumises poolmikus oli valli kalle umbes 40–45°, säilinud kõrgeimas osas 50–60°. Kõikjal kivivalli 3 kivide peal oli savikiht, mis allpool oli erosiooni mõjul paksem. Savi oli topitud ka kivide vahele, mis aitas neid koos hoida, lisaks muutus sein saviga katmise tagajärjel siledaks ja sellest üles ronimine raskemaks.

Valli 3 müürilaotises paljandus kaks korrapäraselt laotud sakki, millest ühe alumises osas oli selgelt näha pragu müüritises, s.t seal polnud kivimüür olnud laotud korraga. Pragu ulatus kuni 3,2 m kõrguseni korrapärase müüritise jalamilt, sellest kõrgemal oli kivivall laotud ühekorraga. Tõenäoline, et siinkohal oli tegu kinni laotud varasema väravakohaga (jn 11). Otse võimaliku väravakoha vastas oli arvatav kunagine sissepääs ka vallis 4.

Kaevandites F ja J puhastati välja kivivalli 3 säilinud ülemine osa. Siin oli valli harjal tegemist korrapäraste süvenditega, mis on osalt märgitud ka maalinna 1842. aasta plaanile. Selgus, et süvendid olid tekitatud kivide võtmise käigus, s.t kivid olid kõikjal lahtised, mitte laotud. Kivide vahel olid tühikud, puudus süsi või muu leiuaines. Tegemist oli kivivalli sisetäidise kividega – korrapäraselt olid olnud laotud üksnes ääred, valli sisemus oli aga kividega korrapäratult täidetud. Hiljem, tõenäoliselt uusajal, oli siit organiseeritud korras ehitus- või teetööde jaoks kive võetud.

Ehitusjärk E paljandus 2024. aasta kaevandis M linnuse suure valli lõunaosas. Selgus, et vallist 3 u 3 m linnuse õue poole on olnud tegemist teise, arvatavalt varasema kivivalliga, mis oli sarnaselt vallile 3 laotud korrapäraselt paekividest. Paekivide taga linnuse õue pool algasid kohe väiksemad, laugjama kallaku moodustavad kivid, mis ulatusid kuni Aita Kustini poolt 1962. aastal välja puhastatud, u 1,5 m kõrguse paeplaatidest laotud sisemise valliseinani. Valli 5 kividest rinnatis oli olnud selle taha jäävast tasapinnast kõrgem ega saanud olla ehitatud puidust.

Mingil ajal laoti vastu valli 5 välisserva täiendav, peaaegu püstloodne kivivall 5-1 (jn 13). Kahe kividest valli vahel olid nüüd puitkonstruktsioonid, võib-olla palkidest palissaad (jn 12). Vallidest 5 ja 5-1 väljapoole jääv osa kindlustisest erines linnuse lõunaosas sellest, mis tuli välja idapoolsetes kaevandites. Siin ei ulatunud hilisem kivivall kuigi kõrgele ning kindlustise ülemine osa oli ehitatud puidust. Säilinud postiaugud osutavad ilmselt mulla ja väheste kividega täidetud rõhtpalkidest kastidele. Pole kindel, kas valli alumine osa oli kunagi olnud laotud ka kivimüürina, kaevand M nii kaugele ei ulatunud.

Ehitusjärk F oli alumine kultuurkiht, mis oli säilinud vallide 1, 2 ja 4 all ning osalt ümbruses. See markeeris esimest asustusetappi enne kindlustiste püstitamist (jn 6: 6–7).

Valjala keskse linnuse vallikaevanditest ning linnuse õueala kaevanditest saadud materjalist tehti 21 <sup>14</sup>C analüüsi (jn 14), millele lisanduvad varem publitseeritud analüüsid linnust ümbritsevalt alalt. Välja arvatud osad selgelt varasemad ja hilisemad tulemused, langeb enamik dateeringutest perioodi 11. sajandi keskpaigast kuni 13. sajandi kolmanda veerandini.

Hilisemate kindlustiste alal tegutseti juba 11. sajandi keskpaigas. Tõenäoliselt pärinevad varaseimad kindlustised, vallid 1, 2, 4 ja 5, kas 11. sajandi lõpust või 12. sajandi algusest (jn 15). Kuna need ei puutu stratigraafiliselt omavahel kokku, pole võimalik nende ehitamise järjekorda kindlaks teha, kuid mingil ajal on need ilmselt kõik koos eksisteerinud. Hiljemalt 12. sajandi esimeses pooles rajati kivivall 3, mis mingil hetkel kaeti osaliselt muldvalliga 3-1. Kuna muldvall peitis suure osa varasemast, ilmselt väga imposantsest kivilinnusest, pidi selle püstitamiseks olema praktiline vajadus. Tõenäoliselt oli selleks katapultide ilmumine piiramistehnikasse. Oletamisi võiks valli 3-2 püstitamise ajaks seega pidada aasta 1200 ümbrust.

Kõige intrigeerivam on küsimus linnuse hiliseima ehitusjärgu A dateeringust. Kuna vallide täiendavaks kindlustamiseks kasutati kultuurkihiga pinnast, võib arvata, et inimtegevus alal, kust pinnast koguti, oli kogumise ajaks juba mõnda aega varem lakanud. Tegu on raske savise mullaga, mis ilmselt toodi võimalikult lähedalt, küllap kunagisest "linnast", kus kohati on tõepoolest võimalik oletada pinnase eemaldamist (jn 16). Lisaks tuleb võtta arvesse, et linnus oli enne ehitusetapi A algust olnud mõnda aega maha jäetud, sest selle ülemine osa oli hakanud varisema. Hiliseim ehitusetapp ei saanud seega leida aset enne 13. sajandi lõppu või 14. sajandit.