

ARHEOLOOGILISED  
VÄLITÖÖD  
EESTIS

ARCHAEOLOGICAL  
FIELDWORK  
IN ESTONIA

2007

Koostanud ja toimetanud  
*Ülle Tamla*

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*Esikaas:* 13.–14. sajandist pärit ribiline väike klaaspudel Tartu vanalinnast.

*Cover:* Fragment of a 13.-14 cc small glass bottle (Ribbenflasche) from Old Tartu.

*Tagakaas:* Tervena säilinud keskaegne nahkjalats Tartu vanalinnast.

*Back cover:* Well preserved leather shoe from Old Tartu.

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# ARCHAEOLOGICAL INVESTIGATIONS AT THE CASTLE OF THE TEUTONIC ORDER IN VILJANDI

**Riina JUURIK, Anti LILLAK and Heiki VALK**

*Tartu Ülikool (University of Tartu), Lossi 3*

*51003 Tartu, Eesti (Estonia)*

*Riina.Juurik@ut.ee*

*a31138@ut.ee*

*Heiki.Valk@ut.ee*

In 2007, archaeological investigations continued in Viljandi, on the hill Kaevumägi, where the main buildings of the Teutonic Order castle are situated. Excavations were financed by the town of Viljandi. The main purpose of the work was to clean out some parts of the masonry walls in order to conserve and expose them. In all, excavations were conducted in four places:

1. In the first outer bailey, the outer side of the western wall of the northern building was cleaned out (Fig. 1: 1).

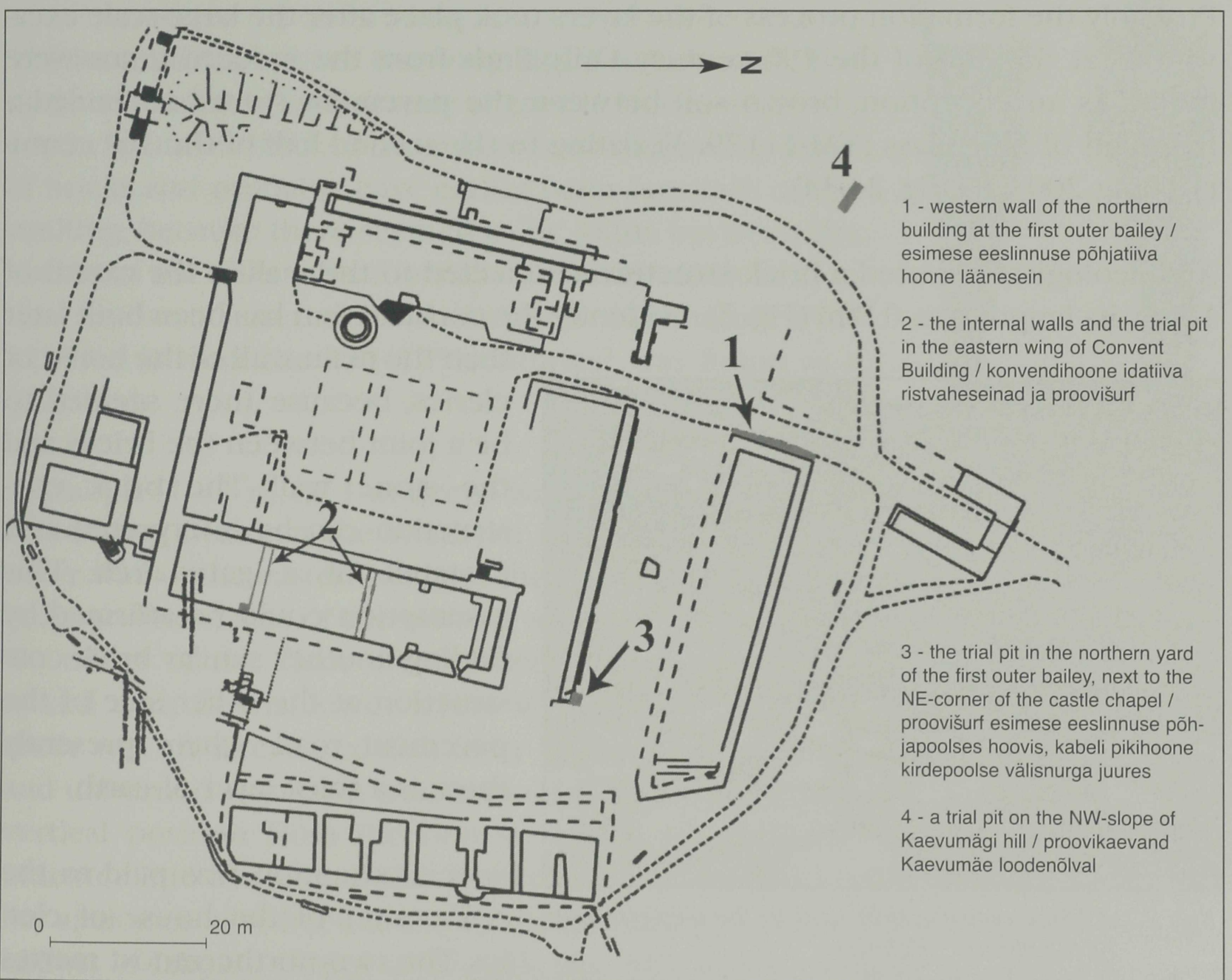


Fig. 1. General view of the hill Kaevumägi in Viljandi and the locations of the excavation plots.  
Jn 1. Viljandi Kaevumäe üldplaan ja kaevandite asukohad.



2. In the eastern wing of the Convent building, two internal walls were documented. A trial pit was made next to the southern internal wall at the eastern part of the building (Fig. 1: 2).

3. A trial pit was made in the northern yard of the first outer bailey, next to the NE-corner of the castle chapel (Fig. 1: 3).

4. In addition, a trial pit was made on the NW-slope of the hill Kaevumägi (Fig. 1: 4).

## THE WESTERN WALL OF THE NORTHERN BUILDING AT THE FIRST OUTER BAILEY

In the first outer bailey, the western wall of the northern building (the so-called *vaimulikehoone* or the house of clerics) was cleaned out. Layers of earth and lime mortar (in all up to 0.4 m in depth and up to 1.35 m wide) were removed in the extent of 10 m to conserve the wall and expose the stone pavement next to it. Probably the formation process of the layers took place after the large-scale excavations at the end of the 19<sup>th</sup> century. Only finds from the modern times were found. As an exception, brown soil between the pavement stones contained a fragment of blue glass (VM 11179: 3), dating to the second half of the 16<sup>th</sup> century (Ring 2003, 84, fig. 2.034).

Archaeologists revealed a brick structure connected to the wall in the extent of 1.2 m; its length was 0.8 m (Fig. 2). Evidently the construction has been built later

than the main wall of the house of clerics, because there seemed to be a joint between the bricks and the stone wall. The brick construction can be interpreted as a footstall of a gate arch. This assumption could be affirmed by finding another similar brick construction at the other side of the pavement road, where presently there is a thick layer of earth.



Fig. 2. A brick construction next to the western wall of the "house of clerics".  
A view from the NW.

Jn 2. Telliskonstruktsioon vaimulikehoone lääne-seina küljes. Vaade loodest.

Special attention was paid to the NW-corner of the house of clerics. The two northernmost metres of the outer side of the western wall (right next to the brick con-



struction) were situated 0.6 m east of the general wall alignment. Part of it formed also the western end of the building's northern wall. Between the above-mentioned wall part and the stone pavement, a gap (0.3–0.4 m wide) was recorded. The reason of this wall “anomaly” remains unclear, because definite building stages cannot be defined there. According to one possible explanation, the corner of the house of clerics has been at least partly wrecked and then rebuilt in its present form<sup>1</sup>.

## THE EASTERN WING OF THE CONVENT BUILDING

In order to conserve the two internal walls of the eastern wing of the Convent building they had to be cleaned out. Unfortunately, the walls were unearthed without archaeological supervision by the conservators: archaeologists only documented the situation later.

The internal walls were 9 m long and 0.6–1 m wide. The northern wall was built mainly of granite stones while the southern one of bricks. The ends of both walls were made of bricks and probably have earlier been footstalls of the vaulting, because there seemed to be joints between the walls and the assumable footstalls. From the ditch next to the southern internal wall, an iron cannonball (VM 11179: 14) from the 15<sup>th</sup>–17<sup>th</sup> centuries<sup>2</sup> was found as a stray find.

A trial pit (1 × 1 m, *ca.* 1 m deep) was made to the southern corner, between the southern internal wall and the outer wall of the eastern wing of the Convent building, in order to find traces of the missing stone pavement floor. No traces of the floor were found; upper layers were mixed with debris, lower layers were clayish. Between them was an uneven coalish layer that contained burnt and unburned wood. An iron item (Fig. 3) was found in a vertical position from the bottom of the pit, probably indented into the natural clay. It may be a cap of a spear haft. Probably slightly earlier analogies have been found in Siksälä cemetery (Peets 2007, 178) and from the hillfort of Izborsk (Sedov 2007, 325, figs. 330: 8, 9, 11; 331: 10, 11) but they are a



Fig. 3. Probable cap of a spear haft.

Jn 3. Oletatav odavar-re metallotsik.  
(VM 11179: 13.)

<sup>1</sup> Hypothesis by Arvi Haak (TM).

<sup>2</sup> Oral information by Ain Mäesalu (TÜ).



bit smaller and do not have an extra inner socket or metal flap for fastening a cap to a haft with a rivet or a nail.

## TRIAL PIT NEXT TO THE CASTLE CHAPEL

In order to conserve the NE-corner of the castle chapel, the exact location of the lowermost hewed cornerstone had to be found. A trial pit (1.5 × 1.5 m) was made next to the northern side of the corner. Under a thin layer of debris, a stone pavement was unearthed. It laid on a sand bed that contained few animal bones, a flint stone (VM 11179: 18), a fragment of a wheel-thrown pottery (VM 11179: 17) and a fragment of a Siegburg stoneware (Fig. 4: 3; dated to 1350–1550<sup>3</sup>).

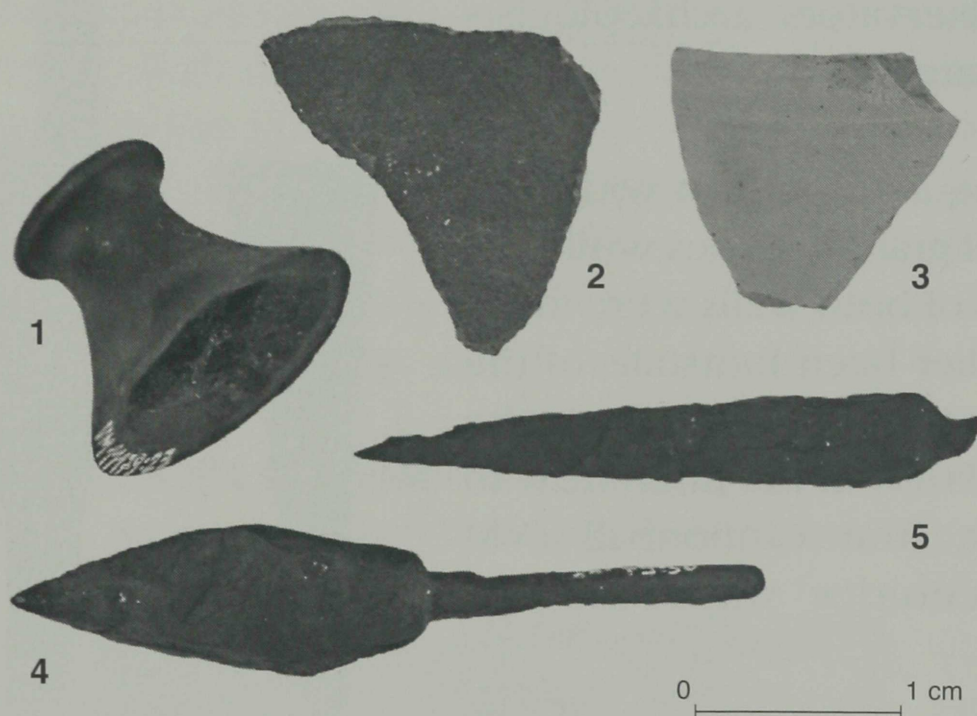


Fig. 4. Finds from the trial pit next to the chapel corner. 1 - potential handle knob of a dagger, 2 - fragment of stoneware, 3 - fragment of a Siegburg stoneware, 4, 5 - crossbow bolts.

Jn 4. Leide kabelinurka kaevatud šurfist. 1 - oletatav pistoda käepideme nupp, 2 - kivikeraamika katke, 3 - Siegburgi kivikeraamika katke, 4, 5 - ammu-nooleotsad.  
(VM 11179: 23, 49, 16, 50, 52.)

Under the sand bed, several dark and intensive layers (altogether 0.8 m thick) mixed with debris were situated; they contained several thin spots of mortar, lime, sand and charcoal. Presumably, these layers were formed on site, but partially disturbed by several earth-re-moving construction works in the castle. They contained find material from different periods - iron nails, fragments of metal items, numerous animal bones, including some with cutmarks, and bone items. From the upper part of the dark zone an ice-nail (VM 11179: 19) and a potential handle knob of a dagger (Fig. 4: 1) were found.

The lower part contained fragments of stoneware (Fig. 4: 2; dated to the 2<sup>nd</sup> - 3<sup>rd</sup> quarter of the 13<sup>th</sup> century<sup>4</sup>) and a fragment of a wheel-thrown fine ceramics (VM 11179: 45). From that soil, also a crossbow bolt of a group CIII: 1 (Fig. 4: 4; Mäesalu

<sup>3</sup> Oral information by Arvi Haak (TM).

<sup>4</sup> Oral information by Arvi Haak.



1991, 174), dating from the long period of the 14<sup>th</sup> century onwards and a fragment of a crossbow bolt (originally with a socket) of a group AI: 2 (Fig. 4: 5; Mäesalu 1991, 170), that can be dated to the first quarter of the 13<sup>th</sup> century, were found. The last item has probably got into the later formed layer as a result of some kind of earth works.

Under the dark heterogeneous layers, varicoloured sandy clay, 0.7–0.8 cm thick, was revealed. It did not contain any artefacts, but was partially mixed with natural humus soil. Presumably, the clay layer was formed while the groundwork of the Convent building was made at around the turn of the 13<sup>th</sup>–14<sup>th</sup> centuries (Alttoa 2003, 103–104; Tõnisson *et al.* 2008, 276). Therefore, the layers, including the soil containing a crossbow bolt of the early 13<sup>th</sup> century, cannot be older than the Convent building. The lowest layer was dark grey sand that could be natural humus soil. It remains unknown, whether this layer contained any occasional Viking Age finds, because the soil was not sieved. Earlier excavations have shown that this kind of soil contained single potsherds of that time (see Haak 2001, 3).

The lowermost hewed cornerstone lied actually almost on a ground level and has been shifted from its original position (Fig. 5). The outer wall of the Convent building was made of large granite stones and limestones. The lower edge of the footing was 2.5 m below the modern ground level.



Fig. 5. NE-corner of the castle chapel. An arrow points to a hewed cornerstone that is shifted from its original position. A view from the N.

Jn 5. Kabeli pikihoone kirdenurk. Nool näitab paigast nihkunud tabutud kvaadrikivi. Vaade põhjast.

## TRIAL PIT ON THE NW-SLOPE OF THE HILL KAEVUMÄGI

In order to check the hypothesis that cultural layers of Late Iron Age hillfort might have been removed from the plateau of the hill Kaevumägi to its slopes while constructing the Convent building a trial pit was made on the NW-slope of the





Fig. 6. The location of the trial pit on the NW-slope of the hill Kaevumägi. A view from the NWW.  
Jn 6. Kaevumäe loodenõlva proovikaevandi asukoht. Vaade lääneloodest.

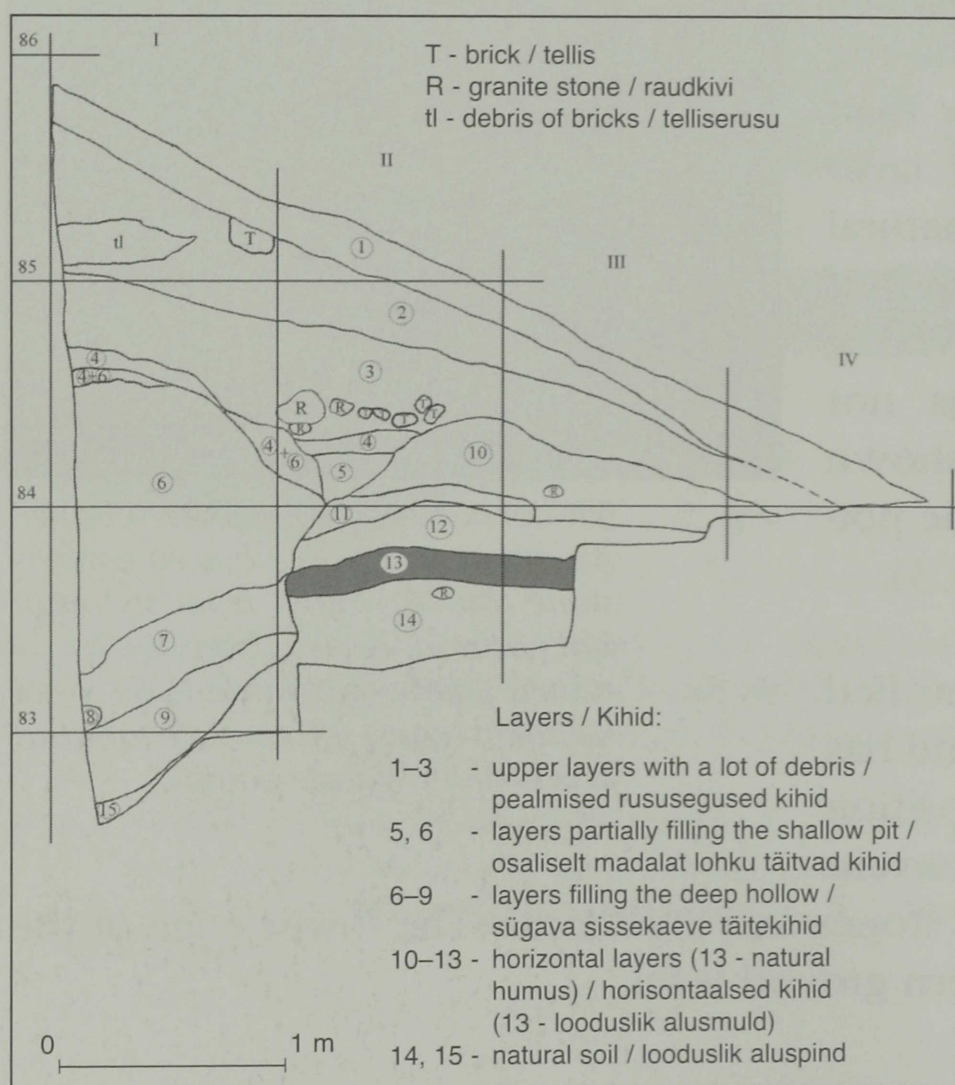


Fig. 7. The southeastern profile of the trial pit on the slope.  
Jn 7. Nõlvakaevandi edelaprofiil.

hill, on the eastern slope of the deep moat (Fig. 6). It was situated roughly north-westerly - south-easterly and was 4 m long and 1 m wide. It became evident that layers on the slope consisted of numerous strata (Fig. 7). The upper layers contained a lot of debris, animal bones and some medieval and post-medieval finds, including iron nails, a fragment of a proto-stoneware jug (Fig. 8: 6; dated to the 1<sup>st</sup> half or the middle of the 13<sup>th</sup> century)<sup>5</sup> and two fragments of wheel-thrown pottery (Fig. 8: 2, 3). One of them can be dated to the Late Iron Age or to the 13<sup>th</sup> century, the other one probably to the 13<sup>th</sup> century.<sup>6</sup>

At the depth of *ca.* 0.8-1 m, a shallow (up to 0.4 m deep) pit was revealed. It contained single rubble stones and fragments of bricks. The upper part of the pit was filled with brown soil containing animal bones (including one with cutmarks, VM 11179: 76), burnt stones, charcoal, a fragment of an iron item (VM 11179: 75), a fragment of an amber bead (Fig. 8: 5) and a finger part of an iron gauntlet (Fig. 8: 4, dated to the 14<sup>th</sup>-15<sup>th</sup> centuries).<sup>7</sup> The lower part of the pit consisted of intensive dark soil without any

<sup>5</sup> Oral information by Arvi Haak.

<sup>6</sup> Oral information respectively by Arvi Haak.

<sup>7</sup> Identified and dated by Ain Mäesalu.



finds. The cause and function of the pit remained unclear.

The layers under the shallow pit, on the side of the excavation area facing to the moat were laying horizontally. This clearly shows that the original shape of the hill Kaevumägi has been different from the situation nowadays. Most of the horizontal layers contained very few finds, for example a fragment of a Siegburg stoneware (VM 11179: 80; dated to second half of the 15<sup>th</sup> – first quarter of the 16<sup>th</sup> century)<sup>8</sup> and a fragment of a possibly hand-made ceramics (Fig. 8: 1), that is probably older than the 13<sup>th</sup> century.<sup>9</sup> These layers may have been moved from their original position. On the natural soil laid dark grey sand that contained neither finds nor anything that would indicate human activity; therefore, it may be natural humus. This opinion is supported by the fact that the natural ground was at the same level on the western side of the moat.

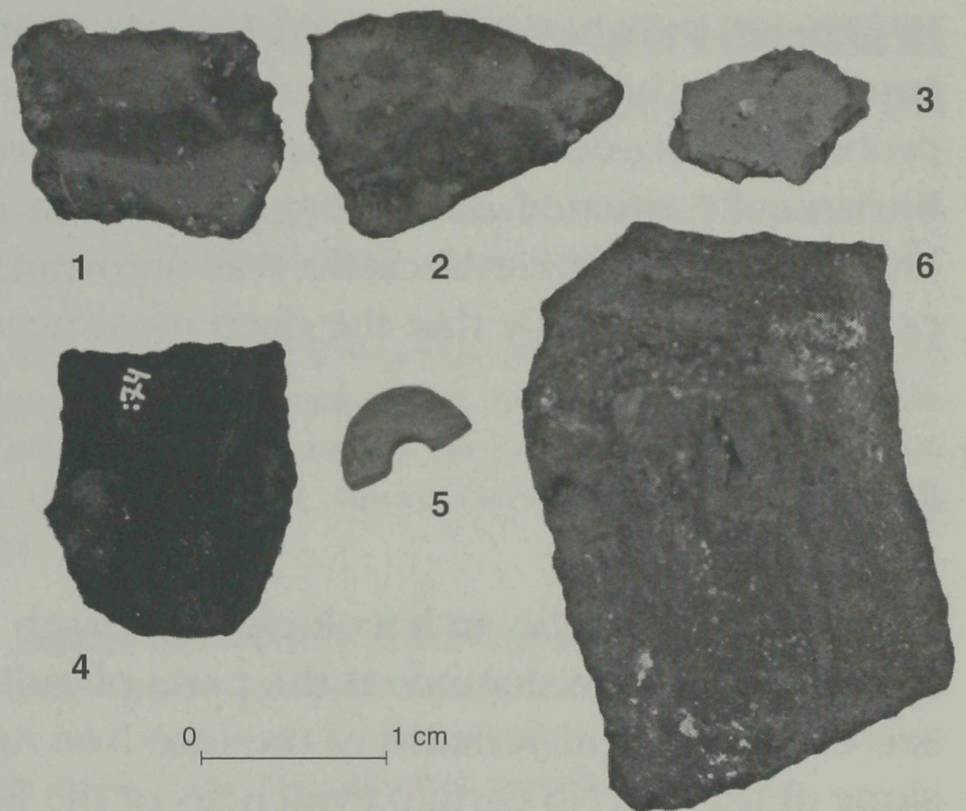


Fig. 8. Finds from the trial pit on the slope. 1 - fragment of possibly hand-made ceramics, 2, 3 - fragments of wheel-thrown pottery, 4 - finger part of an iron gauntlet, 5 - fragment of an amber bead, 6 - fragment of a proto-stoneware jug.

Jn 8. Leide nõlvakaevandist. 1 - arvatav käsikeraamika kild, 2, 3 - kedrakeramika killud, 4 - soomuskin-da sõrmeosa, 5 - merevaikhelme katke, 6 - proto-kivikeraamilise kannu katke. (VM 11179: 81, 61, 60, 74, 73, 59.)

Horizontal layers were cut off short on the side of the excavation area facing the hill plateau, revealing a deep hollow. Its upper part started in the depth of ca. 1.3 m and it reached at least 3.2 m in depth from the present ground level. Its north-western slope was unearthed in the excavation area, but its bottom remained probably unexposed. The filling layers did not contain any find material, but tiny fragments of bricks indicate their medieval or post-medieval origin. Apparently, the deep hollow cannot be a part of an earlier moat, as it was suggested at first, because in that case there should be humus and eroded soil on the slope of the hollow, but that was not the case.

<sup>8</sup> Oral information by Arvi Haak.

<sup>9</sup> Oral information by Arvi Haak.



In general, the above-mentioned hypothesis about removed cultural layer of the Late Iron Age hillfort was neither confirmed nor proved false. Single finds that can probably be dated to the prehistoric times, were found in later-mixed layers. The horizontally situated dark grey sand, which may have been formed before the erection of the medieval castle, was unfortunately empty of finds. Horizontal layers indicate evidently that the deep moat west of Kaevumägi is mostly artificial.

## CONCLUSIONS

The main aim of the archaeological research in the summer of 2007 on the hill Kaevumägi was to document the parts of buildings that were planned to be conserved. In addition, remains of the Late Iron Age hillfort were searched for on the slope of the hill. No certain evidences of the latter were found. However, the stray finds from that period are still remarkable, showing that there has been some kind of human activity on the hill Kaevumägi in the Late Iron Age. It is potentially perspective to continue research on the slopes of the hill to gather new information about the hillfort of Viljandi.

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## ARHEOLOOGILISED UURIMISTÖÖD VILJANDI ORDULINNUSEL

*Riina JUURIK, Anti LILLAK ja Heiki VALK*

2007. aastal jätkusid arheoloogilised uurimistööd Viljandi ordulinnuse alal Kaevumäel. Peamine eesmärk oli eksponeerimiseks välja puhastada mõned müüriosad. Töö toimus neljas kohas (jn 1: 1–4).

Esimese eeslinnuse põhjapoolse hoone (nn vaimulikehoone) lääneseina välisküljelt eemaldati müüri äärde kuhjunud pinnast. Kaevamiste käigus paljandus maakividest müüriga liituv telliskonstruktsioon, mida võib tõlgendada värava võlvkaare kanna jäänusena (jn 2). Samuti selgus, et hoone lääneseina põhjapoolsemad 2 meetrit olid ehitatud üldisest müürijoonest mõnevõrra tahapoole. Sellist astangulist müüriladu on raske mõista.

Konvendihoone idatiivas (jn 1: 2) fikseeriti kaks konservaatorite poolt välja kaevatud ristvaheseina. Näib, et need on laotud varasemate tellisvõlvkaarte kandade vahele. Lõunapoolse vaheseina idapoolsesse otsa, vastu hoone idaseina rajati 1 x 1 m suurune šurf, kuid märke otsitavast põrandast ei leitud. Saadud esemeleidude hulgas väärrib eraldi märkimist odavarre metallotsik (jn 3).

Teine šurf (1,5 x 1,5 m) rajati konvendihoone kabeli pikihoone kirdepoolse välisnurga vastu (jn 1: 3). Nüüdisaegsest maapinnast õige vähe allpool paljandus munakivisillutis ning selle all mitmed tõenäoliselt keskajast pärit ladestused. Need sisaldasid arvukalt lubja-, mördi-, liiva- ja söelaike, loomaluid ning leide (jn 4), sh kivitööd, luuesemeid ja kaks ammunooletsa (neist üks pärineb 13. sajandi esimesest veerandist). Üks tahutud alumine kvaadrikivi paiknes praktiliselt praeguse maapinna tasemel, kuid oli oma esialgselt kohalt eemale nihkunud (jn 5).

Lisaks eelnevale tehti proovikaevand (4 x 1 m) Kaevumäe loodenõlvale (jn 1: 4; 6). Seal loodeti leida jälgi hilisrauaaegse linnuse kultuurkihist, mis võiks olla sinna teisaldatud konvendihoone ehitamisel 13.–14. sajandi vahetuse paiku. Sealsed kihid (jn 7) sisaldasid loomaluid ja mõne keskaegse leiu (sh raudkinda sõrmeosa, kivi- ja kedrakeraamika katkeid), samuti üksikuid savinõukilde, mida võiks oletamisi dateerida muinasaja lõppu või 13. sajandisse (jn 8). Kaevamiste käigus avastati sügav sissekaeve, mille täpne rajamisaeg ja otstarve jäi esialgu selgitamata. Samas ilmnes, et algne mäe kuju on olnud praegusest oluliselt erinev – tollase nõlva alumised kihid olid horisontaalsed ja ei järginud praeguse nõlva kallet. Seega võib väita, et linnuse läänepoolne sügav vallikraav peab suures osas olema inimtekkeline. Kindlalt muinasaega dateeritavaid kihte ei leitud, ent kindlasti tasub linnuse varasemate ehitusetappide tundmaõppimiseks uurida mäe nõlvu ka edaspidi.