



ARCHAEOLOGICAL INVESTIGATIONS AT THE COURTYARD OF JAKOBI STREET 2 / LOSSI STREET 3, TARTU

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Archaeological monitoring and excavations were carried out under the general supervision of the author of the current article in the centre of Tartu in the vicinity of Jakobi Street 2 (Fig. 1). During the reconstruction the foundations of the Jakobi 2 building were dug out to install drainage pipes and a moisture barrier. The pipelines of sewerage and central heating were replaced and rainwater sewerage was installed around the building.

Monitoring and rescue excavations were carried out by Andres Tvaari and Rivo Bernotas in the courtyard of Jakobi Street 2 / Lossi Street 3 (Fig. 2) in 2010 (Tvaari 2011). Approximately 520 m² in total was excavated under our supervision. On the northern side of the building, in the churchyard of the medieval St Mary's Church, the investigations lead by Martin Malve and Raido Roog continued in 2011 and will not be considered in the present article.

Immediately south from the excavation plot lies the building of Lossi Street 3. Before constructing this building large-scale archaeological investigations were carried out in the 1980s (Mäesalu 1990; Trummal 1992; Metsallik 1995). The building of Jakobi Street encircles the courtyard from northern and western side. Archaeological excavations were not done while erecting the building in 1938–1939. Scarce notes and photos published in press at the time give evidence of what was unearthed during the construction. A few medieval finds have reached the collections of Estonian National Museum.

The cultural layer of archaeological interest has mostly been destroyed in the course of constructing the buildings and installing pipelines of Jakobi Street 2 and

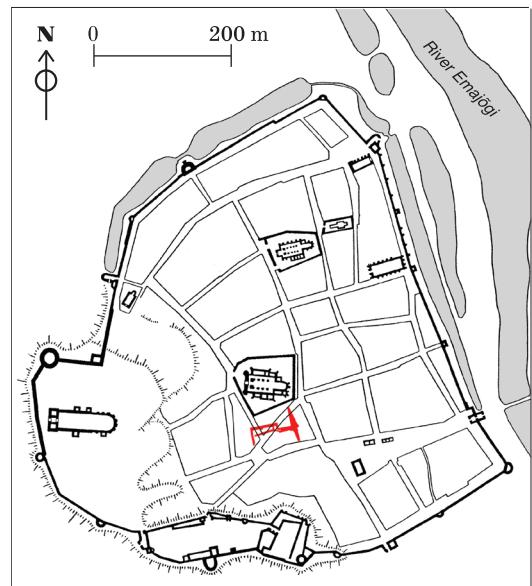


Fig. 1. Location of the investigated area at the Jakobi 2 / Lossi 3 courtyard on the reconstructed plan of late medieval Tartu.

Jn 1. Jakobi 2 / Lossi 3 hoovis uuritud ala asukoht hiliskeskuse Tartu plaani rekonstruktsioonil.

Drawing / Joonis: Andres Tvaari

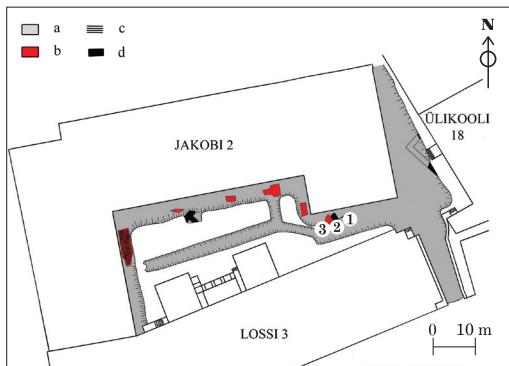


Fig. 2. Plan of the investigated area. a – excavated area, b – excavated Viking Age cultural layer, c – medieval wood log pavement, d – fragments of medieval stone walls, 1–3 – wooden cesspits.

Jn 2. Uuritud ala üldplaan. a – kaevatud ala, b – viikingiaegne kultuurkiht, c – keskaegne palksillutis, d – keskaegsete kivimüüride jäänused, 1–3 – keskaegsed jäätmekastid.

Drawing / Joonis: Andres Tvauri



Fig. 3. Viking Age and medieval cultural layer in the western part of the courtyard. View from the east. 1, 2 – prehistoric cultural layer, 3 – medieval cultural layer.

Jn 3. Viikingi- ja keskaegne kultuurkiht hoovi lääneosas. Vaade idast. 1, 2 – muinasaegne kultuurkiht, 3 – keskaegne kultuurkiht.

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the upper part of the prehistoric layer (Fig. 3: 2) was dark gray and contained eroded sand, charcoal, burnt stones, clay daubs and animal bones. It was rich in potsherds,

Lossi Street 3. Prehistoric, medieval or early modern period layers have been preserved only partially. Sewerage pipes were mainly installed into former pipeline trenches and the trench dug to unearth the foundation of the Jakobi Street 2 building coincided with the original foundation hole. Thus the layers were documented mainly in the cross sections of trenches. All in all, it was possible to study the formerly undamaged cultural layer in the area of approximately 45 m².

VIKING AGE CULTURAL LAYER

The prehistoric cultural layer deposited on natural yellow sand or travertine has preserved in several spots in the courtyard of Jakobi Street 2 and Lossi Street 3. The thickness of the prehistoric layer was 30–55 cm.

In the western part of the courtyard the prehistoric cultural layer consisted of two different stratigraphic units. The bottom layer (Fig. 3: 1), 5–15 cm thick, brownish with stripes of ashes was rich in animal and fish bones, potsherds of hand-made Röuge-type rough and fine ware. The layer contained also 11th century north-western Russian earthenware. Besides ceramics a tooth pendant was found. Most likely this layer was deposited before before 1030 AD when according to the Old Rus Primary Chronicle Yaroslav Vladimirovich (later referred to as Yaroslav the Wise), Grand Prince of Kiev conquered Tartu. In the eastern part of the courtyard there were also more sherds of hand-made pottery in the bottommost part of the prehistoric layer, but no clear stratigraphic distinction was visible between the upper and lower part of the prehistoric layer.

In the western part of the courtyard the upper part of the prehistoric layer (Fig. 3: 2) was dark gray and contained eroded sand, charcoal, burnt stones, clay daubs and animal bones. It was rich in potsherds,

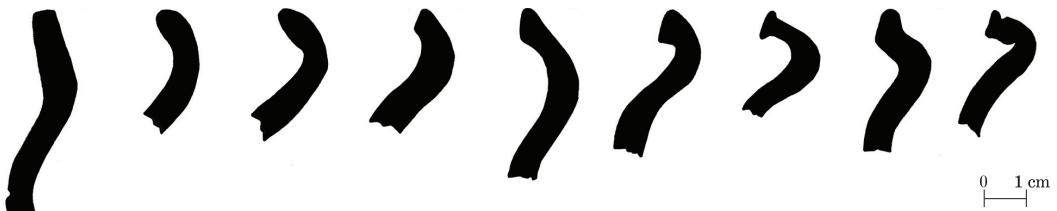


Fig. 4. Sections of the earthenware vessels from Viking Age cultural layers.

Jn 4. *Viikingiaegsetest kihitest leitud kedrakeraamika servaprofile.*

(TM A 188: 246, 1221, 1432, 1411, 247, 938, 926, 925, 251.)

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the majority of which belong to north-western Russian-style wheel-thrown pottery, decorated with horizontal and wavy lines made by a comb-shaped template (Fig. 4). A spindle whorl (Fig. 5: 1) made from Ukrainian Ovruch pink slate, was collected from this layer. In addition, an amber cross pendant (Fig. 5: 2), an unprocessed piece of amber, a glass bead with golden foil, a pendant made from animal tooth, an iron arrowhead (Fig. 5: 3), knives, fragments of crucibles and a simple bronze bracelet were found.

The ceramics as well as other finds show that the upper strata of the prehistoric cultural layer has deposited between the years 1030–1061 when the fort of Yuryev belonging to the Grand Princes of Kiev and an adjacent settlement site were located here. No ceramics or finds dating from a later period than the middle of the 11th century were found from the prehistoric cultural layer.



Fig. 5. Finds from Viking Age cultural layer. 1 – spindle whorl made from pink slate, 2 – amber cross pendant, 3 – iron arrowhead.

Jn 5. *Leide viikingiaegset kihist. 1 – roosast kiltkivist värtnakeder, 2 – merevaigust ristripats, 3 – rauast nooleots.*

(TM A 188: 204, 1041, 1042.)

Photo / Foto: Andres Tvaauri

MEDIEVAL CULTURAL LAYER

The medieval cultural layer was excavated in two spots of the area – in the western and eastern side of the courtyard (Fig. 2). In the western part of the yard near the wall of Jakobi Street 2 building the prehistoric layers were covered with an up to 20 cm thick sandy filling. On top of the filling there was a brownish layer, up to 25 cm thick, containing pieces of wood and textile, a stoneware vessel, a fragment of glazed redware dating from the 13th century, a bone comb with long teeth (Fig. 6), and an iron key.



Fig. 6. Bone comb with long teeth found under the medieval wood log pavement.

Jn 6. Keskaegse palksillutise alt leitud pikapiiline luukamm.

(TM A 188: 200.)

Photo / Foto: Andres Tvauri

0 1 cm



Fig. 7. The medieval wood log pavement in the western part of the courtyard. View from the east.

Jn 7. Keskaegne palksillutis hoovi lääneosas. Vaade idast.

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Abundant fragments of 11th century wheel-thrown pottery in the layer indicate that we are dealing with the 13th century re-deposition of a prehistoric layer.

On top of the fore mentioned brownish layer, 6 metres of a north-south directed pine log pavement was traceable (Fig. 7). The diameter of the unpeeled logs was 10–12 cm. The width of the pavement has been more than 1.4 m. It was not possible to measure the original width of the pavement because in the western side the logs were cut through by the construction of Jakobi Street 2 building and in the eastern side they extended out of the excavation plot. Judging by the finds from the layers beneath and above the pavement it dates to the second half of the 13th century or to the 14th century.

Remains of the lower parts of three wooden cesspits were found in the eastern part of the courtyard (Fig. 2: 1–3). Mainly decayed wood have been preserved of the



Fig. 8. Earthenware pots from cesspits nos 1 and 2.
Jn 8. Lihtkedrakeraamilised potid jäätmekastidest nr 1 ja 2.
(TM A 188: 185, 186.)
Photo / Foto: Andres Tvauri

constructions. The content of the pits, sticky layers of excrements with finds characteristic to cesspits were preserved partially. It was not possible to measure all the pits in detail due to their poor preservation.

Of the easternmost cesspit (No. 1), its northern corner made in crossbeam technique, only a few of only a few log layers and a 20 cm layer of the pit's content were preserved. Decayed wood from horizontal logs constituting the walls of the middle cesspit (No. 2) was preserved, but no information about the construction of corners was obtained. The cesspit extended into travertine sediments. According to this the width of the pit has been 1.1 m and the length at least 2 m. The height to which the typical content of the latrine cesspit was preserved was 1 m from the bottom. The western cesspit (No. 3) was probably made of horizontal logs attached to casing made of vertical posts. Again, the layer consisting of the cesspit content was 1 m thick.

Abundant animal bones, sherds of stoneware and earthenware (Fig. 8) and fragments of glass beakers (Fig. 9) were gathered from the pits. In addition, pieces of a small wooden stave dish, fragments of leather shoes, window-glass, birch bark vessels,



Fig. 9. Fragments of glass beakers from lavatory cesspit No. 1.
Jn 9. Klaasnöude kilde jäätmekastist nr 1.
(TM A 188: 110, 113, 112, 111, 107.)
Photo / Foto: Andres Tvauri

0 5 cm



Fig. 10. Remains of medieval heat storage hypocaust furnace. View from the north.

Jn 10. Keskaegse hüpokaustahju jäänus. Vaade põhjast.

Photo / Foto: Andres Tvauri

a double composite bone comb, a ceramic lid etc. were found. The finds are characteristic to the 14th century.

Walls made of bricks and boulder were unearthed in several spots of the courtyard. The average size of all the bricks ($30 \times 15 \times 10$ cm) suggests that these are the remains of buildings from the 15th – 16th centuries. Some of the buildings are depicted on the map of Tartu from the year 1767 (RGVIA 349-12-4665) and they are known to be pulled down after the Great Fire of 1775. A wall fragment was cleared and documented in the northern part of the courtyard (Fig. 10). Heat accumulation stones found next to the wall and traces of soot on the wall indicate that here has been heat storage of a hypocaust furnace.

RESULTS AND CONCLUSION

The cultural layers of Viking Age, medieval and Early Modern Era were preserved only partially in the courtyard of Jakobi Street 2 / Lossi Street 3.

In many spots of the courtyard atop virgin soil Iron Age cultural layer had been preserved with the thickness up to 55 cm. The lower part of the prehistoric layer dates to Viking Age, probably to the period before the conquest of 1030. The upper, thicker

part of the prehistoric layer had been deposited roughly between 1030–1061, when the hill fort of Yuryev belonging to the Grand Prince of Kiev and an adjacent settlement site were located in Tartu.

Some of the medieval cultural layer and constructions had been preserved. Note-worthy are the traces of a log pavement from the second half of the 13th century or from the 14th century in the western part of the courtyard and remains of three 14th century cesspits in the eastern part of the yard. In addition, remnants of medieval and Early Modern Era buildings made of boulder and bricks were found.

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ARHEOLOOGILISED UURINGUD TARTUS JAKOBI 2 / LOSSI 3 HOOVIL

Andres Tvaari

Arheoloogiline järelevalve ja kaevamised Tartu kesklinnas Jakobi 2 hoone ümbruses (jn 1–2) toimusid seoses hoone rekonstrueerimisega ja mitmesuguste trasside rajamisega. Kultuurkiht oli vaadeldaval alal enamasti hävitatud Jakobi 2 ja Lossi 3 hoonete või nendega seotud torustike rajamisel. Puutumatut muinas-, keskvõi varauuaegset kultuurkihti oli säilinud vaid kohati. Kanalisatsioonitrassid paigaldati põhiliselt varasemate torustike asemele ja vundamentide isoleerimiseks rajatud kaevis läbis suuremalt osalt kunagist Jakobi 2 hoone vundamendisüvendit. Seetõttu dokumenteeriti kultuurkihti peamiselt kaevise profiilis. Kogu uuritavaala suurus oli 520 m², milles 45 m² alal oli arheoloogiline kultuurkiht säilinud puutumatuna.

Viikingiaegset kultuurkihti, mis lasus looduslikul kollasel liival või allikalubjal oli säilinud mitmes kohas Jakobi 2 ja Lossi 3 hoonete vahelisel alal 30–55 cm paksusena (jn 3). Hoovi lääneosas koosnes muinasaegne kultuurkiht kahest osast. Alumine (jn 3: 1), 5–15 cm paksune kiht oli pruunikat värviga ja selles oli tuhavirge, rohkesti looma- ja kalaluid ning Rõuge-tüüpiläime- ja peenkeraamiliste savinõude kilde, leiti üks loomahambast ripats. Tõenäoliselt pärineb see kiht enne 1030. a, mil Vana-Vene leetopisside andmetel vallutas Kiievi suurvürst Jaroslav Vladimirovitš (Tark) Tartu. Muinaskihi ülemine osa (jn 3: 2) oli värvuselt tumehall ning sisaldas uhteliiva viirge, sütt, põlenud kive, savitihendeid ja loomaluid. Sellest leiti arvukalt savinõukilde, milles enamus pärineb Loode-Vene päritolu nõudest (jn 4). Siit leiti roosast kiltkivist värtnakeder (jn 5: 1), merevaigust ristripats (jn 5: 2), töötlemata merevaigutükk, metallfooliumiiga klaashelmes, hammarsripats, rauast nooleots (jn 5: 3), nugasid, sulatustiiglite katkeid ning lihtne pronksist käevöru. Leidude alusel oli muinaskihi ülemine osa ladestunud ajavahemikus umbes 1030–1061, mil siin asus Kiievi suurvürstide Jurjevi linnus ja selle juurde kuulunud asula.

Kuigi ka hoovi idaosas oli käsikeraamikat rohkem muinaskihi alumises osas, ei eristunud peamiselt käsikeraamikat sisaldanud kiht stratigraafiliselt muinaskihi pealmistest osadest. 11. saj keskpaigast hilisemalt leiumaterjalil muinaskihibit ei saadud.

Keskaegset kultuurkihti kaevati Jakobi 2 ja Lossi 3 hoonete vahelisel alal hoovi lääne- ja idaosas (jn 2). Mujal õnnestus keskaja kihistusi dokumenteerida vaid kaeviste profiilides. Hoovi lääneosas Jakobi 2 hoone seina ääres kattis muinaskiht kuni 20 cm paksune liivasegune täitekiht. Selle peal oli kuni 25 cm paksune pruun kiht, mis sisaldas puidu- ja tellisetükikesi.

Siit leiti kivikeraamilise nõu ja 13. saj pärineva glasuurkeraamika katke, pikkade piidega luukamm (jn 6) ja rauast vöti. Sellest kihist saadud rohked 11. saj kedrakeramiliste savinõude killud näitavad, et tegemist on 13. saj paiku ladestatud muinaskihibiga.

Kirjeldatud pruunika kihil peal oli 6 m pikkuuselt jälgitav põhja–lõuna-suunaliselt kulgenud 10–12 cm läbimõõduga koorimata männipalkidest sillutis (jn 7). Sillutise laius oli vähemalt 1,4 m. Algset laiust mõõta polnud võimalik, sest lääne pool olid palgid läbi lõigatud Jakobi 2 hoone sissekäevega ja ida pool jääd need kaevandist välja. Sillutise alusest ja pealsetest kihist saadud leidude põhjal otsustades pärineb see 13. saj teisest poolest või 14. saj.

Hoovi idaosast leiti jäänuseid kolmest kõrvuti paiknenud puidust lampkasti alaosast. Kastidest olid säilinud vaid kõdupuidu viirud ning laiguti väljaheidetest koosnev rohekaspruun nätske kultuurkiht, milles leidus jäätmekastidele tüüpilisi leide. Idapoolsemast kastist (nr 1) oli säilinud paari palgikorra kõrguselt ristpalkkonstruktsioonis põhjanurk ja selle tasapinnal paarikümne sentimeetri paksune kihistus kasti sisust. Keskmise kasti (nr 2) seintest oli säilinud üksnes kõdunenud rõhtsaid palke, nurkade konstruktsionist teavet ei saadud. Kasti sissekäeve ulatus looduslikku allikalupja, mille põhjal otsustades on selle laius olnud 1,1 m, pikkus sissekäeve põhjal vähemalt 2 m. Lampkastile iseloomulikku sisu võis mõõta 1 m. Kastidest läänepoolseim (nr 3) oli arvatavasti valmisitud rõhtpalkidest raamkonstruktsioonis, st kasti nurkades on olnud püstpostid. Viimases andsid tunnistust kõdunenud postijäänumed. Kasti sisu oli säilinud samuti u 1 m. Lampkastide seest saadi lisaks loomaluudele veel kivikeraamiliste ja lihtkedrakeramiliste savinõude (jn 8) ning klaaspeekrite kilde (jn 9). Leiti ka väikeste laudnõude tükke, nahkjalatsite katkeid, aknaklaasi kilde, kasetohust nõude katkeid, luust kahepoolne kamm jm. Kastidest saadud leiumaterjal on iseloomulik 14. sajandile.

Kaevandis leiti ka kivihoonetate müüre, mis olid laotud tellistest mõõtmetega keskmiselt 30 × 15 × 10 cm. Tõenäoliselt on tegemist 15.–16. saj püstitatud hoonete jäänustega. Hoovi põhjaosas leitud müüriratkate (jn 10) näib selle juurest leitud kerisekivide ja müüril olevate tahmajälgede põhjal kuuluvat hüokaustahjule. Osa kõnesolevatest tellishoonetest on märgitud Tartu linna plaanil aastast 1767, millele kantud hooned lammutati pärast 1775. a suurtulekahju.