

The Bishop's House and new additions to the study of the limestone quarry on Toompea Hill

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INTRODUCTION

During a routine watching brief in the Bishop's Garden (Est. *Piiskopi aed*), a small public park and viewing platform on top of Toompea Hill in Tallinn in the summer of 2018, the remains of a large building were uncovered less than 20 cm below the ground while excavating for drainage works and utility trenches. Further examination of the area led to the discovery of a late medieval building which is believed to be the long-lost Bishop's House. The information gathered during the first part of the park's reconstruction project and from Toom-Kooli Street in 2017 allowed for an updated look on the medieval limestone quarry on Toompea Hill (Reppo 2018a). In this article, the results of the 2018 season at Bishop's Garden and Toom-Kooli St. 23 (Fig. 1, 1–2) are presented. This will be followed by a revision of the quarry's size and location and a discussion on the development of Toompea.

THE BISHOP'S GARDEN

The Bishop's Garden is situated on the western side of the Toompea plateau which currently sits at around +48.00 m a.s.l. During the works carried out in 2017, it was concluded that apart from the post-medieval water cistern, the area of the park has very little archaeological features of interest. The second, southern half of the park, reconstructed in 2018 offered a much different result. Several walls were uncovered as soon as work started on-site just a mere 20 cm from the ground level. Although the required depth for the utility trench was only 70 cm at best, a test pit was dug at the request of the Tallinn Urban Planning Department. The aim was to ascertain the floor levels of the rooms associated with these walls which seemed to belong to one or two buildings. By chance, this test pit was situated directly on the location of a partially preserved 15th–16th century hewn stone portal between two medieval cellar rooms (Fig. 2). This allowed recording the floor levels of both inside and outside the room with the portal.

The northern side pillar of the portal was preserved at the height of 77 cm and made of three limestone blocks; the southern side was 80 cm high and made of four limestone blocks. The entrance was 74 cm wide and based on the cuts in the stone pillars, the door opened into the eastern room. The doorsill was made of two blocks believed to have been in secondary use based on the way the stone was hewn. The walls of the building were fairly substantial – the western wall of the building was 230 cm wide; the eastern wall was 172 cm wide with an 11.85 m long internal wall between the two of them on the southern side of the building (Fig. 3). The eastern part of this wall was vaulted. Additionally, the test pit allowed observing a rather striking feature of the building – the plastered walls of the cellar. The plaster was still

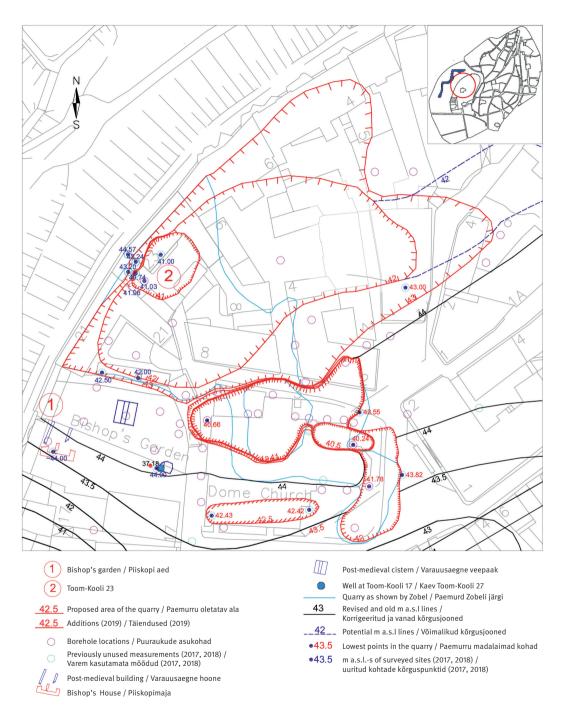


Fig. 1. Location of surveyed sites (1–2). Revised reconstruction of the quarry and m a.s.l. lines. Based on unpublished data from described excavations; Uuetalu et al. 1960; Üprus et al. 1953; Zobel 2008, 34, fig. 19; Zobel 2011, 50, fig. 18; Zobel & Mudist 2006; Reppo 2018b.

Jn 1. Järelevalvealused objektid (1–2). Paemurru ja paekivitaseme samakõrgusjoonte uus rekonstruktsioon. Allikateks kaevamisaruanded, Uuetalu et al. 1960; Üprus et al. 1953; Zobel 2008, 34, fig. 19; Zobel 2014, 48, fig. 18; Zobel & Mudist 2006; Reppo 2018b.

Drawing / Joonis: Monika Reppo



Fig. 2. 15th–16th century hewn portal remnants between two cellar rooms. Jn 2. 15.–16. sajandi raidkiviportaali jäänused kahe keldriruumi vahel. Photo / Foto: Monika Reppo

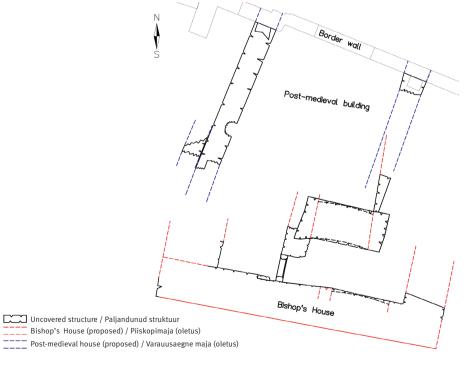


Fig. 3. Buildings discovered at the Bishop's Garden during the 2018 season. Jn 3. Piiskopi aiast 2018. aasta kaevamiste käigus avastatud hooned. Drawing / Joonis: Monika Reppo

adhering to the walls, most extensively on the internal side of the southern wall (Fig. 4) - it was unpainted and undecorated. Traces of plaster were visible on most of the walls that were uncovered. Although contact with fresh air did cause some weathering, on the first sight, however, it did not cause substantial damage to the plaster.



Fig. 4. The portal and two cellar rooms. Jn 4. Raidkiviportaal ja kaks keldriruumi. Photo / Foto: Monika Reppo

The cellar's floor was paved with limestone slabs which had been laid on a brownish silty clay layer which was similar to that recorded elsewhere on Toompea directly on the limestone plateau (e.g. Tarakanova & Saadre 1955, 19; Aus *et al.* 1983, 8) although the plateau level was not reached here. The floor was discovered 2.5 metres below the surface in very bad condition (+44.33 m a.s.l.), partially unpreserved and covered in a thick layer of debris (limestone blocks, household waste). The fill included several late 16th and 17th century glazed redware fragments, some window glass sherds and a piece of a slate tablet (AI 7957: 10–26; Fig. 5).



Fig. 5. Finds from Toom-Kooli St. 23 and the Bishop's Garden. 1 – grayware, 2 – window glass, 3, 5 – sherds of redware tripod, 4 – highly decorated redware, 6–7 – early modern grayware with iron slip decoration.

Jn 5. Toom-Kooli tn 23 ja Piiskopi aia leide. 1 – hall savinõud, 2 – aknaklaas, 3, 5 – kolmjalgnõu katke, 4 – ornamenteeritud glasuurkeraamika katke, 6–7 – angoobmaalinguga halli savinõu katked.

(AI 7746: 149; AI 7957: 19, 14; AI 7746: 150; AI 7957: 15, 23-24.)

Photo / Foto: Monika Reppo

The discovered cellar was preserved *in situ* and covered with sand to allow future excavations – as the cellar is one of the largest structures uncovered in Toompea that predates the 1684 fire, further research is intended to be undertaken in the future. Several questions remain after the watching brief such as the possibility of an additional room to the south of the building and the extent of the building on the northern side. The initial reconstruction of the potential building is presented in Figure 3. It should be noted that as this building was recorded as part of a watching brief, the parts of the building were uncovered and paved at different stages of the construction work carried out in the park which is also the reason behind the lack of an overall photograph of the structures.

Based on historical records, we know that the Bishop's House stood in this area of Toompea and the public park is also named after the location of the building. Unfortunately, the building is not shown on the town model of Erik Dahlberg made in 1682, a common source for the town layout before the Great Fire of 1684. The Bishop's House is first mentioned in 1420 (Kangropool 1971, 43) and it stood here at least until the 16th century, potentially having been destroyed in a fire¹ as could be evidenced by some charcoal in the debris. Other property surrounded the Bishop's House, which probably was a representative, imposing building. A plot belonging to the Uexkülls of Vigala stood in the eastern corner, on modern-day Toom-Kooli St. 17 during the medieval period, whereas an oblong stone building belonging to Nils Stackelberg stood at the cliff edge on the western side of Bishop's Garden as shown on a town plan from 1682 (Kangropool 1971, 43–46) and extended towards the castle in the south.

The remains of a large rectangular post-medieval building (surface ca. +46.45 m a.s.l., foundation level was not reached) were also discovered (Fig. 1, 3). The building of these walls had partially damaged different parts of the medieval building. The walls of this post-medieval building were up to 105 cm wide and they ran parallel from north-east to south-west. The width of the building was 7.5 metres, the full length remains unknown – the western wall was demolished at the southern end and both of the walls ran under the boundary wall between the two parts of the park. The western wall was visible as a 6.5 m long fragment whereas the eastern one was only 72 cm long having been probably demolished during different ground works in the park. As no walls or traces thereof were discovered on the northern side of the park in 2017, the northern wall of the building may have stood where the park boundary wall currently stands (Fig. 3). It is possible that this building is the one shown on the 1682 town plan as belonging to Nils Stackelberg, although the building shown on the plan lies a little bit more to the west.

In addition to the medieval cellar and the 17th-century house, traces of older boundary walls (foundation +45.95....46.00 m a.s.l.) between the street and plots were discovered along-side a $1.32~\text{m}^2$ area of $35\times75~\text{cm}$ limestone pavement tiles (+46.75 m a.s.l.) which are believed to have been a part of the park area in the first half of the 20th century. The park was used as a garden of the Cathedral from the 18th until the 19th century and in 1864, a gymnastics park was opened after which the garden has been a public area (ET 2004, 65). The 80–90 cm wide boundary wall between the street and the park was partially reconstructed as well. On the southern end, the old wall was well preserved underground (90 cm high), the northern end had been demolished by earlier trenchworks. A single Gouda clay pipe fragment (AI 7957: 38) was found under the original wall.

¹ Local clergyman and chronicler Balthasar Russow notes two large fires on Toompea during the 16th century. The fire of 1553 destroyed most of the buildings on Toompea. In the fire of 1581, half of the Cathedral was destroyed, together with more than 30 buildings and houses (Russow 1967, 96, 328). The author is grateful to Toomas Tamla for pointing this out.

In the final phase of the watching brief, the medieval well at Bishop's Garden was partially cleaned and covered for visitor safety. As part of the work, the internal measurements of the well were recorded $(261 \times 281 \times 155 \times 219 \text{ cm})$. The narrower walls – the south and the eastern wall – were man-made whereas the wider walls – the north and the western wall – were hewn out of natural limestone (+44.00 m a.s.l.). The partially removed fill was comprised of late 1990s, early 2000s waste such as phone cards, wallets and IDs. The depth of the well from the edge to the remaining debris layer was around 6.8 metres. In 1954–1955, the well was recorded to be 9.75 metres deep (Zobel 2001, 28; +37.18 m a.s.l.), so a debris layer of nearly 3 metres had formed in the last 60+ years.

TOOM-KOOLI ST. 23

During the 2018 season, an intermittent watching brief was carried out on the site of Toom-Kooli St. 23 (Fig. 1, 2) where the medieval limestone quarry cuts had been discovered in and around the small 13th-century cellar the year before. Prior to the excavation and survey in 2017, the post-medieval building did not have any other cellar rooms but during the construction work, a large area under the building was uncovered. This was extended in 2018 to include the northern side of the plot and the western side of the courtyard for a separate entrance. Both of these fairly large-scale earthworks revealed even more traces of the ear-



Fig. 6. View towards the edge of the plateau at Toom-Kooli St. 23. The edge of the quarry forms a natural 'wall'.
Jn 6. Vaade Toompea saarlava serva poole Toom-Kooli tn 23 hoovis. Paemurru serv moodustab loodusliku "seina".

Photo / Foto: Monika Reppo

ly medieval quarry, namely the quarry cuts. The information from the northern part of the building was already presented in 2018 (Reppo 2018a, 159–160), but the western extension is currently unpublished.

During earthwork for the new entrance on the western side, a 3-metre-deep trench was dug until the quarry floor level was reached (Fig. 6). It appears that on the western side of the plot, the quarry extended slightly deeper than on the northern and north-eastern side. Another drop in the quarry level is to the south as described in 2018 (Reppo 2018a, 160). The finds from the western fill were mostly organic – manure with animal bones and some limestone debris. The quarry floor level was covered with a thin, find-free silty layer. As noted above, this layer appears in most sites on Toompea where the plateau level is reached.

After a thorough search, one sherd of Paffrath-type globular pot was found from the thick dark brown manure layer above it which could be dated to the first half of 13th century (AI 7746: 130; after Russow 2006) alongside some iron objects which were corroded beyond recognition. Another presumable fragment of Paffrath ware (Fig. 5: 1) and

a piece of a 13th century highly decorated glazed redware (Fig. 5: 4) were found when digging for the entrance from the inside of the building at the same level. Both types of pottery have also been found during the 2017 season at this site.

The dark brown layer was even and potentially the courtyard level at some point during the use of the small cellar. This dark brown layer is covered by a brownish layer which is very thin on the western side of the courtyard but much thicker on the southern side of the courtyard. The finds include a large leg of a tripod pot with yellow-brownish glaze, a few sherds of glazed redware and some fragments of a red glazed stove tile (AI 7746: 131–136). One of the fragments was from a glazed slipware vessel with concentric circles (AI 7746: 136) which is usually dated slightly later than the rest of the material but as it was found in the top part of this layer, it is considered to indicate the period when this layer was covered by an uneven fill level, reminiscent of demolition and/or building debris from a limestone structure (Fig. 6, left profile).

The debris layer probably relates to a north-south (northwest-southeast) orientated building visible on the 1682 town model in the centre of Toom-Kooli St. 23. One fragment from a maiolica bowl was found from this debris (AI 7746: 137) which dates to the same period. A cut runs through this and the previous layers which indicates the earthwork during the construction of the modern-day building currently standing at Toom-Kooli St. 23. The fill of the cut was indistinguishable from the courtyard fill accumulated over the years which included a clay pipe fragment, a redware handle and a stove tile fragment (AI 7746: 138–140), a few black and green glazed stove tiles were also found from this layer (AI 7746: 141–142). At the time of writing this article, the building work is still ongoing at Toom-Kooli St. 23 although as of now, only the removal and replacement of the cobblestone pavement and the completion of the new entrance remains.

THE QUARRY - A SECOND REVISION

A revised reconstruction of the quarry was proposed in 2018 (Reppo 2018a, 158). Opinions and hypotheses about the quarry have previously been strongly based on the reconstructions of professor Rein Zobel (1928–2012), an Estonian architectural historian with minor contestation over the years (e.g. Künnapuu 1970, 86; Tamm 2004, 379). Zobel believed that the quarry was situated on the north-western corner of Kiriku St. 6 (centre of the quarry), Toom-Kooli St. 6 (centre and western edge), Toom-Kooli St. 21 and 23 (north-western edge), southern part of Kiriku St. 2 and 8 (northern edge) and central part of Kiriku Square (southern and eastern edge of the quarry; Zobel 2008, 34; Fig. 12). When working on the revision of the quarry's outline published in 2018, several discrepancies and errors were discovered in Zobel's reconstruction as a result of omitting some borehole data and raw data from archaeological studies carried out in the late 1990s. The listed information was revised when reconstructing the borders and depths of the quarry. Additional data was used from research carried out after Zobel's death. As a result, it was determined that the quarry extended further north towards the edge of the plateau and the proposed periods of use was shorter at least for Kiriku St. 6 and longer for Toom-Kooli St. 23. The quarry was also shallower or deeper in some parts, notably in the central part (Kiriku St. 6) which Zobel had proposed to be the deepest part of the

² The contour map is compiled using a method where the orientation of the labels is used to indicate the direction of the slope: sloping towards the quarry, the label is above the line to mark descent from the marked altitude (e.g. from +41.00 m to +40.00 m) and outside the quarry below the contour line to mark ascent (e.g. from +41.00 m to +42.00 m). The quarry slopes are also marked with hachures towards the depression area for added clarity.

quarry. Although it was deep, there were several higher blocks of limestone cliff remaining that Zobel did not take into account in his reconstruction.

The reconstruction presented in 2018 was however not intended to be final – it clearly suffered from availability of data as revision was only possible for areas where research had been undertaken and documented. The data used in this addition to the proposed quarry limits and characteristics largely takes into account the same information as before – architectural studies carried out at Toomkirik (Uuetalu *et al.* 1960; Üprus *et al.* 1953), the boreholes drilled in 1940 (Üprus *et al.* 1953, fig. 4; Tamm 2004, 381), 1953, 1954 and 1961³ and reconstructions-revisions proposed by Zobel (2008; 2014) and geomorphologist Sulev Künnapuu (1970; 1912–1995). However, some surveys not used in 2018 and some older studies on the development of Toompea have been added alongside the 2018 data from Toom-Kooli St. 23 and the Bishop's Garden. All of the surveys that have been used in the reconstruction in 2018 and 2019 have been listed in Table 1 for future reference. The data presented in Table 1 shows all the surveys and research relating to the area of the quarry shown in Figure 1 that the author has been able to find. The archaeological remarks, reported surveys and excavations from 1940–2018⁴ have been used. It should be noted that some lack reports or the data has been gathered from excavation notes.

Table 1. Sites and data used in the reconstruction. Those with no m a.s.l. results are referenced by company only.

Tabel 1. Rekonstruktsiooni koostamiseks kasutatud uurimisobjektid ja andmed. Ilma m ü.m.p. andmeteta objektidel on märgitud vaid teostaja.

Compiled by / koostanud: Monika Reppo

No / Nr	Site / Objekt	Date / Aeg	Quarry m a.s.l. / Paepind (m ü.m.p.)	Source / Allikas
1	Toompea	1940	+40.24 - +41.80 (Kiriku 6), +41.03 (TK23), +41.90 (Kohtu 4)	Naha 1940; Üprus <i>et al.</i> 1953, fig. 4; Tamm 2004, 381
2	Toom-Kooli 21	1952	5,0 m ↓	Tarakanova & Saadre 1955, 19, fig. 5
3	Toomkirik	1953	+41.80 (measurement from Naha 1940)	Üprus et al. 1953
4	Boreholes	1953	+40.92	Zobel & Mudist 2006
5	Boreholes	1954	+39.89 - +43.91	Zobel & Mudist 2006
6	Toomkirik	1955	+40.66 - +44.09 (not shown on map)	Nitski 1955
7	Toomkirik	1960	+43.83 - +44.43	Uuetalu <i>et al</i> . 1960
8	Toom-Kooli 17/19	1961	+37.18 - +45.00	Zobel & Mudist 2006
9	Kiriku St. 2/Kiriku põik 1	1966	NA	KRPI (now in the archives of MA)
10	Boreholes	1970	other	Künnapuu 1970
11	Piiskopi, Kiriku Sq	1981	+43.55 - +43.82	Aus & Tamm 1981, 13-19
12	Rahukohtu, Kiriku põik	1982	NA	KRPI (now in the archives of MA)
13	Kiriku St. 2–8	1996	NA	OÜ Agu EMS
14	Piiskopi, Kiriku St., Kiriku Sq	1996	+44.23 - +45.22 Kiriku Sq; +42.41 - +43.86 Kiriku St	Talvar 1998
15	Toom-Kooli St., Kiriku Sq	1996	+43.75	Talvar 1997a
16	Rahukohtu 5	1997	Ca. +44.00	Jaanits 1997
17	Rahukohtu 5	1997	Ca. +44.00	Talvar 1997b
18	Kiriku Sq 4	1998	Limestone level reached	OÜ Agu EMS, Kiudsoo & Mäll 1998

³ These three have been published as a CD-ROM catalogue in 2006 by Rein Zobel (Zobel & Mudist 2006).

⁴ The first recorded cultural layer thickness was reported in 1898, noted during the building of St Alexander Nevsky Cathedral to have been 10 to 21 feet thick (Tizik 1900, 24).

No /	Site /	Date /	Quarry m a.s.l. /	Source /
Nr	Objekt	Aeg	Paepind (m ü.m.p.)	Allikas
19	Toom-Kooli 17	2000	NA	OÜ Tael
20	Toomkirik	2000	NA	OÜ Tael
21	Pikk jalg 16 / Piiskopi 2 / Kohtu 2	2001	NA	OÜ Tael
22	Kiriku Sq	2001	Natural gravel level reached	Talvar 2001
23	Rahukohtu 1	2001	+42.95 - +43.00	Smirnov 2002
24	Rahukohtu 4	2000-2001	No report, quarry cut visible	OÜ Tael; Perens 2003, 28
25	Rahukohtu 5	2011	NA	OÜ Gradiens
26	Toom-Kooli 21	2012	No report	OÜ Muinasprojekt
27	Kiriku 2, 4	2013	NA	OÜ Agu EMS
28	Kiriku 2, 4	2015	NA	OÜ Muinasprojekt
29	Toom-Kooli 21/2	2015	+42.00 - +42.50	Reppo & Toos 2017
30	Kiriku 2, 4	2015-2016	NA	OÜ Agu EMS
31	Rahukohtu 1/3	2016	NA	OÜ Agu EMS
32	Kiriku Sq 1	2016	+44.04	Bernotas 2016
33	Rahukohtu 1	2017	NA	OÜ Agu EMS
34	Toom-Kooli 19	2017	NA	OÜ Agu EMS
35	Toom-Kooli 19	2018	Well: +44.00, base +37.18; doorway +44.17	Reppo 2018b
36	Toom-Kooli 23	2017-2019	+40.50(?) - +44.00	OÜ Agu EMS

The systematic analysis of survey reports has allowed to further clarify some aspects of the quarry. The updated reconstruction is presented in Figure 1. Most importantly, with the discovery of the Bishop's House, the western extent of the quarry seems even more concrete. It is likely that the Bishop's House was built taking into account the quarry and the location of the well. Hence, the author does not believe that the quarry would have extended any further west, as is also evidenced by the floor level of the cellars and the internal construction of the medieval well. When reconstructing the limits of the quarry in 2018, the internal construction of the well had not been taken into account as Rein Zobel's reconstruction was used as a basis. His reconstruction only marks the total depth of the well. As proposed in 2018, the southern side of the quarry on the plot of Toom-Kooli St. 23 is believed to have been in use for longer than the northern part. It was markedly deeper⁵ than the northern part of Toom-Kooli St. 23, filled with silty clay but included some ceramics from the 14th century – Siegburg stoneware (SIEG3a, 1300-1425, AI 7746: 119-120). The fill on the western side of the quarry was earlier, from the 13th century and a use-layer (a yard?) seems to have formed here on the quarry floor earlier than in the southern side. Other changes to the reconstruction are based on quarry floor levels and are marked on Figure 1 accordingly.

THE DEVELOPMENT OF TOOMPEA AND THE QUARRY

The limestone quarry on Toompea plateau⁶ is believed to have been in use already prior to the arrival of the Danes 800 years ago but the founding of the quarry proper has been linked to

⁵ At least 50 cm - the quarry floor was not reached here.

⁶ Toompea hill is mostly formed of Ordovician limestone which rests on Cambrian sandstone at the foot of the hill (ET, 252). The limestone which was quarried here is known as Lasnamäe limestone. It is deposited in 56 layers in this area but on Toompea, the top 30 are missing (Perens 2003, 25), potentially signifying extensive quarrying. On the outside, the natural cliff face is mostly covered with limestone cladding as the cumbersome sediment had started to significantly deteriorate by the end of the 19th century, so it was supported on the outside from 1870 until 1903 (Zobel 1994).

the construction of the old castle or *castrum minus*, believed to have been completed by 1229 at the south-western corner of the 7 ha plateau. In reality, emphasizing the role of the Danes in the quarrying of limestone is just a hypothesis. We have no information on how much of the area was quarried beforehand and we have been unable to uncover traces of earlier buildings on Toompea Hill, mostly due to limitations set by the extremely thick cultural layer which means construction work rarely reaches the limestone level. By and large, hypotheses about the development of the town do not focus on the first centuries of known inhabitation of Toompea, either leaving it aside completely due to 'a lack of sources' (e.g. Tiik 1957, 28) or focusing on key sites only – the *castrum minus*⁷ and *castrum maius* and the potential location of the Estonian hill fort, with an honourable mention of St Mary's Cathedral and the Bishop's House and the roads leading to the church (e.g. Zobel 2001; 2008).

Sulev Mäeväli has hypothesised about the development of the street layout in a report where he also noted the lack of relevant research into the early development of Toompea (Mäeväli 1979, 3, 19). Some remarks on the development of Toompea have been made by Jaan Tamm in terms of uncertainty of the location of the Estonian stronghold and the first Danish fortress (Tamm 2001, 180). Jaan Tamm has also noted the peculiarity of the presence of all of the most important institutions of the community in one area at Toom-Kooli Street – the Bishop's House, episcopal estates, the first Cathedral School, the Cathedral, the first Dominican monastery (Tamm 1993, 209) which we know to also be in the vicinity of the deepest parts of the earlier quarry. The post-medieval topography is better studied (e.g. Maiste & Vohli 1996) as there is more data available.

What is clear, is that the possibility to quarry limestone on the plateau certainly allowed for any construction to run less laboriously. It was also a notable feature that definitely influenced the initial development of Toompea. As a hypothesis, the quarry played a role in the selection of the plot for the vice regent's residence *resp.* fortress built in the northern part of the plateau during Queen Margaret's reign (1259–1282; Tamm 2001, 181). With the potential location of the old Estonian hill fort south-east of it on a slightly elevated part of the plateau (Zobel 2001, 41, fig. 23), the quarry firstly could have provided a kind of artificial protection for the supposed fort as it seems to have functioned later for *castrum maius* based on Toom-Kooli St. 23. When excavating for the new cellar and entrance, the fill was removed until the edge of the plateau, where a natural 'wall' (Fig. 6, also seen in Reppo 2018a, 160, fig. 6), ridge had been formed by quarrying. This also brings us to the question of the medieval upper town. On the town model of 1682, a ridge runs on the side of the plateau, marking the town wall.

It is notable that apart from the existing cellar, no medieval structures, remnants thereof or any demolition debris that could be linked either to the medieval or early modern period or to a large structure such as a town wall were found at the far end of the Toom-Kooli St. 23 plot, at the northern edge of Toompea plateau. Part of the wall is believed to have been incorporated in today's main building and courtyard wall. The discovery of the high limestone cut means that at least at Toom-Kooli St. 23, the medieval upper wall did not have a man-made foundation. Rather, the way the limestone had been cut during quarrying formed a barrier up to 2 metres high between the upper town and the lower town. This natural 'wall' was reinforced by a man-made wall on top and could have also carried wooden constructions although no traces were uncovered.

⁷ Architect Ernst Kühnert believed that the medieval cut and fill he saw when building the parliamentary building was related to the medieval quarry situated on-site (Kühnert 1927, 100).

CONCLUSION

In 2018, the surveys at Toom-Kooli St. 23 and the Bishop's Garden were continued. A late medieval building was discovered in the Bishop's Garden which is believed to have been the Bishop's House of Tallinn. The medieval well was examined from the inside and the characteristics of its build were recorded. The survey at Toom-Kooli St. 23 during earthworks in the courtyard further revealed the extent of the limestone quarry and gave evidence on the use of the area in the 13th century and later. The information from these two sites alongside additional data from previously unused surveys and studies allowed for a further clarification of the size and features of the early medieval quarry and for some adjustment of the quarry outline proposed in 2018 by the author. The study of the quarry is also seen as a great example of the importance of carrying out surveys even on simple, minor earthworks as the accumulated data from 1940 until today has enabled to piece together a rather substantial body of knowledge about the quarry and the period of its use in Toompea. It is thus clear that future surveys and studies will only aid in clarifying the situation even further.

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PIISKOPIMAJA JA UUSI LISANDUSI TOOMPEA KESKAEGSE PAEKIVIKARJÄÄRI UURIMISSE Monika Reppo

2018. aastal jätkusid Piiskopi aias ja Toom-Kooli tänav 23 (jn 1) aasta varem alanud uuringud. Välitöödel kogutud info võimaldas taas täpsustada Toompea keskaegse paemurru piire ning arutleda selle kasutusperioodide üle.

Kuigi Piiskopi aia trassitööd kulgesid valdavalt 50-70 cm sügavusel, otsustati praeguse maapinnatasandi lähedalt leitud müüride tõttu rajada ala lääneossa 2,5 m sügavune šurf, mis õnneliku juhuse läbi sattus täpselt kahte keldriruumi ühendava 15.-16. sajandi raidkiviportaali kohale (jn 2). Portaalist oli säilinud vaid külgmiste piitade alumised osad - põhjaküliel 77 cm kõrgune, mis koosnes kolmest kiviplokist: lõunaküljel 80 cm kõrgune, mis moodustus neljast raidkiviplokist. Ka ukselävi koosnes kahest eraldiseisvast plokist, mis annab alust uskuda, et need olid taaskasutatud. Piitade järgi avanes uks idapoolsesse ruumi. Tegemist on küllalt massiivse hoonega, mille läänesein oli 230 cm ning idasein 172 cm paksune. Neid ühendas 11,85 m pikk sein (jn 3). Algselt võlvitud keldri põrandat katsid väga kulunud paeplaadid (+44,33 m ü.m.p.), mis olid laotud pruunikale savisele pinnasele. Kuigi paekivi siin otseselt ei paljandunud, on see kiht väga sarnane paekiviplatool paiknevale kihile, mida on fikseeritud erinevatel Toompea kaevetöödel. Ka kõrgusandmete põhjal võiks platoo siin jääda maksimaalselt 20-30 cm põrandapinnast sügavamale.

Valgete, kaunistusteta krohvitud seintega (jn 4) keldriruumide jäänused säilitati in situ edasisteks uuringuteks. Keldrit täitis tihenemata rusu, mis sisaldas 16. saj lõpu ja 17. saj glasuurkeraamikat, graapenikatkeid, aknaklaasi ja ühte kiltkivitahvli tükki (jn 5). Usutavasti on need keskaegse hoone jäänused jäljed Tallinna piiskopi residentsist ehk Piiskopimajast, mille täpne asukoht oli varem teadmata. Lisaks keldrile leiti ühe uusaegse pikliku hoone jäänused Piiskopi aia lääneosas (jn 3), mille rajamisel oli Piiskopimaja osaliselt lõhutud. Lisaks võimaldas Piiskopi aias asuva keskaegse kaevu osaline puhastamine ja sisevaatlus fikseerida paemurru ulatust, kuna varasemalt on kasutatud vaid kaevu põhja kõrgust (+37,18 m ü.m.p.). Selgus, et kaev on seest nelinurkne $(261 \times 281 \times 155 \times 219 \text{ cm})$, kusjuures kitsamad seinad jäävad lõuna- ja idakülge ja on ehitatud käsitsi, samas kui põhja- ja läänekülg on looduslikust paekaljust (+44.00 m ü.m.p.). Kaevu sügavus täiteni oli uuringute ajal 6,8 m, see tähendab, et viimase 65 aastaga on tekkinud pea 3-meetrine täitekiht.

Toom-Kooli tn 23 kinnistul (jn 1) sai täpsustada keskaegse paekarjääri murrujooni ja omaaegset sügavust, seekord õuealal ja hoone lääneservas, kus varem pole uuringuid toimunud. Siia rajati uus sissepääs keldrikorrusele, mille põhi jäi hoovipinnast 3 m sügavusele. Taas tuvastati paemurdmise jäljed krundi põhjaservas (jn 6). Selgus, et krundi lääneservas ulatus karjäär sügavamale kui põhja- ja kirdeosas. Karjääri pinda kattis õhuke pruunikas savine leiuvaba kiht, sarnane ülalpool kirjeldatule. Sellele ladestunud tihedast tumepruunist sõnnikukihist, mis on ilmselt keskaegse keldri kasutusajal olnud hoovipinnaks, leiti üks 13. sajandi Paffrathi tüüpi keraamika kild. Sarnane kild saadi hoone seest sissepääsu ehitamisel koos 13. sajandi ornamenteeritud glasuurkeraamikaga (jn 5). Sellist keraamikat leiti ka eelneval aastal.

Sõnnikukihti kattis pruunikas varieeruva paksusega ladestus, mis sisaldas punast glasuurkeraamikat ja glasuuritud kahlikatkeid. Üks leidudest pärines punasest maalitud kontsentriliste ringidega glasuurkeraamilisest nõust, mis üldiselt on dateeritud veidi hilisemaks, kuid kuna see saadi leiukihi ülaosast, usub autor, et see viitab perioodile, mil pruunikas kiht kattus ebatasase täitega, ilmselt paekivistruktuuri lammutus- ja/või ehitusrusuga (jn 6, vasakul profiilis). Arvatavasti on see seotud 1683. aasta linnaplaanil jälgitava põhja-lõunasuunalise hoone ehitamisega. Sellest ja eelnevatest kihtidest on läbi kaevatud Toom-Kooli tn 23 hoone sissekaeve, mis oli hoovi aastate jooksul kuhjunud täitest eristamatu, sisaldades nii valgeid savipiipe, punast glasuur- kui ka ehituskeraamikat. Artikli kirjutamise ajal polnud uue sissepääsu ehitamine ja hoovisillutise vahetamine krundil veel lõppenud.

Kahelt kirjeldatud objektilt kogutud info kahasse varasemalt kasutamata paepinna kõrgusandmetega võimaldas teha mõned muudatused ja lisandused autori poolt 2018. aastal esitatud paemurru rekonstruktsioonis. Võttes arvesse arhitektuuriajaloolase Rein Zobeli (jn 1 sinisega) ja geomorfoloog Sulev Künnapuu peamiselt geoloogiliste puuraukude tulemustele toetuvad rekonstruktsioonid ning seniste arheoloogiliste uuringute resultaadid (1940–2018; vt tabel 1), oli võimalik täpsustada karjääri piire kogu ulatuses, kuid ka karjääri sügavust, eriti just Kiriku plats 6 juures, kus tegelikult ühtset karjääriauku ei paiknenud, kuigi varasemalt on see siia märgitud.

Piiskopi aia ja Toom-Kooli tn 23 uute andmete põhjal on võimalik täpsustada ja kinnitada paekarjääri ulatust lääne suunas. Lisakinnituse sai lääneserva paiknemine Piiskopi aia osas, kus oli võimalik kaevu puhastamise juures jälgida looduslikku paepinda. Loomulikult on Piiskopimaja ehitamisel

võetud arvesse paekarjääri ning seetõttu pole jätkuvalt usutav, et karjäär pikemalt läände ulatus. Nagu juba varem kirjeldatud, on Toom-Kooli tn 23 krundil paekarjääri sügavam ja kauem kasutuses olnud osa hoone lõunaküljel – selle täide sisaldas 14. sajandi Siegburgi kivikeraamikat. Hoone lääneküljel näib täide olevat varasem, jäädes 13. sajandisse ning kasutuskiht (õu?) on siin tekkinud varem kui lõunaküljel. Ülejäänud muudatused toetuvad uutele paepinna kõrgustele ning on märgitud joonisel 1.

Hetkel ei ole selge, kas paekivi murdmisega võidi algust teha juba enne 1219. aastat, sel juhul muinaslinnuse tarbeks, mille kohta täpsemad andmed seni puuduvad, ja millist osa karjääri rajamisel ning edasisel laiendamisel etendasid siia saabunud taani ja saksa uusasukad. Paeplatoo kõrguseid on uuringutel paksu kultuurkihi tõttu saadud mõõta harva. Tallinna varase asustusloo uurimisel on Toompea puhul märgitud vaid uuringute keerukust andmete puudumise tõttu või keskendutud suurele ja väikesele linnusele, toomkirikule ja Piiskopi aiale. Mõningaid üksikuid tänavavõrgu arenguhüpoteese on esitatud, samuti on märgitud Toompea kõige olulisemate instantside koondumist Toom-Kooli tänava ühte nurka

(Piiskopimaja ja valdused, Toomkool, esimene dominiiklaste klooster ja toomkirik), mille lähistel paikneb ka karjääri sügavaim osa.

Usutavasti mängis karjäär rolli nii asevalitseja hallatud linnuse kui ka teiste varaste hoonete ehitamisel. Võimalik, et karjäär toimis eestlaste linnuse perioodil ka kaitsva piirdena nagu seda Toom-Kooli tn 23 on kasutatud (jn 6). Toom-Kooli tn 23 ei leitud platoo servast peale keldri mitte ühtegi keskaegset ehitist või selle jäänust, mida võiks linnamüüriga seostada. Linnamüüri vundamendiks oligi kahemeetrine kaljusein, mis karjääri piiras. Võimalik, et sellele toetus lisaks laotud müürile veel ka puitkonstruktsioone, kuid nende jälgi ei leitud.

2018. aastal jätkunud uuringud Piiskopi aias ja Toom-Kooli tn 23 on hea näide sellest, kui oluline on ka väikesemahulistel kaevetöödel arheoloogilise järelevalve rakendamine, sest 1940. aastast tänaseni kogunenud informatsioon on võimaldanud täpsustada Toompea keskaegse paemurru ulatust ja teha teatavaid järeldusi ka Toompea tolleaegse asustuse kohta. Loodetavasti aitavad edasised uuringud seniseid uurimistulemusi veelgi täpsustada.