



FROM A SUBURBAN PASTURE TO THE URBAN CEMETERY – RECENT FIELDWORK IN NORTH-WESTERN CORNER OF MEDIEVAL HAAPSALU

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INTRODUCTION

Haapsalu, a small coastal town established in the mid-13th century on the shore of Haapsalu Bay is one of the many Estonian urban settlements with an extensive heritage protection zone around the historical core.¹ As elsewhere, every single earthwork within the protected area needs to be in concert with heritage protection legislation, which in most cases requires either archaeological supervision or salvage excavation, financed by the developer of the site. Normally the areas designated for archaeological investigation include only few recent disturbances of past deposits, but sometimes the claim for archaeological fieldwork can rightfully be questionable. The present paper will summarise one such example, where at first glance we are trying to study areas without any hope for unaffected material remains of medieval and later human activities. In this case the site under the archaeological surveillance – Ehte and Mängu streets – is located in a north-western corner of a medieval town (Fig. 1) where the late 19th – 20th century sewerage system and water pipes were renewed. Both streets, where archaeological surveillance was prescribed, have been dug up repeatedly, leaving only moderate hopes that something ‘archaeologically interesting’ might be found at all. Thus one of the research questions in July 2012 was bound not only with the local settlement history, but the aim was to test whether ‘archaeology without archaeology’, i.e. studying the factually entirely disturbed deposits, might bring some useful archaeological information at all.

HISTORICAL BACKGROUND

The current state of the research on the medieval urban planning of episcopal town of Haapsalu (Germ. *Hapsal*) argues that the purposefully planned settlement – there are no signs of prehistoric human impact on the spot – in front of the bishop’s castle was established around 1250s (Pärn 1997; 2006; Fig. 1, 1–2). According to this hypothesis, the area under archaeological survey in July 2012 was during the early days of the town building at the outskirts, but was partially included to the walled town possibly in late 14th – 15th century (see Pärn 1997, fig. 2). As the traffic from the castle and town

¹ Detailed information (in Estonian) on the protection zone is available from the national registry of cultural monuments, see <http://register.muinas.ee/?menuID=monument&action=viiew&id=27013> (01.06.2013).

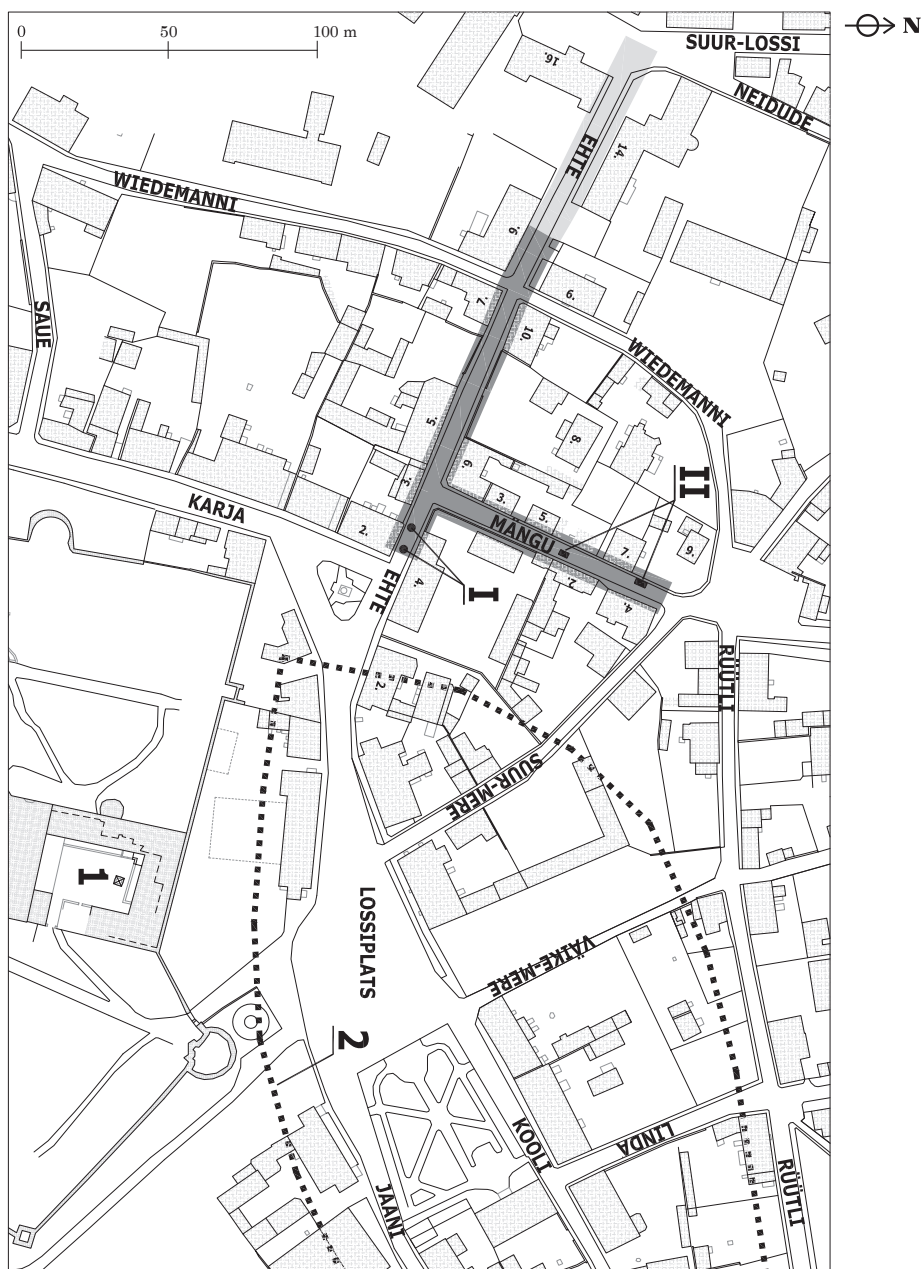


Fig. 1. Historical centre of Haapsalu. 1 – castle, 2 – core area of the mid-13th century town; I – area of burials, II – found structures. The volume of hatching corresponds to the intensity of the medieval layers at the investigated area.

Jn 1. Haapsalu ajalooline keskus. 1 – linnus, 2 – 13. saj keskpaigas asutatud linna tuumik; I – matused, II – avastatud ehitised. Viirutuse tugevus kajastab keskaegsete ladestuste intensiivsust uuritud alal.

Drawing / Joonis: Indrek Vainu

to the harbour/landing site, the rural hinterland and other urban centres most likely concentrated to the north-eastern and south-western sides of the town, it is possible that this quarter of Haapsalu had perhaps less importance in the medieval period. However, the area gained significance in the Early Modern Period as the harbour area shifted from the north-eastern side of the town towards north-west, and neighbouring Suur-Mere street became the main axis between the harbour and the market place (for archaeological surveillance done at Suur-Mere street, see Russow 2004). As the plots of neither Ehte nor Mängu street have so far been archaeologically closely studied (for the research situation see Russow 2008, fig. 2) it is difficult to assess whether the previous supposition is correct.

Since the written evidence concerning the medieval and early modern Haapsalu is scarce we cannot rely on the secondary sources either. The earliest documents mentioning plots along the Ehte street are from the late 16th century, one from 1585 on the matters concerning Ehte Street 4 and another from 1593 describing the property on the corner of Ehte and Karja streets (Jaago 1999, app. 3, nos 102 and 11). Another end of the same street appears in the written sources in the beginning of the 18th century. Even less is known about Mängu street, being first recorded around the mid-18th century.

Closer inspection of the first visual sources depicting early modern Haapsalu might help us slightly further, although some of the data seems to be if not controversial, then dubious. The oldest known general survey of the street network is from 1683, a map compiled by the Swedish fortification officer Samuel Waxelberg. Here Ehte street follows its present-day course (Fig. 2), but what seems to be missing is Mängu street. The comparison with the next surviving map, a town plan produced a century later by land surveyor Samuel Severin Dobermann shows that in 1783 the street appears to be on its present day location (Fig. 3). However, close observation of the Waxelberg's map reveals that the 'missing' street might be located somewhat to the east as a notional extension to the present-day Karja street. It is also important to highlight that on the Dobermann's map another street – former *Dunkel-Gasse*, vanished from the streetscape during the 19th century – is right on the very same spot. The initial conclusion of this comparison is that the Waxelberg's plan is erroneous and he has dislocated Mängu street. Yet this is perhaps a too simplistic approach as otherwise his map is correct and even enables quite precise placements against the present day street network. All in all, this helps us to estimate the street planning in early modern Haapsalu, but does not reveal much about the situation of these particular streets during the medieval period. In this respect only the archaeological study of surviving material evidence helps us further.

RESEARCH OBJECTIVES

Although the perspectives for a fruitful surveillance in July 2012 seemed to be rather pessimistic, a number of research objectives were stated before the fieldwork. A few interesting questions have been raised over the last two decades of the urban archaeological research in Haapsalu concerning this corner of the town. One of the topics debated and anticipated is the direction and the extent of the medieval town wall, which has now been located in various places in the northern side of the town, including two

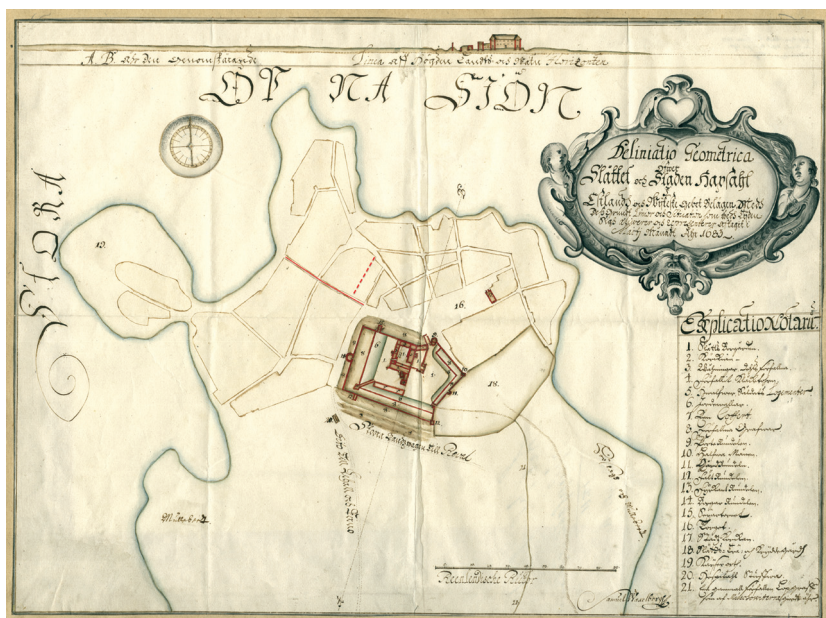


Fig. 2. The oldest visual source on the street network of Haapsalu – a plan by Swedish fortification officer Samuel Waxelberg, 1683. Straight line – Ehte street, hatched line – possible location of Mängu street.
 Jn 2. Vanim kujutus Haapsalu tänavavõrgust – Rootsi fortifikatsiooniohvitseri Samuel Waxelbergi joonis aastast 1683. Sirgjoon – Ehte tänav, katkendjoon – Mängu tänava oletatav asupaik.
 (RKA 0406:28:015:001.)

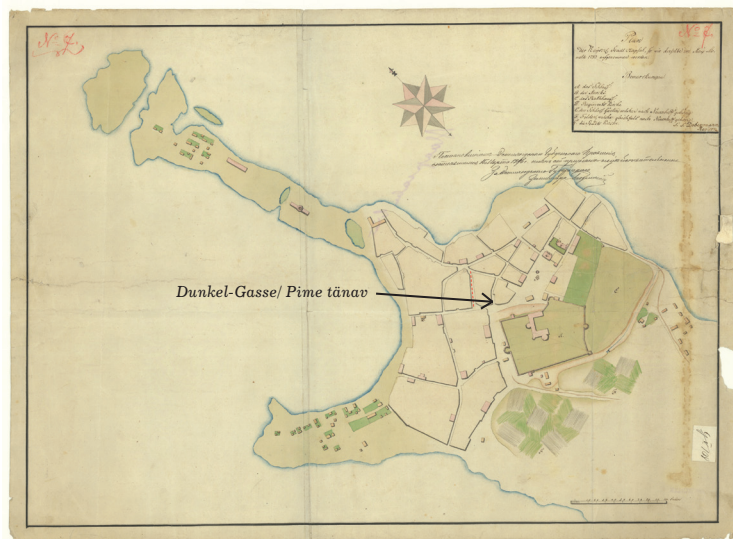


Fig. 3. Situation a hundred years later – a map by land surveyor Samuel Severin Dobermann, 1783. The location of Mängu street has been highlighted.
 Jn 3. Olukord sada aastat hiljem maamõõtja Samuel Severin Dobermanni 1783. a kaardi järgi. Mängu tänava asukoht välja toodud.
 (EAA 854-4-108.)

medieval gates (Russov 2008, 18). The wall follows the present-day Rütli and Wiedemanni streets and there are reasonable expectations that it crosses also Ehte street, possibly with another gateway (Pärn 1997, fig. 2: 2). To locate the wall and the gate was one of the hopes preceding the fieldwork. Another aim was to gather data on the depth and the character of the cultural layers, being so far either not contextualized or found at all. Two short-term surveillances in the 2000s around the area in focus have been rather modest in terms of collecting the information on the medieval and later deposits. Additionally, explaining the age, nature and status (a possible medieval back street or pathway?) of Mängu street were highlighted as important research questions.

RESULTS OF THE FIELDWORK

Ehte street

As common practice in archaeological surveillances, the fieldwork followed the standard procedure of the installation of pipelines, which in this case began from the north-westernmost point of Ehte street and in the next three weeks moved towards Karja street (Fig. 1). Simultaneously only up to 12–15 metres of the trench was opened, making the swift comparison of the layers over a longer distance complicated. For the most part of the surveillance this was not a real obstruction as previous earthwork² had destroyed the former deposits at both sides of the newly dug trench. Nevertheless, the archaeological documentation of the building site was rightfully justified and some of the research objectives were successfully achieved.

Following the possible historical division of the medieval town – *intra et extra muros* –, the investigation of the Ehte street can be divided into two parts, the first being from the north-westernmost point until the crossing of Wiedemanni street, i.e. ‘suburb’ and the second part running further on to Karja street, inside the medieval town. As it turned out, the layers of the medieval suburban area were rather thin, the total depth of the deposits at the north-westernmost end of the trench was 70 cm (natural ground at 1.05 m.a.s.l.), growing up to 130 cm (natural ground at 2.50 m.a.s.l.) at the crossing of Ehte and Wiedemanni streets. In addition to differences in depth, also the change of the character of the deposits should be highlighted as well. At the north-westernmost part of the street until the approximately north-eastern corner of the house at Suur-Lossi Street 16, the bottom layer on the natural ground was 20–40 cm of dark soil, in the lower part as a natural humus layer and the upper part mixed with meagre traces of supposed human activity (pieces of charcoal, bones of cattle, and few burnt stones, but no artefacts were found). On that layer several strata of gravel were placed, the lowermost of it included a few fragments of possible 17th – 18th century architectural ceramics (bricks and roof tiles). No clear evidence of former building structures was found. Thus the first 50 metres of the inspected trench might be interpreted as an area of low settlement density (the relative closeness of the shore should also be remembered) prior to the Early Modern period street coating.

Another section of the intact deposits (total thickness 1 m) was documented near the south-eastern corner of the opposite house at Ehte Street 14, some 10–15 metres further from the location described above. Here the structure of the possible medieval layers was already somewhat varied, consisting in addition to the lowermost humus layer (7 cm) of notably sooty soil (10 cm) with lots of animal bones on top of it, also of

² Two power cables were situated left of the new trench, a water pipe was to the right of it, and the trench itself followed a former sewerage line, partly established already in early 20th century. Next to that, a couple of phone and power cables crossed the street in several places. Thus only in very few places the untouched medieval and Early Modern deposits had survived intact, the longest section being about 3 metres. 221

a levelled stratum (another 10 cm) of heavily burnt cobble stones. The latter can be regarded as a usual deposit of used heating stones of ovens, quite commonly utilised later for levelling streets or courtyards in Haapsalu. As also the next few earth layers were mixed either with loose gravel, burnt stones or occasional lumps of limestone in it (only the topmost 35 cm were homogenous gravel pavements), the overall impression is that during the medieval period and until the 17th century the area was open space in constant human use and maintained at some level. But since the general content/density of the deposits does not match with the medieval streets inside the town it is difficult to identify these layers as ordinary street levels. The closer dating of the layers must be left here open as no artefacts were found. However, as the structure and composition of the earliest deposits described some 25 metres further to the east (just before the street crossing) resembled in general the previously mentioned layers, we can make some assumptions about the relative age of human impact to the region under discussion. Here, from the earlier mentioned sooty layer with animal bones a handful of the mid- to third quarter of 13th-century sherds were found (Fig. 4, 1),

possibly confirming the surprisingly early settlement activity some 150–200 metres from the initial urban core of Haapsalu.

If one of the research objectives (the depth, character and relative age of deposits) turned out to be quite successful, then the other task – locating the possible medieval town wall and gate – was this time more or less an unlucky attempt. The earlier research alongside Rütli and Wiedemanni streets (see Russow 2004, figs 1–2) showed that after the dismantling of the town wall the lower part of it was integrated into the post-medieval housing. The same was also expected during the present surveillance, in addition to high expectations for finding the medieval gate construction on the street crossing. Unfortunately, even if there have been medieval building constructions on the presumed place, all clearly visible and easily interpreted traces of it are by now completely destroyed with extensive concentration of pipelines and cables (Fig. 5). Nevertheless, as an indirect evidence of the major defence structure the ca. 5 cm thick layer of mortar on both sides of the Ehte street was found. The same kind of deposit was also noticed in several occasions during the previous research of



Fig. 4. Selection of finds from Ehte street. 1 – 13th c pottery, 2 – key, 3 – Cologne stoneware, 4 – residue of bonework.

Jn 4. Ehte tn leide. 1 – 13. saj keraamika, 2 – võti, 3 – Kölni kivitööstus, 4 – luutööjääk.

(HM 9176: 2, 6, 9, 8.)

Photo / Foto: Erki Russow

the town wall in the early 2000s. Hence future fieldwork alongside the western side of the Wiedemanni street would be required.

Next the surveillance concentrated on the section of the trench between Wiedemanni and Mängu streets, to the area *inside* the medieval town. Here only the first third of the cut revealed intact layers, whereas the latter two thirds showed that most of the past occupation layers were already destroyed. The sight in front of Ehte Street 10 indicated that the depth and intensity of the medieval layers were slightly different from the previous view. Here the overall thickness of the medieval and post-medieval deposits was *ca.* 80 cm, the bottom half (*ca.* 2.60–3.05 m.a.s.l.) of these were darker earth layers separated with 1–2 strata of occasional stones, perhaps marking the possible intermediate past ground levels. The upper half (*ca.* 3.06–3.40 m.a.s.l.) above these layers was significantly paler and included also a few levels of loose stones. A clear shift occurred after that, as the upper section of the profile consisted of dense layers of gravel, marking the Early Modern (perhaps post-1700) street levels.

Likewise a recognisable growth of the artefact abundance must be highlighted, in comparison to the previously discussed area: the short section of the northern side of the trench produced a nice variety of finds, in addition to the medieval and post-medieval pottery (including a rather rare find of a mid-16th century Cologne stoneware tankard in West-Estonia, comp. Russow 2006, app. 2) also a few metal finds as well as some evidence on local crafts were found (Fig. 4, 2–4).

Even though the collected information is too modest for firm generalisation, some conclusions may be drawn. The comparison of the character of the medieval layers on both sides of the Ehte street demonstrate some resemblances. It is clear that the region was an open area with signs of early (i.e. second half of 13th century) human settlement activities, but whether there was a delineated pathway developed



Fig. 5. The crossing of Ehte and Wiedemanni streets: the possible site of the former medieval town gate seems to be completely destroyed.

Jn 5. Ehte ja Wiedemanni tänavate ristmik – oletatav keskaegne väravakoht on ilmselt varasemate kaevetöödega hävinud.

Photo / Foto: Erki Russow



Fig. 6. Remains of the burials (skeleton D) found at Ehte street.

Jn 6. Ehte tänavalt avastatud matuste (luustik D) jäänused.

Photo / Foto: Erki Russow

Ehte street. When the earlier Soviet period sewerage trench was opened, surprisingly from the southern side of the trench a couple of only partially preserved skeletons were discovered (Fig. 6). A few recognisable burials were situated with the heads towards west at the absolute height 4.10 m.a.s.l for skeleton D³ and 4.15 m.a.s.l for A and B (of what only the lower half of the skeletons were preserved *in situ*). Closer inspection of the remains showed that all human remains were buried in wooden coffins, as demonstrated by a large number of nails as well as the few fragments of poorly preserved boards. In the case of the skeletons A and B the remains were buried close to each other, without any visible distance between the coffins, suggesting a contemporaneous funeral.

The find of several burials at Ehte street raises several questions. First of all, as the layers above the burials were all mixed with later building and other activities, it is difficult to estimate the date of the burials. The few scattered finds of pottery found approximately above the former coffins were from *ca.* the 16th – 17th century. Unfortunately the soil layer below the human remains was by and large the same as at the burial level, containing only one coffin (?) nail. The extrapolation of the secondary sources – mainly information on Ehte street on the Samuel Waxelbergs map of 1683 – give us the *terminus ante quem* for the burials as perhaps

already in the first phase of the urban settlement is difficult to conclude. The occasional stone layers might indicate that during the later stage (as speculation: 14th century?) the studied area was perhaps a connecting road to the shoreline. The relatively high number of 13th century finds (13 fragments of different artefacts, uncommon for such a distant part of the town) deserve also attention. It is tempting to interpret these and the frequent occurrence of animal bones as evidence of an early suburban settlement, but at the present moment this is too far reaching. On the other hand, the idea that the present region was a constantly levelled dumping ground for the first few generations of settlers is not plausible. Only further supplementary archaeological attention to the north-western part of the town might assist to solve this research problem.

The last segment of archaeological surveillance on Ehte street comprised 20 metres between Mängu and Karja streets. Here the revealed situation was entirely unexpected and did not correspond with the results from other parts of

³ Remains of Skeleton C were found on top of Skeleton D.

not later than the 16th century. Another question is whether the human remains found were part of a former medieval (?) cemetery or part of some temporary funerary place created in dire times. Here the analysis of the existing primary and secondary data refers to some larger cemetery. The arguments for that are burials in coffins, the earlier similar finds⁴ from the same spot as well the historical ownership of the neighbouring plots. Namely, the properties on both side of the street have an ecclesiastical background: the plot at Ehte Street 4 belonged in 1585 to the castle church and the opposite side of the street was at the turn of the 16th – 17th century a ‘church estate’ (Jaago 1999, no 102 and 11). As presently the medieval urban church(es) of Haapsalu and cemeteries are not physically located on the past townscape (except for the possible castle churchyard on the eastern side of the castle, a few burials found in the 1980s and 1990s) there is a high probability that prior to the early modern town regeneration the area under discussion was in use as a churchyard.

ANALYSIS OF THE HUMAN SKELETAL REMAINS

Material

Osteological material arrived to anthropological analysis in two packages – skeletons C, D and A, B.

The first package (A, B) contained mainly bones of lower extremities. The bones were sorted and reunited according to their anatomical congruity. Skeleton A consists of bones of lower extremities, both preserved from femoral bones to phalanges of toes. The left femoral bone was fragmentary. Skeleton B consists also from the bones of lower extremities. The right lower extremity was preserved from the femoral bone to phalanges of toes, however the left femoral was absent as well as all foot bones, apart from the heel bone and the ankle bone.

The second package contained also skeletal remains of two individuals. In this case the bones were sorted and the skeletons were reunited according to the skeletal age criteria as only bones of juveniles were found. Skeleton C was also only partially preserved: the bones of both lower extremities were found from femoral bones to ankle and heel bones, only some metatarsal were present. Skeleton D was complete, the cranial and post-cranial skeletons were both present.

It must be noted that besides articulated human skeletal remains the human bones were found amongst commingled osteological material (see below). Also some animal bones were found as is common in the cultural layers of medieval and early modern towns.

Biological age and sex determinations

For ageing and sexing the skeletons common criteria were used (Schinö 1979; Ubelaker 1989; Recommendations 1980; Buikstra & Ubelaker 1994) as well as the metric criteria (Garmus & Jankauskas 1993; Allmäe 1998; Ruff 2007; Ruff *et al.* 2012) to determine the age of juveniles or the sex of adults.

It is quite difficult to determine the biological age on the basis of bones of lower extremities only (**individuals A and B**). Still some age ranges are proposed here. Both skeletons indicated epiphyseal unions completed for all observed bones. The age is definitely above 25 years. On the other hand the changes characteristic to

⁴ During the fieldwork the local inhabitants mentioned that similar finds were discovered also earlier in the 1980s. In autumn 2012 Tõnis Padu (heritage officer of Haapsalu municipality) draw our attention to a short newspaper clip from November 1937 stating that *ca.* dozen skeletons, partly with slashed skulls were found on the same spot and thus identified as victims of some ‘carnage’ (Lääne Elu 1937, no. 87).

osteoarthritis were observed on some foot bones of both skeletons. Thus we may presume that both individuals (A and B) died between the ages of 30–50 years.

Amongst commingled osteological material also some bones of adult individuals were found (two temporal bones, a lumbar vertebra, a right first rib, a left zygomatic bone, the 4th cervical vertebra). However, these bones are not inevitably linked to the skeletons, which were found on site. The temporal bones indicated for example anatomical differences in the size of mastoid process, *processus zygomaticus* and temporal line; so one of the bones may belong to a female and the other to a male skeleton. Both vertebrae (lumbar, cervical) indicated small osteophytes at the edges of vertebral bodies, which is well in accordance with osteoarthritic changes on foot bones. We may speculate that during the earlier activities in the area the skeletal parts, which were relatively higher (skull, thorax, pelvis), in comparison with lower extremities were disturbed and moved to mixed layers. No further conclusion can be drawn on the basis of mixed human bones.

The age at death for **individual C** was determined on the basis of epiphyseal union. For all observable long bones the epiphyseal union was not completed, which means that the individual was probably under 15 years. Unfortunately the innominate bones – the most helpful skeletal part to determine if the age is above or below 15 years of age – were absent. The measurements of femoral and tibial bones of individual C indicated the age above 12 years of life (Allmäe 1998; Ruff 2007). It should be mentioned that the means of diaphyseal lengths of European Americans are presented in Ruff (2007).

The age at death of **individual D** was determined on the basis of dental development (Ubelaker 1989). The maximum lengths of tibial and femoral bones were in accordance with Estonian 14th – 18th cc. summarised sample of 8-year-old children (Allmäe 1998). Slight *cribra orbitalia* – pitting and porosity in orbital roofs – was found on skeleton D. The aetiology of porotic lesions on orbital roofs may evolve via several mechanisms: parasite-induced blood loss and diarrhoea (both iron and magnesium malabsorption) or anaemia as a hepcidin-mediated body adaptive response to infection (Djuric *et al.* 2008). The condition is commonly found in medieval and early modern samples of juveniles' skeletons. For example in Tääksi rural samples 44.1% and in Pärnu urban sample 50% of juvenile skeletons indicated this condition (Allmäe 1999; Allmäe & Limbo 2008).

The skeletons of children were not sexed. The sex of an adult skeleton is quite difficult to determine without innominate bone or skull. There is a possibility to determine the sex of the skeleton from metric data. Unfortunately here also difficulties arose as adult skeletons indicated measurements, which are mainly in range of uncertain sex estimation according to the data by Garmus and Jankauskas (1993). Finally the adult skeletons were sexed according to metric data of the femoral head. The circumference of the femoral head (F20) is quite a reliable measurement for sexing the skeleton on the basis of bones lower extremities. Adult skeleton A is male (F20=160mm), and B (F20=145mm) is probably female.

Body size estimations

The body stature and weight calculations for adults were conducted according to the formulas of Ruff and co-workers (2012). The body stature of the male (A) was 156.8–

160.1 cm and weight 73.3 kg; for the female (B) 154.8–158.4 cm and 62.3 kg accordingly. The calculated stature for the male (A) was modest, below Estonian average; the stature of individual B (female) was above Estonian female average.

The body size of juvenile skeletons C and D was calculated according to Ruff (2007). The stature of individual C (12–15 years) was between 146.5–152 cm and the body weight was 39.6–43.8 kg. The stature of individual D (7–9 years) ranged between 110.7–114.3 cm and the weight between 21.2–21.9 kg.

To summarise, according to anthropological analyses four people have been buried: a 30–50-year-old male (A); a 30–50-year-old (probably) female (B); a child at the age of 12–15 years (C) and a child (D) at the age of 8 years (± 24 months).

MÄNGU STREET

The present day Mängu street is a relatively short (*ca.* 90 metres) passage between the Ehte street and a square called Viieristi (Eng. Crossing of Five). The latter is a result of early modern street planning, after the demolition of the medieval town wall and one of its gates which was located in the centre of the present square. Thus the area of Mängu street was inside the medieval town but the question whether the street is medieval and headed directly to the gate remains open as only one external corner of the gate has so far been unearthed.

The fieldwork at Mängu street began from the corner of Ehte street and ended at the north-eastern corner of the property at Mängu Street 7. Since below the eastern side of the street a Soviet-period sewerage and other communications have been installed, the new cut was dug beside the western footpath. Also here the medieval and post-medieval deposits were only partly preserved because of several telephone and power cables. As it turned out, it was possible to fully document the intact layers from bottom up only in the southern end of the street, in front of the house at Ehte Street 6. The largely mixed strata gave few chances to analyze the development of the street, especially the early modern period street levels.

The thickness of the layers in the preserved parts of the street was approximately 2 metres at the corner of the Ehte and Mängu streets and diminished towards the other end of the Mängu street, measuring there *ca.* 170 cm. The nature of the earliest deposits on the natural ground resembled the situation at Ehte street – on the humus layer (3.30 m.a.s.l. in front of Ehte Street 6) a dark sooty layer of soil was deposited, on top of that a thick greyish layer, rich in animal bones and fragments of medieval artefacts (a lock, 14th century Lower Saxon and Siegburg stoneware, etc.). That deposit was *ca.* 65 cm thick without any very clear borders or (street) levels within the layer and thus was interpreted as a possible courtyard area. The same can be assumed also for most of the upper layers with the exception of a thin deposit of mixed mortar and stones (4.10 m.a.s.l.). The first deposits characterising the possible Mängu street levels were the uppermost 50 cm of cobblestone, gravel and mixed stone layers, perhaps indicating the rather late origin of the street, although further survey is essential to obtain a cross section of the street. The opposite end of the street near the Viieristi square did not reveal anything to confirm or refute the notion of the late origin of the street.

However, the few observations that could be made elsewhere at the street seem to be in accordance with the notion of the late origin of Mängu street. Namely, two



Fig. 7. A mid-13th century arrowhead found at Mängu street.

Jn 7. Mängu tänavalt leitud 13. saj keskpaiga nooleots.

(HM 9176: 36.)

Photo / Foto: Tarvi Toome

on near stoneware and a late medieval redware sherd) found below the bottom row of stones indicate a rather late origin of the structure. As the western side of the building is located right in the middle of the present-day Mängu street, it seems plausible to suggest that even if the area was indeed in use as a pathway (of what we have no archaeological evidence) leading to the town gate during the medieval period, the putative street has changed its course significantly over the centuries.

The second remains of the possible building were found near the north-eastern corner of the building at Mängu Street 7 (Fig. 1, II). Here, from the cross section dug from the main pipeline to the border of the property at Mängu Street 7, a probable hearth was located at the height of 4.30 m.a.s.l. A few late 14th – first half of 15th century stoneware sherds were collected below this, and as a surprise find, from the lowermost level, a mid-13th century arrow (Fig. 7) was found as well.⁵ Further on, the cleaning of the western side of the main trench revealed 2–3 rows (the lowest one at 4.10 m.a.s.l.) of boulders in a ca. 4 m long row referring to a massive building construction. As the hearth was situated right next to the mentioned stone row it seems plausible to connect different building elements together and using the secondary evidence date the possible house tentatively to late 14th or 15th century. However, the obtained information is too scarce to make broader conclusions on the connection with the possible medieval Mängu street – we cannot eliminate the option that the house was erected with the facade towards north, e.g. to the street next to the town wall.

CONCLUSION

Ehte ja Mängu streets have so far been regarded as the periphery of medieval Haapsalu, without any significant importance in the broader townscape. The present fieldwork casts some doubts on that assumption, even if the gathered data can be regarded as tentative, only stressing the importance of the future research on that area. For the moment the rather fragmental collection of information seems to indicate that the western part of Ehte street can indeed be interpreted as an open area in the medieval and early modern period, connected more closely to the street network perhaps only after dismantling the medieval town wall. Surprisingly early artefacts and dense occurrence of animal bones from that region might suggest that the area had some kind

structures from both sides of the trench were located. The first one (Fig. 1, II) appeared in front of Mängu Street 2, where a ca. 3 m long row of stones, mostly of limestone, was recorded. The bigger corner stones (ca. 50 cm large boulders at the northern end of the row) followed by smaller (ca. 20–30 cm) limestones seem to indicate some kind of a light building (shed?). The very fragmented nature of the structure – only 2–3 rows of limestones have survived intact – leave the exact date and the nature of it open, the few sherds (late 13th century Lower Sax-

⁵ Identified by Ain Mäesalu (TÜ) and Jaak Mäll (AM).

of use already from the earliest beginning of the town. The fieldwork at the other end of Ehte street on the other hand showed how important it is to conduct archaeological investigations even if the building site might be repeatedly destroyed. The unexpected find of medieval burials give us new insights to the formulation of the former streetscape and almost for the first time in Haapsalu there is some material evidence on the possible location of the medieval urban cemetery. On the other hand, the surveillance turned out to be unsuccessful on the matters of finding evidence of the medieval town wall and the town gate, thought to be located at the crossing of Ehte and Wiedemanni streets.

Fieldwork at Mängu street also revealed new data on the formation of the medieval and modern town. Here the most important result was the locating of remains of the building structures, which debate the medieval origin of the street. Only further archaeological research of the region might resolve the issues regarding the development of this town block close to the medieval town wall. The medieval deposits inside the former medieval town can by and large be characterised as typical for Haapsalu, while the relatively high amount of 13th century finds so far from the core area of urban settlement was a bit unexpected.

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REFERENCES

- Allmäe, R. 1998.** Tääksi 14.–18. sajandi populatsiooni demograafiline analüüs ja keha-pikkuse rekonstrueerimine. – Loodus, inimene ja tehnoloogia. Interdistsiplinaarseid uurimusi arheoloogias. Ed. by J. Peets. *Muinasaja Teadus*, 5. Tallinn, 163–187.
- Allmäe, R. 1999.** Dental and cranial pathologies in Tääksi 14th – 18th cc. skeletal population. – Papers on anthropology VIII, 9–14.
- Allmäe, R. & Limbo, J. 2008.** 16.–18. sajandi Pärnu garnisoni kalmistule maetute antropoloogias. – Pärnumaa, 1. Loodus. Aeg. Inimene. Tallinn. 369–387.
- Buikstra J. E. & Ubelaker D. 1994.** Standards for Data Collection from Human Skeletal Remains. Proceedings of a Seminar at the Field Museum of Natural History. *Arkansas Archaeological Survey Research Series*, 44. Fayetteville.
- Djuric M., Milovanovic, P., Janovic, A., Draskovic, M., Djukic, K. & Milenkovic, P. 2008.** Porotic lesions in immature skeletons from Stara Torina, late medieval Serbia. – *International Journal of Osteoarchaeology*, 18, 5, 458–475.
- EAA 854-4-108** = Dobermann, S. S. (comp.), Plan der Keyserl. Stadt Hapsal, so wie derselbe im May Monath 1783 aufgenommen worden. (*Map in EAA*.) Digitized copy available at <http://www.ra.ee/kaardid/index.php/et/map/viewImage?id=21086&page=1> (accessed 01.06.2013).
- Garmus, A. & Jankauskas, R. 1993.** Methods of person's identification from the skeleton in Lithuania. – *Medicina Legalis Baltica* 3–4, 5–21.
- Jaago, K. 1999.** Haapsalu kodanikeraamat 1496–1797. *Ajalooarhiivi toimetised*, 5 (12). Tartu.
- Lääne Elu 1937, no 87.** Haapsalus leiti inimluustikke. – *Lääne Elu* 9. nov 1937, page 1.
- Martin, R. & Saller, K. 1957.** Lehrbuch der Anthropologie, I–III. Stuttgart.
- Pärn, A. 1997.** Haapsalu linn Saare-Lääne piiskopkonna keskuste kujunemisloos. – Läänemaa muuseumi toimetised, I. Haapsalu, 26–48.
- Pärn, A. 2006.** Einige Beobachtungen zur Baugeschichte einer Kleinstadt in Westestland anhand Kellerforschung. – Keller in Mittelalter und Neuzeit. Beiträge zur Archäologie, Baugeschichte und Geschichte. Ed. by S. Brüggemann. *Beiträge zur Ur- und Frühgeschichte Mitteleuropas*, 42. Langenweissbach, 173–183.
- Recommendations 1980.** Workshop of European Anthropologists, 'Recommendations for Age and Sex Diagnoses of Skeletons'. – *Journal of Human Evolution*, 9, 517–549.
- RKA 0406:28:015:001** = S. Waxelberg (comp.), Delinatio Geometrica Öfwer Slättet och Staden Hapsahl I Estlandh och Wijkeste Gebet Belägen Medh Dess Grundt Linior och Situation som wedh Tijden Sigh aliwerer och representerer Aftagit i Martj Månadt Åhr 1683 (*Map in RKA*.) Digitized copy available at <http://www2.ra.se/kra/bilder/0406/28/015/001.jpg> (accessed 01.06.2013).
- Ruff, C. D. 2007.** Body size prediction from juvenile skeletal remains. – *American Journal of Physical Anthropology*, 133, 698–716.
- Ruff, C. B., Holt, B. M., Niskanen, M., Sladěk, V., Berner, M., Garofalo, E., Garvin, H.M., Hora, M., Maijanen, H., Niinimäki, S., Salo, K., Schuplerová, E. & Tompkins, D. 2012.** Stature and body mass estimation from skeletal remains in the European Holocene. – *American Journal of Physical Anthropology*, 148, 601–617.
- Russow, E. 2004.** Weitere Forschungen in der Stadt und Burg Haapsalu. – *AVE*, 2003, 148–159.
- Russow, E. 2006.** Importkeraamika Lääne-Eesti linnades 13.–17. sajandil. Tallinn.
- Russow, E. 2008.** Kaks aastakümnet linnaarheoloogiat Haapsalus – mitte ainult potikildudest ja müürikatkeist. Ühe väikelinna mineviku uurimise olevikust ja tulevikust. – Läänemaa muuseumi toimetised, XI. Haapsalu, 7–41.
- Schinö, H. R. 1979.** Lehrbuch der Röntgendiagnostik, II, 1. Skelett. Stuttgart.
- Ubelaker D. H. 1989.** Human Skeletal Remains. Excavation, Analysis, Interpretation. *Manuals of Archaeology*, 2. Washington.

KARJAMAAST SURNUAIANI – VÄLITÖÖD KESKAEGSE HAAPSALU LOODENURGAS

Erki Russow ja Raili Allmäe

2012. aasta suvel toimusid Haapsalus suuremad kanalisatsiooni- ja veetrassitööd, millest osa hõlmas ka linna muinsuskaitsealasse jäävat Ehte ja Mängu tänavat (jn 1). Ehkki mõlemat tänavat on varasemate aastakümnete jooksul korduvalt kaevetöödega avatud, pole senini tänavate arheoloogilistest kihistustest terviklikku läbilõiget. Käesolevate töödega loodeti leida vastust küsimustele, kuivõrd hästi on pärast mitmeid mahukaid trassitööd piirkonnas kultuurikiht säilinud, kas suudetakse leida jälgi Ehte ja Wiedemanni tänava ristmikul oletatud keskaegsest linnamüürist ja linnavärvast ning kas topograafilise (jn 2–3) ja kirjaliku andmestiku alusel pigem hiliseks peetav Mängu tänav võiks olla tekkinud juba keskajal.

Ehte tänavat toimusid uuringud tänava lääneotsast ida suunas kuni Karja tänavani, kuid valdavalt on varasemad ladestused trassi mõlemal küljel toimunud töödega hävinud, mistõttu kogutud teave oli lünklik. Siiski selgus, et kuni umbes Wiedemanni tn 6 (jn 1) edelanurgani on kultuurikihi paksus suhteliselt tagasihoidlik, piirdudes umbkaudu 70 sentimeetriga, millest suure osa moodustasid varauusaegseteks tänavapindadeks tõlgendatud kihistused. Vanimast, looduslikule pinnasele ladestunud kihist koguti arvukalt loomaluid, ent esemeleidude osakaal oli väga väike, mistõttu võib linna algusaegade puhul vahest kõneleada avatud alast, mis võis olla kasutusel asula majandusliku tagamaana (nt heinamaa, karjamaa vms).

Ehte tn mööda idasuunas liikudes muutus kultuurikihi iseloom Ehte ja Wiedemanni tänava ristmikule eelnenud lõigul (kuni 170 cm paks), kus looduslikul pinnal asus intensiivne süsimust kiht, mis lisaks arvukatele söetükikestele sisaldas märkimisväärselt palju varaseid, linna tekeeaega jäävaid esemeleid või nende katkeid (nt jn 4: 1–2). Sellel ladestusel võis eraldada ka põlenud kerisekivide viirge, mis võiks ehk viidata mõnele keskaegse ühendustee või õueala pindamisele.

Küsimusele, kas Ehte ja Wiedemanni tn ristmiku piirkonnas võis asuda keskaegne linnamüür, vastust ei saadud. Selleks on varasemad võimalikud ehitusstruktuurid ja muud jäljed eelnevate kümnendite kaevetöödega (jn 5) hävinud, ainult kaudsete oletuste põhjal (intensiivne mõrdiviirg Ehte tn mõlemal pool enne ja pärast ristmiku, sarnaneb olemuselt mujal Haapsalu linnamüüri lähikonnas avastatud ladestusele) võib selle olemasolu ebaledes kinnitada.

Ehte tn kultuurikihi ladestused Wiedemanni ja Mängu tn vahelises lõigus on suures osas lõhutud, kuid puutumata osas vastavad kihistused üldjoontes eelpool kirjeldatud tähelepanekutele. Küll aga osutus ootamatuks pärast Mängu tänavat avatud viimane Ehte tn trassilõik enne Karja tänavale suubumist. Siin tuli sissekaeve lõunapoolsest küljest päevavalgele mitu katkendlikult säilinud luustikku (jn 1: I, 6), millest paari puhul võib leitud arvukate naelte ning puidujäänuste põhjal väita kirstudes matmist. Arvestades topograafilist situatsiooni (matused olid varauusaegse tänava all), arvukust (1937. aastal on trassitöödel leitud tosin skeletti) ning põgusat kirjalikku ainet on arvatavasti tegu (hilis)keskaegse linnakalmistuga.

Luustike antropoloogiline analüüs näitas, et kogutud inimsäilmete seas saab eristada nelja indiviidi. Luustik A, millest olid säilinud vaid alajäsemete luud, kuulus 30–50-aastasele mehele (kehapikkus vahemikus 156,8–160,1 cm, kehakaal u 73 kg). Luustik B, millest olid samuti säilinud vaid alajäsemete luud, kuulus tõenäoliselt naisele (kehapikkus 154,8–158,4 cm, kehakaal u 62 kg). Matuste A ja B vahekaugus oli minimaalne, mistõttu võib oletada nende matuste üheaegsust. Luustikust C olid samuti säilinud vaid alajäsemete luud; maetud oli 12–15-aastane laps kehapikkusega 146,1–152 cm ja -kaaluga u 40–44 kg. Luustik D oli säilinud tervikuna; maetud oli 8-aastane laps kehapikkusega 110,7–114,3 ja -kaaluga u 21–22 kg.

Mängu tänava järelevalvetööd näitasid, et ka siin on varasemad elutegevusjäljed säilinud vaid väga katkendlikult. Terviklik läbilõige kultuurikihist õnnestus fikseerida ainult Mängu ja Ehte tn nurgal Ehte tn 6 maja esisel, kus ladestuste paksus küündis 170 sentimeetrini. Valdavalt on eelnevad kaevetööd kihistusi tõsiselt kahjustanud, ent kogutud andmed osutavad ala aktiivsele kasutusele juba 13. sajandi keskpaigast alates. Küsimusele, kas Mängu tänav võiks pärineda juba keskajast, vastust ei saadud. Selle vastu võiks rääkida tänava keskpaigas Mängu tn 2 maja esisel idaprofilist tuvastatud vundamendimüürid (jn 1: II), mis kuuluvad ilmselt varauusaegsele kerghoonele. Et hoonejäänused paiknevad keset tänast tänavajoont on kas tänavajoon aegade jooksul oluliselt nihkunud või jääb tänava teke umbes 18. sajandisse. Mängu tn 7 naabrusest leitud teine hoone (jn 1: II) pärineb keskajast, selle välismüüri asend vahetult kõnnitee all ei välista Mängu tn olemasolu keskajal (fassaad ida suunas) kuid samas ka ei kinnita seda (fassaad nt põhja suunas, keskaegse linnavära poole). Kõnealuse maja alusest pinnasest korjati ka üks 13. sajandi keskpaiga nooleots (jn 7).

Kokkuvõttes võib tõdeda, et Ehte ja Mängu tänavate järelevalvetööd osutusid hoolimata uuritud piirkonnas säilinud kultuurikihi katkendlikkusele asustuslooliselt siiski väga kõnekaks. Kuigi üks suurimatest ootustest – keskaegse linnamüüri ja -värava lokaliseerimine – ei täitunud, on kahtlemata oluliseks tulemuseks nii pinnasekihistuste paksuse ja iseloomu registreerimine kui ka teave Ehte tn idaotsast leitud keskaegset surnuaiast. Ka Mängu tänava välitööd annavad uut ainet edasisteks aruteludeks keskaegse Haapsalu loodenurga kujunemisloost.