doi: 10.3176/arch.2012.supv1.08

Chapter 7

HILLTOP SITE AT VÕNNUMÄGI

Valter Lang and Margot Laneman

Abstract

The article highlights the site on the hillock called Võnnumägi less than 1 km from the fort of Keava, which was discovered and excavated within the Keava project. In view of the fact that one end of the hill was cut off with a prominent rampart, the site can be classified as promontory fort; other sides of the enclosed area were without fortifications. Unlike in typical hill forts, there was no definite occupation layer in the compound. A few potsherds and radiocarbon dates prove that the site belongs to the Early Pre-Roman Iron Age. Among the known hill sites of the time, Võnnumägi is standing out as the only one having a substantial earthwork barrier, whereas the rest of the sites have had some wooden defences or had no artificial fortifications. The function of the site is still disputable.[1]

[1] This study was supported by the European Union through the European Regional Development Fund (Center of Excellence CECT), the target financed theme No. SF0180150s08, and by the research grants from the Estonian Science Foundation (Nos 4563 and 6451).

Introduction

The enclosed site on the hill called Võnnumägi was discovered in 2002 during an intensive landscape survey carried out by the members of the Keava expedition. The site is situated 750 m north of the hill fort of Keava and 600 m north of settlement site III of Linnaaluste (Fig. 1). Notably, there was also oral tradition preserved among local people and registered in the Estonian Literary Museum (ERA II, 225-179/18), which reported a second, and much larger, hill fort located somewhere close to the hill fort of Keava, and connected with the latter through a hidden subway.

The site is located on a high southern end of a NNW–SSE oriented promontory, and is cut off from the rest of the elevation by a low rampart. The southernmost end of the promontory stands to the height of approximately 12 m from the foothill, and the slope is relatively steep here, while in the north the ridge is gradually lowering and blending into the surrounding landscape. Steep and high (9–10 m) is also the western side of the hill, while the eastern slope is much lower (4–6 m). The area enclosed with the rampart is 90–95 m long and 55–60 m wide (Fig. 7.1). The length of the rampart reaches 55 m; its maximum width is 6–8 m (including ruins) and the height 0.5–1.5 m. It is not known whether the gaps observed in the middle and eastern part of the rampart result from destruction or indicate the presence of an entrance. In the southern part of the enclosed area there are two elongated moraine elevations of natural origin, the relative height of which reaches to 0.8–1.1 m. The hill is forested, although some clearing was done during the time of investigation.

Excavations at the site were carried out from 2003 to 2005. Four excavation areas, covering altogether 57.5 m^2, were examined (Fig. 7.1). The main excavation area (I) was a 3 × 10 m cutting through the western part of the rampart with the purpose of studying the construction and chronology of the feature. Later on the excavation was extended as a 6 × 0.5 m trench northwards (not drawn on Fig. 7.1) to check the possible existence of a defensive ditch in front of the rampart. Excavation areas II (2 × 5 m) and IV (3 × 3.5 m) were dug with the aim of checking whether or not there had been defences along the western and southern edges of the hill, while the excavation area III (2 × 2 m) was an extension of a test pit, which had yielded some bigger stones that seemed to form a kind of structure. In addition, the whole area of the site was covered with test pits in order to examine the cultural layer and take samples for phosphate mapping (see below, Fig. 7.12). The test pits, 175 in number, were dug mostly at 5 m and at some places at 10 m intervals.

The excavations provided some entirely new and intriguing information about the Pre-Roman Iron Age settlement both in the surroundings of Keava and in general terms. The latter is especially important in view of the poor knowledge we have of the Early Iron Age settlement sites. In what follows we present the results of the fieldwork and briefly discuss the function and context of the site.

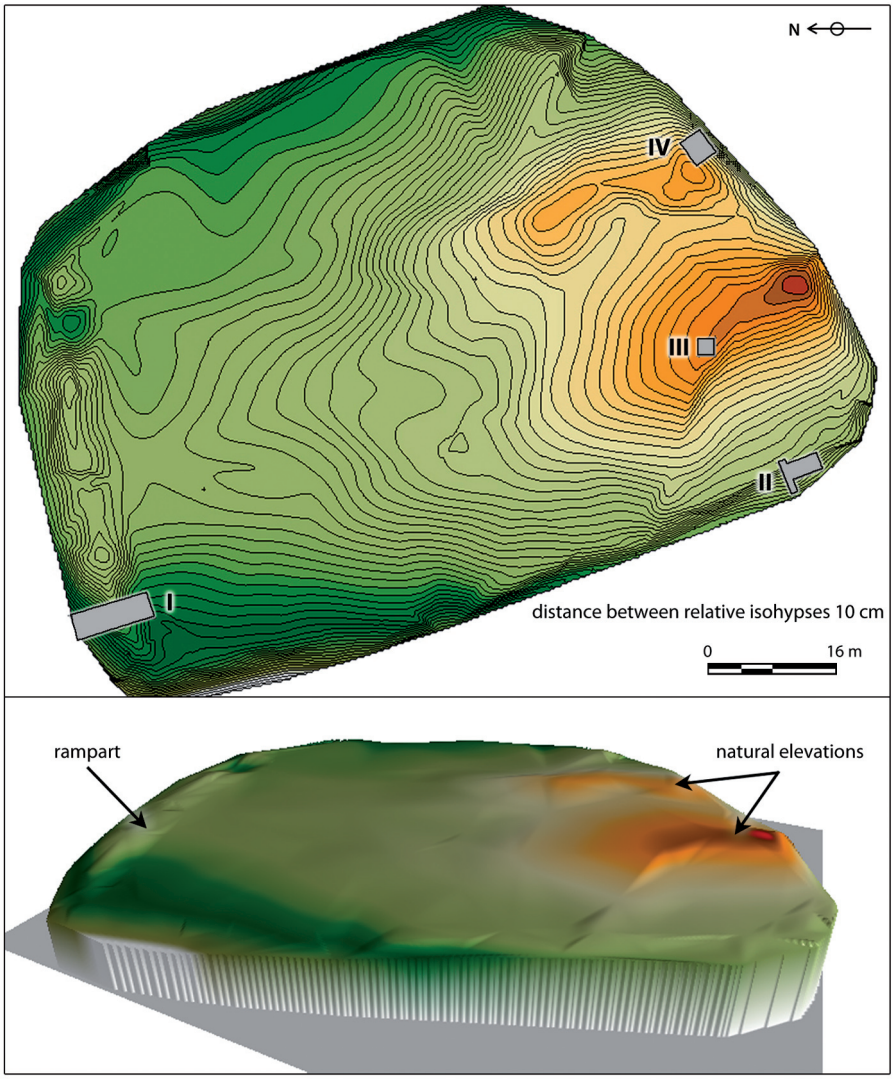

Fig. 7.1. The plateau of the hill fort at Võnnumägi with relative isohypses and excavation areas.

The rampart

The rampart had been built at the place where the ground level was naturally rising from the lower surface of the northern portion of the promontory for approximately half a metre (this elevation is visible in the profiles of the excavation plot; Fig. 7.8). Excavation trench north of the rampart yielded no evidence for the existence of a ditch, and therefore the relative lowness of the ground level in front of the rampart in comparison to the ground surface at its other side must have been of natural origin. The numerous coaly patches and some better preserved

remains of charred wood that were found immediately beneath the rampart (Fig. 7.7) suggest that the site was probably cleared by fire before the construction began. The radiocarbon date obtained from this context also indicates that the wood beneath the rampart is roughly of the same date as the wood used in the construction of the rampart (see below). Another interpretation, however, could be that the rampart was immediately preceded by a rather short-lived wooden structure which had been destroyed in fire. No additional evidence, e.g. post holes, was found for this hypothesis.

The core of the rampart was an earthen bank which had been piled up of sandy soil and occasional stone rubble over an even ground surface. It was approximately 3.5 m wide at its base and reached the height of 0.7–0.8 m from the ancient ground level. The earthwork was densely covered with rather big granite stones, 25–35 cm in diameter, and its outer foot was clearly defined by a straight row of even bigger stones. The notably compact and regular nature of the stone coating makes it difficult to imagine that the stones result from collapsing of an upright stone wall; rather, the outer face of the rampart had originally been made as sloping, while the top of the rampart was probably flat and roughly 2–2.5 m in width. Together with the main stone coating, the maximum height of the rampart was 1.1 m above the ancient ground surface. It is likely, however, that on the top of the rampart the stones had been laid in several layers, though judging from the amount of loose stones in the excavation area, this wall could not have been of any considerable height in terms of defensive capacity (Figs 7.2–7.5, 7.7–7.8).

About 1 m from the stone-coated embankment defined by a row of stones at its foot, there was another, although more irregular, row of even bigger boulders (Fig. 7.4). The stones were situated on the low declivity resulting from the above-mentioned elevation of the ground southwards, and therefore their tops were mostly situated at a slightly lower level than the base of the bank above. The original arrangement was not altogether clear here, and nor was the function of the massive stones. For several reasons, however, it is difficult to imagine that they originated from the stone coating of the earthen embankment.

Fig. 7.2. Uppermost stone cover in the area of rampart, view from the west. Photo by Valter Lang.

Fig. 7.3. Stone coating of the rampart after removing loose stones, view from the west. Photo by Valter Lang.

Fig. 7.4. The rampart after removing loose stones, view from the north. Photo by Valter Lang.

Fig. 7.5. Bottom of the rampart with a row of stones on both sides, view from the west. Photo by Valter Lang.

The inner face of the rampart had been a wooden structure, perhaps an upright wall of horizontal logs, which rested directly on the ground (probably above a thin layer of sand or sandy soil) and perhaps had a row or a low wall of stones at its courtyard facing side. The location of this structure was marked by a ca 30 cm wide and 30 cm thick strip of very coal-rich soil and brick-red sand ca 3 m south of the stone row at the rampart's outer foot, parallel to and stratigraphically at the same level with the latter (Figs 7.5–7.6; see also Fig. 7.7). The stones lining this feature were much smaller than those at the rampart's outer foot, and did not form a perfectly straight row; however, there definitely was regularity in their position, and at places they seemed to have been intentionally placed on top of each other. Some of the stones were fire-cracked. There were also a few pieces of charred wood in this zone, but so small that it would clearly be an exaggeration to call them logs or beams; at best, they were the survived cores of logs. It is thus evident that the wooden structure had perished in fire. We can only hypothesize about its height, which must have been at least 1 m, although most likely it was taller.

There is no doubt that a wall made of horizontally laid timbers needs more substantial support than an ambiguous stone row at its side to withstand the thrust of the embankment behind it. The excavation area, however, yielded no firm evidence of upright posts (e.g., post holes) or any other installation that might have had this task. If there had been any corner-jointed wooden structure attached to the facing of the rampart, it must have been burned down and unrecognizable for excavators in such a narrow section.

The space by the inner side of the rampart was filled with the collapsed material of the rampart, which reached as far as about 2 m from the supposed

Fig. 7.6. Location of the rampart's inner face, with a row of stones and clear signs of burning; view from the west. Photo by Valter Lang.

location of the timber facing (Fig. 7.2). Beneath the ruins, the western part of the excavation right by the fire-marked zone revealed ca 0.9 × 0.8 m area that contained gravel pebbles, spots of red burned sand and charcoal, and was notably strong in compaction and thus difficult to excavate (Figs 7.5–7.6). The brown colour with yellow and grey shades of this deposit did not differ much from the rest of the excavation area south of the rampart, except for a 15 cm wide strip immediately next to the western side of the excavation trench, which was outstandingly dark and rich in coal, even sooty. The compact deposit, ca 15 cm in thickness, was apparently resting on the original ground, while its upper surface remained on ca 10 cm lower

Fig. 7.7. Bottom of excavation I with charred wood found beneath the rampart; also visible are the eastern profile and the stones marking the location of the rampart's inner face; view from the north-west. Photo by Valter Lang.

level than the tops of the adjacent stones lining the supposed wooden face of the rampart. The measures of the feature are unclear, because it certainly continued westward in the unexcavated area and its southern border regrettably missed recording. How to interpret this deposit is also an open question; perhaps it was no more than a layer of clayish gravel that was used to level the ground surface by the rampart's inner side and hardened when the zone was heated in fire. On the other hand, such layer was certainly not present in the eastern portion of the excavation trench. The only peculiar feature recorded there between the original ground surface and the dropped ruins of the rampart was an ambiguous and low pile of small stones next to the eastern profile (Figs 7.5 and 7.8: B). The stones had been strongly fired, as they were fragile and situated in a noticeably coaly soil. This feature too continued in the unexcavated area. Similar stones were also noticed in the western part of the excavation. Most likely they did not come from any separate structure by the rampart's inner side, but their origin is associated with the fire that destroyed the rampart. Finally, it should be mentioned that all of the potsherds, which were the only artefacts found in the trench, were obtained from this area at the rampart's inner side from under its ruins. Some of them were found right where the wall of the rampart had supposedly stood, while others were located as far as a couple of metres from it. The sherds were, however, only twelve in number and do not shed any significant light to the nature of this zone.

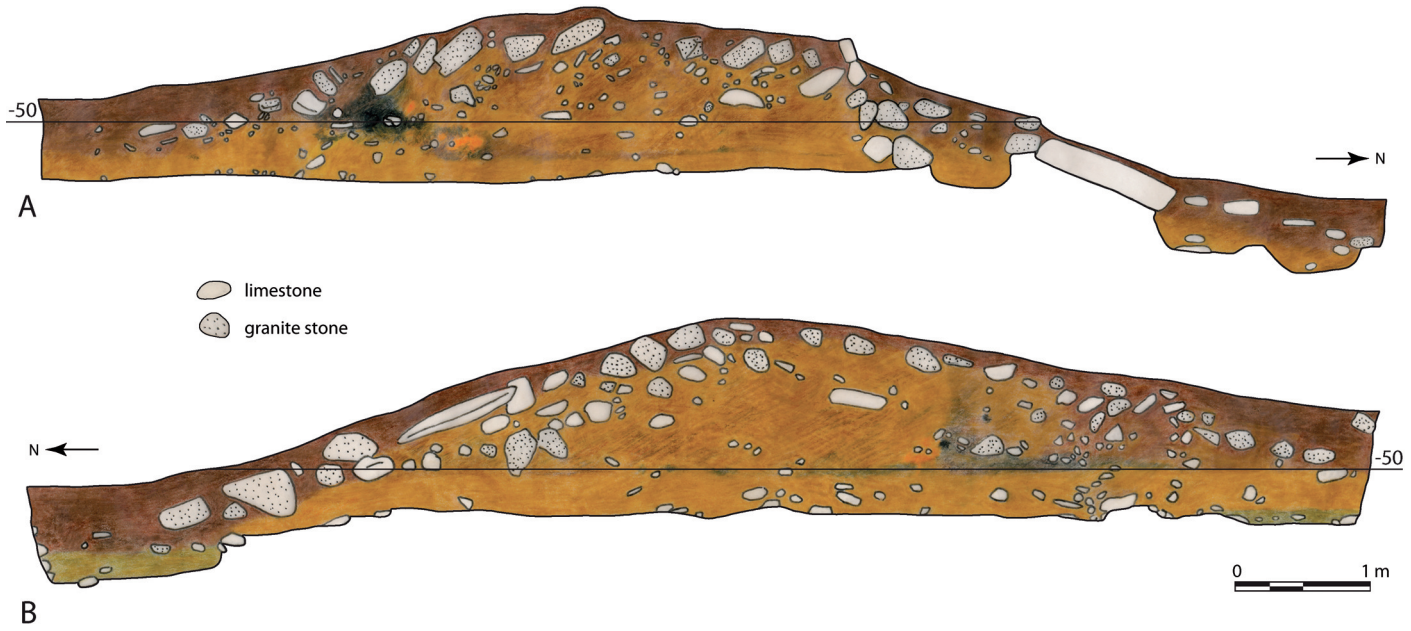

Fig. 7.8. Profiles of the rampart. A western, B eastern profile. Drawing by Andres Tvauri and Riina Vesi.

The radiocarbon dates (see below) confirm that the site burned only once and was subsequently not reconstructed, and thus its stratigraphy appears to be relatively simple compared to the multi-phase character of most of the hill forts. Despite this, there are still many questions to puzzle over. It is difficult to imagine that the original height of the rampart, together with the stones at its top, reached much more than 1.5 m from the ground surface in the site's interior. It was certainly more when approaching from outward, but here the smoothly sloping side of the rampart was rather favouring than seriously deterring the hostile attack, unless there was some substantial wooden structure on top of the rampart to provide additional height. If so, there must have been wooden structures behind the rampart as well, in order to make the rampart defendable and, perhaps, to stabilize the structure. Needless to say, we did not find evidence to confirm this hypothesis. From another point of view, it can well be that the primary function of the rampart was not defensive. And finally, we should keep in mind that archaeologically visible single-phase use does not mean that all the features recorded at excavation were constructed at one time; a gradual development, however, would be very difficult to trace.

Similarly constructed ramparts are difficult to find at Estonian archaeological sites. The inner facing of the 6th–8th-century AD rampart at Pada II hill fort was probably a vertical wooden structure and the sand core of the rampart had been surmounted with stones, but the side confronting the outside world was, however, a vertical dry-stone wall made of limestone slabs. It has been estimated that the original height of this wall could have been 1.5–2 m and that the rampart had been topped with wooden fortifications; the width of the rampart was difficult to determine, but it probably did not exceed 4 m (Tamla 1980, 379; 2008, 228). The outer side of the earthen bank at Unipiha hill fort (3rd–11th centuries AD) had been covered with up to 1 m thick layer of granite stones at certain stages of use (Aun 1975; 1992). Regrettably, the published data do not enable to judge whether the stones were intentionally placed on the earthen bank or originated from a collapsed stone wall on top of the rampart, and the appearance of the inner side of the rampart is also unclear. A limestone cladding has been proposed for the sloping inner side of the sand bank that formed the second stage of fortifications at Jägala fort (Lõhmus & Oras 2008, 34). The appearance of the opposite face of the rampart is, however, an open question and so is the date of the structure (op. cit., 37; more about the Jägala site see also below).

The compound

In excavation area II on the south-western edge of the hill, the thickness of the cultural layer was more than 10 cm, but it was disturbed (by ploughing, perhaps) and poor in finds: only twelve potsherds, two fragments of animal bone and a piece of iron slag were found. No clear evidence of fortifications was found,

although there was a probable post hole and quite a number of smaller stones, some of them fire-cracked, over the excavation area (Fig. 7.9). Less than ten metres north-east, excavation area III on a low moraine ridge yielded neither occupation layer nor finds. The upright limestone slabs and a big granite stone that had been observed in the test pit were situated in the intact yellow moraine beneath a layer of greyish soil, only 15–20 cm thick, and their position was not of human origin (Fig. 7.10).

Excavation area IV right on the south-eastern sloping edge of the hill revealed an outspread pile of limestone slabs and some granite stones under a 20 cm thick layer of turf and brown soil (Fig. 7.11). The feature was so low that there had

Fig. 7.9. Excavation II, pictured from the north. Photo by Valter Lang.

Fig. 7.10. Excavation III, pictured from the north. Photo by Valter Lang.

Fig. 7.11. Excavation IV, pictured from the west. Photo by Valter Lang.

been no surface indications of it, and it was discovered only thanks to the test pitting. The stones were lying rather loosely and therefore made an impression of having been piled up casually. The relatively thick layer of turf above the stones suggests that the pile is not recent. More precise date estimation is impossible, because there were no finds in the excavation area and the charcoal particles were also very rare and tiny.

None of the 175 test pits contained finds or any sign of an occupation layer characteristic of human habitation. In general, the upper layer below the turf, 20–60 cm thick, consisted of brownish soil resembling that in the fields, and was followed by yellow sand or moraine; in a few cases, the presence of stones was noted in the test pit. The overall picture is thus the same as in the excavation III. A soil sample was taken from each pit for later phosphate analyses. As indicated by the results of phosphate mapping (Fig. 7.12), the soils on the plateau are quite even by the content of phosphate and there are no areas particularly rich in phosphate values.

There is no direct evidence of ploughing on the hill, but it is nevertheless possible that the plateau, or at least its more even parts, were used as a field some time after the original use of the site. The rather sharply shaped edges of the hill plateau, as well as the character of the soil horizon may be regarded as indications

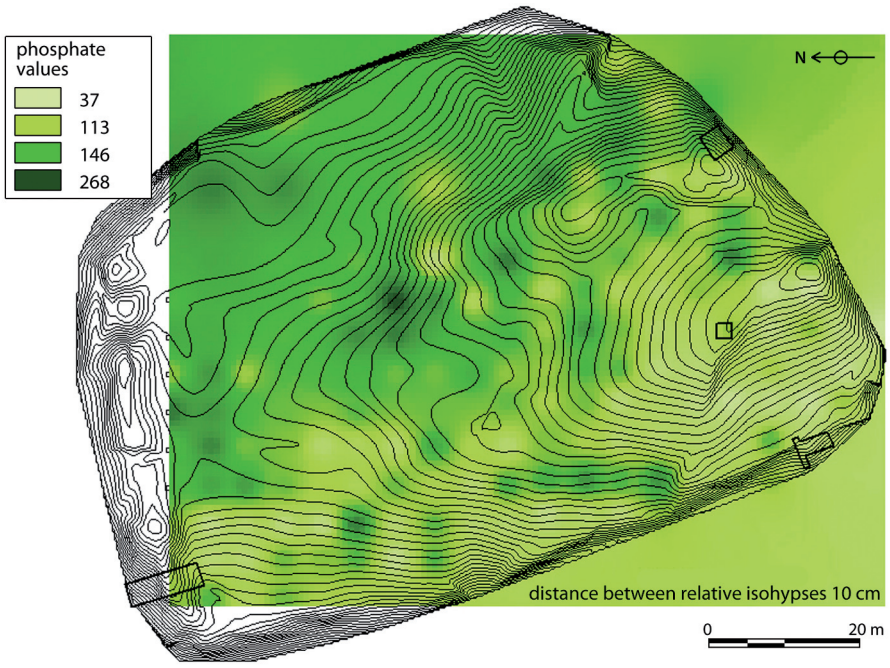

Fig. 7.12. Phosphate map of the plateau of Võnnumägi.

of this. The stones discovered in the excavation IV could thus be interpreted as a result of field clearing. Ploughing may be partly responsible for the absence of occupation layer in the enclosed area.

Finds and dating

Radiocarbon dates are available only for excavation I. The charcoal samples originated from different contexts and features which include a charred log beneath the rampart, a solid piece of charred wood in the fire-marked zone at the supposed place of the rampart's inner facing, the "compact square" against the rampart's inner side, and two samples were obtained ca 1 m south of the rampart's inner side under its ruins. All samples consistently yielded Early Pre-Roman Iron Age dates, i.e. the 4th–3rd centuries BC if calibrated (Fig. 7.13). This reveals that the site had only one, probably a rather short-lived, phase of use, or in other words, after having once been destroyed in fire it was abandoned. This conclusion is consistent with the stratigraphical observations and character of the find assemblage.

Finds were very few in number. In addition to a piece of quartz, only twelve potsherds were found in excavation I, and twelve potsherds along with an iron slag were obtained from excavation II. All sherds are small in size and originate from the walls of hand-moulded pots (see Lang et al. 2004, fig. 9). The fabric of clay is coarse and some of the sherds have striations on the surface. Such pottery could be regarded as consistent with the radiocarbon dates. Interestingly, there was also a sherd decorated with parallel double lines, which are generally presumed to be characteristic of the Viking Age pottery decoration. But since it was tempered with coarse rock debris like the rest of the sherds, and because there is no reason to entirely preclude this kind of decoration for Early Iron Age pottery, this potsherd could be viewed as consistent with the rest of the data.

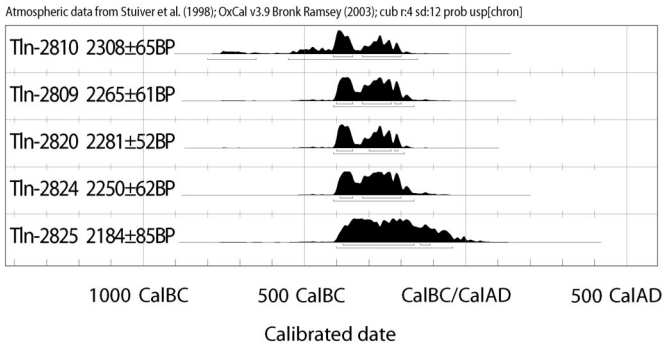

Fig. 7.13. Radiocarbon dates from the rampart of Võnnumägi.

Discussion

In brief, we have a remarkably large site which was established on top of a hill in the Pre-Roman Iron Age and enclosed with a rampart, the building of which was labour-consuming but the defensive function still questionable. These characteristics speak of a wish to be distinguished and exclusive. On the other hand, there is no definite occupation layer on the site. This fact cannot be explained away as a result of some later destructive activities on the hill, and therefore it suggests that the site had been inhabited for a relatively short time and/or by a relatively small group of people, or had not been inhabited permanently. What is clear is that a site with such characteristics is by no means easy to interpret.

In morphological terms, the site at Võnnumägi is a promontory fort, given that in Estonian archaeological tradition all sites with man-made and/or natural defences have been classified as forts. Cutting one end of a hill off with a rampart is a simple and effective way to create a fortified or at least enclosed site, and thus the promontory forts form the most common typological group among Estonian prehistoric forts (Tõnisson 2008, 40 ff.). Most of such sites, however, belong to the later periods of prehistory from the Middle Iron Age onwards and have had defensive or military functions, which sometimes are also recorded in the written sources. Besides, the later forts usually have a thick occupation layer suggesting permanent inhabitation and in most cases they are considerably smaller in surface area than the site at Võnnumägi.

Among known Pre-Roman Iron Age hilltop sites, there is so far only one example beside Võnnumägi that has a similarly elaborate rampart. This is located at Jõesuu in Jägala, northern Estonia, where an enormous area of 2.8 ha has been enclosed with a rampart at the end of a river-bounded promontory. True, the rampart of this site was constructed differently, as it consisted perhaps of sand-filled timber boxes, or at least had a solid wooden framework; stones may have been used to reinforce its outward looking face (Johanson & Veldi 2006; Lõhmus & Oras 2008).[2] The cultural layer in the compound is non-intensive and perhaps spread unevenly. It nevertheless appears to be slightly more informative than at Võnnumägi, as, for instance, hearths or storage pits and hypothetical house remains have been reported from the rampart's inner side (Lõhmus & Oras 2008, 33, 37; see also Kriiska et al. 2009, 42 ff.).

The rest of the Pre-Roman (and probably Roman) Iron Age hilltop sites, approximately twenty in number (see Lang 2007a, fig. 17)[3], have yielded no firm evidence on the existence of substantial ramparts and, strictly, cannot be classified as promontory forts. The data on these sites are, however, very poor and

[2] In a later stage a sand bank, perhaps with sloping faces and limestone-cladding, was heaped over the remains of the previous rampart. The date of this structure is unclear, but an Early Iron Age origin cannot be precluded (Lõhmus & Oras 2008).

[3] A few sites have been added to these numbers in south-eastern Estonia by Heiki Valk during his fieldwork carried out after 2007 (Valk 2008; Valk et al. 2011).

fragmentary, comprising mainly of a few potsherds or/and a few radiocarbon dates of uncertain origin which have accidentally been obtained from multi-layered sites with a long and complicated history. Therefore, it is not an exaggeration to state that the original appearance and character of these sites is entirely unknown. Though they probably had no such ramparts as we found at Võnnumägi, one cannot preclude that they were defended or enclosed with a simpler wooden structure, perhaps a fence. If so, they would not appear so very different from the ramparted sites. For instance, at Pada II fort Pre-Roman Iron Age post holes and charred wood were found in the narrowest part of the promontory, which would have been an expected and logical place for a barrier to enclose the site from the outside world (Tamla 2008, fig. 108). A rampart was indeed erected at this place in the Middle Iron Age. In view of this it is likely that the Pre-Roman Iron Age features at Pada also originated from a wooden defence and not a simple dwelling or alike. Small-scale excavations at Hinniala and probably also Luhtõ forts revealed that a wooden fence or some other slight structure had been present along the edges of the hill, which indicates that the whole area of the site might have had such a surround (Valk 2008). Probable wooden structures of Early Iron Age date have been reported from several other hill forts (Iru, Saadjärve, Alatskivi, Unipiha, Koila), but in those instances there is not much reason to argue for a defensive structure rather than a dwelling or some other building. It is nevertheless clear that there may have been more promontory sites enclosed with wooden barriers than the first look at the archaeological record reveals.

Further, it is likely that besides Võnnumägi there are other Pre-Roman Iron Age promontory forts that have a rampart made of stone (and probably earth). Two promontory forts which have a low rampart and large compound with an area of approximately a quarter of a hectare, but lack the occupation layer, have been reported from Salevere (*Salumägi*) and near Lihula (*Lihuntsi kants*) in western Estonia. Their date is, however, unknown, as the latter has not been excavated (Mandel 2011, 75 f., fig. on p. 75) and excavations at the former have been quite limited so far (Kaldre et al. 2009). Though both their appearance and other archaeological sites in the vicinity suggest an early origin for these forts, one should still be cautious in assigning a date without direct dating evidence.[4] Long and low ramparts defining a large area with no finds at one end of a hillock may also originate from the Final Iron Age, as the fort at Muuksi appears to show (Vedru 1999b).

It is worth emphasizing here that stone ramparts or walls, though rare at the hilltop sites, were in at least technical terms not that innovative or extraordinary in the wider Early Iron Age context. Stone and earth defences are known from the Late Bronze Age fortified settlement in Asva, Saaremaa, and the circular

[4] After completion of this article, radiocarbon dates were obtained from Salevere confirming the Pre-Roman Iron Age origin of the rampart (Helena Kaldre, unpublished data). This means that Salevere can be regarded as definitely belonging to the group of Pre-Roman Iron Age ramparted sites together with Võnnumägi and Jägala. The rampart at Salevere consisted mainly of stones.

ramparts built on flat ground and forming rounded enclosures have also been made of stones (Lang 2007a, 61 ff., 75 ff.). Such ring forts, about a dozen, form another important group of Early Iron Age enclosed sites beside the hilltop sites. True, their spread is limited to western Estonia (see Lang 2007a, fig. 17) and their date within the Early Iron Age is unclear, which means that their chronology may not entirely overlap with that of the hill sites and fine-grained comparisons may be inappropriate. Similarly to the elevated sites, the cultural layer in the ring forts is usually thin and non-intensive, if not absent.

It is clear from the above that all Early Iron Age enclosed settlements are as enigmatic as the Võnnumägi site, as their poor find material sheds little light on the function and use of the sites. This is at sharp variance from the Late Bronze Age so-called fortified settlements, which have thick and find-rich occupation layers and have probably been inhabited by rather large communities consisting of several families (Lang 2007a, 57 ff.). The character of the cultural layers of the Pre-Roman Iron Age enclosed settlements is, however, similar to the open settlements of the time, which probably comprised single households which from time to time changed their place for living. It is thus probable that some of the enclosed sites, especially simple hilltop settlements without artificial defences or with modest wooden fences, have been inhabited by single households whose social prestige was stressed by choosing the living space on the elevations. Even the simple settlements on topographical rises make the settlement pattern hierarchical, the more so that in many instances such settlements appear to have controlled locally important waterways (see, e.g., Veldi 2006). It may thus be justified to call such hilltop residences predominant farms (Lang 1996, 465 ff.; cf. Veldi 2006).

On the other hand, the large-scale construction work necessary to erect the long ramparts suggests a larger group of people working together to achieve specific goals. Traditionally, the sites with ramparts but with no occupation layer have been interpreted as refuges (‘refuge forts’), which had no permanent inhabitation but where the community gathered in times of warfare and danger to defend itself (e.g., Moora 1955; Jaanits et al. 1982, 220). If the rampart at Võnnumägi had a wooden superstructure (which can by no means be excluded), its defensive capacity would have been considerable. The two arrowheads found from Jägala (Lõhmus & Oras 2008, 35; Lõhmus et al. 2010) and the frequent signs of fire observed at the sites could also be viewed as indicators of inter-group aggression. But what is doubtful is that such forts were effective and necessary in view of the sparse settlement network and the nature of warfare at the time. A distant fort probably offered little protection from small and mobile raiding gangs, and if there had been wars for territories with prolonged besieging of central forts, then a larger number of such sites would have been known. Besides, the Pre-Roman Iron Age forts are notably large in surface area and thus their protection would have required a large group of people. Given the rather low population rates for prehistoric Estonia, smaller forts must have been easier to defend. It was noted above that the later forts, which really functioned as such,

were indeed in most cases smaller than the early promontory forts; for instance, the fort of Keava was about 900 m^2 in surface area. This also suggests that a military-protective function of the early enclosed settlements is doubtful.

A third interpretation of the Early Iron Age enclosed sites is that they were communal places for ceremonial gatherings and religious rituals, which were attended from time to time without leaving behind substantial traces to form an occupation layer. A similar function has been suggested for the Early Iron Age ring forts in Gotland, which are very similar to the Estonian counterparts (Cassel 1998, 145 ff.). Additional strength to this interpretation is perhaps provided by the fact that the meteorite lake at Kaali, Saaremaa, is encircled with stone ramparts, and there are reasons to think that this lake, given its unusual origin, was considered holy (see Lang 2007a, 76 f. and the references therein). This argument applies not only to the circular enclosures on flat ground but also to at least some of the hilltop sites, especially those with substantial ramparts. The ramparts, walls and fences may have served to structure the space and control movement and access where necessary, and they probably also had some other meanings and connotations. It is clear, however, that the precise content and meaning of the activities performed at such sites would be impossible to reconstruct. Moreover, without proper evidence it could well be that this is just another notorious case of labelling a site as a 'cult place' only because we do not know what function it once had. The claim that the places of ceremonial and ritual significance may have been used as military forts or refuges sounds like a contrived compromise but may nevertheless be true.

Despite its prominent and, as one might expect, 'central' position in the landscape, contemporary sites in the vicinity of Võnnumägi are unknown. The closest Early Iron Age settlement sites are located at Koogimäe and Käbiküla; there is also a group of stone graves and cup-marked stones 6–7 km south-west of the Võnnumägi site on the lands of the villages of Nadalama, Käbiküla and Ohekatku in the surroundings of the present-day Kehtna (see more in chapter 9). On the other hand, it is intriguing that the circular enclosure at Lipa, also excavated within the Keava project (Konsa et al. 2006), is only 15 km away from Võnnumägi. This fact is, however, difficult to interpret, because the date of the Lipa fort within the Early Iron Age is unclear: even if established in the Pre-Roman Iron Age, it may still be several centuries apart from the Võnnumägi site.

This is not to say that there were no other settlements in the area. Early Iron Age open settlement sites are small in area and poor in finds, and thus difficult to discover and easy to destroy, while stone graves were not erected in the inland regions and the spread of cup-marked stones was also sparse. Thus, it is reasonable to think that the solitary position of the Võnnumägi site is not real, but results from gaps in the archaeological record. Largely the same is the situation around other inland hilltop sites, i.e. the Pre-Roman Iron Age settlement pattern is very difficult to reconstruct there (cf. Veldi 2006). In northern and western Estonia, where the stone graves help, the Pre-Roman Iron Age enclosed sites appear to have been located in densely populated areas with a rather long settlement history,

and thus numerous contemporaneous sites within the range of 5 km from the enclosed site can be observed (e.g., Lang 1996, figs 102, 113, 121). More precise estimations may be dubious, but it nevertheless seems that the hilltop sites were situated rather in the periphery than centre of these densely settled areas.

Conclusions

The excavations at Võnnumägi provided important information to supplement the settlement history of the surroundings of Keava. Although contemporaneous sites are rare there, the presence of the hilltop site probably indicates that the surrounding settlement network was relatively dense in as early as the Pre-Roman Iron Age. Whether a ceremonial or religious place, a fort or a refuge, a wealthy (elite) farm, or combining all these functions, the site at Võnnumägi must have been an outstanding and significant place in at least local context, and even if it was only a short-lived enterprise.

Given that undisturbed Early Iron Age hill sites are rare, Võnnumägi is particularly valuable in contributing to the research into the enclosed sites of the time, especially in view of the incidental character of the previous research. It has been known that after abandoning the Late Bronze Age fortified settlements and before the major development of forts in the Middle Iron Age some rare hill forts and ring forts on flat ground might have existed, but these notions have been vague and even inconsistent. Excavations at Võnnumägi and Jägala were the first to clearly prove that hill sites with elaborate ramparts were in use as early as the Early Pre-Roman Iron Age, and that more such sites can be found among the unexcavated hill forts that so far have been dated to later periods. Moreover, it is evident from the excavation results that early hilltop sites that did not have prominent defences (and there is evidence to suggest that such sites did exist) would be very difficult to discover by digging only a couple of optional test pits on top of a hill. Indeed, if the site at Võnnumägi had not had a rampart, we probably would not have been able to discover it. This means that the Pre-Roman Iron Age hilltop sites may have been far more numerous and the settlement pattern more complicated than previously thought. These circumstances along with the new data obtained from the south-eastern Estonian hill forts (Valk 2008; Valk et al. 2011) have necessitated a closer look at the fragmentary data that had accumulated during the previous decades. As a result, it emerged that the hilltops have been in use throughout the Pre-Roman and probably also the Roman Iron Age. There is still much research to do to get a more precise chronology, especially for the circular enclosures of western Estonia.

Although we might now look more open-mindedly at the unexcavated forts and take more radiocarbon samples and dig more test pits to discover new Early Iron Age enclosed sites, we still do not know how such sites were used. One should be cautious with the idea that if on a hill and termed as fort, then it was a fort.

Such sites may include different places with various functions and purposes, and for some of them the label ‘fort’ may be only conventional, if not misleading. On the other hand, more detailed terminology would be difficult and unreasonable to establish unless we have a better understanding of the character of the sites. In the light of the Early Iron Age enclosed sites it nevertheless seems that we should rethink the entire group of forts and try to better match the approach of Tõnisson (2008) with the approach of Moora (1955), i.e. besides describing how the forts look today, dedicate more time and space discussing what they were. As for the Early Iron Age sites, however, no recipe can be given as how this aim should be reached. It is difficult to imagine that opening extensive excavation areas at Võnnumägi would have provided clear answers as how to interpret the site. But as always, we keep hoping that future research will provide more data for the better understanding of the Early Iron Age enclosed settlements.