

The horizontal stratigraphy of a medieval hamlet

- Mankby in Espoo, Finland

Ulrika Rosendahl

The medieval hamlet Mankby in Espoo, Southern Finland, excavated from 2007–2013, has revealed a landscape that reflects the complex development of the region – from the initial Swedish colonization to the emergence of an established medieval village, a village that was abruptly dissolved in 1556, when the freeholding peasants were forced to leave their land to the royal demesne that the Swedish king Gustavus Vasa founded on this spot. This study explores this landscape change, and the different layers in the landscape through analyse of historical maps combined with data from archaeological field work. The land use in the area gives a quite stable impression from the end of the middle ages to the enlightenment, even though a drastic change in the experienced landscape appeared when the demesne took over the land. In contrast, the medieval hamlet period from the 13th to the mid-16th century show shifts in the land use and movements within the toft-land that reflects the dynamics of the medieval period and shifts in agricultural technique.

Introduction

The reading of layers in the landscape, and looking at long-term changes as well as events that had a quick and radical impact on the landscape has become an important way of analysing the archaeological material. The horizontal stratigraphy of a medieval landscape is, like any stratigraphy, a puzzle of observations and interpretations. This article will present the research from Mankby, a medieval hamlet site in Espoo in southern Finland. The hamlet has been excavated during a

project at Helsinki University and Espoo city museum since 2007 (eg. Haggren, Holappa, Knuutinen, Rosendahl 2010). Since then, our research has moved forward, and the results that we have gained from the excavations have become possible to discuss in the context of the surrounding landscape.

One of the main aims of the studies of Mankby has been to understand the structures behind the formation of hamlets and settlement in southern Finland. The formation of the settle-

ment is not a coincidence or “natural” development, but a result of structures and agency. In the perspective of the evolving early kingdom, the formation of hamlets and villages is a process comparable to urbanization and castle building. It organized both people and the production of foodstuffs into controllable units. The hamlets were, in a sense, the economic base for the emerging states. Still, the agency that resulted in the fact that a specific site was chosen can just as much be explained by the agency of the actual settlers.

The studies of Mankby are also an integrated part of the authors’ upcoming PhD dissertation on the subject of rural settlement strategies and medieval colonization in the Espoo area. Espoo is a parish in of the southern coastal zone of Finland that was colonized by Swedish speaking population during the beginning of the medieval period, probably during the 13th century. The dissertation study aims to analyse the patterns and strategies behind the village formation process, but also to understand the need for recourses, the techniques to exploit them and the social and cultural process that took place when the settlers were encountered with other different cultures in the new area.

Whereas this particular text is based on a paper, originally written for a session on horizontal stratigraphy in the VIII Nordic meeting on Stratigraphy in Jönköping, it approaches the landscape of Mankby from a slightly diffe-

rent angle. By using the terminology of stratigraphy, which we know from fieldwork and excavations, it aims to walk through the different stages in history, as they were stratigraphic contexts, or layers, that have accumulated themselves in the landscape. The choice of word, the layer is to be grasped as a metaphor for the experienced and used landscape that has been present in a specific period in history. As some of these features are visible today, while some are covered by more recent strata, the process to read the landscape can be compared to a contextual excavation, where the newer layers are removed one by one in order to reveal older levels.

In other words, this is a step-by-step-method that moves gradually backwards in time using analysis of historical maps and keys gained from the fieldwork at the site. This approach is chosen in order to fill the gap between the present and the past, analysing not only the oldest stage, but also the stages between the ends of the time spectrum of the site. This method aims to identify the different features in their right contexts, and thus creating a solid base for further studies to engage in a dialogue with the landscape and the different layers it is made of.

The map and the experienced landscape

When cartographic representations emerged as a means to illustrate landscapes, there was a major change in the

way landscapes were experienced. The landscape became visualized as a whole that could be seen in a single moment, and dislocated it from both time and the physical experience of viewing it from the ground (Barret 1999, p. 23, Cosgrove 1984, see also Johnson, 2007 p. 85–89). In rural Southern Finland this can be said to have happened on a quite detailed level when cadastral mapping came into use in the kingdom of Sweden during the 17th century (Huhtamies 2008). By the end of the 18th century there is hardly any village in Espoo, whose fields, meadows and borders has not been carefully measured and drawn on a piece of paper by a cartographer commissioned by the state.

The cartographic venture of the Enlightenment has of course left a wonderfully useful material in the archives for archeologists and historians. But as researchers, thinking about and studying landscapes using these cartographical representations, we, should be aware of the bias the cadastral maps carry within themselves. Maps do not represent the experienced landscape, but rather an attempt to rationalize and control it by focusing on its resources. In landscape archeology today, many researchers have pointed out the importance to understand landscapes in the context of the cultures that inhabited it, and the social and symbolical meanings the landscapes had to these people (Knapp & Ashmore 1999, Bender 1993).

In a society that depended on farming, as in medieval and early modern Mankby, the field and meadow resources were indeed elementary not only for the subsistence of the people, but also for their conception of the time, space and society. Practically all aspects of medieval life was linked to the use of these resources and the cyclic return of the agricultural events (Salminen 2013, p. 165-174). But the landscape that provided all this was not read as a map. It was the living and physical experience of it, that gave the landscape its meaning; like the field strips measured with the village measuring stick or the knowledge of border marks in the woods (Jutikala, 2003, p. 241; Salminen 2013, p. 190–193). Christopher Tilley has described how the experience of space comes through the lived body moving in and looking out on the world (Tilley 1994, p. 16). Sometimes archeologists can try to identify with that experience, as we do surveys, walk through the landscape and spend hours of staring into its features, trying to explain them. But experiencing the landscape using our own set of references is not a solid base for research on a past culture with different rules, habits and views on the world (Johnson 2007, p. 62–62; Tilley 1994, p. 11). The experienced landscape is not only bound to a certain time and culture, it is also viewed different according to the viewer's position in that culture, depending on gender, age and social position (Bender 1993, p. 2).

This said, this is still a study that uses maps and recent archeological fieldwork to explain features that derive from past landscapes. But this cannot be done without acknowledging the context these features have appeared in. The story of the landscape within and near the hamlet Mankby goes from colonization to the forming of one of the largest manors in the area. These radical shifts in the social structure of the site had a surprisingly small effect just viewing the landscape on the map, but an enormous impact on the experienced landscape. In other words, the development of the landscape is not linear and this paper aims to examine through the phases of the medieval hamlet and the early modern manor, as complex structures of a culture.

Starting in the contemporary – towards the manor

When we look at the contemporary landscape, the place called Mankby is quite an anonymous archeological site, consisting of small heaps of stone in a forest. Before the site was found during archeological survey in 2004, the historical village site had been a forgotten place. The area was of extremely little use, situated unpleasantly near heavily trafficked areas. The landscape is cut through by one of the main ring ways around the capital city area of Helsinki. The fields are divided by the traffic system, and the fields of today are quite

small. Since Espoo is part of the Helsinki metropolitan area, the pressure to exploit the area for housing is very big. Especially the east side of the stream is heavily built. Still, the west side of the ring way has a preserved historical landscape. The land is owned by the manor Esbo gård, and several of the buildings originate from the 19th century. Especially those that are built along the old road, the remains of the old country road that once lead from Turku in the west to Vyborg in the East.

The retrospective use of historical maps is essential for interpreting old settlement layers, but also quite recent maps, from the middle of the 20th century can give important information on field structure and other landscape elements. This is especially important in suburban areas that have developed rapidly in the last few decades. If we look at a map from 1961 (fig. 1) we can see the fields as they were before the building of the big traffic systems in the 1960-ies. What becomes visible is the historical landscape of one of the biggest mansions in the area; Esbo gård. The fields are used very efficiently for agricultural purposes. In the beginning of the 20th century marches and meadows were drained and turned into arable land. At the same time, the machines used in agriculture were still quite small, and some very small fields in the woods are still in use. These are today totally covered by the forest.

Figure 1. The Landscape of the manor Esbo gård as seen in a map from 1961. The landscape is at this point still dominated by heavy agricultural use. The toft of the deserted medieval hamlet Mankby and its remains is added to the map. (Grundkarta no. 2032 12/ Esbo 1961)

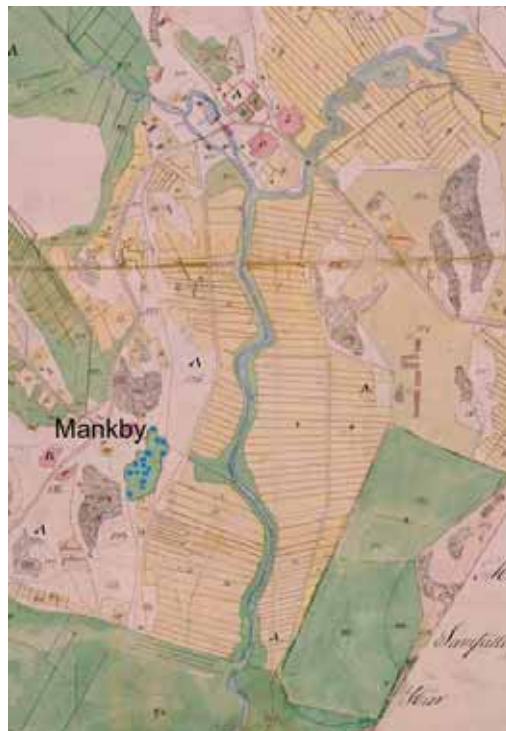
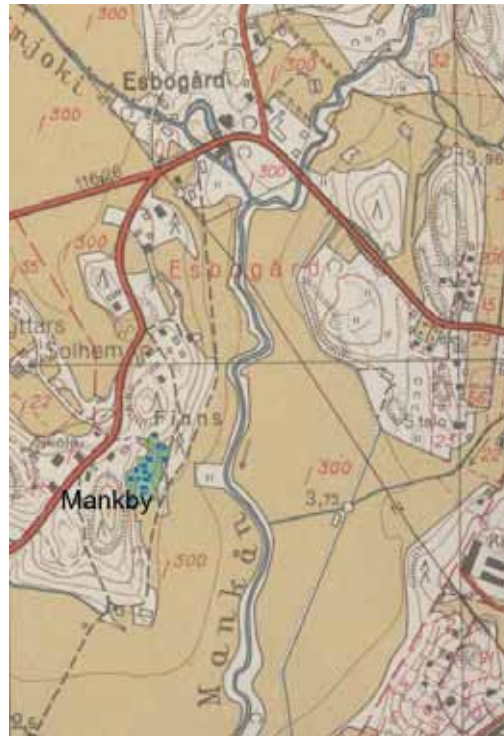


Figure 2. Placing the site of the medieval hamlet Mankby on a map from 1831 helps to separate the hamlets' fields from the meadows. The two main fields were used every second year. (Map: National archives, Helsinki, MMH B7:9/2-10)

If we look at the situation in 1831 (fig. 2), the original main fields appear. They are Esboåkern on the east side of the stream and Mankåker on the west side. These fields have been the most productive ones on the estate, which in all consisted of over one thousand hectares. Especially the eastern field, Esbo åkern had had a very fertile soil. Mankåkern, on the other hand, had had an excellent natural drainage because of the slight slope towards the stream, and thus the field has had no need for blind drains or ditching according to the manager of Esbo gård, who has been taking care of the farming of Esbo gård during the last 35 years. In other words, here we seem to have a correlation between early settlement and fertile soil.

In the map of 1831 we can also see the main elements of the manor Esbo gård. The mansion and its park, with the still existing main building, built in 1797. The barn and the other production units are situated on the southwest side of the park. And on the west side was the dam that the manor used to control the water force in the nearby rapids. Here was the manors' mill and lumber mill located; the existing mill was built 1777. The rapids have been important for the manor since the founding of Esbogård as a royal demesne in 1556. Control over water force has been a dominant feature of the early modern royal demesnes that was founded in this area, this immediate presence of rapids is visible also at the

royal demesne of Helsinki, situated 22 km to the east, and at the royal demesne of Sjunby, situated 20 km to the west of Esbo gård.

The layer of 1779 – early modern times in retrospect

When we continue deeper into the levels of mapping in this area, we are confronted with the oldest map that has remained in the archives (fig. 3). The map itself is a demonstration of how landowners in the age of enlightenment modernized and expanded their arable land. The map is actually a plan of how the manor is going to drain its meadows, making them into fields. In the case of Esbogård, this process seems to have remained mainly on the planning table. The areas are still in use as meadows in the 1831 map. The only exception is a strip of land between the northern and southern part of the field Mankåkern. This meadow seems actually to have been made into a field at this point; we could observe the drainage ditches during field work 2010.

But if we take out of count the old meadows, we get two smaller fields on the west side of the stream, the lower and the upper Mankåker. The name of the fields is referring to Mankby, a hamlet that formerly was in possession of the fields. The inhabitants if Mankby were all independent land owning peasants (swe: skattebönder), that paid tax directly to the crown and had an inwheri-

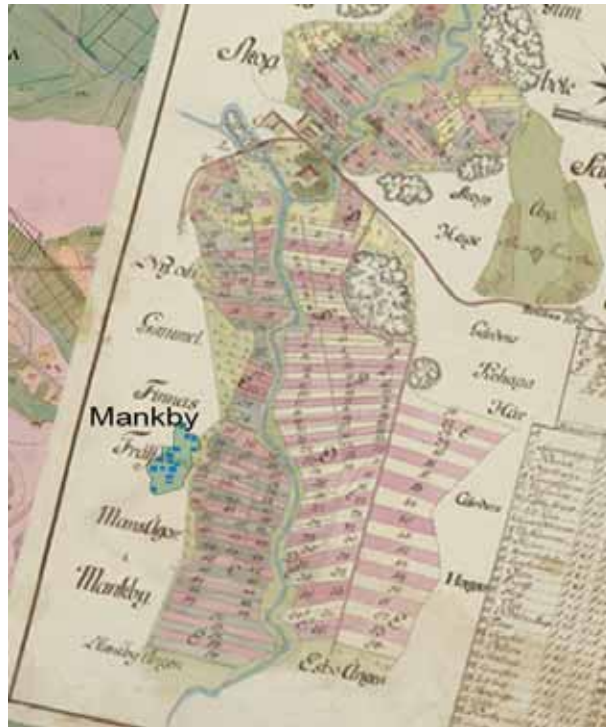


Figure 3. A map from 1779, drawn to illustrate (partly unfulfilled) plans to drain meadows into fields shows that the narrow part of the field (marked with "E") was originally a meadow. (Map: National archives, Helsinki/MMH B7:9/1)

ted right to their lands. Still, they had to leave their homes when the manor Esbo gård was founded by the King in 1556. The lands of the two neighbouring peasant hamlets Mankby and Esboby were at this point incorporated in the new royal demesne. The peasants of the two hamlets were moved to farmsteads in other hamlets in the parish. The hamlet Mankby was deserted in a very quick process. The peasants agreed to give up their lands in August of 1556, and the manor took immediately over the agriculture, as we can read in the preserved book-keeping of the demesne. (Haggrén & Rosendahl 2008, p. 135–137; Ramsay 1924, p. 339–342, KA 3075, KA 3031,).

The shift from medieval times to early modern times was exceptionally drastic for the peasants of Mankby and Esboby that in the end were forced to desert their homesteads because of the Swedish King Gustavus Vasa's plans to modernize Finland. The 16th century royal demesnes of Finland were a result of a modern way of thinking. The King's plans to gain greater control and efficiency in this remote part of the kingdom, can be viewed as a part of the nascence of capitalism in Northern Europe, to use the terms of Matthew Johnson (1996). By establishing royal model farms that could bring up livestock and, if needed, feed the army in case of military threats from the East, the king materialized these new ideas. In

Sweden the time of Gustavus Vasa was also a time of bureaucracy. The reeves of the demesnes had to report the estates finances notoriously to the crown.

From Esbo gård there is thorough bookkeeping preserved from the demesne period. This means that even though there are no older maps than the 1779 map, we are able to estimate the outcome and use of the fields and meadows in the sources of Esbo gård since the middle of the 16th century. August Ramsay has calculated that the cultivated field area of the demesne remained unchanged during the 16th century according to the bookkeeping of the demesne (Ramsay 1924, p. 267). In the map of 1779 the area of the field Mankåker is specified to be a bit less, and the field Esboåkern to be a bit more than 15 hectares, or 30 tunnland, to express it using the contemporary measurement unit. Taking into account the uncertainty of using historical measurement, this number of all in all 30 hectares is surprisingly accurate to the area of 30 hectares that Ramsay estimates to be the area of the demesnes' property in the 16th century (Ramsay 1924, p. 267) Thus, with some precautions, it is fairly safe to say that the fields of Esbo manor in the map from 1779 form the main land resources of the late medieval phase in the hamlet of Mankby and its neighbour Esboby.

The late medieval layer – visible in field observations

If we continue looking for the exact position of the toftland of the medieval hamlet of Mankby, we can tell by the field names that Mankby should be situated to the west of the stream. If we have a look at the Cartographer's draft that preceded the map of 1779 (fig. 4) we can get more information than we find in the final map. What interests us is the small word Mankby, which is written on the west side of the southern field. Even though the location of the tofts of Mankby was not in use since the hamlet was deserted in 1556, it seems like people in the 18th century still had knowledge about the hamlet. Later even this would be forgotten.

Today this place is luckily preserved in the forests of the manor, the archeological site was detected in 2004 (Haggrén & Latikka 2004). The large Helsinki ringway III passes by very closely, but has actually not destroyed any features of the site. The toftland of the village has not been inhabited since the 16th century. There has only been some minor agricultural activity on the site, one of the drying barns of Esbo gård was situated here, and used sporadically up to the 18th century.

The field observations support the assumption on the quick process of abandonment. Since the lack of action on the site since the abandon-

Figure 4. The cartographers draft that preceded the map of 1779 was crucial when identifying the hamlet, since the the name of the deserted hamlet was written at the site where the remains of Mankby was found in 2004. (Map: National archives, Helsinki/MMH konseptikartat)



Figure 5. Combining information from cadastral maps and archeological fieldwork, it is possible to visualize the toftland, fields, meadows, forest, roads and waterways that constituted the primary landscape and resources of the late medieval hamlet.

ment, the remains of the hamlet are very well preserved and still visible over ground. It is definitely one of the best examples of medieval village structure in Southern Finland. We can find over 20 house remains, which go back to different periods of the hamlet. The toft area of the hamlet is clearly built into the slight slope, the area has been cleared of stones, and the excavation has showed a quite extensive use of fill soil. We can also see traces of the roads that lead to the site.

If we add up the information we have at this point, we can visualize the late medieval landscape of the hamlet Mankby (fig. 5). The buildings of the hamlet seem to have a concentrated toft structure on a small area on approximately 150 x 50 meters. The two fields are similar in size, adjusted to be cultivated within a two field- crop rotation system, as were custom in this area. Outside the fields are the meadows. The forests are owned, according to a special Finnish custom, together in a so-called "skifteslag" with the neighbouring hamlets Esboby and Träskby.

Instead of the big rapids the peasants use water force with smaller mills upstream. Because of the land uplift, the stream itself was a small river, and probably sailable without problems. The river lead to the Gulf of Finland, and it is known from the Archives of Tallinn that the peasants of Mankby sailed to Tallinn to trade

their goods in late medieval times. The find material of the excavations show that the peasants have had access to a material culture that very well matches the culture of the hanseatic towns.

Can we go further? – Ard marks and archaic structures

Even though we think that we have a fairly correct picture of the late medieval landscape, we would be interested to go further, to the birth of the settlement in Mankby. The medieval period in this part of the country is characterized by a fairly complicated settlement history. Southern Espoo belongs to the Swedish-speaking part of Finland. Until the mid 20th century, the majority of the population were Swedish speaking, and the parish has a Swedish place name-material. This situation is explained by colonization from Sweden in the 13th century. The structure of the colonisation is however not well known. For example, we know little of what was the incitement to colonize, or what kind of settlement previously existed in the area when the settlers arrived (Rosendahl 2008, p. 61-66). This part of Finland was at that time situated quite far from the central areas in Iron age Finland, and in Espoo we have no dwelling sites or burials that is dated to the Iron age in the archeological record. Still, according to recent pollen studies the coast of Espoo have had cultivated fields at the latest since the 11th century, and in the inland of the

neighbouring parish Kirkkonummi as early as 730 AD (Alenius 2011, p. 92-93). In the whole region of Uusimaa, there is a vast opening of the formerly forested landscape and an increase of cereals around the beginning of the second millennium (Alenius & al 2015, p. 109). In addition to this, because of increased amateur metal detecting, we have gotten new stray finds from the Iron age to the museum collections, that show us that the area cannot have been uninhabited up to the Swedish colonization.

Archaeology seems to be the only source we have to go deeper into the layers of the landscape, and try to understand the landscape of the colonists in the early middle ages. The excavations that our project has been doing on the site might provide some keys to examine these early phases. At this point, we have no clear indication of continuity from the Iron Age on the site. If this observation is correct, we could assume that Mankby is a site founded by medieval settlers. This does not mean that Mankby remains typically "Swedish" during the Middle Ages, on the contrary, we see many signs of hybridization of cultures, and a strong Baltic or Hansaetic influence in the record.

During the excavations we have found some signs of movement within the toftland of the hamlet. One of the most significant signs of changes are the ancient fields that we have found at a spot that we have interpreted as a central, perhaps commonly owned,

area of the late medieval hamlet. In our excavations we have found two stratigraphically overlapping ancient field layers, that both are older than the late medieval buildings. We have radiocarbon datings from grains of rye and barley found in the field layer that show that the younger of the two layers originates from the 1300th century (Lab no. Hela2610 & Hela2611, Luonnontieteellinen keskusmuseo, ajoituslaboratorio, Helsinki). The age of the older field is unclear; but we are still hoping for results from the radiocarbon dating that will tell us a more exact dating for this feature. According to Alenius (2014, p. 109) the transition towards a two year crop rotation, that can be seen in an expansion of hay meadows in the landscape, began in Uusimaa from the 13th century, and continued into the 15th century. This means that the ancient fields found during the excavations are likely to belong to the older phase with one-year crop rotation. During the end of the medieval period the old fields were abandoned, presumably since the two-year crop rotation system had taken over.

The fields appear to be very small, in contrast to the late medieval fields. Their shape is also very different compared to the large fields of the later period; these fields could be described as small irregular squares, whereas the later field are big areas divides into thin strips. Towards the bottom of the layers of the excavated fields we detected ard marks in opposite direction, an indication of the tilling technique

used on the field. This, and the grains of cereals found in the paleobotanical material implies that these fields have been used for grain cultivation. Garden plots are generally thought to be tilled using spades, not the horse pulled ards, and we have no indication of spade marks in the soil. However, since other plant remains, such as cabbage or turnip etc, hardly could be preserved in the material, it cannot be ruled out that other species have not been grown on the field.

What these features imply, is that the initial phase of the settlement did not necessarily rely on a two-year crop rotation with fields in the river valley, but rather on an intense use of small field areas in the actual toftland. A bit higher up in the slope, we find the buildings that could have existed simultaneously with the fields. In this picture we see a 14th century building that revealed itself underneath a 16th century building and we seem to have even older layers underneath this house. We have a 13th century dating from a test pit on this topographical level. During our excavations we could identify remains of oven structures from the oldest layers, although damaged by the younger buildings. Hopefully the forthcoming radiocarbon dates will provide more information to help us to put the picture of the earliest settlement phase together.

One of the big question marks in the material from the Finnish countryside, are the cemeteries that might be part of the early landscape of the hamlets. In

Mankby we have found dug features, which visually show a close resemblance to medieval graves. But since we have no preserved human bone material, which is the normal situation in the acid soil of Finland, it is impossible to prove their existence. However, we have found human graves in two other medieval hamlets in the parish, and these finds makes the interpretation of the Mankby features as graves more liable. In the hamlet Kauklahti, located only 1,5 kilometres from Mankby, a medieval cemetery was identified during excavations 2003 on the tofts of the hamlet (Haggrén 2005) Eight kilometres Southwest of Mankby, in the hamlet of Finnå was a large cemetery with over forty graves found during excavations in 2008. (Haggren 2008, p. 45–46, Kivikero 2011).

The graves provide an interesting discrepancy between the text-based idea of the Christian burial ritual and the archaeological material. The graves seem to follow a Christian burial custom, but the burial ground is not located anywhere near a church or a chapel. On the contrary, they seem rather to be analogue with the burial grounds of the Iron Age society, where burials were closely linked to the settlement. Hamlet cemeteries seem to be very rare in the medieval material in Sweden, which means that this phenomenon is hard to explain referring to the customs of Swedish colonists. In a Finnish context medieval Christian hamlet cemeteries are not unknown, but mainly they have been

found in spots that show continuity from the Iron Age (e.g. Lehtosalo-Hilander 1982, p. 13–15). However, the research on these possibly Christian medieval graves in Finland have been sparse, since the rich findings of the iron age graves seem to have got the main attention of the research.

The landscape of the settlers is hard to reach with accuracy, but using these observations, we can identify some of the core elements that have been present in the early settlement. These consist of a concentrated toftland area, with fields and settlement closely linked to each other. In addition to the housing and production areas, a ritual space, a village cemetery, can have existed in the immediate proximity of the village toftland. The outland use is not easily reached by the means of excavation. The use of small, intensively cultivated fields, however, suggests need of manure and cattle breeding, which in turn needs meadows and pasture lands. These were most likely to be found in the river valley, that later would be made into fields.

The layers of history – a conclusion

This article aimed to look at a landscape as would it consist of layers in a stratigraphy, using historical maps as a metaphorical excavation site, and identify the contexts of different historical phases in the maps and the landscape. Just as an excavation, the

analysis started in the contemporary landscape, peeling off the newer layers and working towards the older levels, aiming at the first historical settlement on the site. These layers would, however, not be useful for understanding the strategies of the land use unless they would be translated from the view of the map into elements that had meaning in the experienced landscape of the inhabitants and its contemporary viewers. These meanings are something that has changed greatly during the different phases of history; maybe more than the actual landscape itself changed.

The place chosen for the study was a site with a quite untypical historic record, the area of Mankby and Esbo gård in Southern Finland. In the contemporary landscape, filled with traffic systems and expanding land use for housing, it is challenging to survey and see the historical land use on the field in this site. With this in mind, maps as young as from the 1960ies show surprisingly old features in the landscape, dating back to the Middle Ages. The other surviving maps from 1831 and 1779 are showing a landscape of power, the landowning of the noble estate Esbo gård, but they also reflect much older field structures. The manor Esbo gård was not founded on noble landholdings, but as a royal demesne by the king Gustavus Vasa in 1556. The demesnes in Finland of the 1500ies did not reflect a noble ideology; they were rather practical institutions that focused on tax collection and production. The land

that the demesne was founded on was the land of two freeholding peasant villages, Mankby and Esboby, which the crown incorporated in their new estate while the peasants had to leave their homes.

The landscape of the deserted, and eventually forgotten, village site Mankby appears to be the oldest layer of permanent settlement and farming in the historical landscape on this site. The site is archaeologically well preserved and has been excavated by our project, and the late medieval land use is quite reachable using the cadastral map record. But we can't assume that the first stage of settlement is directly visible in the landscape of the archaeological site from 1556, or in the cadastral mapping of the area. To see the historical landscapes we must understand the long-term changes that have happened in the past, and approach the oldest periods with open minds. The 500-year long period that we call medieval is not to be assumed to be any more static than the following 500-year period of history.

The elements of the early settlement can only be made visible through archaeological research.

During the excavations at the site, no signs of continuity into the Iron Age has been found. This has supported the assumption that Mankby

emerges as a hamlet for the Swedish speaking settlers that inhabit the coast of Uusimaa from the middle ages onwards. The colonization of the area is a quite radical change in the settlement pattern, and must have had a major impact on the landscape, that before the middle ages seem to have been only sparsely inhabited. We have been able to identify some of the core elements that reflected the life in the early hamlet, and a shift of the land use within the toftland. The early hamlet has a very concentrated structure with buildings and fields, and a potential ritual space with graves, located closely together on the area that we had defined as toftland. Towards the end of the history of the village Mankby, the housing expand to cover the whole toftland and the fields within the village disappears, and the large fields in the river valley - partly still used today - forms the main resource of the village.

This research is conducted with financial support from Svenska litteratursällskapet i Finland.

Ulrika Rosendahl is a PhD student in archaeology at the University of Helsinki.
E-mail: ulrika.rosendahl@helsinki.fi

References

- Archive of the National Board of Antiquities, Helsinki: The research and excavations of Mankby are a part of an on-going project conducted at the University of Helsinki and Espoo City museum. The observations of the site described in the text refer to the following excavation reports:
- 2007: Georg Haggrén, Maija Holappa, Tarja Knuutinen, Olli Kunnas, Tero Pitkänen & Ulrika Rosendahl: Espoo, Espoonkartano, Mankbyn kylätontti. Kartoitus ja koekaivaus.
- 2008: Georg Haggrén, Maija Holappa, Hanna Kivikero, Tarja Knuutinen, Ville-Matti Rohiola, Ulrika Rosendahl, Tanja Rönkkö, Anna-Maria Salonen, Jenni Siltainsuu & Elina Terävä: Espoo, Espoonkartano, Mankbyn kylätontti. Kaivauskertomus.
- 2009: Georg Haggrén, Maija Holappa, Tarja Knuutinen, Annika Eklund, Janne Heinonen, Hanna Kivikero, Ulrika Rosendahl, Anna-Maria Salonen, Jenni Siltainsuu & Elina Terävä: Espoo, Espoonkartano, Mankbyn kylätontti. Kaivauskertomus.
- 2010: Georg Haggrén, Maija Holappa, Janne Heinonen, Hanna Kivikero, Ulrika Rosendahl, Tanja Rönkkö, Anna-Maria Salonen & Elina Terävä: Espoo, Espoonkartano, Mankbyn kylätontti. Kaivauskertomus.
- 2011: Georg Haggrén, Maija Holappa, Tarja Knuutinen, Ulrika Rosendahl, Anna-Maria Salonen, Elina Terävä, Sanna Lillman & Anna Ylitalo: Espoo, Espoonkartano, Mankbyn kylätontti. Kaivauskertomus.
- 2012: Georg Haggrén, Maija Holappa, Ulrika Rosendahl, Anna-Maria Salonen, Elina Terävä, Verna Kalmari, Sanna Lillman & Essi Ruuskanen: Espoo, Espoonkartano, Mankbyn kylätontti. Kaivauskertomus.
- 2013: Georg Haggrén, Maija Holappa, Ulrika Rosendahl, Anna-Maria Salonen & Elina Terävä: Espoo, Espoonkartano, Mankbyn kylätontti. Kaivauskertomus.
- Alenius, Teija 2010. From forest to farmland. Palaeoenvironmental Reconstruction of the Colonization of Western Uusimaa. Maritime Landscape in Change: Archaeological, Historical, Palaeoecological and Geological Studies of Western Uusimaa. *Iskos* 19. Ed. Mika Lavento. Helsinki.
- Alenius, Teija, Haggrén Georg, Oinonen Markku, Ojala Antti & Pitkänen Ritva-Liisa 2014. The history of settlement on the coastal mainland in Southern Finland. Palaeoecological, archaeological, and etymological evidence from Lohjansaari Island, Western Uusimaa, Finland. *Journal of Archaeological Science*. Volume 47/2014.
- Barrett, John C. Chronologies of landscape. *The Archaeology and Anthropology of a Landscape. Shaping your Landscape*. Ed. Peter J. Ucko & Robert Layton. London. p.21–30.
- Bender, Barbara 1993. Landscape – Meaning and Action. *Landscape. Politics and Perspectives*. Ed. Barbara Bender. Oxford. p.1–18.
- Haggrén Georg & Latikka Jaakko 2004. Espoo, Espoonkartanon alueen historiallisen ajan muinaisjäännösten inventointi 2004. Museoviraston rakennushistorian osasto. Opublicerad forskningsrapport. Museiverkets arkiv, Helsingfors.

- Haggrén Georg & Rosendahl Ulrika 2008. Mankby och de sista byborna – En epilog. Byn. Medeltid vid Östersjöns stränder. Esbo stadsmuseums forskningsserie 10. Helsingfors. p. 132–137.
- Haggrén Georg 2005. Arkeologiska undersökningar på en medeltida bytomt i Köklax, Esbo. Nordenskiöld-samfundets tidskrift 65. Helsingfors. p. 83–101.
- Haggrén Georg 2008. Nylands uppkomst – Västra Nylands medeltid. Byn. Medeltid vid Östersjöns stränder. Esbo stadsmuseums forskningsserie 10. Helsingfors. p. 36–52.
- Haggrén Georg, Holappa Maija, Knuutinen Tarja & Rosendahl, Ulrika 2010. Stratigrafin på en välbevarad bytomt – Mankby i Esbo. SKAS 2/2010.
- Huhtamies Mikko 2008. Maan mitta. Maanmittauksen historia Suomessa 1633–2008 . Helsinki.
- Johnsson Matthew 1996. An Archaeology of Capitalism. Oxford & Cambridge.
- Johnsson, Matthew 2004. Ideas of Landscape. Oxford.
- Kivikero Hanna 2011, Cattle Teeth in Graves : Interpretations of animal bones found in Finnish inhumation graves (ca AD 550-1700). MA thesis in Archaeology, University of Helsinki.
- Knapp A. Bernard & Ashmore Wendy 1999. Archeological Landscapes: Constructed, Conceptualized, Ideational. Archaeologies of Landscape. Ed. Wendy Ashmore & A. Bernard Knapp. Oxford. p. 1–30.
- Lehtosalo Hilander, Pirkko-Liisa 1982. Luistari I. The Graves. Suomen muinaismuistoyhdistyksen aikakauskirja. 82:1. Helsinki.
- MMH Lantmäteriets kartarkiv
 - Espoonkartano / Esbogård; Karta öfver åker och äng med beskrifning 1779-1779 (B7:9/1), Karta öfver egorne 1832-1832 (B7:9/2-10) & Konseptikarta.
- National archives of Finland, Helsinki:
 - KA 3075, 3013 Fogderäkenskaper, Esbo kungsgård 1557
- Ramsay August 1924. Esbo socken och Esbo gård på 1500-talet. Helsingfors.
- Rosendahl, Ulrika 2008. Kolonisation och nybyggare I den tidiga medeltiden. Byn. Medeltid vid Östersjöns stränder. Esbo stadsmuseums forskningsserie 10.
- Tilley, Christopher Y. 1994. A Phenomenology of Landscape: Places, Paths, and Monuments. Oxford.