Introduction

Between 500–700 AD, settlement structure in Scandinavia changed radically. More and more abandoned settlements have been discovered, including in the central arable farmlands where they were previously unknown. It has not been fully understood what has caused this large-scale abandonment, but several hypotheses have been proposed. In this paper, I examine these hypotheses more closely, drawing upon archaeological evidence from settlement sites in eastern Norway that have not been included and studied in this line of discussion so far. The more traditional ‘crisis hypothesis’ is evaluated against what I have termed as the ‘lordship’ and the ‘inheritance’ hypotheses, approached both from a macro and micro perspective.

In the administrative region of the Cultural Museum of History in Oslo (CHM), a total of 139 sites producing evidence of 450 houses have been excavated as of 2010 (Fig. 1). Almost half are located in the lowlands, the so-called claylands of the counties Østfold, Vestfold and Akershus, and not the least the Ra in Østfold, Romerike and in the low-lying rural areas close to the Ra in Vestfold (Bårdseth 2007; Gjerpe 2008; Martens 2007; Mjærum – Gjerpe 2012a; 2012b). Only a few excavations have been carried out in the valleys, woodlands and the mountain areas in the south-eastern part of Norway because of less development pressure.

Before 1990, most Scandinavian research on prehistoric settlements and farmscapes were based on fossilised house-foundations and field systems, as they are usually deserted and preserved in marginal environments, especially in the southern part of Norway. (e.g. Myhre 1972; Pedersen 1990) (Fig. 2). A widely held explanation has been that the abandoned farmsteads represented a periphery phenomenon caused by a contraction of settlements. The theories used to explain these changes have been related to settlements stagnation, a decrease in population or plagues. In contrast to this view, 75 per cent of the now known sites in the south-eastern region of Norway have been investigated since 1990, which makes me ask: can the image of settlement crisis and stagnation be maintained when considered using the new evidence from recent excavations?

New research in Scandinavia has provided valuable knowledge on the spatial organisation of households, farmsteads and agrarian landscapes (e.g. Ahlkvist 2002; Edblom 2004; Streiffert 2005; Söderberg 2005), as well as on the relations between sites and settlements in a wider perspective (e.g. Fabech – Ringtved 1999; Carlie 1999; Göthberg 2000; Helgesson 2002). It is generally agreed upon by Scandinavian archaeologists that the settlement pattern went through major changes on the threshold of the Merovingian Period. The reasons, however, are contested.

Three hypotheses

The ‘crisis hypothesis’ has been further developed and elaborated in recent research by Bo Gräslund (2007). In this context he has looked more closely at the phenomena Fimbul and Ragnarok referred to in mythical accounts and verse, such as Gylfaginning and Ka leva. He also finds arguments using written sources from Late Antiquity and China for placing the start of a climatic crisis to 536AD and lasting several years, which is also supported by scientific evidence. Between March 536AD and September 537AD, two summers allegedly were ‘lost’, which resulted in a long continuous cold spell (Gräslund 2007, 104 f.). This view is supported by abnormally high quantities of sulphates found...
Fig. 1. Excavated settlement sites in South-Eastern Norway per 2010. N=139. Data from MCHs settlement research group (see acknowledgement). Map: Frode Iversen.
in the East Antarctic ice cap (540+/-17 years) and in Greenland (534+/-2 years), which has been interpreted as traces caused by a volcanic eruption or an asteroid impact. Dendrochronological evidence from Europe, Asia and South America shows diminished growth in the years after 536AD. This suggests that the crisis seems to have had a profound global impact, and may signify a temperature drop of 4–5 degrees Celsius in the Northern hemisphere of Scandinavia. Recent studies of European climatic development also support this view (Büngten et al. 2011; Zachrisson 2011, 145). Analysis of pollen samples suggest an growth of vegetation in the cultural landscape and increased forestation in the Middle- and Northern Europe during the last decades of the 6th century.

The hypothesis Gräslund presents is fascinating. One single catastrophic event sets off a global crisis – one factor, a big bang. The crisis might have been enhanced by the Justinian plague and thus created extreme conditions. The results were population crisis and destruction en masse in liminal areas of agricultural land in the North. The impact was especially profound in settlements in colder climatic zones, such as Scandinavia. Gräslund links the abandonment of farms during the Iron Age to this crisis (Fig. 2), but does not provide any in-depth analysis of when these settlements were abandoned or how they relate to the surrounding agricultural landscape. The available evidence does not indicate a long-lasting climatic crisis. The question is, however, if this climatic crisis did have an impact on the settlement pattern to such extent as Gräslund presumes. More accurate dating with regard to the time of the abandonment to the decades after 536AD would perhaps strengthen Gräslund’s hypothesis. This in turn would present a foundation for a discussion concerning the extent of the crisis and its consequences for settlement layout.

The so-called ‘lordship’ hypothesis that started to gain support in the 1990s, is based on a process-oriented model that ties landscape and settlement organisation to the development of petty kingdoms and elites holding larger estates. Previously, it was argued that Germanic prehistoric societies were almost exclusively made up of free farmers and families of equal standing. The so-called Gemeinheits-thesis is now outdated. Today, this society is considered as hierarchically organised, and with large estate owners (Röseuer 1995; T. Iversen 1997; Skre 1998; F. Iversen 2008; 2009). The origin and the development of systems of landownership in Scandinavia has, however, been poorly understood.

The question is whether these abandoned settlements are connected to the emergence of new elites who reorganised the landscape, as Dagfinn Skre (1998) and Bjørn Myhre (2002) have proposed for Norway. Similar models have been discussed for Sweden (Zachrisson 2011, 144). Elites have come and gone through history. One might consider a model based on a reorganisation of settlements in central areas and lordship-driven clearances in the periphery during the Merovingian and Viking Periods.

Studies concerning settlement layout surrounding the high-status site of Gamla Uppsala have shown a significant change around 600 AD (Göthberg 2007, 442). Similar changes have been observed in Östergötland near Linköping and on sites in Småland, South Sweden (Ericsson 2001; Petersson 2011, 251). While farmsteads were relocated, the arable fields were continuously used (Petersson 2006, 32). These finds substantiate a model that implies that minor farms were abandoned for the prospect and establishment of larger nucleated settlements (Myhre 2002; Zachrisson 2011, 144). In British research, the so-called manoralisation and development of open-field systems, has also been a main topic of discussion (Reynolds 1999).

Rich monumental burials have also been taken as indicators of a concentration of power and the emergence of new elites in Eastern Norway during the Merovingian Period (Myhre 1992; Gansum 1995). Rich graves in the so-called Åker complex also emerged around 600 AD (cf. Martens, this volume). Terje Gansum (1995), who has examined the large mounds in Vestfold, found that although there is approximately the same number of large mounds dated prior to the 600 AD as after, the earliest are more scattered in the landscape. The later mounds are generally bigger and often concentrated around archaeologically documented power centres, such as Borre, Sem and Gokstad, and indicate nucleated power during the Late Iron Age. Similar perspectives have been discussed for other regions in Norway and Sweden, using large mounds and rich graves as points of reference (cf. Iversen 2008, 76; Bratt 2008). It remains to be seen, then, if the abandoned settlements can be connected to the establishment of large estates surrounding such power centres.

A third, and less discussed hypothesis emphasises changes in hereditary rights from primogeniture to partible inheritance. Torun Zachrisson (1994; 2012) has discussed the impact of allodial rights in relation to the organisation of Iron Age communities. A ‘live-generation rule’ seems to characterise land inheritance during Late Iron Age, according to runic inscriptions from Scandinavia (Brink 2002, 103ff). It has been pointed out that the last stem in the older runic alphabet the futhark is called ‘œdl’, which has its origins from Roman times (Robberstad 1967. 493, Eriksson – Strid 1991, 24; Zachrisson 1994, 219). In a system with partible inheritance large estates would slowly be divided among multiple descendants, while primogeniture would have the effect of keeping large estates united by the control of the elite.
We do not know much about hereditary rights in Scandinavia during Early Iron Age but Tacitus offers some insight concerning the Germanic areas in 98 AD (Ch. 20, 32). He seems to assume primogeniture as the main rule of succession amongst the people called Tencteri (Germ, ch. 32), located near the Rhine, close to today Köln and Bonn. By law, slaves, house and land was inherited by the eldest son. But the horse, according to Tacitus, was inherited by the son who was considered the best warrior, regardless of age. By emphasising this as an exception to the rule, Tacitus illustrates the strong warrior ideal amongst the Tencteri.

There are, however, methodological problems involved by using Tacitus as an analogy for early hereditary laws in Scandinavia. Primogeniture is not known in so-called provincial laws, recorded in the 1100s and onwards. The main principle was partible inheritance with a gradual system of defined classes of heirs. As a general rule land was inherited equally among sons, and movables were split equally among daughters. According to the Gulating law of Western Norway, daughters could also inherit peripheral farmland in the outskirts (Gjerdåker 2001, 15; Kleven 2001, 64–71). The law has certain and distinct stipulations concerning the division of land. If no other methods were found, the infi elds could physically be divided in two halves, a solution that easily would have caused separate settlement layouts without shared ownership of the infi elds (Stylegar 2005).

So far, I have presented one event-oriented hypothesis and two process-oriented hypotheses. The hypothesis concerning a shift in hereditary laws can be linked to the ‘lordship’ hypothesis. The kings’ followers may have gained more importance with the emergence of new petty kingdoms. Warriors who did not own land themselves may have achieved better conditions through their expanding military and political role. The question if farmsteads and their houses were abandoned as a consequence of the division of infi elds and the establishment of new farmsteads, still remains without an answer. This issue represents two contradicting explanations. On one hand, we are faced with the possibility of depopulation in a time of crisis. On the other hand, there is also signs of population increase and intensification of land use, including division of farms. A central issue is related to time.

In the following I give a brief overview of excavated settlement sites in south-eastern Norway. The aim is to identify certain traits in the material that can illuminate the hypotheses and also to demonstrate the potential the archaeological material has to recognise changes in land use and peasant society.

**Methods and material**

The large-scale excavation of settlements at Forsandmoen in Rogaland 1984–1993 was important in many respects, not least that a new generation of Norwegian archaeologists developed competence in methods concerning top soil stripping (Løken – Pilø – Hemdorff 1996; Løken 2001). A new and more efficient way of studying agricultural settlement in the lowlands of...
Norway was introduced, and adopted for use in the many rescue excavations that increased in number in the 90s and the new millennium. Every year between 100 and 150 excavations are carried out in Norway. About 50–75 per cent of these are excavated by topsoil stripping and on sites that usually include traces of settlements.

The Museum of Cultural History of Oslo is the largest excavator in Norway. Its district covers ten out of 19 counties and 55 per cent of the farms in Norway (30,880 of 55,688 farms, according to the survey of Norske Gaardsnavne). By 2010, excavations of prehistoric house sites have been carried out at 132 farms, which represent 0.4 per cent of the total number of farms, including 139 sites with traces of 450 houses. The ratio of houses to sites varies from 1 to 25. My study here concerns the settlements at nucleus of farms (Norw. tun) that have been in use through generations before they were abandoned. I therefore distinguish between tun and a house plot. A tun is defined as a settlement that comprises several house plots, preferably three or more. Abandoned houses are also found in the outskirts of larger historically known tun (i.e. Hesby, Vestfold) and are, as such, more uncertain as indicators of abandoned farms.

About 64 per cent of the material, 89 out of 139 sites include traces of only one or two houses (roughly 60 and 29 sites). Their relevance as a source for this study is therefore limited. Twenty-two sites, about 16 per cent, have traces of three or four houses. I consequently regard these as more representative. The remaining 20 per cent, 28 sites, have traces of five or more house plots. Fifteen of the sites have five or six houses and 13 sites have traces of seven or more house plots, and can be recognised as farmsteads that were abandoned. These should therefore have a potential of shedding light on the processes behind the abandonment, although the archaeological material as such is relatively modest.

Different methodological steps have been taken to approach the three hypotheses. The time of abandonment is a key element of the first hypothesis. It is, however, difficult to determine the exact time the last house in the tun went out of use. Jes Martens have discussed such problems thoroughly in the case of southern Kjølberg in Østfold, where four longhouses may represent four generations at the same farm (Martens 2007, 96–98, 104). The dating is based on the latest C-14 date of constructive features, such as roof-bearing poles, by which the age of the wood itself is measured. Alternatively, dating can be provided by secondary deposited material with a relatively short time horizon, e.g. a single charred grain. Such dates do not always correspond, even when they are taken within the same house plot. Haio Zimmermann (1998, 60–62) suggests that pole-built houses had a life expectancy of 25–50 years, but under optimal conditions considerably longer. Material from south-eastern Norway suggests, however, that the houses seldom can be dated more exactly than within a timeframe of 100–200 years (Gjerpe – Østmo 2008, 134). This makes it difficult to establish a finer chronological time sequence with regard to the abandonment of farmsteads.

The sites within this study are dated to the following periods: Roman Age, Migration Period, Merovingian Period and the Viking Age. The absence of Merovingian Period houses in already established farmsteads is taken as an indicator of abandonment. The three-aisle longhouse with the division of living space and an area for animal husbandry is a common feature throughout the Iron Age, but becomes gradually less common during the Viking Age (Martens 2007). In the Museum’s administrative region, only nine three-aisle longhouses have been C-14 dated to the Merovingian Period, as opposed to fifteen to the Migration Period by 2002 (ibid.).

Hypothesis 2 emphasises the social context and historical known settlement structure. So far, the excavated material has been discussed only to a limited extent and incorporated in a social landscape perspective, incorporating the methods of historical archaeology. In Norway such methods have especially been developed since 1995 at the University of Bergen in the research environment around Professor Ingvild Øye. The studies combine interdisciplinary methods, using written, archaeological and cultural geographical evidence in a long-term perspective that includes and emphasises the whole agricultural landscape and the social and economical relations between the settlements (Øye 2002a; 2002b; Iversen 2008). The methods have only to a limited extent been applied in rescue archaeology, that often focuses on the technical and architectural aspects of the houses and less on their context of the historical landscape and farm land (e.g. Dünhoﬀ2011).

Position is a key feature when exploring hypothesis 3 related to possible hereditary divisions. Here, I have assessed the sites by taking into account so-called division names, which represents another new methodological approach. Out of 56,688 farms recorded in Øluf Rygh’s voluminous compilation, Norske Gaardsnavne (1897–1936), altogether 7150 farms have prefixes, such as northern, southern, eastern, western, big, little, upper, lower etc., and thus an indicator of divided farms. An abandoned farmstead situated by a boundary, e.g. between two historic farms carrying division names, may also indicate that such a process have taken place. In earlier research, farm-names have been considered as a reliable source for understanding the development of prehistoric farms. Together with Magnus Olsen’s work Ættegård og Helligdom (1926), Rygh’s
work revolutionised place-name research and laid the foundation for later settlement studies. With addition to chronological layers, the toponymic material also reflected different social levels. Thus it was a useful source, but also had its limitations. New archaeological information about prehistoric settlement offers, however, new and more direct ways of assessing the same material.

It is unclear how far back it is possible to trace division names. They appear in written sources around the 13th century. In the eastern part of Norway, Bishop Øystein’s cadastre, the so-called Red Book, lists such names systematically for church property from the 1390s. The Red Book also refers to abandoned medieval farms with division names. A study on prehistoric graves located close to farm boundaries in Vestfold, includes farms with division names, and may indicate such processes in the Iron Age (Ødegaard 2007; 2010).

The question then is if these processes could be connected to elites who were reorganising the landscape and emergence of new hereditary laws, and be recognized as indicators of intensification and population increase. Such names occur most frequently in the counties Vestfold and Akershus that also happen to be the areas that have the highest number of abandoned farmsteads. More than 30 per cent of the farms in Vestfold, 24 per cent in Østfold and 22 per cent in Akershus have names that imply divisions (Fig. 3). The percentage of division names decreases the further west and north of these regions one looks. This may suggest that the physical farm division was more common in central areas of Eastern Norway than in other parts of Norway (Lunden 1969, 93; Stylegar 2005).

I have chosen two sites in Vestfold for closer examination to assess the validity of the hypotheses with an emphasis on the relation between the sites and the historically known settlement patterns. How were these settlements situated in the landscape when compared to the historical farms, the organization of the infields and outfields in the Middle Ages and farm boundaries? Both sites have been excavated as part of the E18 road project led by the archaeologist, Lars Erik Gjerpe. Site 1 (Auli) was excavated in 2009–10 by Line Grindkåsa, and site 2 (vestre Ringdal) by Marit Østmo in 2005. The excavation results are published by Gjerpe (2008) and Mjærum – Gjerpe (2012a; 2012b).

Site 1 Auli is located close to the historically known royal villa of Sem. The farm belonged to the St Olav’s monastery in Tunsberg before 1390. Several scholars, among them Halldis Hobæk (2008), have convincingly argued that Auli prior to the foundation of this monastery in 12th century was part of a large royal estate consisting of nearly fifty subordinated farms under the manor of Sem. The site is therefore located in a distinct ‘lordship’ environment. Site 2 is located in an area that had many freeholders during the late Middle Age (Ødegaard 2007, 73; 2010). The reason why these two farmsteads were abandoned will be assessed and discussed against the main tendencies in the source material.
Results

Fig. 4 shows the average number of abandoned sites per century and reveals an interesting pattern. It demonstrates that there is a four to six times greater frequency of farm abandonment during the Migration Period than in the Iron Age as a whole. When reviewing the Iron Age and Middle Age, there is a pattern of three (Merovingian Period) and up to five and six (Middle Ages) abandoned settlements each century. This number also includes small sites. The Migration Period stands out, with a total number of 19 sites per century (38 out of 139 sites). This is further enhanced by a closer look at the sites that contain traces of five houses or more. Approximately 16–17 of 28 sites that have this attribute were abandoned during the Migration Period. Five were abandoned during the Middle Ages, four in Pre-Roman Iron Age and two to three were abandoned during the Merovingian Period. Traces of larger abandoned settlements dated to the Roman Period and Viking Age have not yet been uncovered. Six settlements from the Migration Age are located in Akershus and four in Østfold. Similar types have been found in the county of Vest-Agder, two in Vestfold and one in each of the counties of Buskerud, Hedmark and Telemark.

As for settlement continuity, approximately 40 out of 56 sites (71 per cent) have houses dated both to the Roman Period and the Migration Period, including small sites. However, large settlements show continuity through the Roman Period to Migration Period. A total of 24 out of 27 settlements (89 per cent) from the Roman Period (with three or more houses) were settled also in the Migration Period, and 19 out of 20 settlements having five houses or more (95 per cent).

These figures are in contrast to the development in the transition phase to the Merovingian Period with very slight signs of continuity. Only three of nineteen settlements that have traces of five or more houses, and settled in the Migration Period, show later activity. This is especially true for Moi in Vest-Agder with continuity through the Middle Ages (Reitan 2009). This is also the case for southern Kjølberg in Østfold (Martens 2007), but more uncertain at the site vestre Ringdal in Vestfold (Gjerpe – Østmo 2008). The five longhouses at southern Kjølberg are located close to the present farm. Finds dated to the Viking Age and Middle Ages might suggest that the original settlements have been moved to its present location (Martens 2007, 96). The longhouse that signifies the latest phase at western Ringdal in Vestfold (House II) has been C14-dated to Early Merovingian Period or Late Migration Period (Gjerpe – Østmo 2008, 57). Charred grain, considered a secondary deposition in two roof-bearing postholes, has been used to date the house. The remaining twelve longhouses at western Ringdal have been dated to the Roman Period and Migration Period, and the settlements seem to have terminated by the end of the Migration Period, c. 600 AD. Thus, it is only Moi in Vest-Agder that can prove continuity in settlement with any certainty through the Merovingian Period. This suggests that many settlements were abandoned during the Migration Period in Eastern Norway. A similar pattern has been identified in other parts of Norway, based on fossilised houses in marginal areas. Now this trend has also been recognised in central agricultural areas in Eastern Norway as well.

But what about sites at farms with division names? Altogether 58 out of 139 sites (42 per cent) are located at such farms. In Østfold this is the case for 20 out
of 31 sites, in Vestfold 11 out of 23 (including Nordby), and in Akershus 15 out of 30 sites. In total, 46 out of 84 sites (55 per cent) are located at such farms in these three counties. This seems to be a recurrent feature. The regular frequency of such names is 26 per cent (2258 of 8795 farms). In the other counties in Eastern Norway, the numbers are too small to draw parallel assumptions. Closer assessment of sites dated to the Iron Age shows that 44 per cent (38 out of 88 farms) are located on farms with division names. The highest frequency is related to Pre-Roman Iron Age (55 per cent). The material from the Merovingian Period shows 60 per cent, but is fairly modest as it only counts five sites. The sites dated to the Migration Period that by far make up the largest body, appear in 38 per cent on farms that hold such names, including minor sites.

Viking Age 2 of 9 = 22 per cent
Merovingian period 3 of 5 = 60 per cent
Migration period 15 of 39 = 38 per cent
(included Vestre Ringdal)
Roman Age 7 of 15 = 46 per cent
Pre-Roman Age 11 of 20 = 55 per cent
Sum 38 of 88 = 43 per cent

This demonstrates that a total of ten sites out of 17 larger settlements (59 per cent) that were abandoned during or prior to the Migration Period, including western Ringdal, are located at farms that carry division names. This is the case for six settlements from the Migration Period and four from the Pre-Roman period.

This suggests that larger abandoned settlements are greatly over-represented at farms that hold division names. This phenomenon is, however, not limited to the Migration Period. To explore this relation further, two case studies of sites located at such farms will be considered and included in the final discussion.

Results from the case studies

Early in the Migration Period, a large longhouse was built at site 1. It was 40.5 metres long, 9.5 metres wide and covered an area of approximately 380 square metres. It was exceptionally large, but followed the traditional building style of the period, with separate internal sections for living space and holding animal husbandry. Significant resources must have gone into the construction. The longhouse was destroyed in a severe fire around 600 AD. Shortly after, a male was buried in a mound located in the section where the living space in the house had been. The grave goods indicate a warrior with reasonable wealth and status (C 57449). The location of the inhumation seems to be deliberate and symbolic. The body was laid with the head facing north and furnished with a whole range of weapons, with the exception of a lance (cf. Jørgensen 1999, 164–166; Grindkåsa 2012). The discovery of a brooch plate tells that he was buried with a cape, and most likely a bandoler was attached by a so-called skjøldtorn (shield-thorn) brooch, which is a relatively rare find in Norwegian contexts. Only eight of such brooches are known from Norway, all of which have been found in the eastern regions, and also from the Åker find (Solberg 2000, 192). This type of brooch was more common in Denmark and in Western Europe during the Migration and Merovingian Periods (Koch 1977; Reiß
Frode Iversen, Big bang, lordship or inheritance?  

The man was buried with three knives, a double-edged sword with damascus blade, probably an import, and a shield, amongst other artefacts. The grave also contained the head of a horse and an amulet. The grave goods suggests that a person of a high social standing was buried here and is an early example of a high-status grave, inspired by Continental models, which occurs more frequently during the Merovingian Period.

There are traces of other buildings at the site, indicating a settlement. The site then seems to have been transformed to a grave field comprising up to ten mounds. By mid-19th century, more than six grave mounds were still preserved in the landscape (Nicolaysen 1866, 138) (Fig. 6).

Looking at the topographical situation in the 6th to 7th centuries, when the sea-level was higher, it is clear that the farm territory of the abandoned site was constrained by two rivers and the sea. This coincides with the historical farm’s boundaries. The site is located exactly where the boundaries of three historical farms met; namely Låne, Auli and Aulerød. All three farms were later parts of the same large estate surrounding the manor of Sem (see below). The similarity in the names Auli and Aulerød may signal that the latter was once a part of Auli. The name probably refers to soil condition; Ölfvin, alfr m. gravel, vin, meadow (NG VI, 229). Therefore, the initial division of the farm territory might have gone between Låne and Auli, and the secondary between Auli and Aulerød. In 1390, the area was split up into seven independent holdings belonging to the monastery. Auli is recorded as the western, northern and eastern Auli in the Red Book in the 1390s, and Låne as northern, southern and southernmost Låne, while Aulerød was one holding at that time (RIB, 204f). As far as we know, the seven units had individual settlements, as is later recorded (Fig. 6: 7).

Halldis Hobæk has examined the medieval property structure in the area close to the site. The polygons on Fig. 8 represent concentrations of aristocratic, monastic and royal land in the late Middle Ages. The largest one is the reconstructed royal land around Sem. It consists partly of royal and monastic land. A large estate seems to have been separated from the royal manor and subjected to the monastery of St Olav in Tønsberg during the mid-1100s.

A contemporary saga records that the church of St Mikael situated in Tønsberg in 1190 had landed prop-

Fig. 6. Site 1 Auli. Location compared to the historical settlement structure.
Frode Iversen, Big bang, lordship or inheritance?

[Image: Fig. 7. Site 1 Auli. Location compared to settlement in 1390 AD. 1) Nørdre Låne, 2) Søndre Låne, 3) Sønste Låne, 4) Aulerød, 5) Vestre Aulin, 6) Søndre Aulin, 7) Østre Aulin.]

The case seems to provide evidence for a process where one farm territory was split into several minor holdings. It is difficult to date the stages in this process. One of Norway's largest estates from the Viking Period and the Middle Ages is situated here. The division of the farm territory into minor farms may well have been connected to the development of this estate in an early phase. I interpret this accordingly: the Auli farm was divided into to separate units (Låne and Auli) and the settlement was abandoned around 600 AD. A grave-field, that has left traces of about 6–10 graves, was then established and continued in use for some generations. If the farm was split in two units of equal stature, then the grave-field could be linked to two generations of landholders who were buried at the site of their ancestral settlement. This practice could then have lasted for three to five generations, indicated by the number of graves. This corresponds to around 60 to 100 years, with a hypothetically length of each generation of approximately 20 years (Skre 1997).

There are, however, some elements that go against such an interpretation. The name Låne, most likely stems from the word lán, probably meaning 'rented land' (NG VI, 212). Oluf Rygh has proposed that the word lán is connected to the transfer of private land, in the sense of 'rented land', meaning land used in exchange for a fee. If this name can be traced back to a primary division, Låne must have been rented land at an early stage, and thus belonged to a larger landowner. If this is the case, it may perhaps be more likely that the grave-field represents the same line of landholders. In this sense, the placing of the graves close to the farm boundary could have a double symbolic connotation. Besides reminding the people using the land of Låne of their previous landlords, the graves served to connect and keep the memory of the ancestral farmstead alive for some generations.

This is not the only example that may illuminate such processes in the landscape in Vestfold, although it is difficult to elaborate such a good case as for Auli. The second site, Vestre Ringdal, is located further south (Fig. 10) and was excavated by Mari Østmo in 2005. The settlement consisted of 21 houses: traces of 13 long-houses and eight minor buildings and six graves from Pre-Roman Iron Age and a grave from the Migration Period. Nearly 30 cooking pits and 19 hearths were also found (Fig. 11). The finds (C 55048–C55077) consisted mostly of pottery fragments from both the houses and the graves. At least six of the longhouses are from the Migration Period, but it is difficult to determine whether they were used contemporaneously. Gjerpe and Østmo suggests that the settlement consisted of perhaps two or three simultaneous holdings during the Migration Period (Gjerpe – Østmo 2008, 134).

The settlement was abandoned around 600 AD. It was located 120 metres north of the present farm-boundary separating western and eastern Ringdal, as shown on...
Eldste kjente eierforhold:
Oversikt over heleieblokker

Fig. 8. Concentrations of royal, aristocratic and ecclesiastical land near site 1 in the late Middle ages. After Halldis Hobæk 2008.
Fig. 9. Concentrations of royal and ecclesiastical land near site 1 (marked with a ring) in the late Middle ages. After Haldis Hobæk 2008.
Fig. 12. Ringdal was mapped in a scale of 1:4000 in the period 1807–1820 AD [Wasberg 1970, 116], showing four settlements at Ringdal – one at western Ringdal and three at Eastern Ringdal. The northern and southern settlements at Eastern Ringdal are much younger settlements and not relevant here. The two presumed farmsteads from the Middle Ages were located a distance of 250 metres apart. The farm is mentioned as upper and lower Ringdal (not eastern or western) in the 1390s (RB, 31) and was, most likely, already physically divided. The farmstead at eastern Ringdal was situated near a small hill, which fits well with the term Upper. In 1647, the holdings had similar rent, which indicates an equal division of the farm. The boundary between the eastern and western units is documented on the map from the 1800s and is the same as it is today. The boundary of the named farm that faces west could be old. A grave field with four stone foundations dated to the Early Iron Age is located just 20 metres from this boundary. Its location in the outfields and around
125 metres from the closest main road over the Ra, adds strength to the hypothesis that the grave-field was constructed to mark the boundary between the farms Rødbøl and Ringdal (Ødegaard 2007, 77).

The abandoned settlement was located in the forested outfield area of the 1800s. The path road to the farmstead at western Ringdal about 500 metres to the north passed the abandoned site. The distance to the farmstead at eastern Ringdal was about 700 metres. It is not known how the arable land was organised in the Migration Period, but the site was located in the outskirts of the infield as they are recorded on the map. If this reflects an earlier situation, it would suggest that the settlement had a good location in the transitional zone of infield to outfield. Studies of landownership in the region in the Middle Ages, indicate that Ringdal was not a part of a larger medieval estate, like Auli (Ødegaard 2007, 34).

In my view this indicates that the settlement was abandoned because of a split in a larger farm territory, and the establishment of two new separate settlements. It is possible that a so-called odalskifte is relevant to this case. The farm could easily have been split between two brothers without any interference of manorial structures. It is therefore likely that the Migration Age farm may have consisted of two units at the time of abandonment. During the Middle Ages the farm consisted of two units with split infields and separate settlements. The abandonment may have been a result of a division of farmland territory around 600AD.

Discussion

Research has evolved from focusing on only the farm settlements in the first half of the 1900s, to looking at the whole farm territories also as production units, especially from the 1980s onwards, to better understand the economic and social relations between the farm units. Until the 1990s direct evidence of prehistoric settlement in Eastern Norway was scarce (Østmo 1991). Farm names, graves and stray finds were the most important sources for early settlement history. It has been proposed that the strong link between historic farms and pre-historic graves indicated settlement continuity (Pedersen 1999, e46). In the 1990s the potential of top soil stripping for the understanding of settlement history was recognised. Since then, there has been a steady enlargement of source material, with a discovery of c. 50 new sites every decade. There is reason to believe that this development will continue. Still, certain tendencies can be observed in the available material already at this stage.

Working with this paper, I have examined the total body of evidence with regard to early settlement in South-East Norway, trying to shed some new light on the three main hypotheses that have been in the fore of discussion in Scandinavian research. The new evidence demonstrates that the development in Eastern Norway is far more dynamic than has been presumed. The changes during the transition from Early to Late Iron Age are especially significant.

An assumption with regard to this work is that many abandoned settlements are situated on farms having division names, and that this material has a potential for illuminating processes concerning farm divisions. Overall, the farm divisions may indicate intensification in field structure and settlement. Possible explanations for this could be population increase and new modes of operation, with a shift in balance between animal husbandry and arable cultivation. The quantitatively proven macro conditions have been strengthened by using two more qualitatively oriented case studies on a micro level. They both support a theory that there is a strong connection between abandoned settlements and processes of farm divisions. My review shows that also in East Norway, a trend of abandonment occurs far more frequently during the Migration Period than in the other periods of the Iron Age.

None of the larger abandoned settlements that have been excavated seems to have been abandoned during the Roman Period or Viking Age. They were, however, abandoned both during the Pre-Roman and Migration Periods. Both of the case studies relate to Migration period sites. There are some source critical challenges tied to the dating of the abandonment, but the context of the sites is good. The data imply that the abandon-
ment occurred around 600 AD, and not in the decades following 536 AD. It is uncertain whether these cases are representative, but they do not support Gräslund’s hypothesis. Other hypotheses should therefore be considered.

Site I is located close to what is considered as one of Norway’s largest estates during the Viking Period and Middle Ages. This case study is interesting as it shows that a large building burned down and that a settlement cluster was abandoned. The construction of a grave mound at the site immediately followed this event, in which a weapon-equipped person of high social standing was buried. Over time, this area developed into a grave-field. The abandoned settlement was situated close to the boundary that came to separate three historical farms. In turn, these formed a natural farm territory during the 6th and 7th centuries. In 1390, the area was split into seven smaller units that were all part of a larger estate holding. This could be interpreted as a sign of intensification and reorganisation of the settlement under the auspices of a central landowner. On the other hand, Case 2 shows an equal division of a farm territory. The abandoned settlement consisted of traces of 21 buildings and at least two simultaneous units during the Migration Period. The settlement was therefore most likely moved when the farm was divided.

Could this development have anything to do with a change of hereditary rights? It can be observed that larger settlements were not abandoned during the Roman Period. On the other hand, this was the case in Pre-Roman and Migration Periods. The time lapse between these two periods is extensive and the interpretation is therefore rather uncertain. Still, it is not unlikely that the division processes during the Migration Period may have been connected to hereditary norms.

Prehistoric farming in Eastern Norway has also been archaeologically examined in recent years. The E18 project in Vestfold has demonstrated the usefulness of combining scientific methods with traditional excavation of fossil traces of cultivation. Micro-morphological analyses have shown changes in fertilisation and land exploitation over time. Botanical analyses of wood show, among others, that forests were used as a resource for gathering fodder. Altogether, the settlements by the Ra were more significant than has previously been understood (Mjærum – Gjerpe 2012a; 2012b). Several sites indicate, however, decline already during the Migration Period. In Hordalsåsen there are signs that cultivation terminated towards the end of the Roman period, while pastures expanded during the Migration Period (Mjærum 2012). Traces of cultivation close to the settlement areas at Hesby and Østre Borge, seem to indicate stable settlements from the Bronze age to present times, but also shows a complex development, with reduced activity during the Migration Period (Gollwitzer 2012; Storrusten – Østmo 2012). This complex development makes it difficult to explain the changes using a ‘one-factor’ theory based on a single natural disaster, such as the one in 536 AD (Gjerpe 2012).

The three hypotheses should perhaps be seen holistically. If the minor farms were abandoned because of a climatic crisis, it could have caused new grazing lands in dense settled areas like the Ra. An easier access to manure could have made a more intensive use of arable farming possible, which again resulted in more farms being divided over time. The development is obviously complex and multiple factors need to be assessed to be able to draw any conclusions of certainty. The examined material contains elements that support the crisis hypothesis. It seems likely that a re-organisation of the settlement accelerated at the end of the Migration period or in the early decades of the Merovingian Period. On a practical level, this resulted in, amongst others, a division of farmland. The material gives few indications of the driving forces that led to such development. It could be about demographic relations, where the potential for grain cultivation was more exploited in areas where this was possible. This could have resulted in a growing surplus and, as such, created a foundation for emerging elites and minor kingships. Changes of hereditary rights may then have been a strategy that was motivated by and stimulated to this desired development of both larger estates and split up settlements and farmland.

**Summary**

This article discusses the archaeologically excavated settlement sites in South-Eastern Norway in relation to three hypotheses under discussion in Scandinavian archaeology. It is suggested that also processes of inheritance and landownership is important to understand the changing settlement pattern on the threshold of the Merovingian period. Changes of hereditary rights may then have been a strategy that was motivated by and stimulated to this desired development of both larger estates and split up settlements and farmland.

**Acknowledgement**

The article is partly based on a list over settlement sites in Eastern Norway, which will be published in full in The Museum of Cultural History’s program on Settlement archaeology (Martens in prep). The list is compiled by Jes Martens and updated in collaboration with Lars Erik Gjerpe and Margrete Simonsen. I am thankful for them letting me use this in my article. Thanks to Lars Erik Gjerpe and the E18 project for thought provoking and inspiring discussions on set-
lement structure these last two years, and Ingvild Øye for reading the manuscript critically I would also like to thank Jessica McGraw for input and translating this article.

Zusammenfassung

Dieser Artikel beschreibt die archäologisch ausgegrabenen Siedlungen in Süd-Ost-Norwegen in Bezug auf drei Hypothesen zur Diskussion in die skandinavische Archäologie. Es wird vermutet, dass auch Prozesse der Vererbung und Zugehörigkeit zu Land wichtig ist, die wechselnde Siedlungsstruktur an der Schwelle der Merowingerzeit zu verstehen. Änderungen des Erbrechts kann dann eine Strategie gewesen, die durch motiviert war und stimuliert auf diese gewünschte Entwicklung der beiden größeren Gütern und aufteilen Siedlungen und Ackerland haben.

Résumé

Cet article discute les sites archéologiques fouillés dans le règlement du Sud-Est de la Norvège par rapport à trois hypothèses en cours de discussion en archéologie scandinave. Il est suggéré que aussi des processus de succession et de propriété à la terre est important de comprendre la structure de l’habitat évolue sur le seuil de l’époque mérovingienne. Changements de droits héréditaires peuvent ensuite avoir été une stratégie qui a été motivée par et stimulé à cette évolution souhaitée des deux domaines de plus en séparer les colonies et les terres agricoles.

Bibliography


Martens, J. in prep: Faglig program for bosetningshistorie, Museum of Cultural history, University of Oslo.


NG = Norske Gaardnavne, I–XVIII, ed. O. Rygh et al. Kra. 1897–


Pedersen, E. A. 1999: Transformations to sedentary farming in eastern Norway: AD 100 or 1000 BC? Settlement and Landscape Proceedings


Dr. Frode Iversen, Museum of Cultural History, University of Oslo. Frode.iversen@khm.uio.no